TELETYPE®

WIRING DIAGRAM PACKAGE FOR MODEL 33 PRIVATE LINE SETS (SEE NOTE BELOW)

WDP 0033

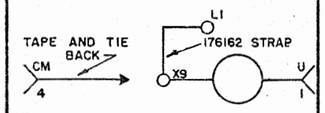
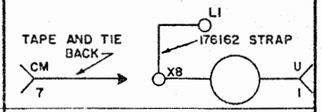
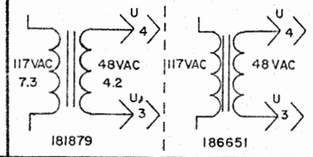
DRAWING NO.	SHEET NO.	DESCRIPTION	ISSUE NUMBER 46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
		SCHEMATIC DIAGRAMS																														
6353WD	ALL	MODEL 33 ASR-KSR-RO FOR DC SIGNAL LINE	20	20	20	20																										
		ACTUAL WIRING DIAGRAMS																														
6354WD	ALL	MODEL 33 ASR-KSR-RO FOR DC SIGNAL LINE	30	30	30	30																										
		CIRCUIT CARD ASSEMBLIES																														
181821	-	500 MA SELECTOR MAGNET DRIVER	12	13	13	14																										
182630-635	-	500 MA SELECTOR MAGNET DRIVER	20	21	21	21																										
183079	-	AUTO READER POWER PACK	13	13	14	14																										
183087	-	MANUAL READER POWER PACK	13	13	14	14																										

NOTE: THIS WDP COVERS THE FOLLOWING MODEL 33 SETS:

33TA, TA/1, TB, TB/1, TC, TC/1, TS, TU, TZ, TAB,
TAC, TAF, TAH, TAJ, TAY, TAZ, TBH, TBP, TBV, TBW, TBZ,
TCA, TCD, TCY, TCX, TDG, TDJ, TDK, TDM, TDY, TEC, TER,
TES,

TELETYPE CORPORATION

NOTE : THE LAST COMPLETED COLUMN INDICATES THE LATEST ISSUE NUMBER OF WDP.

NO.	NOTES	SUPPORTING INFORMATION		CONTENTS
		CATEGORY	NO.	
25.	WHEN THE 182044 ELAPSED TIME INDICATOR IS USED ON HALF DUPLEX ARRANGEMENTS, WIRE AS SHOWN AT 5F6. WHEN FULL DUPLEX OPERATION IS REQUIRED WIRE TIMER AS SHOWN BELOW: .060A OPERATION  .020A OPERATION  			
26.	UCC6-WIRED AS SHOWN IN SOLID LINES. UCC36-T4 CONNECTED TO T15, NO CONNECTION TO T7. CC11 NOT CONNECTED PER DASHED LINE TO PROVIDE 48 VAC OPERATION OF READER TRIP COIL.			
27.	279M-48VAC-110Ω 300M-115VAC-780Ω			
28.	WHEN A SET CONTAINS A UP848 IT WILL BE NECESSARY TO REMOVE THE 182692 STRAP BETWEEN TERMINALS 7B8 AND REPLACE IT WITH THE 182693 STRAP BETWEEN TERMINALS 4B8.			
29.	THE "U" TRANSFORMER MAY BE ONE OF THE FOLLOWING:  			

ISSUE CONTROL RECORD

6353WD

SHEET NO.	ISSUE 20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1	32																	
2	23																	
3	24																	
4	26																	
5	26																	
ISS. NO →	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
~~1~~															30	31	31	32
~~2~~															23	23	23	23
~~3~~															24	24	24	24
~~4~~															24	24	25	25
~~5~~															26	26	26	26

REVISIONS APPLYING TO THIS CONTROL RECORD

ISSUE	DATE	AUTH. NO.
1	5-26-67	94003
2	8-23-67	94003-D
3	8-25-67	94380D
4	12-21-67	95147-RC
5	1-16-68	94998-R
6	8-22-68	95993
7	1-27-69	96776
8	4-16-69	99079
9	5-22-69	99243
10	9-9-69	99474
11	9-17-69	99187
12	10-1-69	99557
13	2-11-70	99187-2
14	3-31-70	170
15	7-30-70	99957
16	1-22-71	419
17	5-14-71	2787
18	1-11-72	4350
19	5-22-72	6325-RC
20	8-1-72	6503RC

WDP

ISSUE CONTROL SHEET 1 OF 1

WD NUMBER 6353 WD	
DRAWN J.E.R	CHKD.
ENGR. A.S.	APPD.

TELETYPE CORPORATION

6353WD

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

NO	NOTES
1.	FOR ACTUAL WIRING DIAGRAM SEE 6354WD.
2.	THE SET IS SHOWN WIRED FOR SIMPLEX .060 AMP. NEUTRAL SIGNAL LINE ON TERMINALS 6 AND 7 OF THE 151411 TERM. STRIP. FOR .020 AMP. NEUTRAL SIGNAL LINE MOVE THE P WIRE FROM TERMINAL 8 TO TERMINAL 9 OF THE 151411 TERMINAL STRIP. ALSO MOVE THE BL WIRE FROM TERMINAL 3 OF THE POWER RESISTOR 181816 TO TERMINAL 4. (SEE NOTE 25)
3.	FOR FULL DUPLEX OPERATION CONNECT THE SEND SIGNAL LINE TO TERMINAL 4 AND 3 OF THE 151411 TERMINAL STRIP. MOVE THE W-BL WIRE FROM TERMINAL 4 TO 5 AND THE BR-Y WIRE FROM TERMINAL 3 TO 5 ON THE 151411 TERMINAL STRIP.(SEE NOTE 25)
4.	ON KSR SETS ALL ASSOCIATED READER WIRING IS NOT USED.
5.	ALL CAPACITANCE VALUES IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
6.	ALL RESISTORS 1/2 WATT AND RESISTANCE VALUES IN OHMS UNLESS OTHERWISE SPECIFIED.
7.	ON RO SETS USE 181836 PLUG ASSEMBLY.
8.	THESE CONNECTIONS ARE MADE AS OPTIONS BY THE CUSTOMER AND OR THE FACTORY.
9.	.060 AMP. SIGNAL LINE OPTION ① .020 AMP. SIGNAL LINE OPTION ②
10.	THIS IS AN 8 LEVEL UNIT.
11.	THESE WIRES ARE IN THE DISTRIBUTOR CABLE AS SPARES. IF NOTE 19 APPLIES TAPE AND TIE BACK THESE WIRES.
12.	THIS FUSE NOT INCLUDED ON SOME SETS. FUSE VALUES ARE AS FOLLOWS:

TRANSFORMER	FUSE	PART NO
181879	1/2 AMP. SL-BL	117176
182657	8/10 AMP. SL-BL	162360
186651	1/2 AMP. SL-BL	117176

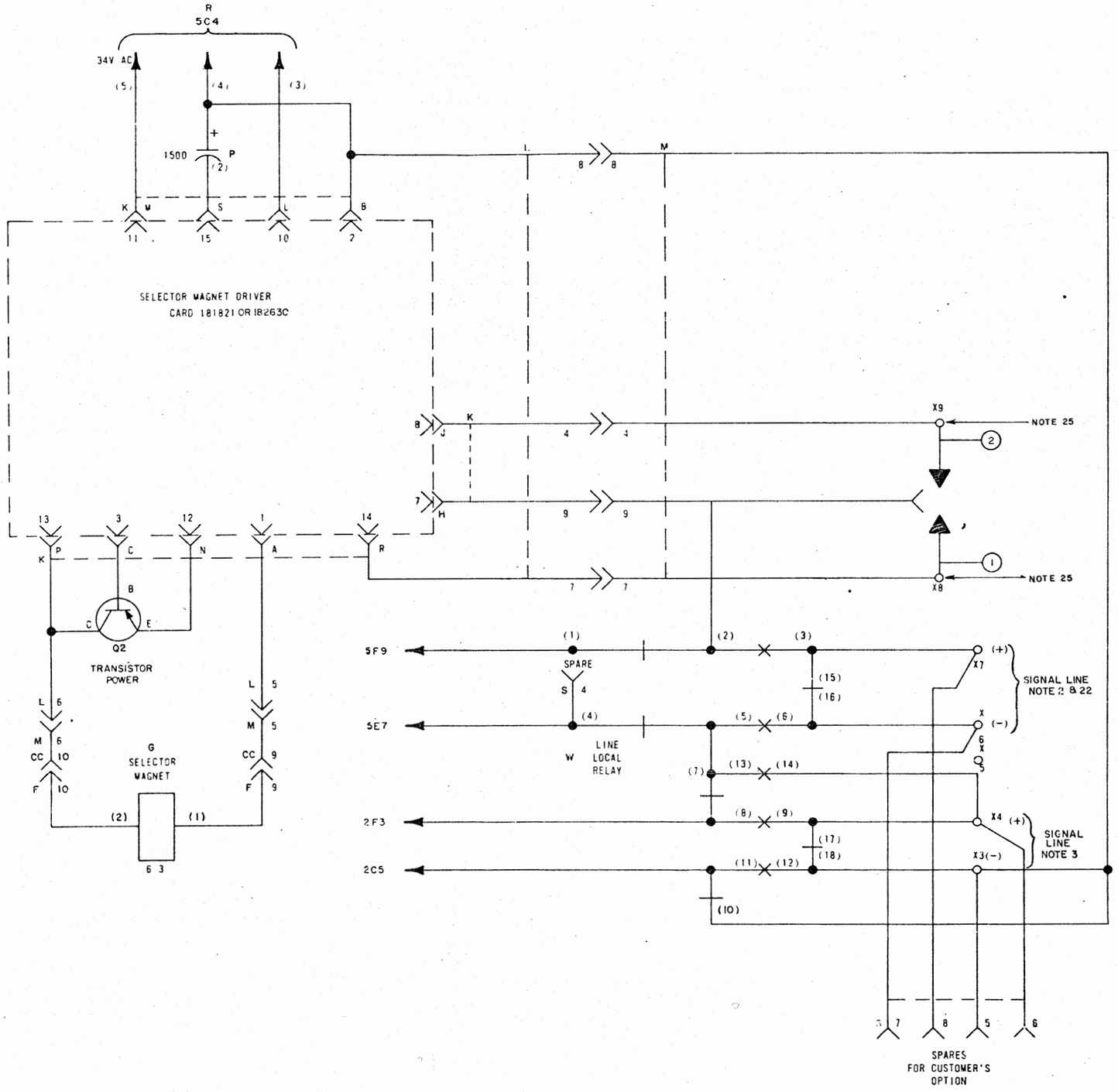
13.	WIRING SHOWN AS XA IS FOR EVEN PARITY KEYBOARDS.
14.	FURNISH 115V AC ± 10%, 60 Hz EXCEPT 50 Hz ON 33TAB, TAH KSR SETS, 33 TAC, TAJ, TBP, TDK, TDM, TES, ASR SETS AND 33 TBM RO SETS.
15.	APPROPRIATE FUSE IN 182182 FUSEHOLDER NOT INCLUDED IN EARLY SETS.

MOTOR	FUSE VALUE	FUSE PART NO.
182241	2.0 AMPS.	138538
182267	1.8 AMPS.	322246

16.	NETWORK 153631 — 470 Ω, 0.1 μF
17.	60 CYCLE READER TRIP COIL RESISTANCE IS 630 Ω 50/60 CYCLE READER TRIP COIL RESISTANCE CHANGED FROM 630 Ω TO 780 Ω FOR IMPROVED 50 CYCLE OPERATION.
18.	LOW PAPER ALARM CONTACTS NOT FOUND IN ALL UNITS. CONTACT RATING 4 AMP. AT 30V DC
19.	TO CUSTOMER SUPPLIED ALARM.
20.	AA,AB,AJ,AK, REFER TO MANUAL READER, BA,BB,BJ,BK, REFER TO AUTOMATIC READER.
21.	MAY NOT BE FOUND ON EARLY UNITS.
22.	33TDY TO BE WIRED FOR .020 AMP. SIGNAL LINE OPERATION.
23.	FOR CUSTOMER USE REQUIRES 48 VAC. POWER SUPPLY.
24.	THE 186556 ELAPSED TIMER ASSEMBLY IS USED ON UP848 AND UP856

NOTES CONTINUED ON ISSUE CONTROL SHEET.

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



6353WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	11-20-63	79266
3	1-8-64	79934
4	4-9-64	81640
5	6-9-64	81773
6	11-27-64	84602
7	2-15-65	84599-1
8	3-15-65	85643
9	8-6-65	88293
10	10-15-65	88983
11	12-17-65	89007
12	1-13-66	88841-3
13	2-1-66	90357
14	3-9-66	89721-2
15	3-29-66	90790
16	5-2-66	90374
17	5-10-66	90380
18	10-12-66	90771
19	10-19-66	92181
20	12-28-66	92962
21	5-26-67	94004
22	8-23-67	94003-1 D
23	8-24-67	94380 D
24	1-16-68	94996
25	1-24-69	96776
26	4-16-69	99079
27	5-20-69	99243
28	9-9-69	99474
29	7-29-70	99957
30	1-22-71	419
31	5-14-71	2787
32	5-22-72	6325-RC

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

SHEET 1 WDP

SCHEMATIC
WIRING DIAGRAM
FOR
MODEL 33
ASR, KSR, RO
DC SIGNAL LINE

APPROVALS	
D AND R	E OF M

E-NUMBER

PROD. NO. 6353 WD

DATE 4-24 67

P.D. FILE NO. 2-30 152/153AA

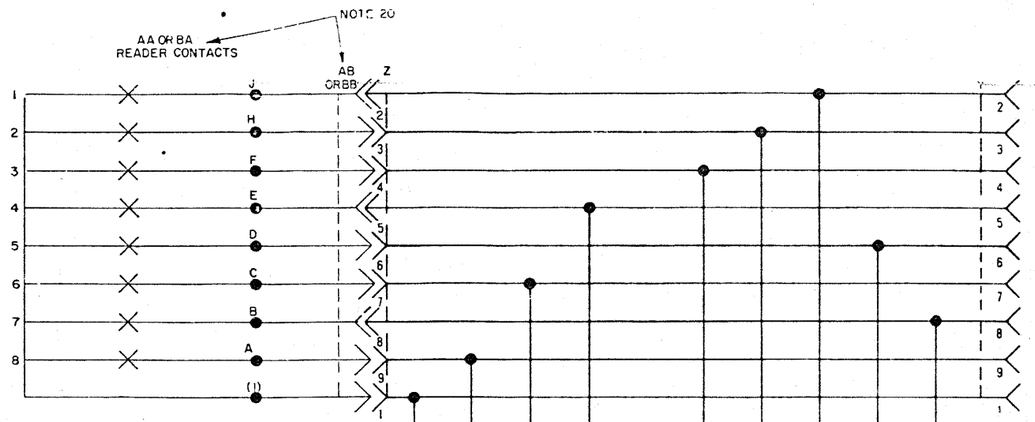
DRAWN J.E.R.	CHKD.
ENGD. A.S.	APPD.

TELETYPE
CORPORATION

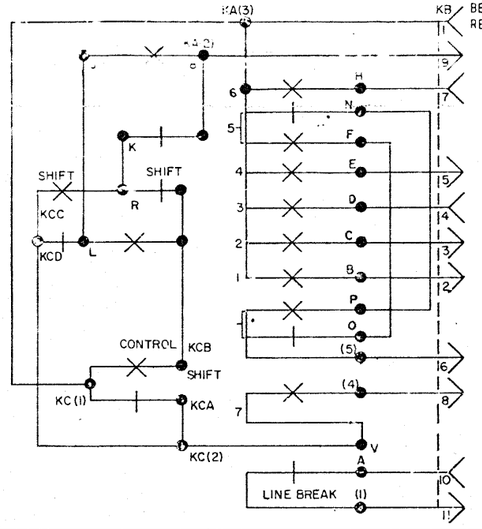
6353WD

SEE SHEET 1 FOR NOTES

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

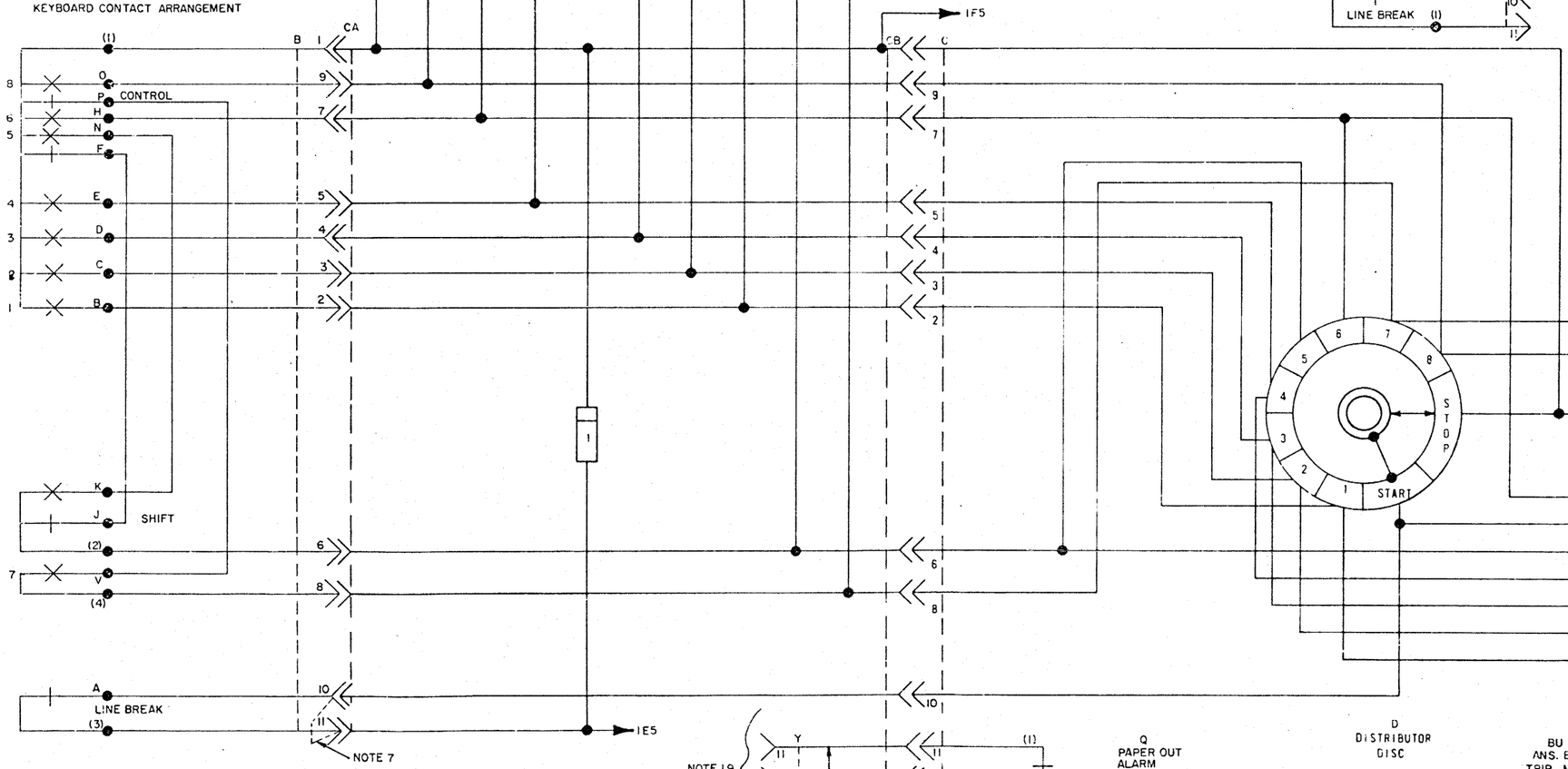


SPARES
FOR CUSTOMER'S
OPTION



KA AND KC
PARITY KEYBOARD CONTACT
ARRANGEMENT

A
KEYBOARD CONTACT ARRANGEMENT



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

SHEET 2

SCHEMATIC
WIRING DIAGRAM
FOR
MODEL 33
ASR, KSR, RO
DC SIGNAL LINE

APPROVALS	
D AND R	E OF M

E-NUMBER

PROD. NO. 6353WD

DATE 4-12-67

P.D. FILE NO. 2-30 152. 153AA

DRAWN JR	CHKD.
ENGD. AS	APPD.

TELETYPE
CORPORATION

6353WD

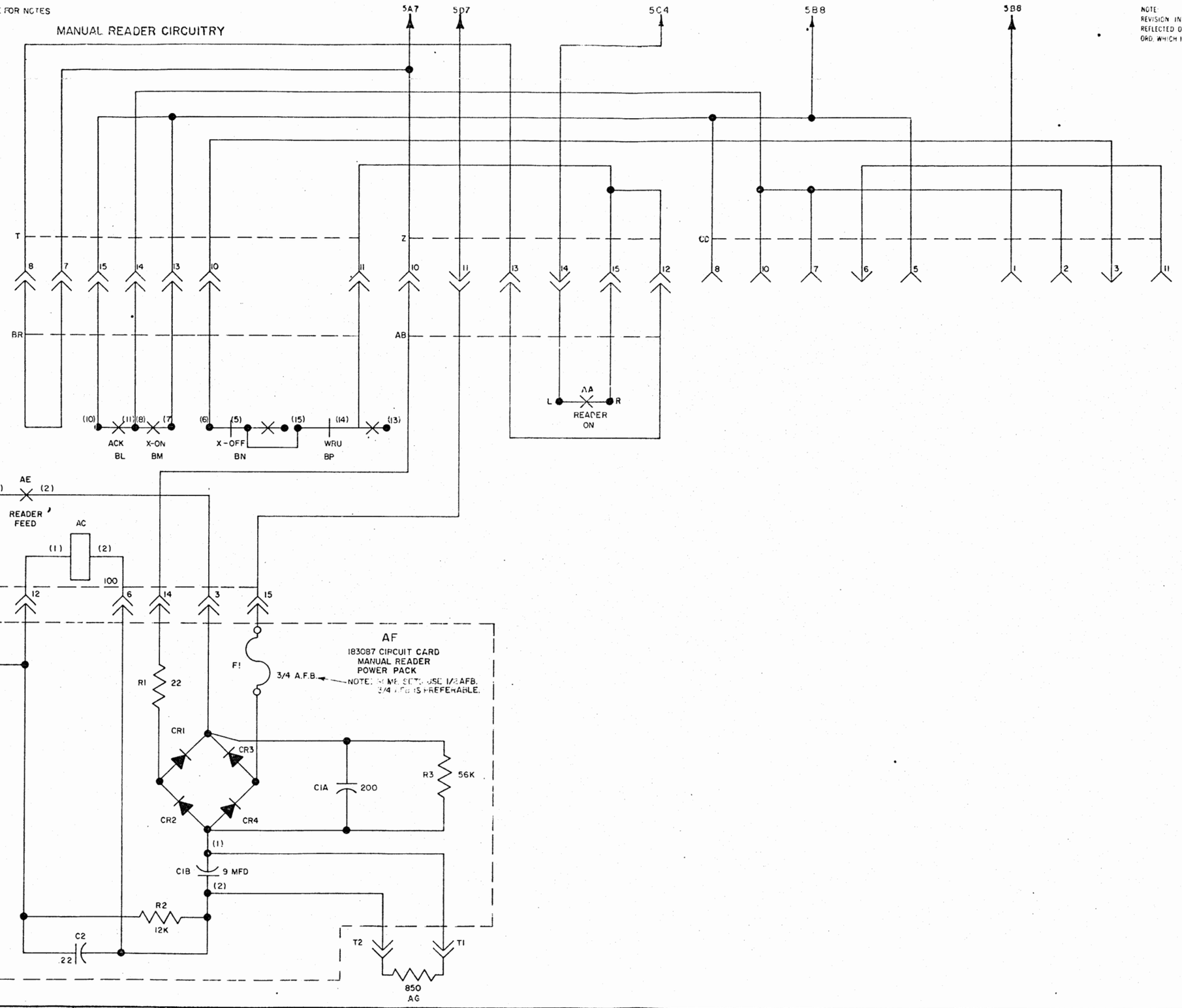
6353WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	11-20-63	79266
3	1-8-64	79934
4	4-9-64	81640
5	6-9-64	81773
6	11-27-64	84602
7	2-15-65	84599-1
8	3-15-65	85643
9	8-6-65	88293
10	10-15-65	88983
11	12-17-65	89007
12	1-13-66	88841-3
13	2-17-66	90357
14	3-9-66	89721-2
15	3-29-66	90790
16	5-2-66	90374
17	5-10-66	90386
18	10 12 66	90771
19	10-19-66	92131
20	12-28-66	93982
21	5-29-67	94003
22	8-23-67	94003-1D
23	1-24-69	96776

SEE SHEET ONE FOR NOTES

MANUAL READER CIRCUITRY



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

6353WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	11-20-63	79266
3	1-8-64	79934
4	4-9-64	81640
5	6-9-64	81773
6	11-27-64	84602
7	2-15-65	84599-1
8	3-15-65	85645
9	8-6-65	88293
10	10-15-65	88985
11	12-17-65	89900
12	1-13-66	80841-3
13	2-17-66	90357
14	3-9-66	89721-2
15	3-29-66	90730
16	5-2-66	90374
17	5-10-66	90380
18	10-12-66	90771
19	10-19-66	91181
20	12-28-66	91362
21	8-22-68	95993
22	9-17-69	99187
23	2-10-70	99187-2
24	3-31-70	170

SEE ISSUE CONTROL RECORD FOR COMPLETE LIST OF SHEETS COMPRISING THIS WD

SHEET 3 WDP

SCHEMATIC
WIRING DIAGRAM
FOR
MODEL 33
ASR, KSR, RO
DC SIGNAL LINE

APPROVALS

D AND R	E OF M

E-NUMBER

PROD. NO. 6353 WD

DATE 4-28-67

P.D. FILE NO. 2-30 152/153AA

DRAWN JER	CHKD.
ENGD. AS	APPD.

TELETYPE
CORPORATION

6353WD

SEE SHEET ONE FOR NOTES

AUTOMATIC READER CIRCUITRY

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

6353WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	11-20-63	79266
3	1-8-64	79934
4	4-9-64	81640
5	6-9-64	81773
6	11-27-64	84602
7	2-15-65	84599-1
8	3-15-65	85643
9	8-6-65	88293
10	10-15-65	88983
11	12-17-65	89007
12	1-13-66	88641-3
13	2-17-66	90357
14	3-9-66	89721-2
15	3-29-66	90790
16	5-2-66	90374
17	5-10-66	90380
18	10-12-66	90771
19	10-19-66	92181
20	12-28-66	92962
21	1-24-69	96776
22	10-1-69	99557
23	3-31-70	170
24	1-22-71	419
25	1-13-72	4350
26	8-1-72	6503RC

NOTE 26

NOTE 28

T

BR

Z

BB

CD

BE

5A7 5D7 5C4 5B8 5B8

ACK BL (10)(11) X-ON BM (8)(7)

EOT BS (1)(2)

ETX BT (16)(17)

X-OFF BN (6)(5)

WRU BP (15)(14)(13)

READER TIGHT TAPE T BA N

BA READER ON R L

BA READER TAPE OUT O U

P BA K TD OFF

BF READER FEED (1)(2)

BC (1)(2) 100

BD

TDC 3

TDC 2

TDC 1

F1 3/4 AMP SL-BL

R1 22

CR1 CR2 CR3 CR4

C1A 200

R3 56K

C1B 9 MFD

R2 12K

C2 .22

T2 T1

BH 850

R5 220, 1W

NOTE:-
WAS 470 OHM, 2W ON EARLIER PRODUCTION, EITHER VALUE SUITABLE IN THIS APPLICATION.

C3 20

CR6

TDC 21K

CR5 R4 10K

BG
183079 CIRCUIT CARD
AUTOMATIC READER POWER PACK

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

SHEET 1 ADP

SCHEMATIC
WIRING DIAGRAM
FOR
MODEL 33
ASR, KSR, RO
DC SIGNAL LINE

APPROVALS

D AND R	E OF M
LDm	

E-NUMBER

PROD. NO. 6353 WD

DATE 4-28-67

P.D. FILE NO. 2-30.152/153AA

DRAWN JER.	CHKD.
ENGD. AS.	APPD.

TELETYPE
CORPORATION

6353WD

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

6353WD

REVISIONS

ISSUE	DATE	AUTH. NO.
2	11-20-63	79266
3	1-8-64	79934
4	4-9-64	81640
5	6-9-64	81773
6	11-27-64	84602
7	2-15-65	84599-1
8	3-15-65	85643
9	8-6-65	88293
10	10-15-65	88983
11	12-17-65	89007
12	1-13-66	88841-3
13	2-17-66	90357
14	3-9-66	89721-2
15	3-29-66	90750
16	5-2-66	90374
17	5-10-66	90380
18	10-12-66	90771
19	10-19-66	92181
20	12-28-66	92962
21	12-21-67	95147-R0
22	1-24-69	96776
23	5-19-69	99243
24	10-1-69	99557
25	3-31-70	170
26	1-22-71	419

AM ELAPSED TIME INDICATOR NOTE 24

115V AC NOTE 14

1A3 34V AC

ZB MOTOR START RELAY

181870

88-108

182241 OR 182267

SL-BL 2-1/4 AMP

FUSE 3.0 AMP. SL-BL

FUSE 3/8 AMP SL-BL

W LINE LOCAL RELAY

373

CK FUSE NOTE 12

U NOTE 29

5F6 NOTE 25

3B4 OR 4B4

3A6 OR 4A6

3A7 OR 4A7

250

2000

1450

750

NOTE 20 AJ OR BJ

AKORBK

AJORBJ NOTE 20

NOTE 17 NOTE 27

NOTE 15 SL-L

NOTE 25

POWER SWITCH CF

LINE LOCAL

LINE

LOCAL

STRAP

ELAPSED TIME INDICATOR

1E4

CH

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

SHEET 5 W.D.P.

SCHEMATIC WIRING DIAGRAM FOR MODEL 33 ASR, KSR, RO DC SIGNAL LINE

APPROVALS	
D AND R	E OF M

E-NUMBER	
PROD. NO.	6353 WD
DATE	4-23-67
P.D. FILE NO.	2-30152/153AA
DRAWN JR	CHKD.
ENGD. AS	APPD.

TELETYPE CORPORATION

6353WD

NO.	NOTES
30.	THE 186543 CABLE ASSEMBLY IS USED ON UP848.
31.	THE WRU CONTACT IS NOT WIRED ON UP848
32.	THE 186554 CABLE ASSEMBLY IS USED ON UP848 AND UP856.
33.	THE 186556 ELAPSED TIMER ASSEMBLY AND THE 181891 SLEEVES ARE USED ON UP848 AND UP856.
34.	a. THE 182044 ELAPSED TIMER KIT IS USED ON MODELS 33TOH, TOP, AND IS FACTORY WIRED AS SHOWN FOR .020A OR .060A HALF DUPLEX OPERATION. b. FULL DUPLEX .060A. IF THIS OPTION IS DESIRED FOR USE WITH THE 182044 ELAPSED TIMER KIT (REFER NOTE 5). DISCONNECT TAPE AND TIE BACK THE YELLOW WIRE THAT IS PRESENTLY CONNECTED AT TERMINAL 9 AND RE-LOCATE THE TIMER LEAD CY-1-BL AND THE 176162 STRAP FROM TERMINAL 5 OF THE "X" TERMINAL STRIP TO TERMINAL 9. c. FULL DUPLEX .020A. IF THIS OPTION IS DESIRED FOR USE WITH THE 182044 ELAPSED TIMER KIT (REFER NOTES 4 & 5) DISCONNECT TAPE AND TIE BACK THE BLACK+GREEN WIRE THAT IS PRESENTLY CONNECTED AT TERMINAL 8 AND RE-LOCATE THE TIMER LEAD CY-1-BL AND THE 176162 STRAP FROM TERMINAL 5 OF THE "X" TERMINAL STRIP TO TERMINAL 8.
35.	279M-48VAC-110Ω 300M-115VAC-780Ω
36.	WHEN A SET CONTAINS A UP848 IT WILL BE NECESSARY TO REMOVE THE 182692 STRAP BETWEEN TERMINALS 7&8 AND REPLACE IT WITH THE 182693 STRAP BETWEEN TERMINALS 4&8.
37.	OLDER SETS NOT EQUIPPED WITH PEDESTAL GROUND STRAP.
38.	OLDER STYLE CONVENIENCE OUTLET MECHANICALLY GROUNDED.
39.	WIRING APPLIES TO UNITS WITH 186651 TRANS. ASSEM. (TRANS. PART NO. 186648)
40.	MANUFACTURING CHANGES MADE IN CABLE OF "PARITY" KEYBOARDS. EARLIER UNITS HAD 2 WIRES IN CERTAIN CONTACT BLOCK AND CONNECTOR PINS (KA-L,R,V,J,KB-1). KEYBOARD FUNCTION UNCHANGED. BOXES REPRESENT SPLICES INTERNAL TO CABLE. SPLICES NOT SHOWN ON ASSOCIATED SCHEMATIC DRAWINGS.
41.	WIRING LEGEND: DISTANT TERMINATING AREA UNITS WITH CABLE WIRING UNITS WITH CIRCUIT BOARD WIRING (WHERE USED) DISTANT TERMINATING TERMINAL WIRE COLOR (1,2 OR 3 COLORS) CC, DA-9-0

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	X	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X										
5	X	X	X	X	X	X	X	X	X	X								

SHEET NO.	ISSUE 20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1	X	X	—	29	29	29	30	30	30	31	32							
2	X	X	—	25	26	27	27	27	27	27	28							
3	X	X	—	26	26	26	26	27	28	28	29							
4	—	—	—	10	10	10	10	10	10	10	10							
5	—	—	—	11	11	11	11	11	11	11	11							
6	—	—	—	—	—	—	—	—	—	—	1							

6354 WD

REVISIONS APPLYING TO THIS CONTROL RECORD

ISSUE	DATE	AUTH. NO.
1	3-9-66	89721-2
2	3-29-66	90790
3	5-10-66	90880
4	6-29-66	90965
5	10-11-66	90771
6	10-19-66	92181
7	5-26-67	94003
8	8-7-67	94091-B
9	8-23-67	94003-1D
10	3-28-68	95607
11	4-11-68	95703
12	5-8-68	95523-4
13	5-21-68	95781
14	1-27-69	96776
15	4-16-69	99079
16	5-22-69	99243
17	9-9-69	99474
18	10-1-69	99557
19	10-16-69	99725
20	10-17-69	99716
21	2-18-70	99947-4
22	3-4-70	99947-1
23	12-9-70	2145
24	1-18-71	736
25	1-22-71	419
26	5-14-71	2787
27	1-14-72	5078
28	3-29-72	5078-1
29	5-22-72	6325-RC
30	11-21-73	8046

ISSUE CONTROL
SHEET 1 OF 1

ACTUAL
WIRING DIAGRAM
FOR
MODEL 33
ASR, KSR, RO
FOR
DC SIGNAL LINE

WD NUMBER	6354WD
DRAWN	CHKD.
ENGD. PR.S	APPD. N.A.J.

TELETYPE
CORPORATION

6354 WD

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-11-BK [20-B] NOTE 19 WIRE COLOR CODE ALSO REFER TO NOTE 41
2.	WIRE COLOR CODE: BK - BLACK BL - BLUE BR - BROWN S - SLATE Y - YELLOW G - GREEN O - ORANGE P - PURPLE R - RED W - WHITE
3.	FOR SCHEMATIC WIRING DIAGRAM SEE 6353WD.
4.	THE SET IS SHOWN WIRED FOR SIMPLEX .060 AMP. NEUTRAL SIGNAL LINE ON TERMINALS 6 AND 7 OF THE 151411 TERMINAL STRIP. FOR .020 AMP. NEUTRAL SIGNAL LINE MOVE THE P WIRE FROM TERMINAL 8 TO TERMINAL 9 OF THE 151411 TERMINAL STRIP. ALSO MOVE THE BL WIRE FROM TERMINAL 3 TO 4 ON THE POWER RESISTOR. (SEE NOTE 34)
5.	FOR FULL DUPLEX OPERATION CONNECT THE SEND SIGNAL LINE TO TERMINALS 4 & 3 OF THE 151411 TERMINAL STRIP. MOVE THE W-BL WIRE FROM TERMINAL 4 TO 5 AND THE BR-Y WIRE FROM TERMINAL 3 TO 5 ON THE 151411 TERMINAL STRIP. (SEE NOTE 34)
6.	TERMINAL DESIGNATIONS ENCLOSED IN PARENTHESIS ARE NOT MARKED ON THE COMPONENT.
7.	ASSOCIATED CABLE ASSEMBLY 181820.
8.	ON R.O. SETS SUBSTITUTE 181838 CABLE ASSEMBLY ON CONNECTOR "7".
9.	181827 CABLE ASSEMBLY USED ON 181820 CABLE ASSEMBLY.
10.	USE 181826 STRAPS ON ASSEMBLY.
11.	IF EITHER X-OFF OR WRU FUNCTION CONTACT IS NOT USED THE CONTACT SHOULD BE JUMPED OUT (UX801).
12.	181839 PLUG ASSEMBLY USED ON ASR SETS. (UX 800)
13.	THESE WIRES ARE IN THE DISTRIBUTOR CABLE AS SPARES.
14.	WIRING DESIGNATED "(NOTE 14)" APPLIES TO UNITS WITHOUT CK FUSE HOLDER.
15.	WIRING DESIGNATED "(NOTE 15)" APPLIES TO UNITS WITH CK FUSE HOLDER.
16.	FUSE VALUES ARE AS FOLLOWS: TRANSFORMER FUSE PART NO. 181879 1/2 AMP. SL-BL 117176 182657 8/10 AMP. SL-BL 162360
17.	WIRING SHOWN FOR KA,KB, & KC IS FOR EVEN PARITY KEYBOARDS.
18.	FURNISH 115V AC ± 10%, 60 Hz, EXCEPT 50 Hz ON 33TAB KSR, AND 33 TAC, TDK, TDM, TES, ASR SETS.
19.	WIRING STATUS: RECTANGULAR BOX INDICATES HISTORY OF WIRING CHANGES.. 00-B NOTE NO. B-DENOTES WIRING BEFORE AND A-WIRING AFTER THE CHANGE DESCRIBED BY THE DESIGNATED NOTE. ENTERED THE PRODUCT
20.	185731 STRAP AND FUSE ASSEMBLY NOT INCLUDED IN EARLY SETS. MOTOR FUSE VALUE FUSE PART NO. 182241 2.0 AMP. 138538 182267 1.8 AMP. 320346
21.	* DENOTES 20 GA. WIRE ** DENOTES 18 GA. WIRE
22.	WIRING REARRANGED TO AVOID CRIMPING TWO 20 GA. WIRES IN ONE TERMINAL.
23.	60 CYCLE READER TRIP COIL RESISTANCE IS 630Ω. 50/60 CYCLE READER TRIP COIL RESISTANCE CHANGED FROM 630Ω TO 780Ω FOR IMPROVED 50 CYCLE OPERATION.
24.	THE 186163 CABLE ASSEMBLY AND PAPER ALARM SWITCH ARE USED ON UP827 ONLY.
25.	MAY NOT BE FOUND ON EARLIER UNITS.
26.	THE 184156 CABLE ASSEMBLY AND PAPER ALARM SWITCH ARE USED ON UP837. WIRING DESIGNATIONS Q(1) - C-11-BK-Y Q(2) - C-12-RS Q(3) - C-13-Y-G
27.	THE ACK AND THE WRU CONTACTS ARE NOT USED ON UP 837
28.	FOR CUSTOMER USE REQUIRES 48 VAC POWER
29.	THE 186546 CABLE ASSEMBLY IS USED ON UP856.

NOTES CONTINUED ON ISSUE CONTROL SHEET

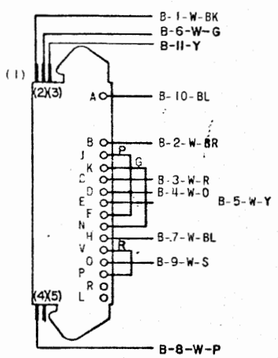
NOTE:
REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS PART OF THIS W.D.

6354 WD

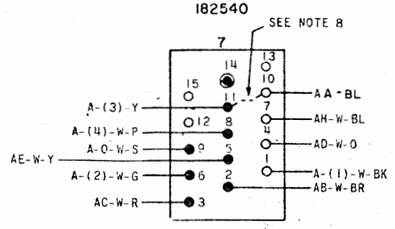
REVISIONS

ISSUE	DATE	AUTH. NO.
A 2	11-20-63	79266
B 3	1-8-64	79934
C 4	2-11-64	80310
D 5	3-15-64	81133
6	6-9-64	81772
7	11-27-64	84603
8	2-15-65	84569-1
9	3-15-65	85643
10	4-10-65	86373
11	8-6-65	88203
12	10-15-65	88983
13	12-17-65	89007
14	1-13-66	88841-3
15	3-9-66	89721-2
16	3-29-66	90790
17	5-10-66	90380
18	10-11-66	90771
19	10-19-66	92181
20	12-1-66	91561
21	5-26-67	94003
22	8-7-67	94091-8
23	8-23-67	94003-10
24	4-11-68	95703
25	5-20-68	95781
26	1-27-69	96776
27	4-16-69	99079
28	9-9-69	99474
29	10-1-69	99557
30	5-14-71	2787
31	5-22-72	6325-RC
32	11-21-73	8046

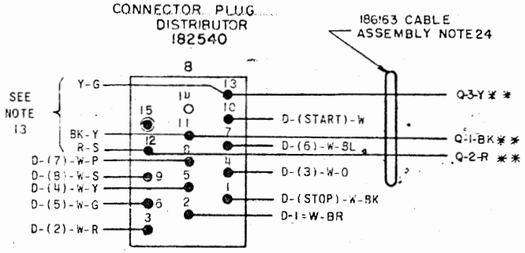
A
KEY BOARD CONTACT BLOCK



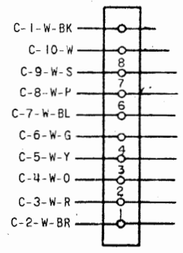
B
CONNECTOR PLUG KEYBOARD 182540



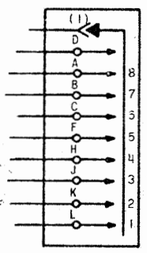
C
CONNECTOR PLUG DISTRIBUTOR 182540



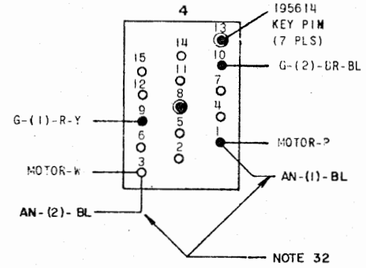
D
DISTRIBUTOR DISC



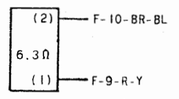
E
ANSWER BACK BLOCK



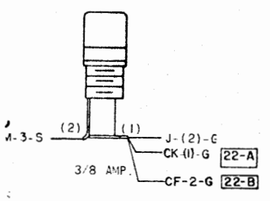
F
CONNECTOR PLUG (PRINTER) 182540



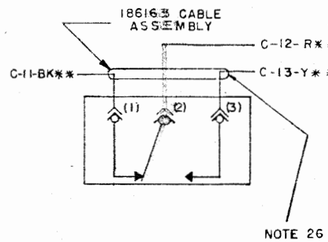
G
SELECTOR COIL 180715



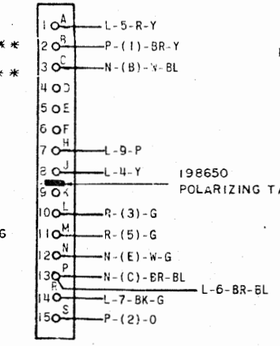
H
FUSE HOLDER 182661



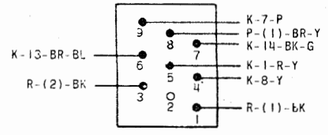
Q
PAPER ALARM SWITCH
NOTE 24



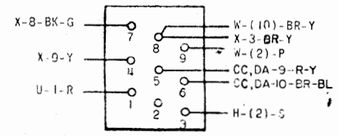
K
S.M.D CARD CONNECTOR - RECEPTACLE 181819



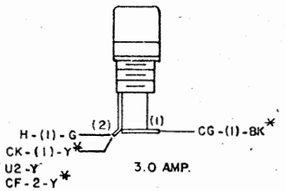
L
CONNECTOR PLUG SMD 182716



M
CONNECTOR RECEPTACLE (UCC6)(UCC 36) 182645



J
FUSE HOLDER 182661



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

SHEET 1 WDP

ACTUAL WIRING DIAGRAM FOR MODEL 33 ASR, KSR, RO FOR DC SIGNAL LINE

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

E-NUMBER	
PROD. NO.	6354WD
DATE	3-25-63
P.D. FILE NO.	2-30.152 153A4
DRAWN C.G.	CHKD.
ENGD. P.R.S.	APPD.

TELETYPE CORPORATION

6354WD

TC 434 (2-63)

SEE SHEET 1 FOR NOTES

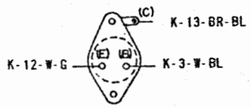
NOTE:
REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS A PART OF THIS DRAWING.

6354 WD

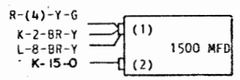
REVISIONS

ISSUE	DATE	AUTH. NO.
22	5-7-68	95523-4
23	5-21-69	99243
24	10-1-69	99557
25	3-4-70	99947-1
26	1-15-71	736
27	1-22-71	419
28	11-21-73	8046

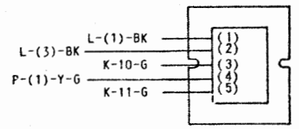
N
TRANSISTOR POWER
181675



P
CAPACITOR
182501

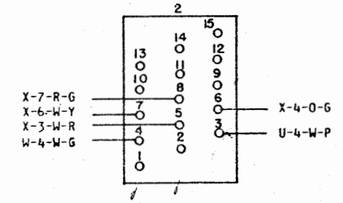


R
TRANSFORMER
337992

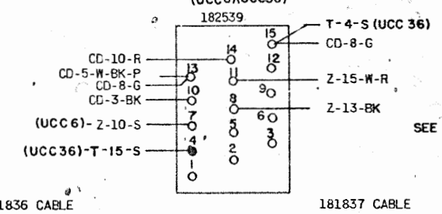


(SOME UNITS CONTAIN 184011, 182722 OR 330793 TRANSFORMER)

S
CONNECTOR RECEPTACLE
(UCC6)(UCC36)
182539



T
CONNECTOR RECEPTACLE
(UCC6)(UCC36)
182539



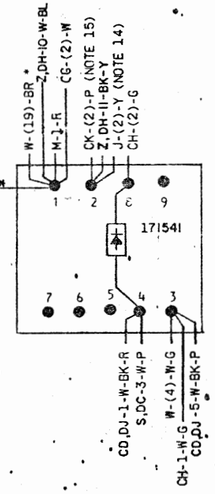
181836 CABLE ASSEMBLY

181837 CABLE ASSEMBLY

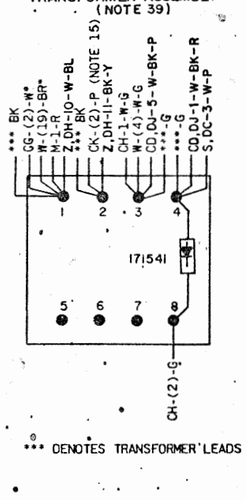
182781 CABLE ASSEMBLY

SEE NOTE 34 → CY-(2)-BL

181879 U TRANSFORMER

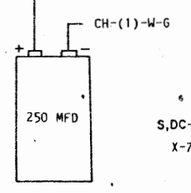


186651 U TRANSFORMER ASSEMBLY (NOTE 39)



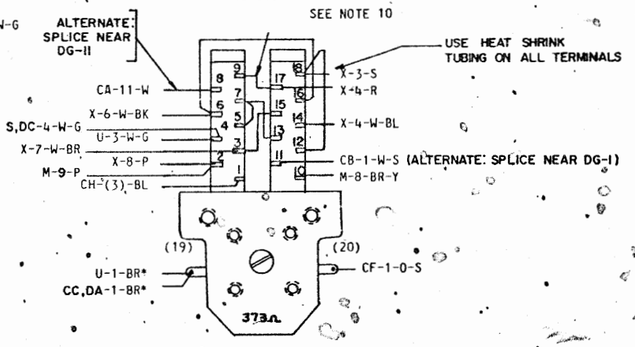
*** DENOTES TRANSFORMER LEADS

V
CAPACITOR
181814

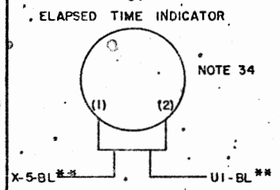


W
LINE RELAY
181810

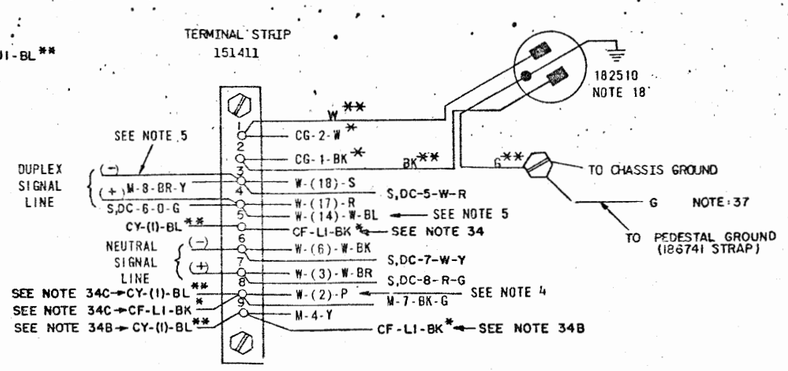
SEE NOTE 10



CY
ELAPSED TIME INDICATOR



X
TERMINAL STRIP
151411



Y
CONNECTOR RECEPTACLE
(UCC 36)(UCC6)
182539

186166 CABLE ASSEMBLY NOTE 25

CB-13-Y**

Z-9-W-S
Z-8-W-P
Z-7-W-BL
Z-6-W-G
Z-5-W-Y
Z-4-W-O
Z-3-W-R
Z-2-W-BR
Z-1-W-BK

Z
CONNECTOR RECEPTACLE
(UCC6)(UCC 36)
182539

186165 CABLE ASSEMBLY
186164 CABLE ASSEMBLY
NOTE 25
186837 ASSEMBLY

182781 CABLE ASSEMBLY

CB-12-R**
CB-11-BK**
(UCC 6)
T-8-BK
T-7-S
U-1-W-BL
Y-9-W-S
Y-8-W-P
Y-7-W-BL
Y-6-W-G
Y-5-W-Y
Y-4-W-O
Y-3-W-R
Y-2-W-BR
Y-1-W-BK

T-11-W-R
CC-12-W-O-BR
CK-(1)-BK-Y (NOTE 15)
U-2-BK-Y (NOTE 14)
CA-9-W-S
CA-8-W-P
CA-7-W-BL
CA-6-W-G
CA-5-W-Y
CA-4-W-O
CA-3-W-R
CA-2-W-BR
CA-1-W-BK

WDP

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

SHEET 2

ACTUAL
WIRING DIAGRAM
FOR
MODEL 33 - ASR, KSR, RO
FOR
DC SIGNAL LINE

APPROVALS	
D AND R	E OF M
HJK	

E-NUMBER	
PROD. NO.	6354WD
DATE	9-25-63
P.D. FILE NO.	2-30.152/153AA
DRAWN CG	CHKD.
ENGD. PRS	APPD.

TELETYPE CORPORATION

6354 WD

TC 434 (2-63)

SEE SHEET 1 FOR NOTES

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

6354WD

REVISIONS

ISSUE	DATE	AUTH. NO.
18	6-29-66	90965
19	10-11-66	90771
20	5-29-67	94003
21	8-21-67	94003-1D
22	5-22-69	99243
23	10-1-69	93557
24	2-18-70	99347-4
25	3-4-70	99947-1
26	12-9-70	2145
27	1-14-72	5078
28	3-29-72	5078-1
29	11-21-73	8046

CA
CONNECTOR RECEPTACLE
(UCC6)(UCC36)
182539

CB
CONNECTOR RECEPTACLE
(UCC6)(UCC36)
182539

182693 CABLE ASSEMBLY

186166 CABLE ASSEMBLY
186165 CABLE ASSEMBLY
186164 CABLE ASSEMBLY

NOTE 25

153631

Z-9-W-S
Z-8-W-P
Z-7-W-BL
Z-6-W-G
Z-5-W-Y
Z-4-W-O
Z-3-W-R
Z-2-W-BR
Z-1-W-BK

W-(8)-W
W-S
W-P
W-BL
W-G
W-Y
W-O
W-R
W-BR
W-BK

Y-13-Y **
Y-12-R **
Y-11-BK **
W-(11)-W-S

SEE NOTE 9

CC
CONNECTOR RECEPTACLE
(UCC36)(UCC6) 182539

153631

M-6-BR-BL
W-(19)-BR
Z-14-W-O-BR
M-5-R-Y
(UCC6)
CFL-1-O
BL
(UCC36)

CD
CONNECTOR RECEPTACLE
(UCC6)(UCC36)
182539

182693 CABLE ASSEMBLY

T-14-R
U-3-W-BK-P
U-4-W-BK-R
T-15-G
T-13-G
T-13-W-BK-P
T-10-BK

181836 CABLE ASSEMBLY

CF
POWER SWITCH
197081

178162 STRAP
X-5-BK*
CC,DA-3-O*
W-(20)-O-S
J-(2)-Y*
H-(1)-G
22-A
22-B

KB
CONNECTOR RECEPTACLE
(182540)
(NOTE 17)

195614 KEYPIN

KA-1-Y
KA-A-BL
KA-2-W-S
KA-4-W-P
KA-H-W-BL
KA-5-W-G
KA-E-W-Y
KA-D-W-O
KA-C-W-R
KA-B-W-BR

CG
CONVENIENCE OUTLET
301713
(OUTLET VIEWED FROM TERMINAL (WIRED) SIDE)

X-1-W *
U-1-W *
X-2-BK *
J-1-BK *
G
NOTE 38
TO CHASSIS GROUND

CH
POWER RESISTOR
181816

1450
750
2K
W-(1)-BL
V-(1)-G
U-3-W-G
U-8-G
V-(2)-W-G
SEE NOTE 4

CK
FUSE HOLDER
SEE NOTE 16

NOTE 15

U-2-P
Z,DH-11-BK-Y
H-(1)-G
J-(2)-Y*
22-A

KC
PARITY KEYBOARD
CONTACT BLOCK, LEFT
(NOTE 17)

R-G
W-BK
KA-6-O-G
KB-6-W-G
KC-B-O-G
KB-8-W-P
KB-7-W-BL
KB-5-W-Y
KB-4-W-O
KB-3-W-R
KB-2-W-BR
KB-10-BL
NOTE 40

KA
PARITY KEYBOARD
CONTACT BLOCK, RIGHT
(NOTE 17)

KB-11-Y
KB-9-W-S
W-BK
NOTE 40

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

WDP

ZF
182182 FUSEHOLDER
185734 2-1/4 AMP. SL-BL FUSE

ZB-4-BK 20-A
20-A TO PLUG 4 AREA "F"
185731 STRAP

ZA
MOTOR, 181870
SYNCHRONOUS.

ZD-(1)-Y
ZE-(1)-R
ZB-3-BL
181391 TERMINAL TO CHASSIS GROUND

ZB
RELAY
181877

ZC-(2)-BK
ZF-2-BK 20-A
TO PLUG 4 AREA "F" 20-B
0.140Ω
ZA-(3)-BL

ZC
CAPACITOR
181384
88-108MFD

ZE-(1)-BK
ZB-2-BK

ZD
TERMINAL COVERED WITH SUITABLE TUBING INSULATION SECURED AT BOTH ENDS*

ZA-(1)-Y
TO PLUG 4 AREA "F"

ZE
TERMINAL COVERED WITH SUITABLE TUBING INSULATION SECURED AT BOTH ENDS*

ZA-(2)-R
ZC-(1)-BK

ZA
MOTOR, 182241 (60 CYCLE) OR 182267 (50 CYCLE)
SYNCHRONOUS

ZC-(1)-Y
ZB-(2)-R
ZB-3-BL
GR
181391 TERMINAL TO CHASSIS GROUND

ZB
RELAY
181877

ZD-2-BK 20-A
ZA-(2)-R
0.140Ω
TO PLUG 4 AREA "F" 20-B
ZA-3-BL

ZD
182182 FUSEHOLDER
SL-BL FUSE
SEE NOTE 20

20-A TO PLUG 4 AREA "F"
ZB-4-BK 20-A
185731 STRAP

ZC
TERMINAL COVERED WITH SUITABLE TUBING INSULATION SECURED AT BOTH ENDS*

ZA-(1)-Y
TO PLUG 4 AREA "F"

SHEET 3

ACTUAL
WIRING DIAGRAM
FOR
MODEL 33
ASR, KSR, RO
FOR
DC SIGNAL LINE

APPROVALS	
D. AND R. H.J.K.	E OF M
E-NUMBER	
PROD. NO. 6354WD	
DATE 9-25-63	
P.D. FILE NO. 2-30.152/153AA	
DRAWN C.G.	CHK'D.
ENG'D. P.R.S.	APP'D.

TELETYPE CORPORATION

6354WD

MANUAL, READER
UX 800

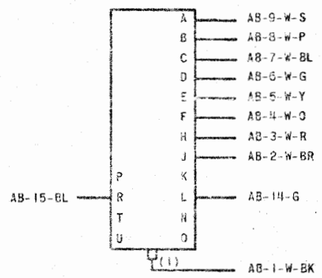
SEE SHEET 1 FOR NOTES

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

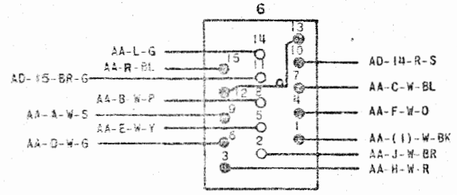
6354WD

REVISIONS		
ISSUE	DATE	AUTH. NO.
A 2	11-20-63	79266
B 3	RECORD ONLY	
C 4	3-16-64	81133
D 5	4-9-64	81640
6	11-27-64	84502
7	10-19-66	92181
8	1-27-69	96776
9	2-18-70	99947-4
10	12-9-70	2145

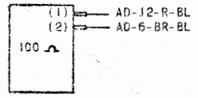
AA
READER CONTACT BLOCK



AB
CONNECTOR PLUG (PRINTER) 182540

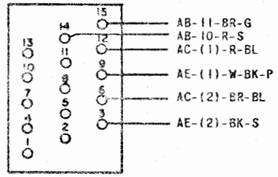


AC
READER FEED MAGNET

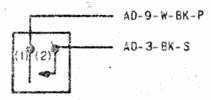


AD
CONNECTOR RECEPTACLE 182539

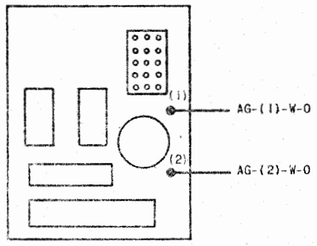
(TO READER POWER PACK)



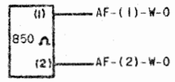
AE
READER FEED CONTACT



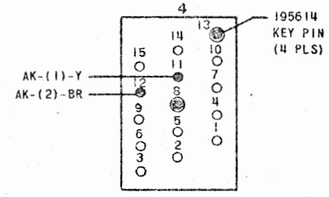
AF
BOARD ASSEMBLY READER POWER PACK 183087



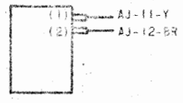
AG
RESISTOR, POWER 183081



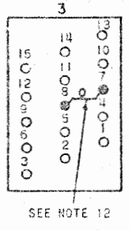
AJ
CONNECTOR PLUG (PRINTER) 182540



AK
READER TRIP MAGNET (SEE NOTE 23)

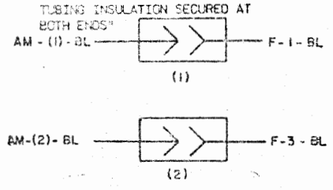


AL
CONNECTOR PLUG (PRINTER) 182540

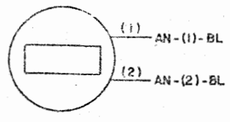


SEE NOTES 32 & 33

AN
TERMINAL COVERED WITH SUITABLE TUBING INSULATION SECURED AT BOTH ENDS"



AM
ELAPSED TIME INDICATOR 186556



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

SHEET 4

ACTUAL WIRING DIAGRAM FOR MODEL 33 ASR, KSR, RO FOR DC SIGNAL LINE

APPROVALS	
D AND R H.J.K.	E OF M
E-NUMBER	
PROD. NO. 6354WD	
DATE 9-25-63	
P.D. FILE NO. 2-30.152/153AB	
DRAWN C.G.	CHKD.
ENGD. P.R.S.	APPD.

TELETYPE CORPORATION

6354WD

SEE SHEET 1 FOR NOTES

AUTOMATIC READER
UX 801

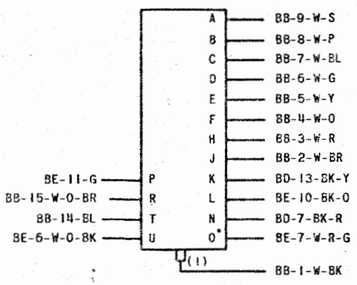
NOTE:
REVISION INFORMATION MUST ALSO BE REFLECTED ON THE ISSUE CONTROL RECORD, WHICH IS PART OF THIS W.D.

6354WD

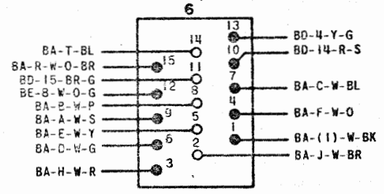
REVISIONS

ISSUE	DATE	AUTH. NO.
A 2	11-20-63	79286
B 3	RECORD ONLY	
C 4	3-16-64	81133
D 5	4-9-64	81640
6	11-27-64	84602
7	10-19-66	92181
8	4-11-68	95703
9	5-20-68	95781
10	1-23-69	96775
11	10-1-69	99557

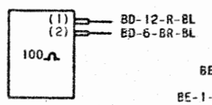
BA
READER CONTACT BLOCK



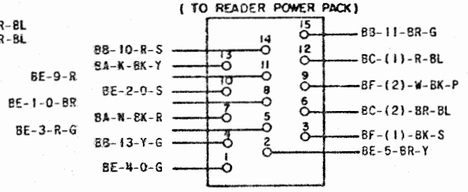
BB
CONNECTOR PLUG (PRINTER) 182540



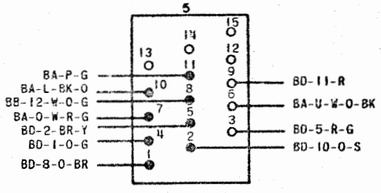
BC
READER FEED MAGNET



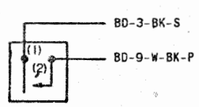
BD
CONNECTOR RECEPTACLE 182539



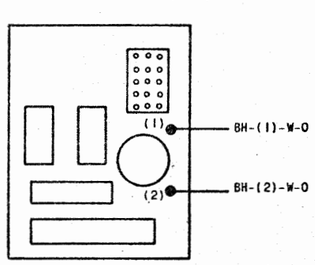
BE
CONNECTOR PLUG 182540



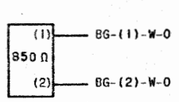
BF
READER FEED CONTACT 182137



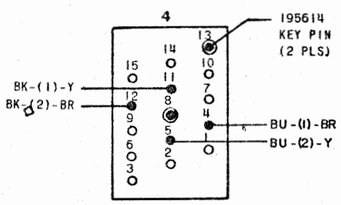
BG
BOARD ASSEMBLY READER POWER PACK 183079



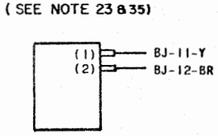
BH
RESISTOR POWER 183081



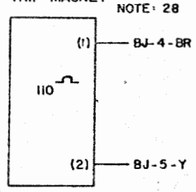
BJ
CONNECTOR PLUG (PRINTER) 182540



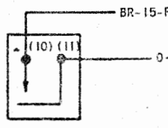
BK
READER TRIP MAGNET (SEE NOTE 23 & 35)



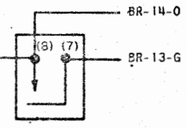
BU
ANS. BACK TRIP MAGNET NOTE 28



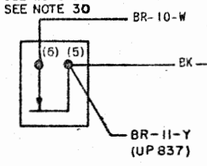
BL
ACK CONTACT SEE NOTE 27



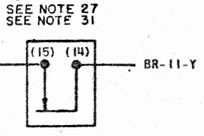
BM
X-ON CONTACT SEE NOTE 30



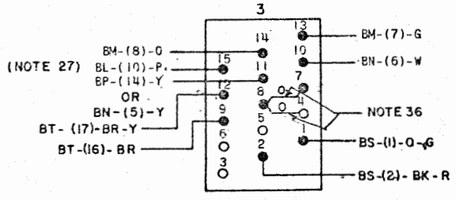
BN
X-OFF CONTACT SEE NOTE 11 SEE NOTE 30



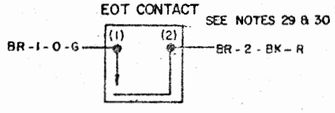
BP
WRU CONTACT SEE NOTE 11 SEE NOTE 27 SEE NOTE 31



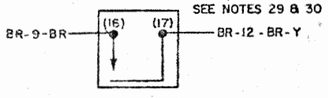
BR
CONNECTOR PLUG (PRINTER) 182540



BS
EOT CONTACT SEE NOTES 29 & 30



BT
ETX CONTACT SEE NOTES 29 & 30



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

SHEET 5 WDP

ACTUAL WIRING DIAGRAM FOR MODEL 33 ASR, KSR, RO DC SIGNAL LINE

APPROVALS

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

E-NUMBER

PROD. NO. 6354WD

DATE 9-25-63

P.D. FILE NO. 2-30.152/153AA

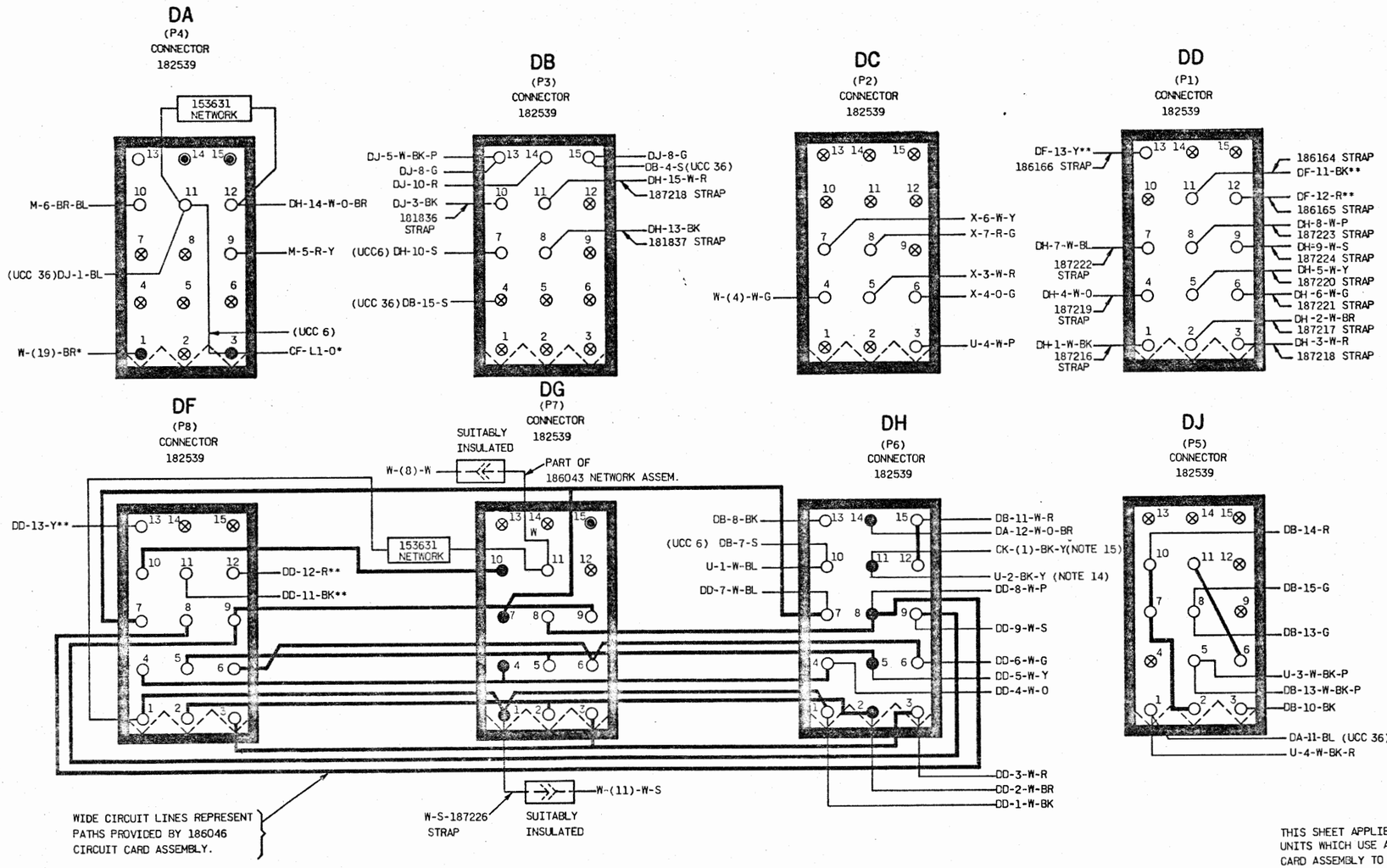
DRAWN C.G.	CHK'D.
ENGD. P.R.S.	APP'D.

TELETYPE CORPORATION

6354WD

REVISIONS		
ISSUE	DATE	AUTH. NO.
1	11-21-73	8046

UNITS WITH CIRCUIT BOARD WIRING



	CONNECTOR	DESIGNATION
	W/186046 CIRCUIT CARD	W/O 186046 CIRCUIT CARD
P1	DD	Y
P2	DC	S
P3	DB	T
P4	DA	CC
P5	DJ	CD
P6	DH	Z
P7	DG	CA
P8	DF	CB

THIS SHEET APPLIES TO LATER VERSION UNITS WHICH USE A 186046 CIRCUIT CARD ASSEMBLY TO PROVIDE PART OF WIRING.

WDP

SHEET 6

ACTUAL
WIRING DIAGRAM
FOR
MODEL 33-ASR, KSR, RO
FOR
DC SIGNAL LINE

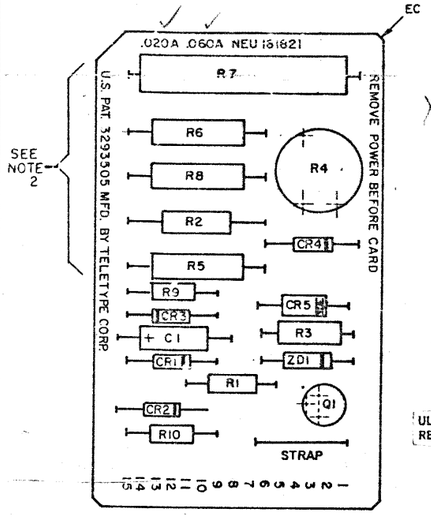
APPROVALS		
PROJ. SUPV.	PROJ. DIR.	MFG. REL. COMPL.
ENGR. ACP.	DSGNR.	
DRN. DWJ.	DATE	
R&D FILE 2-30.152/153AA		
S-NUMBER 60773		

TELETYPE

6354WD (6)

TC 434 (3-69)

NO	NOTES
1	MASTER ARTWORK NO. 181821AW FOR PRINTING SCREEN IS AVAILABLE IN R&D OFFICE SERVICE SECTION.
2	RAISE R2, 5, 6, 7, 8 - 1/32 TO 1/16" ABOVE CIRCUIT CARD.
3	TO FACILITATE MANUFACTURE THE COMPONENT LAYOUT WAS CHANGED INCLUDING R4 AND CR-5 WHICH WAS CHANGED FROM VERTICAL MOUNTING AND THE ADDITION OF 336470 OR RM-39550 STRAP.
4.	CR1, CR2 - 182520 (1N3193) AND CR3, CR4 - 181619 (1N482) WERE REPLACED FOR STANDARDIZATION.



UL RECOGNITION SYMBOL REQUIRED PER MR 2001.

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.

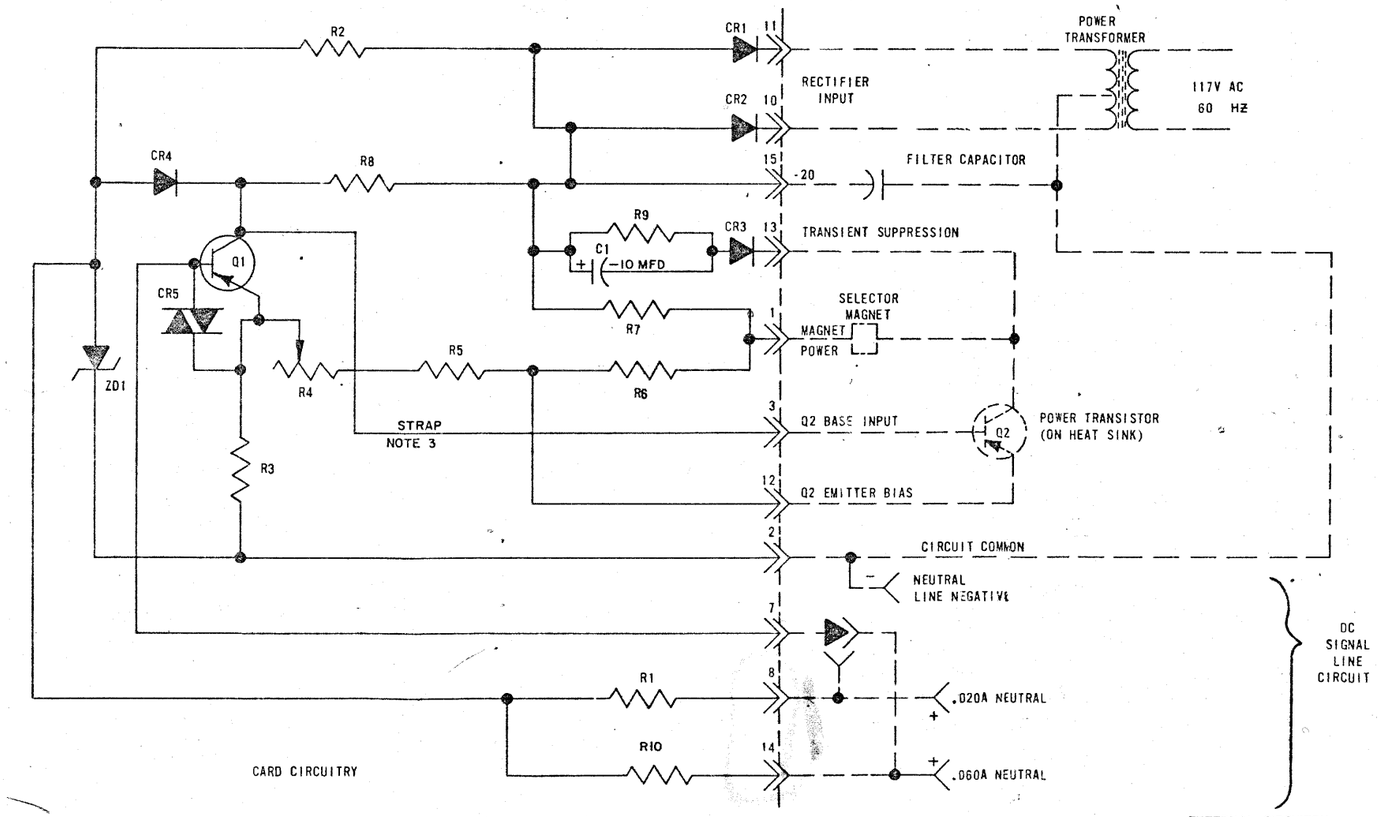
THE DIRECT CURRENT SIGNAL LINE CIRCUIT IS CONNECTED THROUGH TERMINALS 14 OR 8 AND 2 DEPENDING ON LINE CURRENT. TERMINAL 1 STRAPPED EXTERNALLY TO TERMINAL 14 OR 8, DEPENDING ON LINE CURRENT.

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 OR R10. 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	1	RESISTOR 420 OHMS 1.2W	.010 AMP. SWITCHING - FOR .020A NEUTRAL LINE
R10	182707	1	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 4 W	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	171541	2	DIODE (NOTE 4)	POWER RECTIFIER
CR2			SAME AS CR1	POWER RECTIFIER
CR3	197464	2	DIODE (NOTE 4)	COLLECTOR TRANSIENT LIMITING
CR4			SAME AS CR3	VOLTAGE CLAMPING
CR5	178944	1	VARISTOR 100A	INPUT PROTECTION
ZD1	182774	1	DIODE, ZENER 4.7V 5% 1W	REFERENCE
C1	182628	1	CAPACITOR .10 MFD 25W VDC	COLLECTOR TRANSIENT LIMITING
Q1	181671	1	TRANSISTOR, HIGH GAIN	INPUT SWITCH
	RM39550	1	STRAP	NOTE 3
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
6	4-2-68	95450
7	7-5-68	95948
8	11-6-68	96521
9	12-20-68	98266
10	2-3-71	5320
11	3-29-72	236
12	3-29-72	236-1

REVISIONS			
AUTH. NO.		10728	11701
CONFORMANCE DATE			
DRAWING ISSUE	13	14	
ASSOCIATED NOTE	4	4	
MFG. VERSION	8	8	
CUSTOMER IDENTIFICATION ISSUE	12	12	

WDP

APPROVALS

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

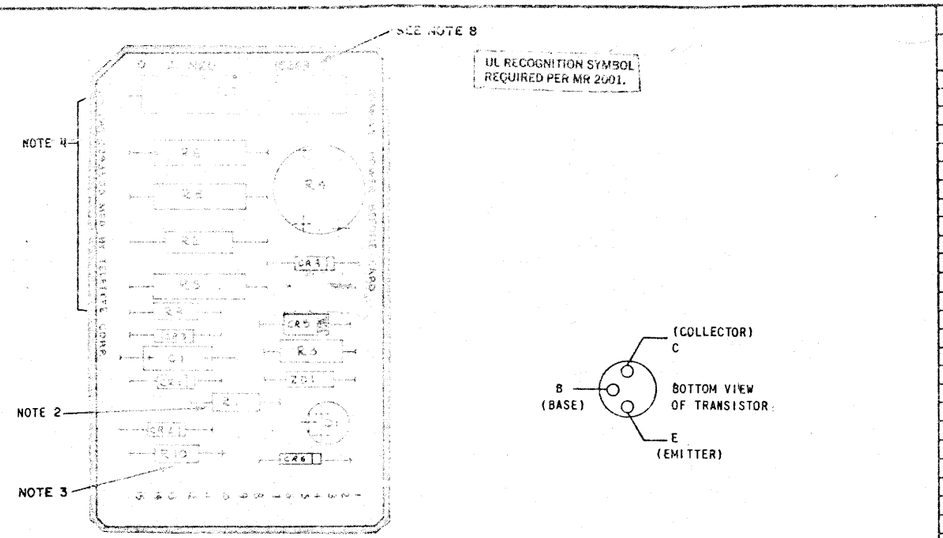
E-NUMBER	
PROD NO 181821	
DATE 7-20-63 4-28-67	
R&D FILE 2-30.152, 153AA	
DRAWN JER-CG	CHKD. NAJ
ENGD. AS-PBS	APPD. JW

TELETYPE CORPORATION

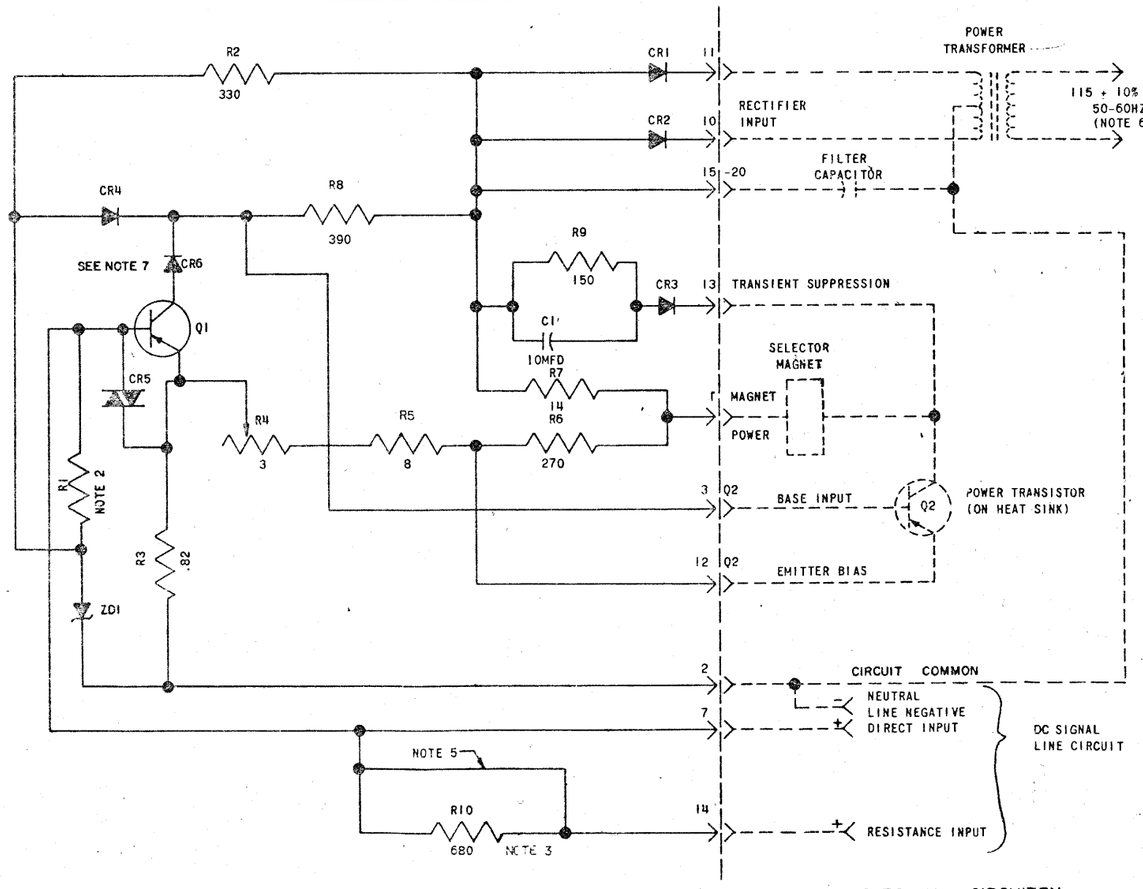
181821

TC 637(1-67)

NO.	NOTES
1.	MASTER ARTWORK NO.'S 182630AW, 182631AW, 182632AW. PRINTING SCREENS ARE AVAILABLE ON A SERVICE EXCHANGE BASIS.
2.	THE SELECTION OF THIS RESISTOR DEPENDS ON THE APPLICATION IN WHICH THE DRIVER IS TO BE USED.
3.	R10 IS USED ON 182630 ASSEMBLY ONLY.
4.	RAISE R2,5,6,7,8 1/32 TO 1/16 ABOVE CIRCUIT CARD.
5.	THE 336470 STRAP IS USED ON THE 182631 AND 182632 ASSEMBLIES
6.	SEE 5983WD FOR APPROPRIATE POWER INPUT.
7.	DIODE CR6 WAS ADDED TO PROTECT Q1 FROM DESTRUCTION BY ACCIDENTAL GROUNDING OF THE COLLECTOR OF Q2. 181653 DIODE WAS USED FIRST BUT CHANGED TO 199442 TO REDUCE "LEAKAGE" CURRENT DURING SPACING PULSES.
8	.020 A NEU 182630 .060 A NEU 182631 .040A NEU 182632
9.	TO FACILITATE MANUFACTURE THE COMPONENT LAYOUT WAS CHANGED INCLUDING R-1 AND CR-5 WHICH WAS CHANGED FROM VERTICAL MOUNTING.
10.	CR1,CR2-182520(IN3193) AND CR3,CR4-181619 (IN482) WERE REPLACED FOR STANDARDIZATION



CONSTANT CURRENT .500 SELECTOR MAGNET DRIVER



CIRCUIT CARD ASSEMBLY

REF. DESIG.	TELETYPE PART NO.	TOTAL QTY	NAME & DESIGNATION	LOCATING FUNCTION	USED ON	FOR
R1	182779	SELECT ONE SEE NOTE 2	RESISTOR 420 OHMS 1/2W	.010 AMP. SWITCHING	182630	.020A NEUTRAL LINE
"	182797		RESISTOR 135 OHMS 1/2W	.030 AMP. SWITCHING	182631	.060A " "
"	182180		RESISTOR 200 OHMS 1/2W	.020 AMP. SWITCHING	182632	.040A " "
R10	182777	1	RESISTOR 680 OHMS 1/2W	INPUT CURRENT LIMITING	182630	DATA SET OPERATION
R10	336470	1	STRAP	.030 AMP. SWITCHING	182631	.060A NEUTRAL LINE
R10	336470	1	STRAP	.020 AMP. SWITCHING	182632	.040A " "
R2	181669	1	RESISTOR 330 OHMS 2.1/2W	ZENER CURRENT LIMITING		
R3	182778	1	RESISTOR 0.82 OHM 1/2W	COMMON EMITTER BIAS		
R4	182773	1	RHEOSTAT 3 OHMS 2.1/2W	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 4 W	Q1 COLLECTOR LOAD		
R9	182776	1	RESISTOR 150 OHMS 1/2W	Q2 COLLECTOR LOAD TRANSIENT LIMITING.		
CR1	171541	2	DIODE (NOTE 10)	POWER RECTIFIER		
CR2			SAME AS CR1	POWER RECTIFIER		
CR3	197464	2	DIODE (NOTE 10)	COLLECTOR TRANSIENT LIMITING		
CR4			SAME AS CR3	VOLTAGE CLAMPING		
CR5	178844	1	VARISTOR 100A	INPUT PROTECTION		
CR6	199442	1	DIODE, 1N270	SEE NOTE 7		
ZD1	182774	1	DIODE, ZENER 4.7V 5% 1W.	REFERENCE		
C1	182628	1	CAPACITOR, 10 MFD, 25WVDC	COLLECTOR TRANSIENT LIMITING		
Q1	181671	1	TRANSISTOR, HIGH GAIN	INPUT SWITCH		
EC	182775	1	CIRCUIT BOARD, ETCHED			

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 7 AND 2. WITH AN ALTERNATE CONNECTION THROUGH R10 AT TERMINAL 14 PROVIDING A CURRENT LIMITING FUNCTION.

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 CIRCUITS OF TRANSISTORS Q1 AND Q2.

182630-35

REVISIONS

ISSUE	DATE	AUTH. NO
2	8-8-62	30-1259
3	11-27-62	30-5368
4	12-17-62	30-5445
5	1-23-63	30-5560
6	3-20-64	81340
7	5-21-64	81761
8	4-26-65	86507
9	6-10-65	86507-2
10	9-19-66	88816
11	10-25-66	88816-1
12	12-14-66	92190
13	2-7-67	93101
14	5-3-67	93502
15	6-20-68	19358-R
16	7-9-68	95948
17	12-20-68	98266
18	8-10-70	2316
19	3-3-71	2320
20	6-9-71	8816-1

REVISIONS

CUSTOMER IDENTIFICATION ISSUE	MFG VERSION	ASSOCIATED NOTE	DRAWING ISSUE	CONFORMANCE DATE	AUTH. NO.
20	B	10	21		10728

ADP

APPROVALS

D AND R	E OF M
HJK	

E-NUMBER	
PROD. NO. 182630-35	
DATE 6-2-62	
P.D. FILE NO. 30-158AAA	
DRAWN E.R. REG	CHKD.
ENGD. R.J.M.	APPD.

TELETYPE CORPORATION

182630-35

REF. DESIG.	PART NO. REQ	QTY	DESCRIPTION	FUNCTION
R1	183083	1	RESISTOR, 22 OHM	SURGE LIMITER
R2	183082	1	RESISTOR, 12,000 OHM	ARC SUPPRESSOR
R3	118198	1	RESISTOR, 56,000 OHM	BLEEDER
R4	118180	1	RESISTOR, 10,000 OHM	ARC SUPPRESSOR
R5	144464	1	RESISTOR,220 OHM (NOTE 4)	VOLTAGE DROPPING
C1	183078	1	CAPACITOR, DUAL SECTION	
			A - 200 MFD, 200V DC	POWER SUPPLY FILTER
			B - 9 MFD, 200V DC	SURGE SOURCE
C2	183084	1	CAPACITOR, .22 MFD	ARC SUPPRESSOR
C3	183121	1	CAPACITOR, 15 MFD	FILTER
CR1	312341	6	DIODE, 400V (NOTE 5)	POWER SUPPLY RECTIFIER
CR2			SAME AS CR1	POWER SUPPLY RECTIFIER
CR3			SAME AS CR1	POWER SUPPLY RECTIFIER
CR4			SAME AS CR1	POWER SUPPLY RECTIFIER
CR5			SAME AS CR1	ARC SUPPRESSOR
CR6			SAME AS CR1	RECTIFIER
F1	143630	1	FUSE, 3/4 A.F.B.	POWER SUPPLY PROTECTION (SEE NOTE 2)
FC	171595	2	FUSE CLIP	
T1	183085	2	TERMINAL WITH WIRE LEAD	
T2			SAME AS T1	
J1	182540	1	CONTACT BLOCK, 15 POINT	
E	182641	15	TERMINAL, MALE P.C.	
EC	183137	1	ETCHED CIRCUIT BOARD	
RYL.1	183088	1	RELAY, 2, 100 OHM	AUTOMATIC READER CONTROL
	151637	2	SCREW, 4-40 FIL. HEAD	
	110743	2	LOCKWASHER, 4-40	
	151880	2	NUT	

SIMILAR TO:

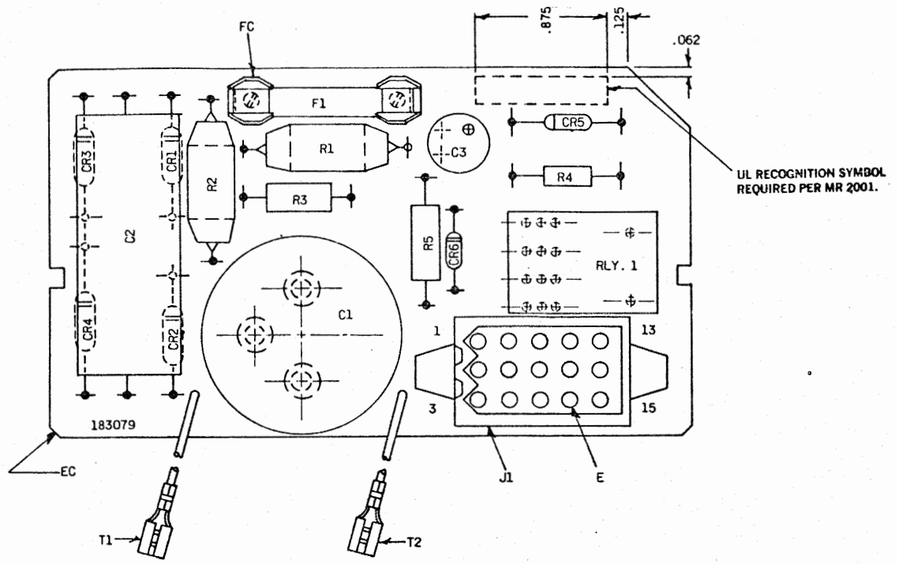
NO.	NOTES
1.	MASTER ARTWORK NO.: 183079AW FOR PRINTED SCREENING AVAILABLE IN R&D OFFICE SERVICE SECTION.
2.	SOME PREVIOUS CIRCUIT CARD ASSEM. USED 1/2 AFB. 3/4 AFB. IS PREFERABLE.
3.	COMPONENT LAYOUT WAS CHANGED TO ALLOW FOR NEW STYLE CAPACITOR WITH VENT.
4.	R5 CHANGED FROM 470 OHM 2W, TO 220 OHM, 1 WATT ON ASSEM. LATER THAN ISSUE 12. CARD ASSEM. ISSUE 13 AND HIGHER ARE SUITABLE FOR ALL APPLICATIONS. CARD ASSEM. LOWER THAN ISSUE 13 PROVIDE LESS OPERATING MARGIN WHEN USED IN MODEL 38 SETS OR IN MODEL 33 SETS WITH INTEGRAL DATA SETS.
5.	FOR STANDARDARDIZATION CR1-6 WERE CHANGED FROM 181654.

CIRCUIT DESCRIPTION

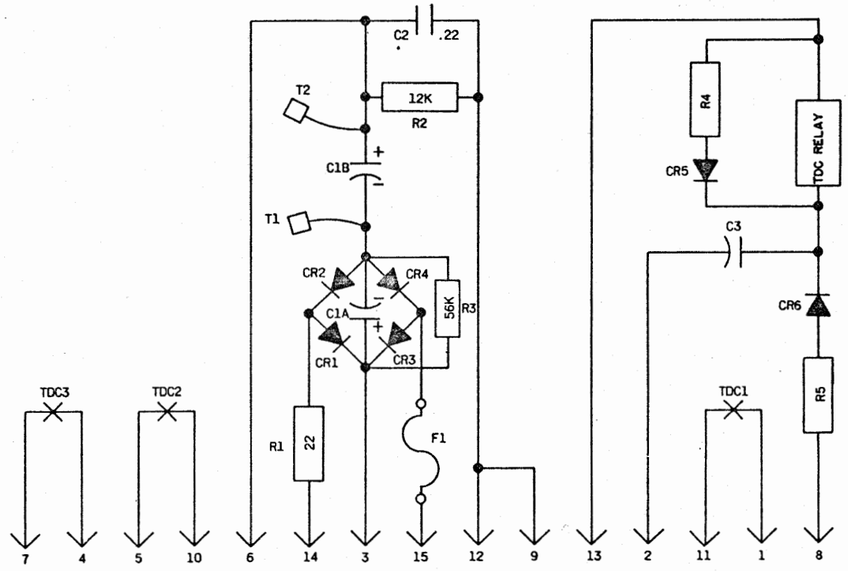
THIS POWER PACK CONSISTS OF A 150 VOLT POWER SUPPLY OPERATING DIRECTLY FROM THE 117V AC LINE, A WAVE SHAPING NETWORK, AND AN ARC SUPPRESSOR. IT IS DESIGNED TO OPERATE WITH AN INDUCTIVE LOAD OF APPROXIMATELY 100 OHMS BETWEEN TERMINALS 6 AND 12, WITH A 850 OHM, 40 WATT RESISTOR CONNECTED BETWEEN T1 AND T2.

TD FEED SWITCH IS CONNECTED BETWEEN TERMINALS 9 AND 3. THE UNIT IS DESIGNED TO DRIVE THE READER MAGNET IN THE MODEL 33 ASR SET.

TDC RELAY CONTACTS ARE USED FOR AUTOMATIC READER CONTROL. 48V AC INPUT IS RECTIFIED THRU R5 AND CR6 BEFORE REACHING TDC RELAY. CAPACITOR C3 FILTERS TO GROUND THRU COMMON POINT OF TDC1.



POWER PACK ASSEMBLY W/RELAY



REVISIONS		
ISSUE	DATE	AUTH NO.
13	1-13-72	4350

REVISIONS					
CUSTOMER IDENTIFICATION ISS/G VERSION	ASSOCIATED NOTE	DRAWING ISSUE	CONFORMANCE DATE	AUTH. NO.
13	8	5	14		12174

CIRCUIT CARD
EC 183079
POWER PACK ASSEMBLY
W/RELAY

APPROVALS		
PROJ. SUPV.	PROJ. DIR.	MFG. REL. COMPL.
ENGR. T.Y.	DSGNR.	
DRN. F.R.	DATE 8-4-72	
E-NUMBER		
SD-CD NO.		
R&D FILE 1.47.60.AA		

TELETYPE

183079

ALL DIMENSIONS ± UNLESS OTHERWISE SPECIFIED

CIRCUIT CARD ASSEMBLY

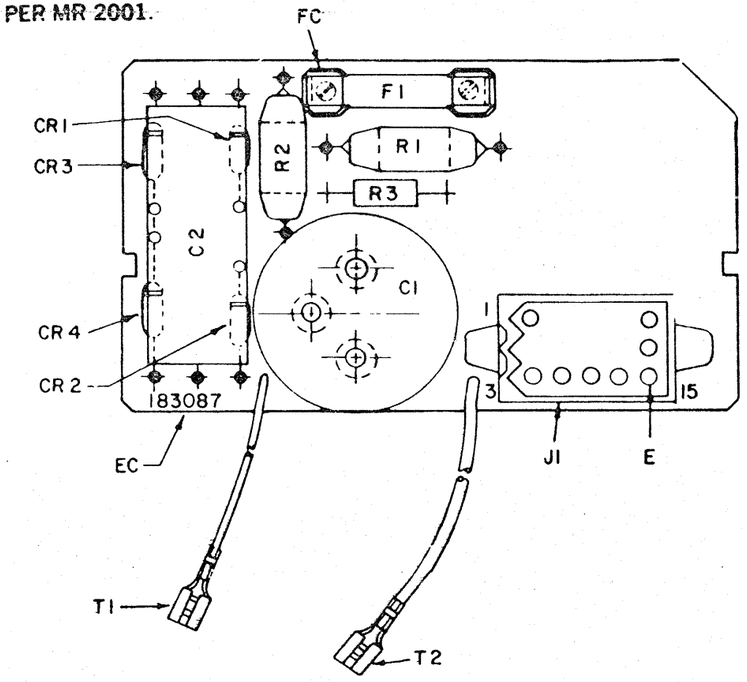
POWER PACK ASSEMBLY

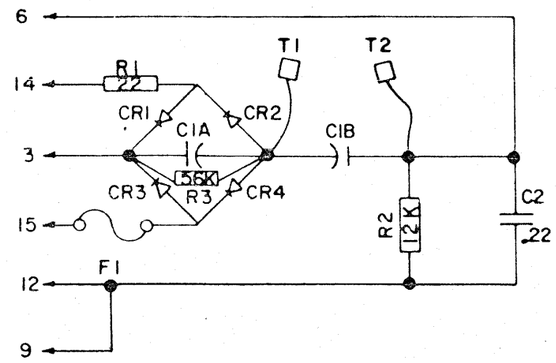
NO B/M

183087

UL RECOGNITION SYMBOL REQUIRED PER MR 2001.

NO.	NOTES
1	MASTER ARTWORK 183087AW FOR PRINTED SCREENING AVAILABLE IN R&D OFFICE SERVICE SECTION.
2	SOME PREVIOUS CIRCUIT CARD ASSEMBLY USED 1/2 AFB 3/4 AFB IS PREFERABLE.
3	ON ISSUE 10, BOARD NUMBER WAS 183080.
4.	FOR STANDARDIZATION CR1-4 WERE CHANGED FROM 181-654.





PARTS REQ	NO REQ	USED ON	NO REQ
SEE BELOW		182134	1

REVISIONS

ISSUE NO	DATE	AUTHOR NO
2	8-20-62	30-1276
3	9-26-62	30-1351
4	2-20-63	30-5537
5	6-26-63	76290
6	9-19-66	88816
7	11-25-66	88816-1
8	8-22-68	95993
9	9-17-69	99187
10	2-10-70	99187-2
11	3-3-71	2320
12	-20-72	564-2
13	12-18-72	6803

CUSTOMER I.D. ISSUE	MFG. VERSION	ASSOCIATED NOTE	DRAWING ISSUE	CONFORMANCE DATE	AUTH NO.
13	B	4	14		12174

WDP

DESIGNATION	TELETYPE PART NO	TOTAL QTY	DESCRIPTION	FUNCTION
R1	183083	1	RESISTOR, 22 OHM	SURGE LIMITER
R2	183082	1	RESISTOR, 12,000 OHM	ARC SUPRESSOR
C1	183078	1	CAPACITOR, DUAL SELECTION	
			A-200 M.F.D. 200 V.D.C	POWER SUPPLY FILTER
			B-9 M.F.D. 200 V.D.C.	SURGE SOURCE
C2	183084	1	CAPACITOR, .22 M.F.D.	ARC SUPRESSOR
CR1	312341	4	DIODE, 400 V. (NOTE 4)	POWER SUPPLY RECTIFIER
CR2			" "	" " "
CR3			" "	" " "
CR4			" "	" " "
F1	143630	1	FUSE, 3/4 A. F.B.	POWER SUPPLY PROTECTION SEE NOTE 3.
FC	171595	2	FUSE CLIP	
T1	183085	2	TERMINAL WITH WIRE LEAD	
T2			" " " "	
J1	182540	1	CONTACT BLOCK, 15 POINT	
E	182641	8	TERMINALS MALE P.C.	
EC	183137	1	ETCHED CIRCUIT BOARD	NOTE 3
	151637	2	SCREW 4-40 FIL HEAD	
	110743	2	LOCK WASHER # 4	
	151880	2	NUT	
R3	118198	1	RESISTOR, 56,000 OHM	BLEEDER

THIS POWER PACK CONSISTS OF A 150 VOLT POWER SUPPLY OPERATING DIRECTLY FROM THE 117 VAC LINE. A WAVE SHAPING NETWORK AND AN ARC SUPRESSOR IT IS DESIGNED TO OPERATE WITH AN INDUCTIVE LOAD OF APPROXIMATELY 100 OHMS BETWEEN TERMINALS 6 AND 12. WITH A 850 OHM 40 WATT RESISTOR CONNECTED BETWEEN T1 AND T2.

AN ON-OFF CONTROL SWITCH IS CONNECTED BETWEEN TERMINALS 9 AND 3. THE UNIT IS DESIGNED TO DRIVE THE READER MAGNET IN THE MODEL 32 AND 33 ASR.

APPROVALS

D AND R	E OF M

E. NUMBER

PROD NO 183087

SCALE: 1/1

STOCK SPECIFICATION

SIZE	KIND	SHAPE	TEMPER

DRAWN	P.O. FILE NO	DATE
T.R.	1-47.60 AA	6-7-62

DESIGNED	ENGINEER	CHECKED	APPROVED
	J.A.J.	AAH	

TELETYPE CORPORATION

183087

ET 108164
TC 257 (6-54)