DUPLICATE

| 7172 WD | | |
|---|---|---|
| REVISIONS | | |
| ISSUE | DATE | AUTH. NO. |
| 1 | 6-4-64 | 15637-B |
| 2 | 9-26-65 | 89039 |

NOTES

1. All empty spaces on this chart indicate that the characters for these positions are the same as those in the corresponding position of Arrg't. "MA".

2. "Shift" characters are printed by first depressing SHIFT keytop and then the keytop having the desired character.

3. "None" or "(N)" indicates no printing shift character for its corresponding unshift position.

4. "(U)" indicates UNSHIFT; "(S)" indicates SHIFT.

5. Codes: ASCII - American Standard Code for Information Interchange

6. Two-letter code indicates typewheel arrangement and normally occupies position of SPACE function for which printing is suppressed.

7. For Manufacturing Information - Refer to 180560 Drawing.

8. Type Style Designations:

   M - Murray
   UL - UP-LO
   MC - Mono-Case

9. "Customer Application" indicates that this arrangement was requested by Sales Order and that information regarding usage and matching keytop arrangement is unavailable.

Sheet 1 of 8

MODEL 33
TYPEWHEEL
ANALYSIS CHART

APPROVALS

| D AND R | E OF M |
|---|---|
| HJK | |

ENGINEER

PROD. NO. 7172WD

DATE:

P.D. FILE NO. G-A152A60

DRAWN: | CHKD. [illegible]

ENGD. RLW | APPD. [illegible]

TELETYPE CORPORATION

7172 WD

DUPLICATE

## LEGEND

| SYMBOL | DESCRIPTION | USAGE |
|---|---|---|
| ↑ | Exponentiation | |
| ← | Implies; replaced by | Transmitted after error |
| \ | ACKnowledge (Reversed virgule) | 1. Used in answer to RU inquiry. 2. Used in transmissions between 5 and 8 level systems where one system does not recognize a character transmitted by the other. |

7172 WD

REVISIONS

| ISSUE | DATE | AUTH. NO. |
|---|---|---|
| 1 | 5-4-64 | 15397 |
| 2 | 9-28-65 | 89039 |

Sheet 2

MODEL 33
TYPEWHEEL
ANALYSIS CHART

APPROVALS

| D AND R | E OF M |
|---|---|
| HJK | [illegible] |

ENGINEER

PROD. NO. 7172WD

DATE:

RD. FILE NO. G-152A60

DRAWN. RLW CHKD. [illegible]

ENGD. RLW APPD. [illegible]

TELETYPE CORPORATION

7172 WD

| TYPE-WHEEL | ARRG'T | "M4" | "M3" | "M2" | "M1" | "M0" |
|---|---|---|---|---|---|---|
| | PART NO. | 180538 | 182200 | 182203 | 183508 | 183511 |
| ORIGINAL CUSTOMER | | BELL | WECO | NAT'L. CASH REG. | M.I.T. | REMINGTON RAND |
| MATCHES KEYTOP ARRANGEMENT | | "DEA" | - | - | - | "DEF" |
| DRIG. USED ON | | UP800 | CUSTOMER SPECIFICATIONS | CUSTOMER SPECIFICATIONS | CUSTOMER SPECIFICATIONS | UP800 |
| SEE NOTE | | | 4 | 5 | 6 | |

| CHARACTERS | CHARACTERS IN THE "SHIFT" POSITION (3) | | | | |
|---|---|---|---|---|---|
| A (4)(5) | 1 | ( | ) | | |
| B (4)(5) | 2 | [ | ] | | |
| C (4)(5) | 3 | { | } | | |
| D (4)(5) | 4 | ¢ | ¬ | | |
| E (4)(5) | 5 | | | | |
| F (4)(5) | 6 | | | | |
| G (4)(5) | 7 | & | ? | | |
| H (4)(5) | 8 | * | ! | | |
| I (4)(5) | 9 | | | | |
| J (4)(5) | 0 | | | | |
| K L | | = | | ≠ | |
| M | | ≤ | = | ≥ | |
| N | | < | > | ≠ | |
| O | | , | & | ' | |
| P | | # | ( | ( | |
| Q (4)(5) | | @ | ) | ) | |
| R (4)(5) | | A | | | |
| S (4)(5) | | B | | | |
| T (4)(5) | | C | | | |
| U (4)(5) | | D | | | |
| V (4)(5) | | E | | | |
| W (4)(5) | | F | | | |
| X (4)(5) | | G | | | |
| Y (4)(5) | | H | | | |
| Z (4)(5) | | I | | | |
| 1 | A | ¢ | ¬ | | |
| 2 | B | [ | ] | | |
| 3 | C | { | } | | |
| 4 | D | ¢ | ¬ | | |
| 5 | E | | | | |
| 6 | F | | | | |
| 7 | G | & | ? | @ | |
| 8 | H | * | ! | ¢ | |
| 9 | I | ( | ) | [ | |
| 0 | J | ) | ( | ] | |

(SEE SHEET 2 FOR EXPLANATION OF SYMBOLS IN THE "SHIFT" POSITION (THOSE ON LOWER HALF OF KEYTOP) SEE NOTES 1 AND 3)

| VARIABLE CHAR. | (U) | (B) | (S) | (U) | (S) | (B) | (S) | (U) | (B) |
|---|---|---|---|---|---|---|---|---|---|
| NOTE: FINDT THE REMAINING CHARACTERS MAY VARY WIDELY, BOTH UNSHIFT AND SHIFT CHARACTERS ARE SHOWN FOR EACH ARRG'T. (4) | ~ | > | ; | ; | ~ | ; | ~ | ; | ~ |
| | ; | < | ~ | ~ | ; | ~ | ; | ~ | ; |
| | : | + | : | : | < | : | < | : | < |
| | < | = | < | < | : | < | : | < | : |
| | = | - | = | = | = | = | = | = | = |
| SEE NOTE (5) | | $_{16}$ | | $_{16}$ | + | | $_{16}$ | | $_{16}$ |

| TYPE STYLE (6) | M | M | M | M | M |
|---|---|---|---|---|---|
| CODE (7) | ASCII 6-1-24-5 | ---------LIKEBOYS--------- | | | ASCII 6-1-24-5 |

| 7172 WD | | |
|---|---|---|
| REVISIONS | | |
| ISSUE | DATE | AUTH. NO. |
| 1 | 4/1/68 | 16457-6 |
| 2 | 9-20-68 | R8030 |

SHEET 3

MODEL 33 TYPEWHEEL ANALYSIS CHART

APPROVALS

| D and R | EDP# |
|---|---|
| 4/24 | |

CUSTOMER

PROD. NO. 7172WD

DATE: 2/24/69

MD FILE NO. 0-4152800

DRAWN: NLE | CHKD. A.C.T.

ENGD. RLW | APPD. A.C.T.

TELETYPE CORPORATION

7172 WD

| TYPE-WHEEL | ASSY'T | "HF" | "MG" | "MH" | "MJ" | "MK" |
|---|---|---|---|---|---|---|
| | PART NO. | 183592 | 184685 | 184686 | 184688 | 184689 |
| ORIGINAL CUSTOMER | | WASH. UNIV. ST. LOUIS | MITRE HONEYWELL | HONEYWELL | AUER BERMAN LAB. | BOLT BERANEK & NEWMAN |
| MATCHES KEYTOP ARRANGEMENT | | — | DRH | | | |
| ORIG. USED ON | | CUSTOMER'S SPECIFICATION | CUSTOMER'S APPLICATION | CUSTOMERS APPLICATION | CUSTOMERS APPLICATION | |
| SEE NOTE | | (V) | (B) | (B) | (B) | (B) |

## 7172 WD

REVISIONS

| ISSUE | DATE | AUTH NO. |
|---|---|---|
| 1 | 8-28-64 | 84480 |
| 2 | 11-5-64 | 84480 |
| 3 | 3-26-65 | 85019 |

(SEE SHEET 2 FOR EXPLANATION OF SYMBOLS)
(SEE NOTES 1 AND 33)
(THOSE ON LOWER HALF OF KEYTOP)

| CHARACTERS | CHARACTERS IN THE "SHIFT" POSITION (C) |
|---|---|
| 1 | ! |
| B | C |
| C | 3 |
| 4 | $ |
| E | 5 |
| F | 6 |
| 7 | ' |
| 8 | ( |
| 9 | ) |
| Z | * |
| K | + |
| L | , |
| M | — |
| N | > |
| O | ? |
| P | @ |
| Q | A |
| R | B |
| S | D |
| T | E |
| U | F |
| V | G |
| W | H |
| X | I |
| Y | J |
| Z | K |
| 2 | L |
| 3 | M |
| 4 | N |
| 5 | O |
| 6 | P |
| 7 | Q |
| 8 | R |
| 9 | S |
| → | T |
| | U |
| | V |
| | W |
| | X |
| | Y |
| | Z |

| VARIABLE CHAR. | (U) | (S) | (U) | (S) | (U) | (S) | (U) | (S) | (U) | (S) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |

NOTE: SINCE THE REMAINING CHARACTERS MAY VARY BETWEEN BOTH UPPER & LOWER CASE, THESE CHARACTERS ARE SHOWN FOR EACH ASSY'T. (C)

| | M F | M G | M H | M J | M K |
|---|---|---|---|---|---|
| SEE NOTE (C) | | | | | |

| TYPE STYLE (A) | U | M | M | M | M |
|---|---|---|---|---|---|
| CODE (A) | UNKNOWN | — | — | — | — |

SHEET 4

MODEL 33 TYPEWHEEL ANALYSIS CHART

APPROVALS

| | DATE | CODE |
|---|---|---|
| DRAWN | 3-20-64 | |
| ENGR. | | |
| CUSTOMER | | |

MODEL NOS. 7172 WD

DATE: 3-20-64

NO. FILE NO. G-AI02A80

DRAWN: P.J.S. SHEET 1 OF 4

ENGR. R.L.H. APPD. J.R.C.

TELETYPE CORPORATION

7172 WD

ECCN 5 (A) 7172WD.DWG

| TYPE-WHEEL | ARRGT | "ML" | "MN" | "MP" | "MR" | "MS" | 7172 WD |
|---|---|---|---|---|---|---|---|
| | PART NO. | 184690 | 184691 | 184693 | 184695 | 184950 | REVISIONS |
| ORIGINAL CUSTOMER | | WESTREX | RCA | UNIVAC | RCA | WESTREX | ISSUE / DATE / AUTH NO. |
| MATCHES KEYTOP ARRANGEMENT | | — | — | — | — | — | A 9-26-63 10903 |
| GRID USED ON | | — | — | — | — | — | |
| SEE NOTE | | ⑤ | ⑤ | ⑤ | ⑤ | ⑤ | |

CHARACTERS — CHARACTERS IN THE "SHIFT" POSITION (2)

| | | | | | | |
|---|---|---|---|---|---|---|
| A | | | | | | |
| B | | | | | | |
| C | | | | | | |
| D | | | | | | |
| E | | | | | | |
| F | | | | | | |
| G | | | | | | |
| H | | | | | | |
| I | | | | | | |
| J | | | | | | |
| K | | $ | | | BLANK | |
| L | $ | ( | % | | ^ | $ |
| M | | ) | | | # | |
| N | | → | | | | |
| O | □ | [ | ] | | □ | |
| P | | < | > | | → | |
| Q | | ≤ | ≥ | | | |
| R | | ¢ | | | | |
| S | | K | | | | |
| T | | L | | | | |
| U | | M | | | | |
| V | | N | | | | |
| W | | O | | | | |
| X | | P | | | | |
| Y | | Q | | | | |
| Z | | R | | | | |
| 2 | | " | ½ | | | |
| 1 | | ' | / | | | |
| 3 | | | B | | ≤ | |
| 4 | | | T | | ∨ | ≠ |
| 5 | | | U | | ∧ | |
| 6 | | | V | | UNION | |
| 7 | | | W | | | |
| 8 | | | X | | | |
| 9 | | | Y | | | |
| 0 | | | Z | | | |
| | ○ | # | Ø | | □ | |
| VARIABLE CHAR. | (U) | (S) | (U) | (S) | (U) | (S) | (U) | (S) |
| NOTE: SINCE THE SIGNALING CHAR. MAY VARY WIDELY BOTH UNSHIFT AND SHIFT CHAR. ARE SHOWN FOR EACH ARRGT. ⑥ | | ¼ | ⅛ | | | | | |
| | | ½ | ¼ | | / | | ½ | |
| | | ¾ | ⅜ | | | | ⅓ | ≠ |
| | | | ⅝ | | | | ⅔ | ≠ |
| | ML | MN | MP | | MR | MS | | |
| SEE NOTE ⑥ | | | | | | | | |
| TYPE STYLE ④ | M | M | M | | M | M | | |
| CODE ⑤ | — | — | — | | — | — | | |

(SEE SHEET 2 FOR EXPLANATION OF SYMBOLS)
(SEE SHEET 3 FOR EXPLANATION OF CODES)
(THOSE ON LOWER HALF OF KEYTOP)
(SEE NOTES 1 AND 3)

SHEET 5

MODEL 33 TYPEWHEEL ANALYSIS CHART

APPROVALS

| D AND R | E OR M |
|---|---|
| S-NUMBER | |
| PROD. NO. 7172WD | |
| DATE: 8/23/65 | |
| PD FILE NO. D-4132660 | |
| DRAWN JAB 6/8/65 | |
| ENGR. JAB APPD. | |

TELETYPE CORPORATION

7172 WD

E1000695
TD1000695-01

| TYPE-ANGE | ARRG'T | "NT" | "MU" | "NV" | "MW" | "MY" | 7/72 WD |
|---|---|---|---|---|---|---|---|
| | PART NO. | 184694 | 184692 | 184696 | 184697 | 184698 | REVISIONS |
| | ORIGINAL CUSTOMER | HAL/ PARK REGISTER | HAL/ PARK REGISTER | HONEYWELL | HONEYWELL | HONEYWELL | ISSUE DATE AUTH. NO. |
| | MATCHES KEYTOP ARRANGMENT | — | — | — | — | — | 1 9-26-68 68039 |
| | ORIG. USED ON | | | | | | 2 |
| | SEE NOTE | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ | |

| CHARACTERS | CHARACTERS IN THE "SHIFT" POSITION ⑤ | | | | | | |
|---|---|---|---|---|---|---|---|
| | 8 | ! | ! | ! | ! | ! | ! |
| | 9 | " | 2 | 2 | " | 2 | " |
| | 0 | $ | 3 | 3 | $ | 3 | $ |
| | 1 | ¢ | 4 | 4 | ¢ | 4 | ¢ |
| | 2 | % | 5 | 5 | % | 5 | % |
| | 3 | & | 6 | 6 | & | 6 | & |
| | 4 | ' | 7 | 7 | ' | 7 | ' |
| | 5 | ( | 8 | 8 | ( | 8 | ( |
| | 6 | ) | 9 | 9 | ) | 9 | ) |
| | 7 | Ø | ø | ø | * | * | * |
| | = | = | = | = | = | = | = |
| | ; | + | P | M | P | + | + |
| | : | * | L | L | L | ; | ; |
| | . | ← | ← | ← | > | > | > |
| | , | < | < | < | < | < | < |
| | / | ? | ? | ? | ? | ? | ? |
| | A | A | A | A | A | A | A |
| | B | B | B | B | B | B | B |
| | C | C | C | C | C | C | C |
| | D | D | D | D | D | D | D |
| | E | E | E | E | E | E | E |
| | F | F | F | F | F | F | F |
| | G | G | G | G | G | G | G |
| | H | H | H | H | H | H | H |
| | I | I | I | I | I | I | I |
| | J | # | J | # | J | J | J |
| | K | $ | K | $ | K | K | K |
| | L | % | L | % | L | L | L |
| | M | U | M | U | M | M | M |
| | N | V | N | V | N | N | N |
| | O | W | O | W | O | W | O |
| | P | X | P | X | P | P | P |
| | Q | Y | Q | Y | Q | Q | Q |
| | R | Z | R | Z | R | R | R |
| | S | ≠ | S | < | S | < | S |
| VARIABLE CHAR. | | "U" | "S" | "U" | "S" | "U" | "S" |
| NOTES: SINGS THE REMAINING CHAR. MAY VARY WIDELY BOTH UNSHIFT AND SHIFT CHAR. ARE SHOWN FOR EACH ARRG'T. ① | | "S" | "U" | "S" | "U" | "S" | "U" |
| | | > | > | > | > | > | > |
| | | < | < | < | < | < | < |
| | | ∨ | ∧ | ∨ | ∧ | ∨ | ∧ |
| | | ∧ | ∨ | ∧ | ∨ | ∧ | ∨ |
| | | MV | | MW | | MY | |
| TYPE STYLE ⑪ | | M | M | M | M | M | M |
| CODE ⑫ | | — | — | — | — | — | — |

(SEE SHEET 2 FOR EXPLANATION OF SYMBOLS)
(THOSE ON UPPER HALF OF KEYTOP)
(SEE NOTES 1 AND 3)

(SEE SHEET 2 FOR EXPLANATION OF SYMBOLS)
(THOSE ON LOWER HALF OF KEYTOP)

SHEET 6

MODEL 33
TYPEBASE
ANALYSIS CHART

APPROVALS

| | D AND R | C OF E |
|---|---|---|
| ENGINEER | | |
| PROD. MG. | 7/72WD | |
| DATE: 8/25/65 | | |

NO FILE NO. G-41-32A60
DRWG. FAB. DWG.
ENGR. JAB APPD.

TELETYPE CORPORATION

7/72 WD

E70B913

| TYPE-WHEEL | ASSG'T | "MZ" | "MA" | "MB" | "MC" | "MD" |
|---|---|---|---|---|---|---|
| | PART NO. | 184931 | 184932 | 184933 | 184934 | 184935 |
| ORIGINAL CUSTOMER | | WESTNEX | WECO | WESTNEX | WECO | WECO |
| MATCHES KEYTOP ARRANGEMENT | | — | — | — | — | — |
| ORIG. USED ON | | — | — | — | — | — |
| SEE NOTE | | (9) | (8) | (9) | (8) | (8) |
| CHARACTERS | | CHARACTERS IN THE "SHIFT" POSITION (5) | | | | |

(SEE SHEET 2 FOR EXPLANATION OF SYMBOLS)
CHARACTERS IN THE "UNSHIFT" POSITION
(THOSE ON LOWER HALF OF KEYTOP)
(SEE NOTES 1 AND 3)

[illegible]

| VARIABLE CHAR. | (U) | (S) | (U) | (S) | (U) | (S) | (U) | (S) | (U) | (S) |
|---|---|---|---|---|---|---|---|---|---|---|
| NOTE: SINCE THE REMAINING CHAR. MAY VARY WIDELY, BOTH UNSHIFT AND SHIFT CHAR. ARE SHOWN FOR EACH ASSG'T. (4) SEE NOTE (8) | [illegible] | [illegible] | | | | [illegible] | | | [illegible] | [illegible] |
| | | | NA | | NB | | MC | | ND | |

| TYPE STYLE (2) | M | M | M | M | M |
|---|---|---|---|---|---|
| CODE (3) | — | — | — | — | — |

REVISIONS

| ISSUE | DATE | AUTH NO. |
|---|---|---|
| 2 | 9-26-60 | [illegible] |

SHEET 7

MODEL 33 TYPEWHEEL ANALYSIS CHART

APPROVALS

DATE 8/25/55

TELETYPE CORPORATION

7172 WD

| TYPE-WHEEL | ARRGT | "NE" | "NP" | "NG" |
|---|---|---|---|---|
| | PART NO. | 184956 | 184957 | 184958 |
| ORIGINAL CUSTOMER | | BURROUGH | WECO | STANFORD |
| MATCHES KEYTOP ARRANGEMENT | | — | — | — |
| GRDS. USED ON | | — | — | — |
| SEE NOTE | | (5) | (5) | (5) |

7172 WD

REVISIONS

| ISSUE | DATE | AUTH. NO. |
|---|---|---|
| 2 | 9-26-69 | 69259 |

CHARACTERS — CHARACTERS IN THE "SHIFT" POSITION (4)

| | | | | |
|---|---|---|---|---|
| A | J | 1 | | |
| B | K | 2 | | |
| C | L | 3 | | |
| D | M | 4 | | |
| E | N | 5 | | |
| F | O | 6 | | |
| G | P | 7 | | |
| H | Q | 8 | | |
| I | R | 9 | | |
| J | S | 0 | | |
| K | X | • | | |
| L | Y | ( | | |
| M | Z | ) | | |
| N | [ | / | | |
| O | \ | : | | |
| P | ] | ; | | |
| Q | ^ | = | | |
| R | _ | ? | | |
| S | ! | @ | | |
| T | " | [ | | |
| U | # | \ | | |
| V | $ | ] | | |
| W | % | ^ | | |
| X | & | _ | | |
| Y | ' | ! | | |
| Z | * | " | | |
| 0 | + | # | | |
| 1 | , | $ | | |
| 2 | - | % | | |
| 3 | . | & | | |
| 4 | / | ' | | |
| 5 | : | * | | |
| 6 | ; | + | | |
| 7 | < | , | | |
| 8 | = | - | | |
| 9 | > | . | | |
| | ? | / | | |

(USE SHEET 2 FOR DESIGNATION OF CHARACTERS IN THE "SHIFT" POSITION (CHARACTERS IN THE "SHIFT" POSITION (THOSE ON LOWER HALF OF KEYTOP)

(SEE NOTES 1 AND 3)

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | / | ( | ! | | 1 | | 0 | | |
| 2 | - | ) | " | | 2 | | 9 | | |
| 3 | ? | ; | # | | 3 | | 8 | | |
| 4 | U | C | $ | | 4 | | 7 | | |
| 5 | V | 9 | % | | 5 | | — | | |
| 6 | W | 8 | & | | 6 | | 4 | | |
| 7 | X | 7 | ' | | 7 | | 5 | | |
| 8 | Y | 6 | * | | 8 | | 6 | | |
| 9 | Z | 5 | + | | 9 | | ( | | |
| 0 | NE | 4 | , | | 0 | | ) | | |

| VARIABLE SHIFT | "U" | "S" | "U" | "S" | "U" | "S" |
|---|---|---|---|---|---|---|
| NOTE: SINCE THE REMAINING CHAR. MAY VARY WIDELY BOTH UNSHIFT AND SHIFT CHAR. ARE SHOWN FOR EACH ARRGT. (1) SEE NOTE (6) | ! | 1 | ⅛ | ¼ | ⅓ | < |
| | " | 2 | ⅜ | ½ | ⅝ | > |
| | # | 3 | ⅔ | ¾ | ⅞ | → |
| | $ | 4 | ¢ | £ | ¥ | ↑ |
| | % | 5 | ∅ | ± | ° | / |
| | & | 6 | ≠ | ÷ | ≈ | ∫ |
| | ' | 7 | ≤ | ≥ | ∞ | ∆ |
| | * | 8 | ∏ | ∑ | √ | Ω |
| | + | 9 | ∂ | ∫ | ( | |
| | , | 0 | ∆ | ∇ | ) | |
| | - | NE | ∏ | ∑ | | |
| | . | | ∫ | ∂ | | |
| | / | | ∇ | √ | | |

| TYPE STYLE (2) | M | M | M |
|---|---|---|---|
| CODE (3) | | | |

SHEET 8

MODEL 33 TYPEWHEEL ANALYSIS CHART

APPROVALS

| D.AND.R. | E.O.M. |
|---|---|
| | |

| | |
|---|---|
| ENGINEER | |
| PROD. NO. | 7172WD |
| DATE | 8/25/65 |
| PD FILE NO. | D-4139A60 |
| DRWG. JAB | CHKD. |
| ENGD. JAB | APPD. |

TELETYPE CORPORATION

7172 WD