MASTER DRAWING LIST REV. NO. OF DWG. NO. TITLE LET. SHEETS A-PL-LT33-DC-Ø TELETYPE ASR33-TU 120V A-SP-LT33-Ø-5 TTY MODIFICATION PROCEDURE A-SP-LT33-Ø-6 TTY ALIGNMENT/TEST PROCEDURE A-SP-LT33-Ø-8 TTY ACCEPTANCE PROCEDURE A-SP-LT33-Ø-10 TTY PACKING PROCEDURE A-SP-LT33-Ø-11 TTY INSTILLATION PROCEDURE A-AL-LT33-Ø-12 TTY ACCESSORY LIST Ref. B-44-4915-0-0 TTY READER CONTROL 4915 - FOR IN HOUSE USE ONLY -REF 5 TTY 33ASR-TU SPECIFICATION A-SP-L133-0-3 DRN. P MARCOTTE tal EQUIPMENT REVISIONS DATE CHG. NO. APP'D. REV. CHK'D. 072770 00003 C.B. LT33-DC TELETYPE 120V 60HZ NUMBER 11/20 AML SCALE # LT33-DC SHEET OF DIST.

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| 1 | 7 405 29 5 | THISTYPE ASR 33-TU | | 1 | | | | | | |
| 2 | D-1A-7 00 659 3-0-0 | TELETYPE CABLE | | 1 | | | | | | |
| 3 | D-1C-7 505038-0-0 | TELETYPE MOLIFICAT | IONE (120V) | | - | | | | | |
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| TITL | TELETYPE A. R33-T 120V (LT33-DC) | 'U | NO. NONE | A P | |) n 1~EE'rj | MBER C-Ø | | REV | ECO NO. |
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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/23/68

TITLE MODIFICATION PROCEDURE FOR TELETYPE MODEL 33ASR-TU OR TBP

REVISIONS

| REVISIONS | | | | | | | | | |
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| DESCRIPTION | CHG NO | ORIG | DATE | APPD BY | DATE | | | | |
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| | DESCRIPTION | | | | | | | | |

The 33TBP and 33TU must be modified in the following manner:

- 1. Remove the WRU pawl from the function casting. It is the second pawl from the right of the casting. Ref: Vol. II - Sec: 574-122-700 page 6
- 2. Remove the blue lead from the $750\Omega resistor$ post and reconnect it to the 1450Ω resistor post.

Ref: Vol. I - Sec: 574-100-102 page 14

3. On the call control unit terminal strip the following wires are transferred:

| Color of wire | Remove From | Connect To | |
|---------------|---------------|------------------|----------|
| Brown/White | Term.3 | Term.5 | |
| Blue/White | Term.4 | Term.5 | |
| Purple | Term.8 | Term.9 | |
| Ref: Vol. | T - Sec: 574- | -100-102 page 14 | (fig.12) |

4. The leads of DEC cable #5288-2 which have red crimp lugs are connected to the call box terminal strip as follows: 0.

| Color of Wire | Term. No |
|---------------|----------|
| Grey/White | 3 |
| Red | 4 |
| Yellow/White | 6 |
| Black | 7 |

5. Mount the 4195 reader control card on the left side of the call control unit. A bracket is provided for mounting and is located to the right of arrow pointing to "plate" near the on-off switch. Connect the wires on one end of reader control card to locations as

| follows: Color of Wire | Length of Wire | Origin | Connect To |
|---------------------------|----------------|------------------|---------------------|
| Yellow/White | 6" approx. | To sole- | L2 of on-off |
| _ | | noid | switch |
| Yellow/White | 6" approx. | To reader switch | Ll of on-off switch |
| Yellow/White | 2' approx. | | Plug #4 of cal. |
| | | | (3rd hole from |

SIZE CODE NUMBER REV APPD SP LT33-0-5

SHEET $\frac{1}{}$ OF $\frac{2}{}$

ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE MODIFICATION PROCEDURE FOR TELETYPE MODEL 33ASR-TU OR TBP

Brown

Plug #4 of call control unit (3rd hole from right)

Ref: Sec: 574-100-102 page 14 (fig.12)

- 6. Connect two SP4B4 thyractors to the on-off switch as
 - a. One thyractor from position 2 to position 1 of the onoff switch.
 - b. The other thyractor from position 2 to position L2 of the on-off switch.

| SIZE | CODE |

NUMBER

LT33-0-5 SP

SHEET 2 OF 2

REV

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/23/68

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TITLE ALIGNMENT/TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

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TELETYPE ALIGNMENT PROCEDURE:

A. Carefully check for damaged or obviously misaligned components.

Note: In the following sections, power is off unless noted.

- B. Main Shaft
 - 1. Clearance between slotted bronze bearing 015 and collar
- C. Distributor Clutch
- 1. Endplay between left bearing and clutch .002 .008 gear assembly
 - 2. Clearance between brush holder and disc 025 at closest point
 - 3. Clearance between shoe lever and stop lug with clutch disengaged and keyboard universal lever in down position
 - 4. Increase in clearance recorded in step .050 .080 #3 after clutch has been engaged
 - 5. Disengage clutch and depress any nonfunction key. Clearance between clutch shoe lever and trip lever with upper edge of clutch lever in line with upper .035 edge of trip lever
 - 6. Power on and keyboard universal lever in latched position. Clearance of clutch shoe lever beyond rear most surface of trip lever
- D. Selector Clutch
 - 1. Disengage clutch. Endplay between .008 clutch and side plate

| ENG Of Suis APPD | SIZE | CODE | NUMBER LT33-0-6 | REV |
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| EC FORM NO. | | | SHEET 1 OF | 4 |

DEC FORM NO. DRA 107

DEC FORM NO

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE ALIGNMENT/TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

- 2. Disengage clutch. Trip leter shall engage shoe lever by approximately the full thickness of shoe lever.
- 3. Disengage clutch lift trip lever to trip clutch, permit trip lever to rest on shoe lever. Edge of shoe lever shall sit in center of slot in trip lever
- E. Codebar Clutch

1. Disengage clutch. Endplay at maximum

2. Endplay in latchlevers

- 3. Typing unit in stop condition. Trip lever shall engage shoe lever by approximately the full thickness of shoe lever
- 4. Disengage clutch lift trip lever to trip clutch, permit trip lever to rest on shoe lever. Edge of shoe lever shall sit in slot in trip lever.
- F. Function Clutch
 - 1. Disengage clutch. Endplay between clutch and collar at maximum

- 2. Typing unit in stop condition. Trip lever shall engage shoe lever by approximately the full thickness of shoe lever.
- 3. Disengage clutch. Lift trip lever to trip clutch, permit trip lever to rest on shoe lever. Edge of shoe lever shall sit in center of slot in trip lever.
- G. Rear Rail
 - 1. Power on. Perform carriage return. Power of. Release codebar clutch. Rotate main shaft until codebars are fully raised. Observe small portion of #1 codebar slide below right guide plate. Move carriage to right margin. Protruding portion of codebar must remain constant throughout carriage traverse.
- H. Drive Bail
 - 1. Power on. Perform carriage return. Power off. Release codebar clutch. Rotate main shaft until carriage drive bail reaches its rearmost position.

SIZE CODE Δ SP

NUMBER LT33-0-6

REV

SHEET $\frac{2}{}$ OF $\frac{4}{}$

| ENGINEER | NG | SPECIFICATION CONTINUATION | N SHEET |
|---|-------|--|----------------------|
| TITLE ALIGNME | NT/TI | ST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR | TU OR TBP |
| | | Clearance between print hammer bail and print hammer trip lever This clearance must remain constant as carriage is manually moved to right margin. | .015 .030 |
| I. | Prin | Place carriage approximately 1/2 inch from left margin. Set (3-5-78) code in selector. Rotate main shaft until drive bail reaches rearmost position. Take up print suppression latchlever play to the right. Clearance between print suppression latch and print hammer bail | • <u>015</u> •030 |
| J. | Read | | .002 max. |
| | | b. Sprocket backlash shall not exceed | .001 max. |
| | 2. | Control Lever In Free Position. a. Armature in attached position. Clearance between top surface of top plate to tip of each sensing pin in fully extended positions | |
| | | b. Armature in unattracted position. Clearance between tip of each sensing pin below top surface of top plate | .015 max. |
| | 3. | Tape 1id closed. Tape 1id latch must be centrally located in cut out of tape 1id. Clearance between top plate and latch spring | . <u>005</u> .030 |
| | 4. | Armature in unattracted position. a. Clearance between feed pawl and rachet with fine teeth between feed pawl and detent lever | . <u>001</u> .008 |
| | | b. Clearance between blocking pawl and rachet tooth | .001 .010 |
| к. | Tape | Punch | |
| ingerentarione in the modern energy of their age. | 1 | Check to insure punch driver arm assembly SIZE CODE NUMBER | ER REV |
| | | A SP LT33-0-6 | ER REV |

DEC FORM NO DRA 108 SHEET __ 3 OF __ 4___

ENGINEERING SPECIFICATION CONTINUATION SHEET TITLE ALIGNMENT/TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP is securely fastened to main rocker shaft. 2. Power on. Manually rotate main shaft until function rocker shaft and stripper bail are in most forward positions. Take up rear roller play toward rear and tape nudger play in clockwise direction. Clearance between rear roller and highest point on tape nudger. 3. Set all marking code in selector. Manually rotate main shaft until function rocker shaft and stripper bail are in rearmost position. There must be some clearance between rightmost sensing lever and its associated pawl. a. Clearance between left most sensing .005 .020 lever and its associated pawl b. Take up all play in stripper bail toward rear. Feed wheel in its fully detented position. Clearance between feed pawl and feed wheel ratchet .001 .005 tooth 4. Position end of spring to lowest notch of arm with bushing. Perforate alternate R and hyphen codes in 8 inches of tape. Align #2 code hole of tape with first .072 hole on smooth side of guage TP156011. The four remaining .072 guage holes must be visable through corresponding #2 code holes in tape. The #2 code hole which corresponds with .86 guage hole must be entirely within the perimeter of that guage hole. TEST PROCEDURE Run the following tape using PDP8/S or PDP8/I processor: Combo Test - MAINDEC-08-D2TA (A) If failures occur run the following diagnostic pertaining to the particular area, that failed in the Combo Test, repair, re-run combo. MAINDEC-08-D25A Teleprinter Test DEC-8-2-U-RIM Binary Loader MAINDEC-08-D2QA Punch Test

Keyboard Test

Reader Test

DEC FORM NO

SHEET $\frac{4}{}$ OF $\frac{4}{}$

MAINDEC-08-D2RA

MAINDEC-08-D2PA

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DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/23/68

TITLE ACCEPTANCE PROCEDURE FOR TELETYPE MODEL 33ASR-TU

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SCOPE:

To define the criteria to accept a (ASR) model 33TU for shipment.

TEST HARDWARE:

PDP8

TEST SOFTWARE:

Engineering specifications A-SP-LT33-0-3

Diagnostic program

MAINDEC-08-D2TA - Combo Test

MAINDEC-08-D2PA - Reader Test
MAINDEC-08-D2SA - Printer Test
MAINDEC-08-D2OA - Punch Test
MAINDEC-08-D2FA - Keyboard Test

PROCEDURE:

Run the diagnostic MAINDEC-08-D2TA. The unit is accepted for shipment to a customer when this diagnostic program has been run for one complete pass without error typeouts. Quality control inspection form to be filled out before shipment.

SHIPPING SOFTWARE:

Diagnostic program

MAINDEC-08-D2RA
MAINDEC-08-D2QA
MAINDEC-08-D2SA
MAINDEC-08-D2TA
MAINDEC-08-D2PA

 ${\tt Maintenance\ manual\ volume\ I\ and\ II}$

Parts manual

SHIPPING HARDWARE:

#5288-2 cable - 12 feet

ENG SIZE CODE NUMBER REV
A SP LT33-0-8

DEC FORM NO

SHEET _1 OF 1

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 5/3/68

TITLE PACKING PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

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- 1. Put reader clip in holder; reader pins in upward position as originally received.
- 2. Use one tie wrap to hold carriage at left margin.
- 3. Mount printer unit to fiberboard platform with the eight (8) mounting screws and three (3) studs, originally provided.
- 4. Put chad box and reader power pack as well as copy holder in the box provided.
- 5. Fifty (50) cycle teletypes should have transformer (previously mounted) left in base stand.
- 6. The four (4) mounting screws that mount the printer to the base stand should be put in a bag along with the on/off knob and the platen knob and then tied to the base stand.
- 7. Teletype AC cable and 5288-2 cable should be placed on the plastic cover where paper roll normally goes and wrapped in kim pack.
- 8. Tape down printer cover, punch paper-roller, printer paper-roller and cables of item 7 above. Additional tape should be used to secure whole cover to base.
- 9. Make sure that there are three (3) thumbscrews that hold teletype cover on, and four (4) screws in the front of the machine, also a screw in reader cover and one (1) faceplate for each machine.

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DEC FORM NO.

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DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 5/3/68

TITLE

INSTALLATION PROCEDURE FOR TELECYPE MODEL 33ASR-TY OR THE OR THE

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- 1. Remove all tape holding covers and cables.
- 2. Remove the whole cover and in the reader, remove clip which holds reader pins in an upward position before turning machine on.
- 3. Mount power supply for reader on basic stand and plug connector cable in.
- 4. Remove tie wrap being used to hold carriage at left hand margin.
- 5. Mount base to bottom of unit with screws provided.
- 6. Replace cover being sure that three (3) thumbscrews, four (4) ponhead screws and one (1) special screw (for reader) are correctly installed before attaching face plate and knobs.

SIZE CODE SP REV NUMBER LT33-0-11

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| 1 3 6-5360 | ROLLS, ROLLED OILED PAPER T | 'AFE | 3 | | | | | | |
| 2 36-5365 | ROLL, TWX PAPER | | 1 | | | | | | |
| 3 BULLETIN 273B | TTY MANUAL VOL #1 (VENDOR) | | 1 | | | | | | |
| 4 BULLETIN 310B | TTY MANUAL VOL #2 (VENDOR) | | 1 | | | | | | |
| 5 BULLETIN 1184B | TTY MANUAL PARTS (VENDOR) | | 1 | | | | | | |
| 6 18-9137 | ROLL TTY RIBBON | | 1 | | | | | | |
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| | DWG. NO. | | REV. | NO. OF | TITLE |
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| A-PI | -LT33-DD-Ø | | | 1 | TELETYPE A'R33-TU 240V |
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| | P-LT33-Ø-5 P-LT33-Ø-6 | | - | 4 | TTY MODIFICATION PROCEDURE TTY ALIGNMENT/TEST PROCEDURE |
| | P-LT33-Ø-8 | | | + + | TTY ACCEPTANCE PROCEDURE |
| | -LT33-Ø-10 | | | 1 | TTY PACKING PROCEDURE |
| | -LT33-Ø-11 | | | i | TTY INSTALLATION PROCEDURE |
| | -i.T.i14-12 | | | ì | TTY ACCESSORY LIST |
| B-W | -4915-0-0 | | Ref. | 1 | TTY READER CONTROL 4915 |
| | | | | | |
| | | - FOI | R IN HO | USE U | SE ONLY - |
| A-5P | -LT33-0-3 | Marin - Cultural Paris - and Maringan man | Ref. | 5 | TTY 33ASR-TU SPECIFICATION |
| | | CALIFORNIA DE LA ALBORTO | | | |
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| A | 72770 000 | 03 (| E.B. ENG 2. PRO | . RUSS | DATE LT33-DD TELETYPE 240V 50HZ |

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| TEM NO | DWG NO. / PART NO. | DESCRIPT | ION | | | | | | | |
| 1 | 7405295 | TELETYPE ASR33-TU | | 1 | | | | | | |
| 2 | b -1 A-7 006593-0-0 | TELETYPE CABLE | | 11 | \perp | | | | | |
| 3 | D-10-7505039-0-0 | TELETYPE MODIFICATIONS | (240V) | | | | | | | |
| 1 | 1204789 | MOTOR SYNE-500HM #18226 | 7 | | | | | | | |
| 5 | 1204850 | DRIVE GEAR #181855 | | 1 | | | | | | |
| 6 | 120464 9 | PINION GEAR #181851 | | 1 | | | | | | |
| 7 | 1204848 | PLATE WITH STUD #18185 | 0 | 1 | | | | | | |
| 3 | 16025 8 3 | TRANSFORMER #1725 | | 1 | | | | | 1 | |
| 3 | 9008853 | PLUG MALE #5666 A.H. | | 1 | | | | | | |
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| | 240V (LT33-DD) | | | APL | 1 1 | · · · · · · · | , | | Ļ | L |
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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/23/68

TITLE MODIFICATION PROCEDURE FOR TELETYPE MODEL 33ASR-TU OR TBP

REVISIONS

DESCRIPTION CHG NO ORIG DATE APPD BY DATE

The 33TBP and 33TU must be modified in the following manner:
1. Remove the WRU pawl from the function casting. It is

the second pawl from the right of the casting.

Ref: Vol. II - Sec: 574-122-700 page 6

2. Remove the blue lead from the 750 Ω resistor post and reconnect it to the 1450 Ω resistor post.

Ref: Vol. I - Sec: 574-100-102 page 14

3. On the call control unit terminal strip the following wires are transferred:

Color of wire
Brown/WhiteRemove From
Term.3Connect To
Term.5Blue/WhiteTerm.3Term.5PurpleTerm.8Term.9Ref: Vol. I - Sec: 574-100-102 page 14 (fig.12)

4. The leads of DEC cable #5288-2 which have red crimp lugs

4. The leads of DEC cable #5288-2 which have red crimp lugs are connected to the call box terminal strip as follows:

Color of WireTerm. No.Grey/White3Red4Yellow/White6Black7

5. Mount the 4195 reader control card on the left side of the call control unit. A bracket is provided for mounting and is located to the right of arrow pointing to "plate" near the on-off switch. Connect the wires on one end of reader control card to locations as follows:

Color of Wire Length of Wire Origin Connect To To sole- L2 of on-off Yellow/White 6" approx. noid switch To reader Ll of on-off Yellow/White 6" approx. switch switch Plug #4 of call Yellow/White 2' approx. control unit (3rd hole from

| FNG. | APPD | SIZE | CODE | NUMBER | REV |
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DEC FORM NO.

SHEET $\frac{1}{}$ OF $\frac{2}{}$

ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE MODIFICATION PROCEDURE FOR TELETYPE MODEL 33ASR-TU OR TBP

Brown

Plug #4 of call control unit (3rd hole from right)

Ref: Sec: 574-100-102 page 14 (fig.12)

- 6. Connect two SP4B4 thyractors to the on-off switch as follows:
 - a. One thyractor from position 2 to position 1 of the onoff switch.
 - b. The other thyractor from position 2 to position L2 of the on-off switch.

SIZE CODE SP

NUMBER 33-0-5

LT33-0-5

DEC FORM NO

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/23/68

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TITLE ALIGNMENT/TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

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TELETYPE ALIGNMENT PROCEDURE:

A. Carefully check for damaged or obviously misaligned components.

at closest point

Note: In the following sections, power is off unless noted.

- B. Main Shaft 1. Clearance between slotted bronze bearing
- and collar C. Distributor Clutch
- .008 gear assembly 2. Clearance between brush holder and disc
 - 3. Clearance between shoe lever and stop lug with clutch disengaged and keyboard universal lever in down position

1. Endplay between left bearing and clutch

- .050 4. Increase in clearance recorded in step #3 after clutch has been engaged .080
- 5. Disengage clutch and depress any nonfunction key. Clearance between clutch shoe lever and trip lever with upper edge of clutch lever in line with upper edge of trip lever
- 6. Power on and keyboard universal lever in latched position. Clearance of clutch shoe lever beyond rear most surface of trip lever
- D. Selector Clutch
 - .002 1. Disengage clutch. Endplay between .008 clutch and side plate

NUMBER SIZE CODE REV APPD SP LT33-0-6

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CONTINUATION SHEET

TITLE ALIGNMENT/TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

- 2. Disengage clutch. Trip leter shall engage shoe lever by approximately the full thickness of shoe lever.
- 3. Disengage clutch lift trip lever to trip clutch, permit trip lever to rest on shoe lever. Edge of shoe lever shall sit in center of slot in trip lever

1. Disengage clutch. Endplay at maximum

E. Codebar Clutch

2. Endplay in latchlevers

- 3. Typing unit in stop condition. Trip lever shall engage shoe lever by approximately the full thickness of shoe lever
- 4. Disengage clutch lift trip lever to trip clutch, permit trip lever to rest on shoe lever. Edge of shoe lever shall sit in slot in trip lever.
- F. Function Clutch

1. Disengage clutch. Endplay between clutch and collar at maximum

.002

- 2. Typing unit in stop condition. Trip lever shall engage shoe lever by approximately the full thickness of shoe lever.
- 3. Disengage clutch. Lift trip lever to trip clutch, permit trip lever to rest on shoe lever. Edge of shoe lever shall sit in center of slot in trip lever.
- G. Rear Rail
 - 1. Power on. Perform carriage return. Power oif. Release codebar clutch. Rotate main shaft until codebars are fully raised. Observe small portion of #1 codebar slide below right guide plate. Move carriage to right margin. Protruding portion of codebar must remain constant throughout carriage traverse.
- H. Drive Bail
 - 1. Power on. Perform carriage return. Power off. Release codebar clutch. Rotate main shaft until carriage drive bail reaches its rearmost position.

SIZE CODE NUMBER Α SP LT33-0-6

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| TITLE ALIGNMENT/ | TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY | OR TU OR TBP |
| | Clearance between print hammer bail and print hammer trip lever This clearance must remain constant as carriage is manually moved to right margin. | . <u>015</u> .030 |
| _ | rint Suppression Latch Place carriage approximately 1/2 inch from left margin. Set (3-5-78) code in selector. Rotate main shaft until drive bail reaches rearmost position. Take up print suppression latchlever play to the right. Clearance between print suppression latch and print hammer bail | • <u>015</u> •030 |
| | eader Control lever in free position. Alternately hold and release armature to cycle sprocket and sensing pins through several positions. At each position: a. The sprocket pin shall be in line with sensing pins within | .002 max. |
| | b. Sprocket backlash shall not exceed | .001 max. |
| 2. | Control Lever In Free Position. a. Armature in attached position. Clearance between top surface of top plate to tip of each sensing pin in fully extended positions | |
| | Armature in unattracted position. Clearance between tip of each sensing pin below top surface of top plate | .015 max. |
| 3. | Tape lid closed. Tape lid latch must be centrally located in cut out of tape lid. Clearance between top plate and latch spring | . <u>005</u> .030 |
| 4. | Armature in unattracted position. a. Clearance between feed pawl and rachet with fine teeth between feed pawl and detent lever | . <u>001</u> .008 |
| | b. Clearance between blocking pawl and rachet tooth | .001 .010 |
| K. Ta | pe Punch | |
| еврыния стана простана при стана при | Check to insure punch driver arm assembly | |
| | SIZE CODE NU SP LT33-0 | IMBER REV |

A SP

DEC FORM NO **DRA 108**

SHEET __ 3 OF __ 4__

ENGINEERING SPECIFICATION

CONTINUATION SHEET

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TITLE ALIGNMENT/TEST PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

is securely fastened to main rocker shaft.

- 2. Power on. Manually rotate main shaft until function rocker shaft and stripper bail are in most forward positions. Take up rear roller play toward rear and tape nudger play in clockwise direction. Clearance between rear roller and highest point on tape nudger
- 3. Set all marking code in selector. Manually rotate main shaft until function rocker shaft and stripper bail are in rearmost position. There must be some clearance between rightmost sensing lever and its associated pawl.
 - a. Clearance between left most sensing .005 .020 lever and its associated pawl
 - b. Take up all play in stripper bail toward rear. Feed wheel in its fully detented position. Clearance between feed pawl and feed wheel ratchet tooth
- 4. Position end of spring to lowest notch of arm with bushing. Perforate alternate R and hyphen codes in 8 inches of tape. Align #2 code hole of tape with first .072 hole on smooth side of guage TP156011. The four remaining .072 guage holes must be visable through corresponding #2 code holes in tape. The #2 code hole which corresponds with .86 guage hole must be entirely within the perimeter of that guage hole.

TEST PROCEDURE

Run the following tape using PDP8/S or PDP8/I processor: Combo Test - MAINDEC-08-D2TA

(A) If failures occur run the following diagnostic pertaining to the particular area, that failed in the Combo Test, repair, re-run combo.

Teleprinter Test MAINDEC-08-D25A DEC-8-2-U-RIM Binary Loader Punch Test MAINDEC-08-D2QA MAINDEC-08-D2RA Keyboard Test MAINDEC-08-D2PA Reader Test

(B) Unit is ready for shipment when Combo Test #MAINDEC-08-D2A

SIZE CODE NUMBER LT33-0-6 SHEET $\frac{4}{}$ OF $\frac{4}{}$

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DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/23/68

TITLE ACCEPTANCE PROCEDURE FOR TELETYPE MODEL 33ASR-TU

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SCOPE:

To define the criteria to accept a (ASR) model 33TU for shipment.

TEST HARDWARE:

PDP8

TEST SOFTWARE:

Engineering specifications A-SP-LT33-0-3

Diagnostic program

MAINDEC-08-D2TA - Combo Test

MAINDEC-08-D2PA - Reader Test MAINDEC-08-D2SA - Printer Test MAINDEC-08-D2QA - Punch Test

MAINDEC-08-D2FA - Keyboard Test

PROCEDURE:

Run the diagnostic MAINDEC-08-D2TA. The unit is accepted for shipment to a customer when this diagnostic program has been run for one complete pass without error typeouts. Quality control inspection form to be filled out before shipment.

SHIPPING SOFTWARE:

Diagnostic program

MAINDEC-08-D2RA MAINDEC-08-D2QA MAINDEC-08-D2SA MAINDEC-08-D2TA MAINDEC-08-D2PA

Maintenance manual volume I and II

Parts manual

SHIPPING HARDWARE:

#5288-2 cable - 12 feet

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SHEET 1 OF 1

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ENGINEERING SPECIFICATION

DATE 5/3/68

TITLE PACKING PROCEDURE FOR TELETYPE MODEL 33ASR-TY OR TU OR TBP

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- 1. Put reader clip in holder; reader pins in upward position as originally received.
- 2. Use one tie wrap to hold carriage at left margin.
- 3. Mount printer unit to fiberboard platform with the eight (8) mounting screws and three (3) studs, originally provided.
- 4. Put chad box and reader power pack as well as copy holder in the box provided.
- 5. Fifty (50) cycle teletypes should have transformer (previously mounted) left in base stand.
- 6. The four (4) mounting screws that mount the printer to the base stand should be put in a bag along with the on/off knob and the platen knob and then tied to the base stand.
- 7. Teletype AC cable and 5288-2 cable should be placed on the plastic cover where paper roll normally goes and wrapped in kim pack.
- 8. Tape down printer cover, punch paper-roller, printer paper-roller and cables of item 7 above. Additional tape should be used to secure whole cover to base.
- 9. Make sure that there are three (3) thumbscrews that hold teletype cover on, and four (4) screws in the front of the machine, also a screw in reader cover and one (1) faceplate for each machine.

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INSTALLATION PROCEDURE FOR TELECYPE MODEL 33ASR-TY OR THE OR THE

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- 1. Remove all tape holding covers and cables.
- 2. Remove the whole cover and in the reader, remove clip which holds reader pins in an upward position before turning machine on.
- 3. Mount power supply for reader on basic stand and plug connector cable in.
- 4. Remove <u>tie wrap</u> being used to hold carriage at left hand margin.
- 5. Mount base to bottom of unit with screws provided.
- 6. Replace cover being sure that three (3) thumbscrews, four (4) ponhead screws and one (1) special screw (for reader) are correctly installed before attaching face plate and knobs.

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| ITEM NO. | DWG NO. / PART NO. | DESCRIPT | TION | | | | | KIT BY | INST. |
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| 2 | 3 6-5 3 6 5 | ROLL, TWX PAPER | | 1 | | | | | |
| 3 | BULLETIN 273B | TTY MANUAL VOL #1 (VENDOR | 2) | 1 | | | | | |
| 4 | BULLETIN 310B | TTY MANUAL VOL #2 (VENDOR | 1 | 1 | | | | | |
| 5 | BULLETIN 11848 | TTY MANUAL PARTS (VENDOR) | | 1 | | | | | |
| 6 | 18-9137 | ROLL TTY RIBBON | | 1 | _ | | | | |
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