TC-130 PDP-11

LOGIC MANUAL

PN. 130015

February 24, 1977
NOTES:

1. RUBBER STAMP OR BLACK FELT PEN CHARACTERS AS SHOWN

2. ASSEMBLY:
   - USE 3M PRESS NO. 3440
   - USE LOCATOR PLATE NO. 3443-11
   - USE SETTING NO 9 OF GAUGE 3436-1
   - CUT CABLE USING SCOTCHFLEX CABLE SHEAR OR EQUIV.
   - SEAT CABLE INTO COVER USING SCOTCHFLEX TOOL
   - NO. 3453, CHECK FOR ALIGNMENT
   - PLACE BODY ON LOCATOR PLATE
   - POSITION COVER AND CABLE OVER CONN BODY
   - LOWER HANDLE TO COMPLETE ASSY
   - REMOVE BY LIFTING ON CONNECTOR

FOR PARTS SEE PARTS LIST 121004
NOTES:

1. RUBBER STAMP OR BLACK FELT PEN CHARACTERS AS SHOWN.

2. ASSEMBLY:
   USE 3M PRESS NO 3440
   USE LOCATOR PLATE NO. 3443-11
   USE SETTING NO. 3 OF GUAGE NO. 3436-1
   CUT CABLE USING SCOTCHFLEX CABLE SHEAR OR EQUIV.
   SEAT CABLE INTO COVER USING SCOTCHFLEX TOOL NO
   3453, CHECK FOR ALIGNMENT
   PLACE BODY ON LOCATOR PLATE
   POSITION COVER AND CABLE OVER CONN BODY
   LOWER HANDLE TO COMPLETE ASSY
   REMOVE BY LIFTING ON CONNECTOR

FOR PARTS SEE PARTS LIST 121006

REVIEWS

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<td>A</td>
<td>ADDED -3 PER CO 00647</td>
<td>6-17-6</td>
<td>Y.D.</td>
</tr>
<tr>
<td>B</td>
<td>REVISED PER CO 0069</td>
<td>6-17-6</td>
<td>Y.D.</td>
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ASSEMBLY
CABLE, READ

TOLERANCES UNLESS OTHERWISE SPECIFIED

SCALE

SIZE DRAWING NO.

DO NOT SCALE DRAWING SHEET 1 OF 1
NOTE 5:

1. RUBBER STAMP OR BLACK FELT PEN CHARACTERS AS SHOWN
2. ASSEMBLY:
   USE BM PRESS NO. 3440.
   USE LOCATOR PLATE NO 3443-II.
   USE SETTING NO 9 OF GUAGE 3434-1.
   CUT CABLE USING SCOTCHFLX CABLE SHEAR OR EQUIV.
   SEAT CABLE INTO COVER USING SCOTCHFLX TOOL NO 3453, CHECK FOR ALIGNMENT.
   PLACE BODY ON LOCATOR PLATE.
   POSITION COVER AND CABLE OVER CONN BODY.
   LOWER HANDLE TO COMPLETE ASSY.
   REMOVE BY LIFTING ON CONNECTOR.

FOR PARTS SEE PARTS LIST 121014
NOTE:
1. REF SCHEMATIC DWG NO. 122022
2. RUBBER STAMP CHARACTERS SHOWN USING BLACK INK
3. FOR MATERIAL SEE P/L 122005

ASSEMBLY Dwg.
ADAPTER, TAPE READER CONNECTOR

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NOTE:
1. REF SCHEMATIC DWG. NO. 122021.
2. RUBBER STAMP CHARACTERS SHOWN USING BLK INK
3. FOR MATL SEE PL 122006

FOR TERMINATOR RESISTOR NETWORK
BECKMAN # B95-5-R220/350
OR EQUIVALLANT.

KEY BETWEEN 10512 (REF)

KEY BETWEEN 567 (REF)

TOP

122006

16 PIN DIP SOCKET

J1 J2

J102

V A

(FAISIDE)
NOTE: UNLESS OTHERWISE SPECIFIED
1. REF SCHEMATIC Dwg No. 122022
2. RUBBER STAMP CHARACTERS SHOWN USING BLK INK
3. FOR MATERIAL SEE PL 122018
4. RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX WHERE SHOWN
REVISIONS

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<th>DATE</th>
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<tr>
<td>A</td>
<td>INCORPORATE CO-0146</td>
<td>1-11-77</td>
<td>L.L. 1-24-77</td>
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</table>

KEY BETWEEN 10 & 12 (REF)

FOR TERMINATOR RESISTOR NETWORK
BECKMAN 896-5-R220/390
OR EQUIVALENT

KEY BETWEEN 5 & 7 (REF)

NOTE: UNLESS OTHERWISE SPECIFIED
1. REF SCHEMATIC DWG NO. 122022
2. RUBBER STAMP CHARACTERS S-OWN USING BLK INK
3. FOR MATERIAL SEE PL 122019
4. RUBBER STAMP ASSY NO. WITH LATEST REV LTR APPROX WHERE SHOWN

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5. "A" and "K" are component location code; "B" thru "J" are for ref only & do not appear on part.
2. Jumper points "A" thru "H"; "J" thru "N";
3. For optional jumpering and/or jumper arrays, ref JOA & schematic.
4. Rubber stamp Assy. No. with latest rev LTR located approx where shown (FAR SIDE).
5. Rubber stamp character shown using BLK ink.
6. For material see P/L No. 122037
7. Ref. schematic 122036

NOTE: UNLESS OTHERWISE SPECIFIED
KEY SLOT (REF) BETWEEN S & T AT J2
BETWEEN 10 & 12 AT J1.

"A" AND "K" ARE COMPONENT LOCATION CODE; B"THRU"J"
ARE FOR REF ONLY & DO NOT APPEAR ON PART.

FOR OPTIONAL JUMPERING AND/OR JUMPER ARRAYS,
REF J.O.A. & SCHEMATIC.

RUBBER STAMP ASSEMBLY NO. WITH LATEST REV LTR LOCATED
APPROX WHERE SHOWN (FAR SIDE).

RUBBER STAMP CHARACTER SHOWN USING BLK INK.

FOR MATERIAL SEE P/L NO. 122036
1. REF SCHEMATIC 122036

"A" FARSIDE
"V" FARSIDE

CONN PIN (REF)
20 AWG WIRE
WITH TEFLOL SLEEVING (36 PL)

2.2 µF

SWITCH

"DRIVE CONTROL"
FOR TERMINATOR RESISTOR NETWORK
BECKMAN NO. 898-5-R220/330 OR EQUIV

KEY SLOT BETWEEN 5 & 7 AT J2 & 10 & 12 AT J1 (REF)

TOP

122034

16 PIN DIP SOCKET

18

"V" (FAR SIDE)

"A" (FAR SIDE)

AWG 20 SOLID COPPER WIRE 36 PL

CONN PIN (REF)

MAX.

SAC 180/2-2 CARD EDGE CONNECTOR (SAE)

OR EQUAL

3 FOR MATL SEE P/L 122034

2 RUBBER STAMP CHARACTER SHOWN WITH BLK INK

1 REF SCHEMATIC DWG NO. 122021

NOTE:
KEY SLOT BETWEEN 8 & 10 AT J1 & BETWEEN 3 & 5 AT J2 (REF)

NOTE S:
1. RUBBER STAMP CHARACTERS SHOWN WITH BLK INK
2. REF SCHEMATIC DWG NO 122022
SWITCH OPERATION DESCRIPTION

1. Grayhill - ON = Rocker depressed to numbered side
2. CTS - ON = Toggle positioned to numbered side

<table>
<thead>
<tr>
<th>CONFIGURATION SETTINGS</th>
<th>DESCRIPTION</th>
<th>SYSTEM CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-A1</td>
<td>FOR DRIVES THAT REQUIRE REWIND</td>
<td>1. REMOVE ALL PERIPHERAL TERMINATORS IN DAISY CHAIN</td>
</tr>
<tr>
<td>ON</td>
<td>COMMAND REMOVAL PRIOR TO BOT</td>
<td></td>
</tr>
<tr>
<td>9-A1</td>
<td>FOR DRIVES THAT DO NOT REQUIRE REWIND</td>
<td>2. INSTALL CONTROL TERMINATOR ONLY IN LAST DAISY CHAIN POSITION</td>
</tr>
<tr>
<td>OFF</td>
<td>COMMAND REMOVAL PRIOR TO BOT</td>
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<tr>
<td>9-A2</td>
<td>FOR DRIVES THAT STORE EOT STATUS</td>
<td>3. CORRECTLY IDENTIFY CONFIGURATION &amp; SET SWITCHES ACCORDINGLY</td>
</tr>
<tr>
<td>ON</td>
<td>NOTE: A8 SHOULD BE OFF</td>
<td></td>
</tr>
<tr>
<td>9-A3</td>
<td>FOR DRIVES THAT DO NOT STORE EOT STATUS</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>NOTE: A8 SHOULD BE ON</td>
<td></td>
</tr>
<tr>
<td>9-A4</td>
<td>FOR 7 TRACK DRIVES</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-A5</td>
<td>FOR 9 TRACK DRIVES</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
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<td></td>
</tr>
<tr>
<td>9-A8</td>
<td>FOR 9 TRACK NRZI DRIVE</td>
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<tr>
<td>9-A9</td>
<td>FOR 7 TRACK DRIVES, 9 TRACK 1600 BPI DRIVES, 9 TRACK 550/1600 DUAL DENSITY</td>
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<tr>
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<td>9-A7</td>
<td>FOR DRIVES THAT DO NOT PRESENT NRZ STATUS</td>
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<tr>
<td>ON</td>
<td>ON DRIVE READ CONNECTOR</td>
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<tr>
<td>9-A7</td>
<td>FOR DRIVES THAT DO PRESENT NRZ STATUS</td>
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<tr>
<td>OFF</td>
<td>ON DRIVE READ CONNECTOR</td>
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<tr>
<td>9-A8</td>
<td>FOR 7 TRACK DRIVES</td>
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<tr>
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<tr>
<td>9-A9</td>
<td>FOR 9 TRACK DRIVES</td>
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</table>

NOTES:

1. FOR 7 TRACK DRIVES IN DRIVE DAISY CHAINS, ONLY PRIMARY SPEED SELECTION IS AVAILABLE.
2. REF. ASSY. DWG. 122037, 122038, & 122039.
3. 122010 INSTALLED WHEN TRANSPORT HAS 4-POSITION UNIT SELECT SWITCH (SEE EXCEPTION BELOW).
4. 122011 INSTALLED IN 4th TRANSPORT IF MORE THAN 4 TRANSPORTS ARE DAISY CHAINED.
5. 122012 INSTALLED WHEN TRANSPORT DOES NOT HAVE UNIT SELECT SWITCH.
6. FOR PERTEC COMPATIBLE UNIT SELECT OPTION: JUMPER E TO F, G TO H, AND M TO N.
7. FOR EXTERNALLY CONNECTED UNIT SELECT SWITCH:
   CUT ETCH BETWEEN P & R AND CONNECT EXTERNAL SWITCH TO A, B, C, D, & L.
NOTE: UNLESS OTHERWISE SPECIFIED
ALL RESISTORS ARE 10K OHMS.
ASSEMBLY
TC-130 - BOARD NO. 1
DRAWING NO. 130017
NOTE:

① RUBBER STAMP PART NO WHERE SHOWN USING BLK INK.
NOTE: UNLESS OTHERWISE SPECIFIED
1. FOR MATERIAL SEE P/L 131001
2. RUBBER STAMP ASSY NUMBER WITH
   LATEST REVISION LETTER LOCATED
   APPROX WHERE SHOWN
3. WIRE PER WIRE LIST 131001 IF ITEM
   NO. 1 IS SUPPLIED, WIRE PER WIRE
   LIST 131004 IF ITEM NO. 8 IS
   SUPPLIED IN LIEU OF ITEM NO. 1
   AND REMOVE THE FOLLOWING
   BB11 WIRES:
   B5 IE2 TO B5 IE2 (BG4H)
   B5 IB1 TO B5 IE1 (BG5H)
   B5 IA1 TO B5 IE1 (BG6H)
   A5 IV1 TO A5 IV1 (BG7H)
   A5 IU1 TO A5 IU1 (NP6H)
4. IF ITEM NO. 8 IS USED IN LIEU OF
   ITEM NO. 1 ITEMS 2, 3, 4 & 5
   ALREADY EXIST AND NEED NOT
   BE SUPPLIED
**SPEED SWITCH SETTINGS**

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<tr>
<th>SWITCE POSITIONS</th>
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<td>10G &amp; 11G</td>
<td>12.5IPS</td>
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<tr>
<td>1</td>
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<tr>
<td>2</td>
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**NOTE:**

G10 is primary speed selection.
# Bus Switch Settings

## Interrupt Bus Level

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**Note:**
Bus switch settings are normally set at level 5.
DEAD TRACK DETECTOR

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B 130029

Do Not Scale Drawing