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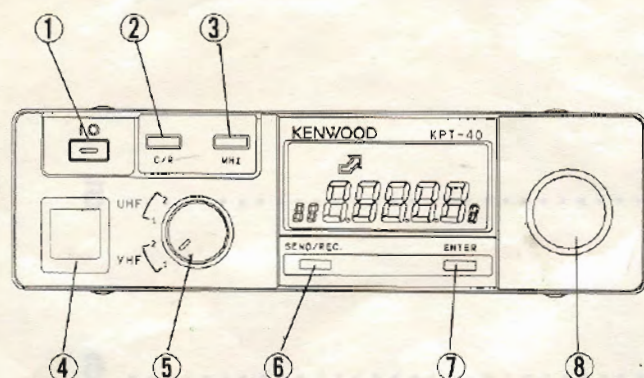
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SPECIFICATIONS

Operating Voltage	13.8 VDC $\pm$ 15%
Current Drain (Max.)	0.1 A
Operating Temperature	- 10°C to + 50°C (14°F to 122°F)

1. OPERATING CONTROLS

FRONT PANEL



- ① **POWER switch**
Press to turn the KPT-40 on or off.

- ② **C/R key**
This key is used to confirm the data.

After pressing the ENTER key pressing the key at in the RX frequency mode will cause the radio to begin to confirm the RX frequency of the previous channel.

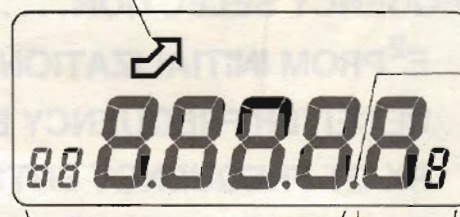
After pressing the ENTER key pressing the key at without the RX frequency mode (RX QT, TX, or TX QT frequency mode) will cause the radio to begin to confirm the RX frequency of the channel.

This key is used to linitialize the E²PROM.
(Please refer to the E²PROM INITIALIZATION)

- ③ **MHz key**
This key is used to increase / decrease the operating frequency in 1MHz increments.
- ④ **Connector**
Connect the supplied / optional cord to this connector.
- ⑤ **UHF/VHF selector**
Before the power switch is turned on, rotate this selector to the coresponding position of your transceiver.
- ⑥ **SEND / REC key**
This key is used to initiate cloneing.
- ⑦ **ENTER key**
This key is used to enter the displayed data into the memory channel.
- ⑧ **TUNING control**
This control is used to select the desired transmitter/receiver frequency or QT frequency.

DISPLAY

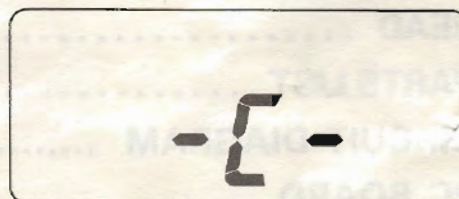
- ①
On when the TX frequency ,or the TX QT frequency is selected.
or
On during the contents of the KPT-40 transferring to the transceiver to be connected.



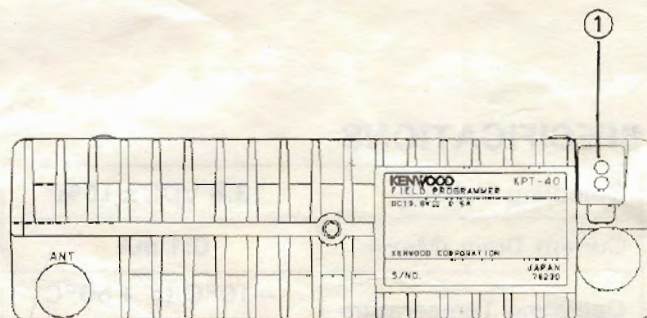
- ②
Displays the selected transmitter / receiver frequency, or QT frequency.

- ③
Displays the selected memory channel.

On when the clone mode is selected.

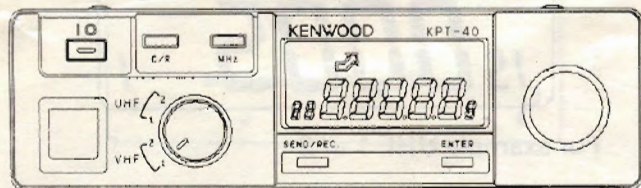


REAR PANEL



- ① **13.8 VDC power input connector**
Connect the supplied DC power cable to this connector. Pay close attention to the polarity. Red is positive and Black is negative.

2.FREQUENCY SELECTION

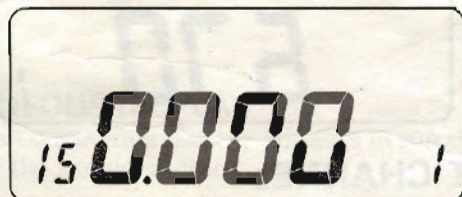


1. BEFORE THE POWER SWITCH IS TURNED ON, rotate the UHF/VHF selector to the corresponding position of your transceiver.

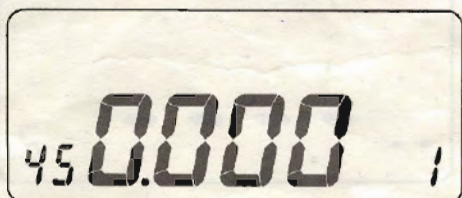
position	Frequency range (Preset Frequency) MHz	IF frequency MHz (※)
VHF 1	150[146] to 174 (150)	34.4
VHF 2	136 to 150 (150)	21.4
UHF 1	430 to 470, or 490 to 520 (450)	34.3
UHF 2	400 to 430, or 470 to 490 (450)	30.3

※ Please refer to the SERVICE MANUAL of the transceiver.

2. Turn the power switch on.
For example VHF 1 or 2



For example UHF 1 or 2



NOTE;

The frequencies shown above are frequencies after a E²PROM reset. If the display shows incomplete data or you think the displayed frequency is in error you should reset the E²PROM using the instructions in THE E²PROM INITIALIZATION.

E²PROM INITIALIZATION

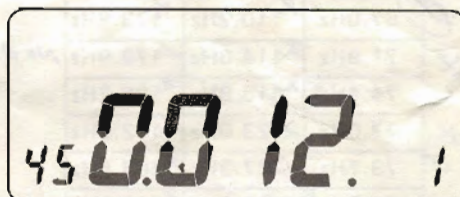
1. Turn the KPT-40 POWER switch OFF.
2. Press and hold the C/R key.
3. Turn the POWER switch ON.
4. Release the C/R key.

RECEIVER FREQUENCY ENTRY

3. Rotate the TUNING control clockwise / counterclockwise to select the desired receive frequency.
For example VHF 1 or 2



For example UHF 1 or 2



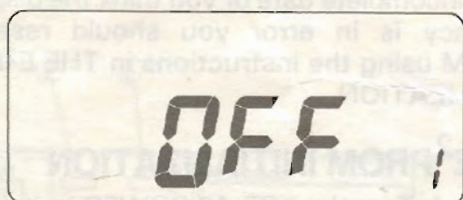
MHz INCREMENT

1. Press and hold the MHz key.
2. Rotate the TUNING control clockwise/counterclockwise to increase/decrease the operating frequency in 1MHz increments.

4. Press the ENTER key.

RX QT FREQUENCY ENTRY

FOR THE TRANSCEIVER INSTALLED THE
OPTIONAL QT UNIT ;



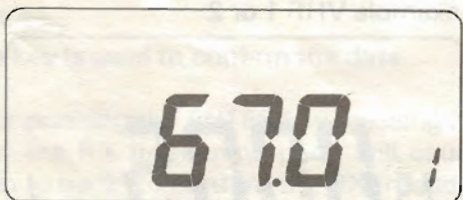
IF QT UNIT IS NOT INSTALLED;

or

IF QT IS NOT SELECTED;

press the ENTER key and continue to step 7.

5. Rotate the TUNING control clockwise / counterclockwise to select the desired RX QT frequency.

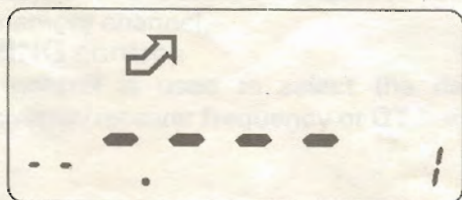


6. Press the ENTER key.

67.0Hz	110.9Hz	173.8Hz
71.9Hz	114.8Hz	179.9Hz
74.4Hz	118.8Hz	186.2Hz
77.0Hz	123.0Hz	192.8Hz
79.7Hz	127.3Hz	203.5Hz
82.5Hz	131.8Hz	210.7Hz
85.4Hz	136.5Hz	218.1Hz
88.5Hz	141.3Hz	225.7Hz
91.5Hz	146.2Hz	233.6Hz
94.8Hz	151.4Hz	241.8Hz
100.0Hz	156.7Hz	250.3Hz
103.5Hz	162.2Hz	
107.2Hz	167.9Hz	

TRANSMITTER FREQUENCY ENTRY

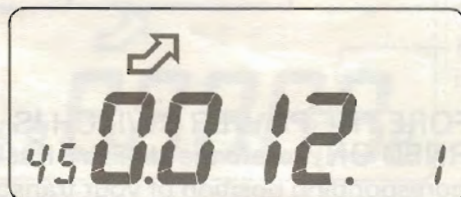
7. Display shows the transmitter frequency entry mode.



8. Rotate the TUNING control to select the desired transmitter frequency.
For example VHF 1 or 2



For example UHF 1 or 2



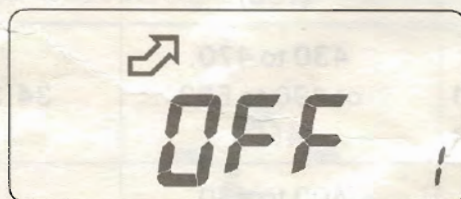
9. Press the ENTER key.

IF QT UNIT IS NOT INSTALLED;

press the ENTER key and continue to step 11.

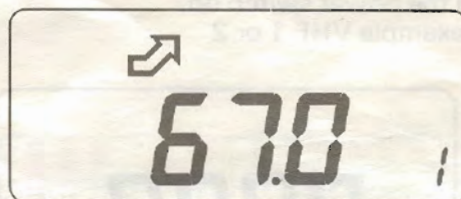
TX QT FREQUENCY ENTRY

10. Display shows the TX QT frequency entry mode.



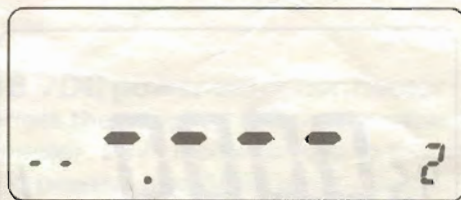
FOR THE TRANSCEIVER INSTALLED THE
OPTIONAL QT UNIT ;

Rotate the TUNING control clockwise / counterclockwise to select the desired TX QT frequency.



NEXT CHANNEL

11. Press the ENTER key to enter the data and go to next channel.

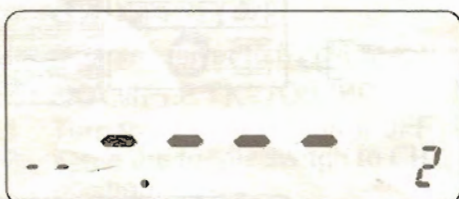


Turning off the power switch will not erase the data entered.

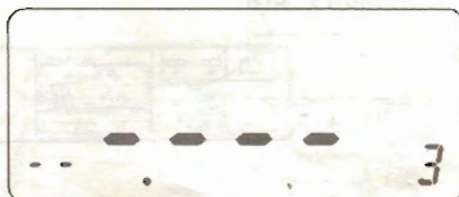
Repeat steps 3 thru 11 to enter data .

CHANNEL SKIP

To skip channel press the ENTER key.
For example

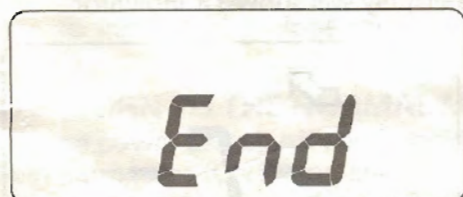


Press the ENTER key.



FREQUENCY ENTRY IS COMPLETED

After the last 16 channel (QT) TX frequency is entered the display shows ;



Using the CLONE function you can copy the contents of the KPT-40 to the other transceiver .
Please refer to the next CLONE section.

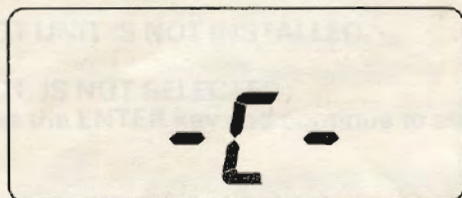
ERRONEOUS DISPLAY

When an erroneous display appears in the display turn off the power switch.

3.CLONE

Using this function you can copy the contents of the KPT-40 to the transceiver to be connected.

1. Turn the KPT-40 POWER switch OFF.
2. Press and hold the SEND/REC key.
3. Turn the POWER switch ON.
4. Release the SEND/REC key. The display will show "- C -" clone indicator.



5. Select the transceiver to be clone mode.

FOR EXAMPLE TK-706/806;

- 5-1. Turn the POWER switch OFF.
- 5-2. Place the toggle switch to CH 1 position.
- 5-3. Remove the top cover and as shown in the fig.1 remove the 2-pin connector (CN7) and shift it to the ○ mark side.

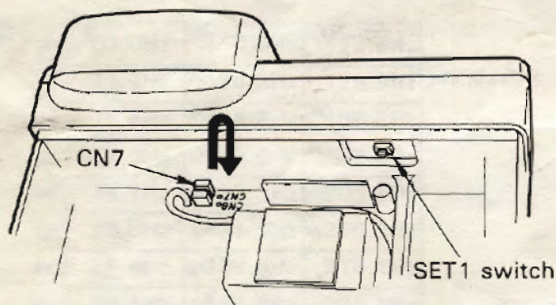


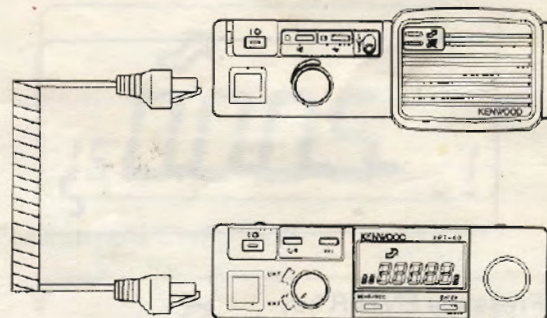
fig.1

- 5-4. Press and hold the SET1 switch as shown in the fig.1.
- 5-5. Turn the POWER switch ON.
- 5-6. Release the SET1 switch. The BUSY indicator will light green to indicate the clone mode.

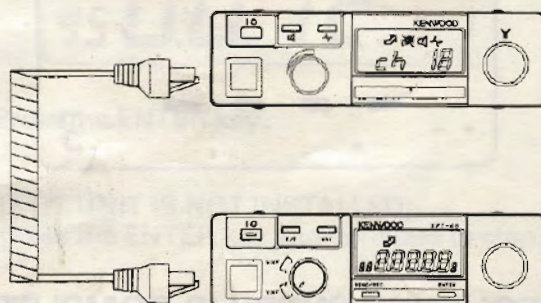
FOR THE OTHER RADIOS;

Please refer to the SERVICE MANUAL of the unit.

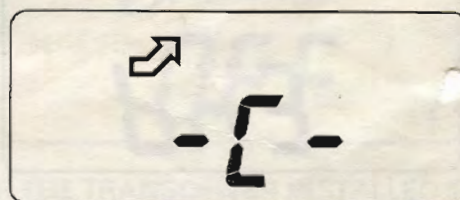
6. Connect the KPT-40 to the transceiver by using the supplied/optional cord.
For example TK-806.



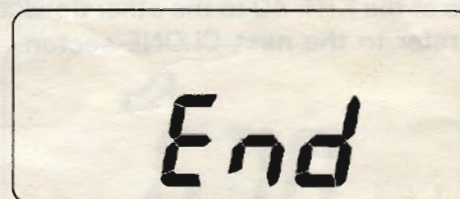
For example TK-805.



7. Press the KPT-40 SEND/REC key to transfer the data.
The display will show TX indicator.



8. After approx. 20 seconds the transceiver will beep.
The "End" indicator will appear in the KPT-40.



RETURN TO NORMAL MODE.

FOR EXAMPLE TK-706/806.

Turn the power switch off and remove the 2-pin connector (CN7) and shift it to the other side as shown in the fig.2.

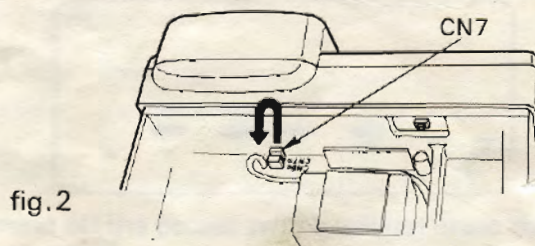


fig.2

9. Press the SEND/REC key to repeat the procedure for another transceiver.

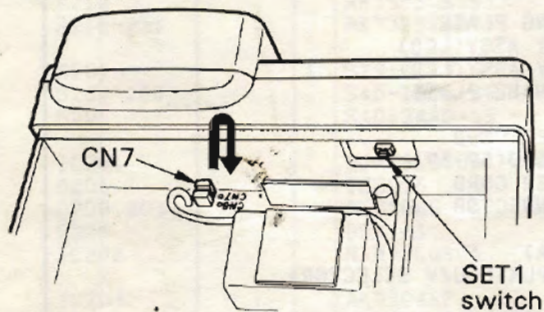
4.READ

Using this function you can read the contents of the transceiver to the KPT-40.

1. Select the transceiver to be clone mode.

FOR EXAMPLE TK-706/806 .

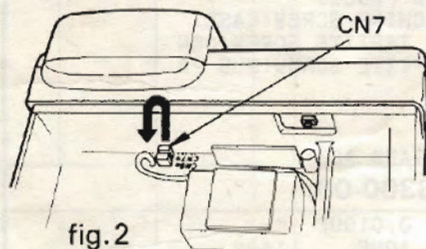
- 5-1. Turn the POWER switch OFF .
- 5-2. Place the toggle switch to CH 1 position.
- 5-3. Remove the top cover and as shown in the fig.1 remove the 2-pin connector (CN7) and shift it to the ○ mark side.



- 5-4. Press and hold the SET 1 switch as shown in the fig.1.
- 5-5. Turn the POWER switch ON.
- 5-6. Release the SET1 switch.
The BUSY indicator will light green to indicate the clone mode.

TO RETURN TO THE NORMAL MODE;

Turn the power switch off and remove the 2-pin connector (CN7) and shift it to the other side as shown in the fig.2.



FOR THE OTHER RADIOS ;

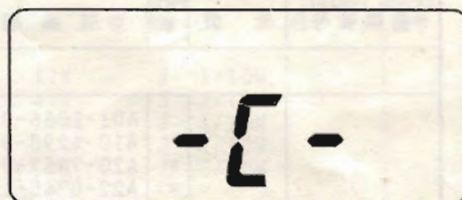
Please refer to the SERVICE MANUAL of the unit..

2. Rotate the UHF/VHF selector to the corresponding position of your transceiver.
3. Reset the KPT-40 E²PROM.

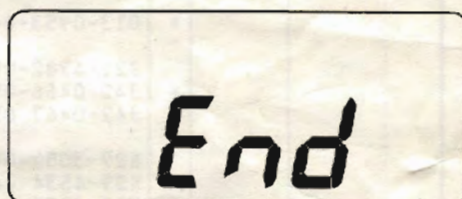
E²PROM INITIALIZATION

1. Turn the KPT-40 POWER switch OFF.
2. Press and hold the C/R key.
3. Turn the POWER switch ON.
4. Release the C/R key.

4. Select the KPT-40 to be clone mode.
 1. Turn the KPT-40 POWER switch OFF.
 2. Press and hold the SEND/REC key.
 3. Turn the POWER switch ON.
 4. Release the SEND/REC key. The display will show " - C - " clone indicator .



5. Connect the KPT-40 to the transceiver by using the supplied/optional cord.
6. To read the contents of the transceiver to the KPT-40 press a clone mode key of the transceiver.
(For example TK-706/806 ; SET 1 key)
7. After approx.20 seconds the transceiver will beep .
The "End" indicator will appear in the KPT-40.



8. Turn the KPT-40 POWER switch OFF.
9. Turn the POWER switch ON.
10. Press the C/R key to confirm the data.

736-9287
AIF

5.PARTS LIST

* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
KPT-40						
			A01-1066-03	CASE		
			A10-1293-01	CHASSIS		
		*	A20-7057-03	PANEL ASSY		
		*	A22-0765-13	SUB PANEL		
		*	B03-0560-04	DRESSING PLATE		
			B38-0321-05	DISPLAY ASSY(LCD)		
			B38-0322-05	DISPLAY ASSY(LCD)		
		*	B40-7623-04	MODEL NAME PLATE		
			E30-2076-05	DC POWER CORD		
		*	E30-2089-05	CARE CORD(5P-5P)		
			E30-2172-05	DC POWER CORD		
			E40-9016-05	PIN CONNECTOR		
			F05-1023-05	FUSE(1A)		
			F15-0667-04	BLIND PLATE(U/V SELECTOR)		
			G09-0405-05	D SPRING(U/V, TUNING)		
			G13-0688-04	CUSHION(CHASSIS)		
			G13-0935-04	CUSHION(C/R, MHZ)		
			G13-0936-04	CUSHION(U/V SELECTOR)		
			G13-0937-04	CUSHION(TUNING)		
		*	G13-0953-04	CUSHION(LCD)		
			J21-4282-08	MOUNTING HARDWARE(LCD)		
		*	J42-0466-05	BUSHING(EXT SP)		
		*	J42-0467-05	BUSHING(ANT)		
			K27-3052-04	BUTTON(POWER SWITCH)		
			K29-4534-04	KNOB(U/V SELECTOR)		
			K29-4533-04	KNOB(TUNING CONTROL)		
			K29-4535-04	BUTTON(C/R, MHZ, SEND, ENTER)		
			N09-0650-05	SCREW(LCD, SUB PANEL)		
			N33-2606-45	OVAL HEAD MACHINE SCREW(CASE)		
			N87-2606-46	BRAZIER HEAD TAPTITE SCREW(CON)		
			N88-2606-46	FLAT HEAD TAPTITE SCREW(SUB PA)		
			LC7582	IC(LCD DRIVER)		
			X53-3300-00	CONTROL PC BOARD ASSY		
CONTROL PC BOARD Assy (X53-3300-00)						
C201			CK73FB1H103K	CHIP C 0.010UF K		
C202			CE04EW1C100M	ELECTRO 10UF 16WV		
C203			CK73FB1H223K	CHIP C 0.022UF K		
C204			CK73FB1H102K	CHIP C 1000PF K		
C205, 206			CC73FCH1H330J	CHIP C 33PF J		
C207-209			CK73FB1H102K	CHIP C 1000PF K		
C210			CC73PSL1H101J	CHIP C 100PF J		
C211-213			CK73FB1H102K	CHIP C 1000PF K		
CN201			E40-3237-05	PIN CONNECTOR		
CN202			E40-3485-05	PIN CONNECTOR		
J201		*	E08-0673-05	RECTANGULAR RECEPTACLE		
W201			E31-6125-05	CONNECTING WIRE		
X201			L77-1397-05	CRYSTAL RESONATOR(4.19MHZ)		
R201			RK73FB2A563J	CHIP R 56K J 1/10W		

E: Scandinavia & Europe K: USA P: Canada W: Europe

U: PX(Far East, Hawaii) T: England M: Other Areas

UE: AAFES(Europe) X: Australia

△ indicates safety critical components.

* New Parts
 Parts without Parts No. are not supplied.
 Les articles non mentionnés dans le Parts No. ne sont pas fournis.
 Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
R202			RK73FB2A473J	CHIP R 47K J 1/10W		
R204-211			RK73FB2A473J	CHIP R 47K J 1/10W		
R212			RK73FB2A104J	CHIP R 100K J 1/10W		
R213			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R214			RK73FB2A103J	CHIP R 10K J 1/10W		
R215			RK73FB2A183J	CHIP R 18K J 1/10W		
R216-221			RK73FB2A473J	CHIP R 47K J 1/10W		
S201		*	S29-1443-05	ROTARY SWITCH(U/V SELECTOR)		
S202-205			S40-1086-05	PUSH SWITCH		
S207			S40-2440-15	PUSH SWITCH(POWER)		
IC201			NJM78L05UA	IC(5V AVR)		
D201			1SS226	DIODE		
D202, 203			DLS1585			
D204			DSM1A1	DIODE		
IC202			NJM78L08UA	IC(VOLTAGE REGULATOR/ +8V)		
IC203			AK93C46F	IC(1K EEPROM)		
IC204			75104G-605-1B	IC(MICROPROCESSOR)		
IC205			S-8054ALR-LN	IC(VOLTAGE DETECTOR)		
Q201			2SC2712(Y)	TRANSISTOR		
S206			W02-0388-05	ENCODER		

E: Scandinavia & Europe K: USA P: Canada W: Europe
 U: PX(Far East, Hawaii) T: England M: Other Areas
 UE: AAFES(Europe) X: Australia

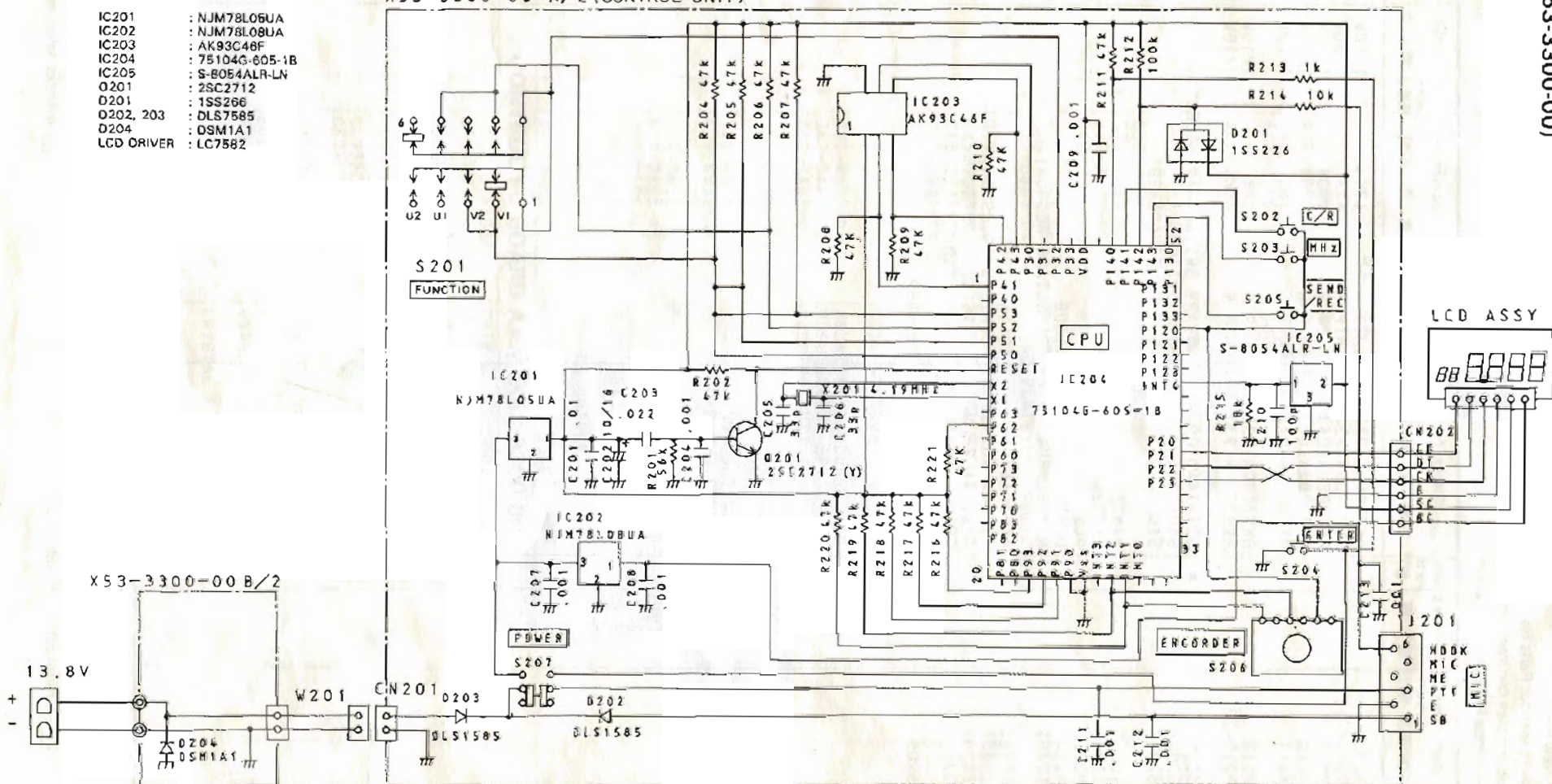
 indicates safety critical components.

6. SCHEMATIC DIAGRAM

CONTROL UNIT (X53-3300-00)

IC201	:	NJM78L05UA
IC202	:	NJM78L08UA
IC203	:	AK93C46F
IC204	:	75104G-605-1B
IC205	:	S-8054ALR-LN
O201	:	2SC2712
O201	:	1SS266
O202, 203	:	DLS7585
D204	:	DSM1A1
LCD DRIVER	:	LC7582

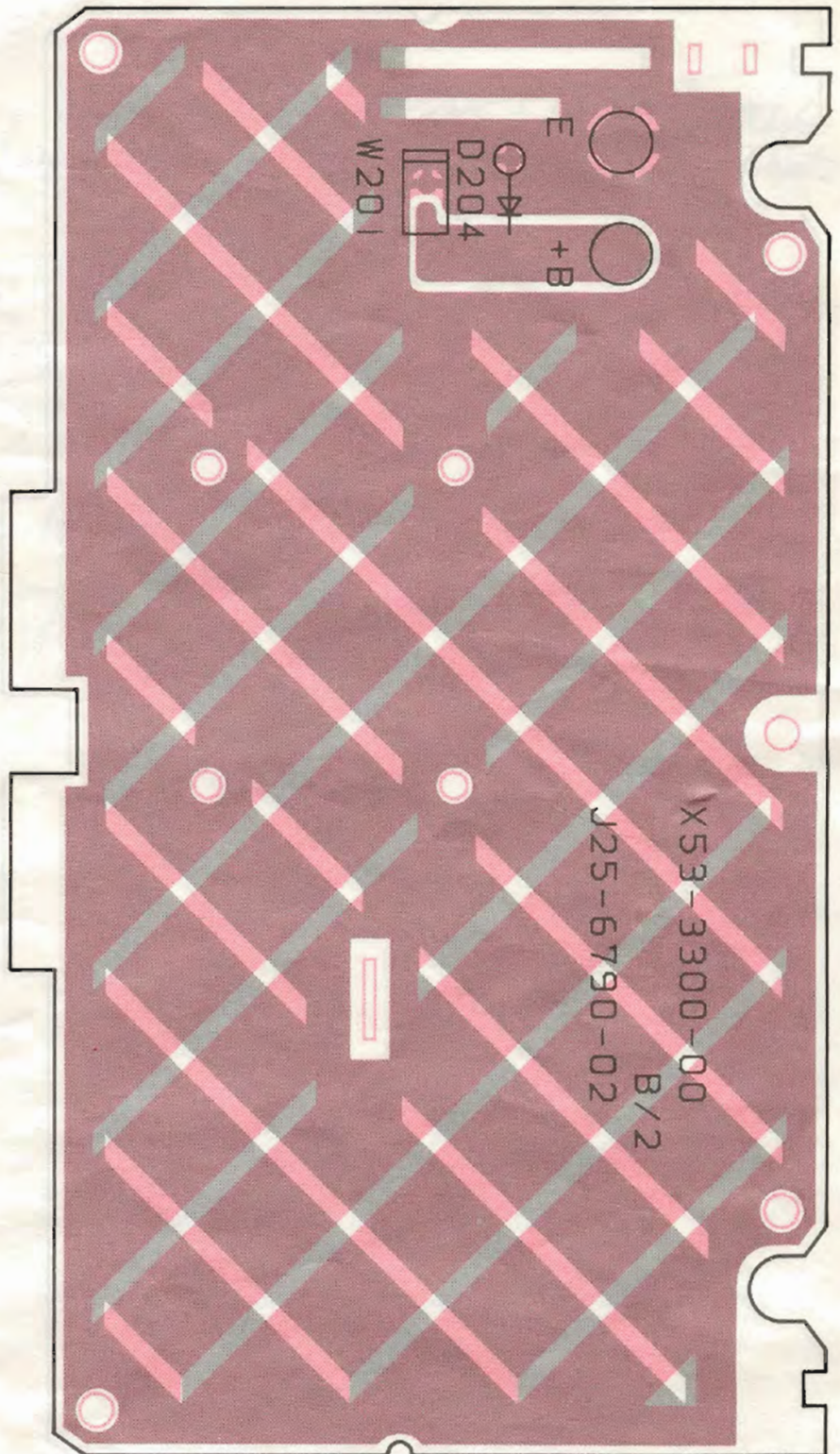
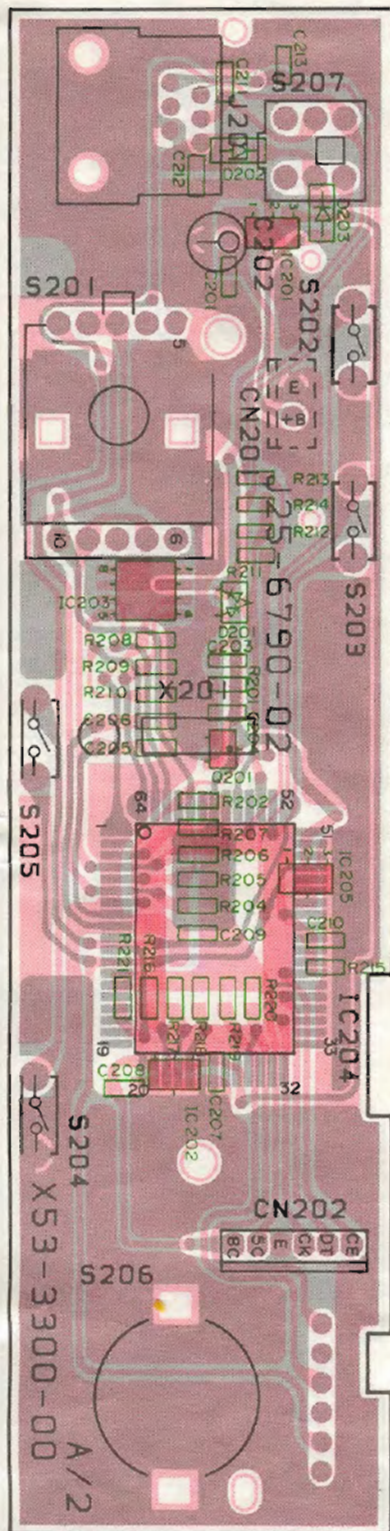
X53-3300-00 A/2 (CONTROL UNIT)



7.PC BOARD VIEW

▼ CONTROL UNIT (X53-3300-00)

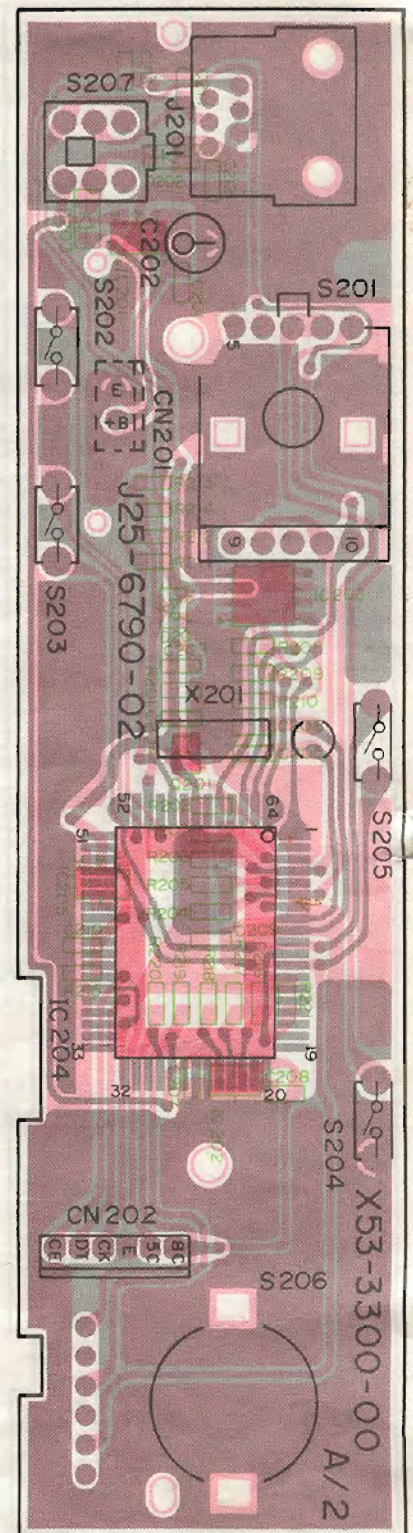
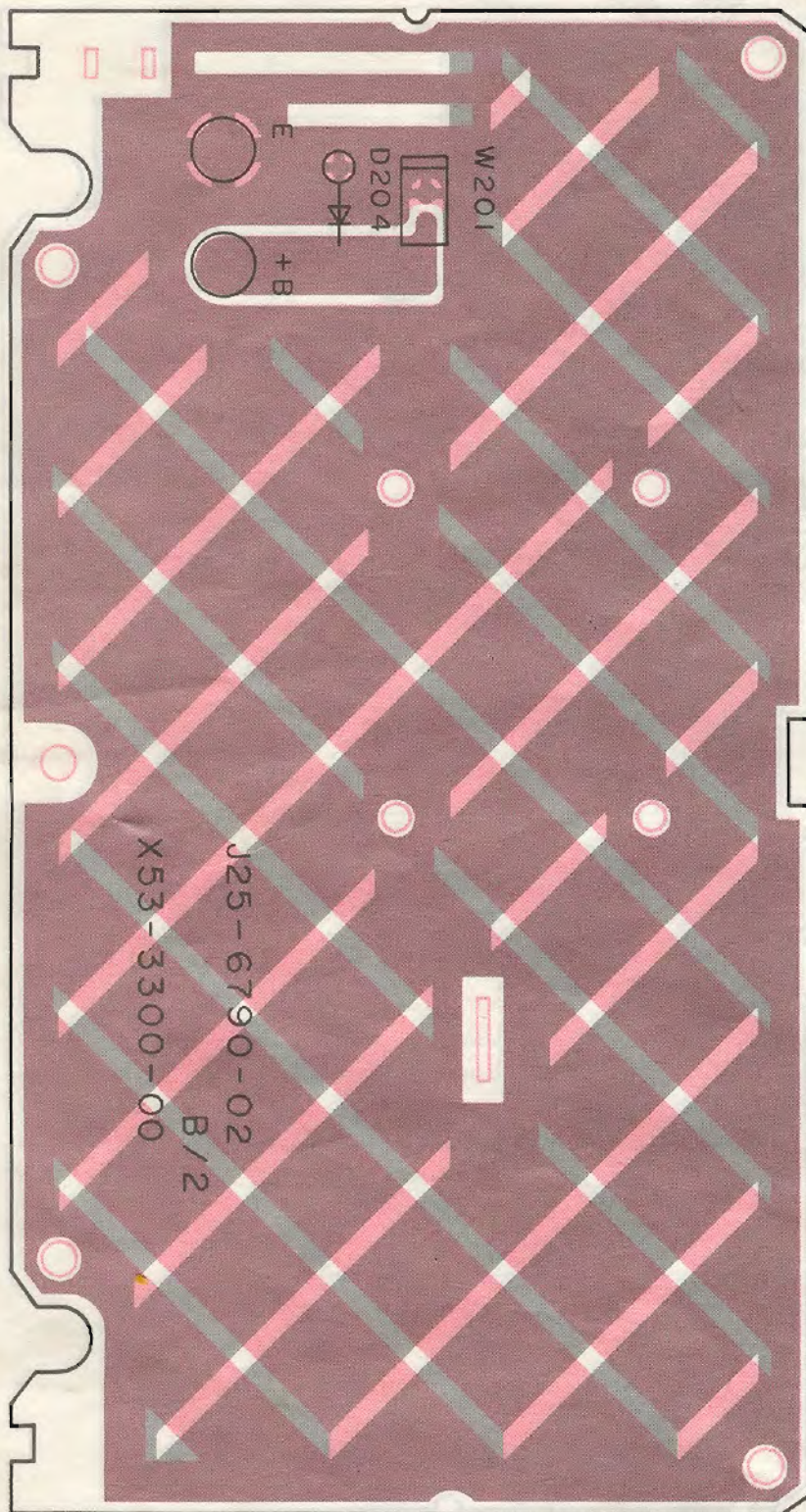
[Component side view]



IC201: NJM78L05UA, IC202: NJM78L08UA,
 IC203: AK93C46F, IC204: 75104G-605-1B,
 IC205: S-8054ALR-LN, Q201: 2SC2712, D201: 1SS266,
 D202, 203: DLS1585, D204: DSM1A1,
 LCD DRIVER: LC7562

▼ CONTROL UNIT (X53-3300-00)

[Foil side view]



AK93C46F

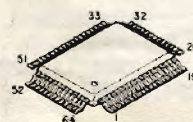
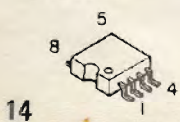
2SC2712

S-8054ALR-LN

NJM78L05UA
NJM78L08UA

75104G-605-1B

LC7582



- 1 - BLUE INTERNATIONAL ^{INTERNATIONAL} FLOAT TRUCK
- 2 - BLACK RENWORTH. (2)
- ✓ 3 - Gm Pickup ~~86P-794~~ (2)
- ✓ 4 - Gmc 1 TON
- 5 - Red Tandem (2)
- ✓ 6 - 544E
- ✓ 7 - 490 JOHN DEER (NO KEY)
- 8 - 310 C.
- 9 - 490 ESCAVATOR
- 10 - YELLOW FREIGHTLINER.

157.940

123

170.940

VX 173.34

RX 169.35

C6 123.00

VAC 169.38

KEYS: ~~Box Dodge~~
2 ~~ESC, Bx H&G~~

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