

## HOW TO CHECK VOLTAGE

### A) GENERAL NOTE

RAX is microprocessor based system which requires utmost care in trouble shooting procedures. Please observe the following notes to protect the equipment or the parts from being damaged.

- 1) Be sure to switch off power and wait for 2 minutes (confirm all the 3 diodes are off) and plug off PS-24M if used before attempting to remove the XC-Cards from the Exchange Unit.  
Removing or inserting a XC-Card while power is on will cause a permanent damage to digital components mounted on the XC-Card.
- 2) Guard XC-Card against static discharge  
Provide beforehand Anti-static polyethylene bag, for example, laminated or carbon-loaded bag. As soon as a XC-Card is removed from Exchange Unit, it has to be put into the anti-static polyethylene bag for protection from static damage. (When the defective XC-Card is returned to factory for repair, it has to be put in anti-static bag then packed to be free from damages during transportation ).
- 3) Handle the XC-Card with utmost care. Hold the XC-Card by edges and be careful not to touch electronic parts mounted on the card. Static electricity discharged from your fingers ( body ) may cause a permanent damage to the XC-Card.

### B) TESTING EQUIPMENT REQUIRED

A voltmeter which can measure DC voltages.

### C) HOW TO CHECK DC VOLTAGE ON XC-064

- STEP 1 Turn off the power switch and plug off PS-24M if used.
- STEP 2 Loosen 4 screws and remove the covers as shown in Fig. #1.
- STEP 3 Remove all XC- cards except XC-064.
- STEP 4 Turn on power switch. Please note that RAX Exchange Unit is equipped with the automatic cut off switch which automatically shuts off the power when cover is removed. This automatic cut off switch must be in depressed position, for example, by putting a tape etc. during voltage check. Refer to Fig. #2.

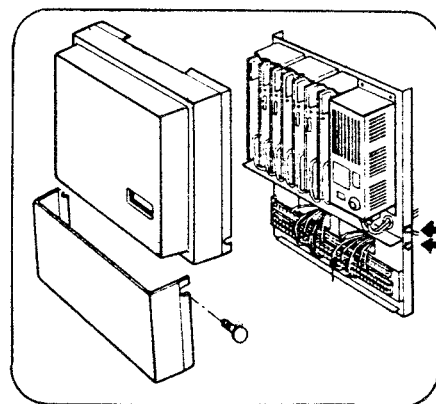


Fig. #1

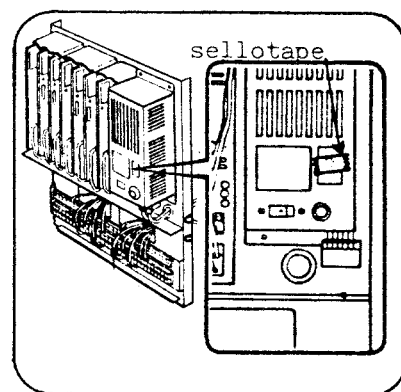


Fig. #2

STEP 5 Using a voltmeter, please check DC voltage at the connector receptacle marked: CN-A shown in Fig.#3. When you measure the voltage specified in the below table, it means that the right power is loaded to the XC-064.

Points to be measured	Right DC voltage
A in Fig.#3	+24V with 10% allowance
B in Fig.#3	+5V with 4% allowance
C in Fig.#3	-5V with 5% allowance

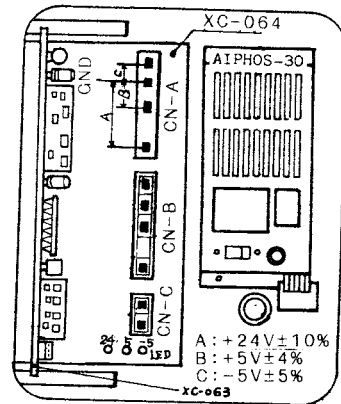


Fig. #3

#### D) HOW TO CHECK DC VOLTAGE ON XC-060 XC-063

STEP 1 Turn off the power switch and wait for 2 minutes.

STEP 2 Remove all other XC-cards except XC-060.

STEP 3 Turn on the power switch.

STEP 4 Check the DC Voltage as stated in the above table.

STEP 5 Turn off the power switch and wait for 2 minutes.

STEP 6 Replace defective XC-Card.

(To check the remaining XC-Cards XC-061, XC-062 & XC-063's follow STEP's 2-6 till all the XC-Cards have checked)

STEP 7 After checking the voltage, take off the sellotape so that the automatic cut off switch pops up (refer to C: STEP 4). Replace the main cover first then the smaller cover for the terminal block. Switch on the power switch.

#### E) HOW TO CHECK THE OUTPUT OF THE REGULATOR UNIT AIPHOS-30

Follow above STEP's C : 1.2 & 4. disconnect the connector plug marked: CN-B and measure the voltage at D, E, F shown in Fig. #4. When you measure the voltage specified in the below table, it means that the Regulator Unit is producing the right output.

Points to be measured	Right DC voltage
D in Fig.#4	+24V with 10% allowance
E in Fig.#4	+5V with 4% allowance
F in Fig.#4	-5V with 5% allowance

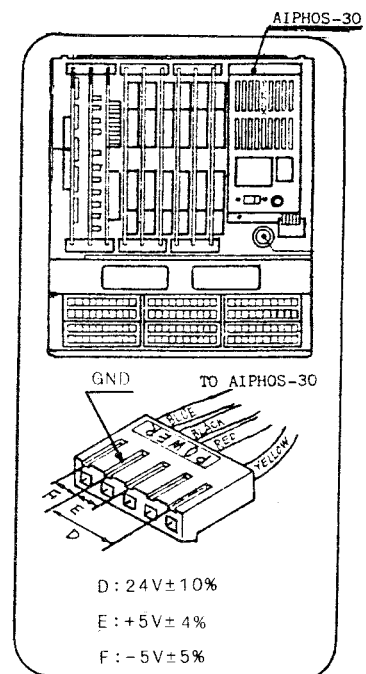


Fig. #4

After checking the voltage, follow STEP 7 mentioned above.

\* NOTE FOR REPAIR PERSONNEL

Please put the defective XC-Card into Anti-static polyethylene bag such as laminated or carbon-loaded one for returning the same to the factory for repair.

F) HOW TO CHECK OUTPUT VOLTAGE OF PS-24M

- STEP 1 Turn off the power switch.
- STEP 2 Loosen 4 screws and remove the covers as shown in Fig. #1.
- STEP 3 Disconnect 2P plug located on XC-064 card. ( marked : CN-C )
- STEP 4 Check the DC voltage at G point as shown in Fig. #5.

Points to be measured	Right DC voltage
G <sub>1</sub> in Fig.#5	+24V with $\pm 1_0$ V allowance

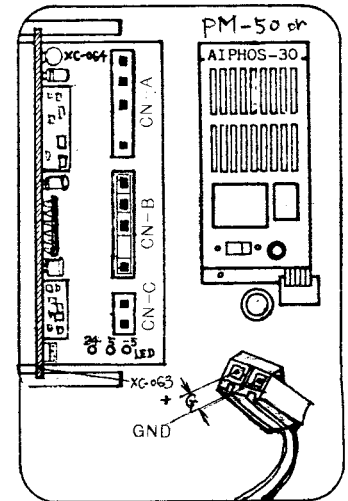


Fig. #5

G) HOW TO CUT OFF THE JUMPER WIRE

When All call is required a jumper wire on XC-061 has to be cut off and supplementaly power supply PS-24M must be installed.

- STEP 1 Turn off the power switch.
- STEP 2 Loosen 4 screws and remove the covers as shown in Fig. #1.
- STEP 3 Remove XC-061 carefully.
- STEP 4 Cut off the jumper on XC-061 card as shown in Fig. #6.
- STEP 5 Insert the XC-061 card.

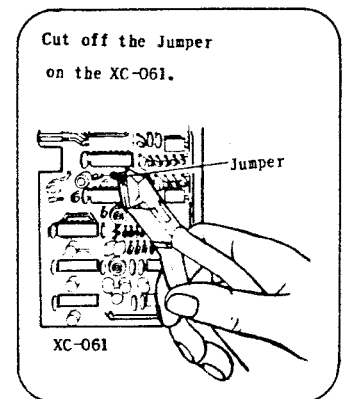


Fig. #6