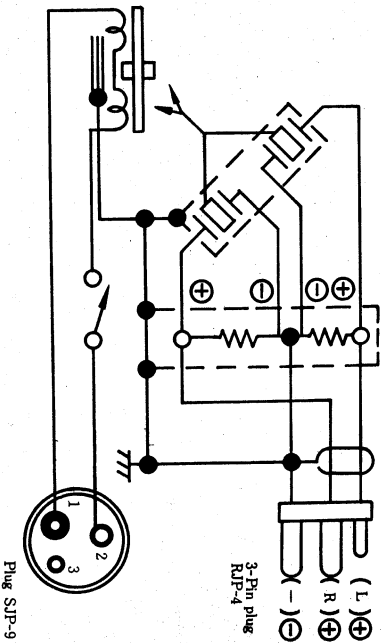


D. Alignment of SW2

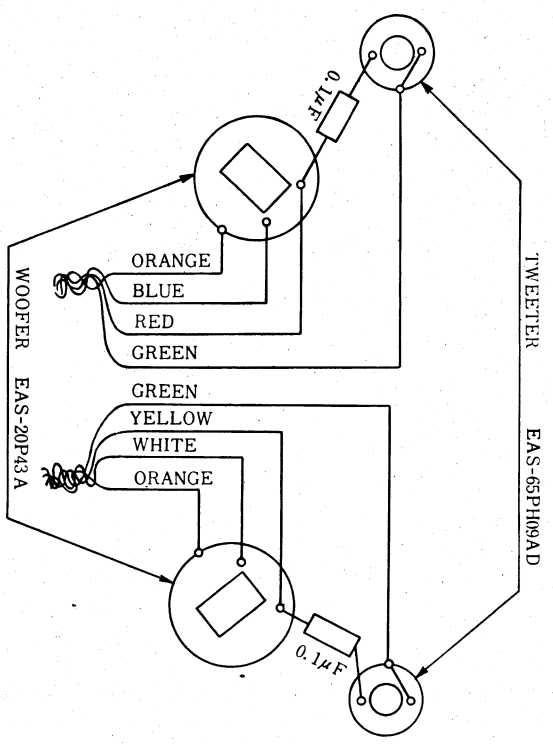
- 1) As to the diagram of aligning point and according to the carved mark as indicated in the drawing, the dial pointer should be positioned at 7.5MC.
  - 2) 7.5MC signal from SG should be connected between antenna lead(orange) and earth lead(green) though the dummy antenna.
  - 3) Adjusting screw of SW2 Osc. coil L4 & ANT coil L1 should be turned to obtain maximum output.
  - 4) Next, the dial pointer should be positioned at 21MC aligning point. The adjusting screw of trimmer capacitor Ct1 & Ct4 should be turned to obtain maximum output.
- Note : In this case, signal from SG should be 21MC.
- 5) The procedure 3) & 4) should be repeated 2~3 times to obtain maximum output, respectively.
- Caution: Don't misalign by image frequency.

**RECORD CHANGER UA-15**

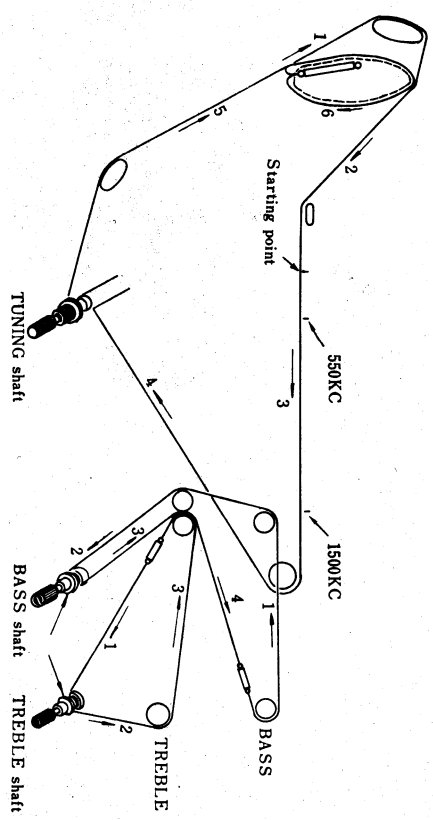
**RECORD CHANGER UA-15 WIRING DIAGRAM**



**SPEAKER CONNECTION**



**DIAL CORD STRINGING**



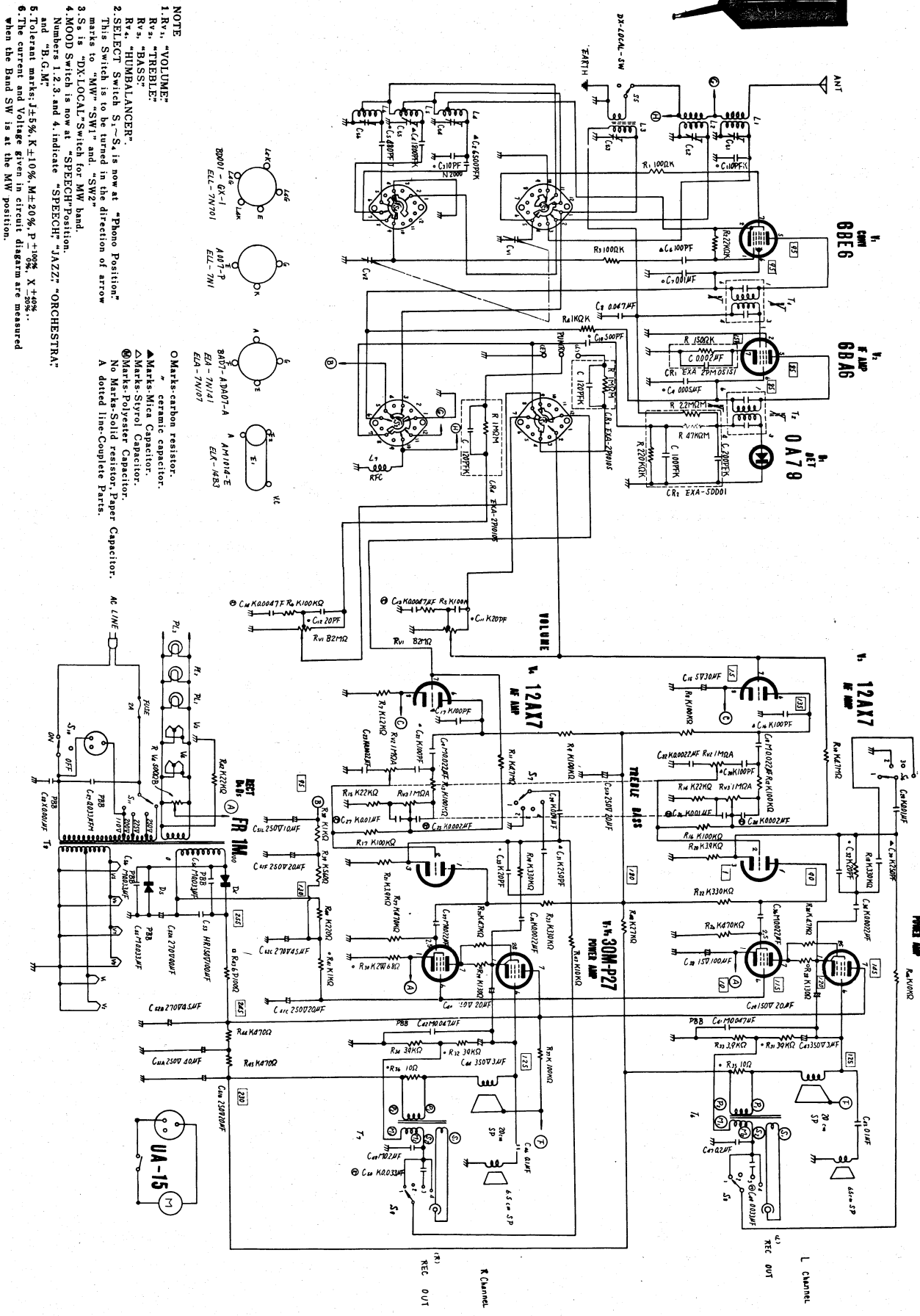
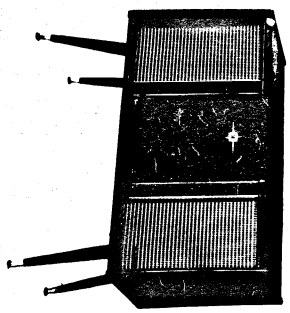
Notice:

1. The way of hanging the dial cord is shown by arrow marks in the figure.
2. The variable capacitor is positioned at minimum capacity.
3. RF alignment should be regulated by setting the left end of the dial pointer to the marks on the dial back panel.

# 3 BAND 8-TUBE STEREO ENSEMBLE

### SPECIFICATIONS

Freq. Range: MW: 525-1605kc (571-185.9m)  
 SW: 2.3-7Mc (130-42.9m)  
 LW: 1.7-22Mc (42.9-13.6m)  
 455KC

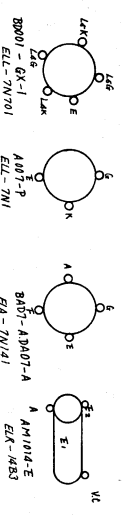


### NOTE

1. R<sub>1</sub>, "VOLUME"
2. R<sub>2</sub>, "TREBLE"
3. R<sub>3</sub>, "BASS"
4. R<sub>4</sub>, "HUMBALANCER"
5. SELECT Switch S<sub>1</sub>-S<sub>4</sub> is now at "Phono Position". This Switch is to be turned in the direction of arrow marks to "MW", "SW1" and "SW2"
6. MOOD Switch is now at "SPEECH" Position. Numbers 1, 2, 3, and 4, indicate "SPEECH", "JAZZ", "ORCHESTRA" and "B.G.M."
7. Tolerant marks: ±5%, K±10%, M±20%, P±10%, X±5%.
8. The current and Voltage given in circuit diagram are measured when the Band SW is at the MW position.

### MARKS

- Marts-carbon resistor.
- ceramic capacitor.
- ▲ Marts-Mica Capacitor.
- △ Marts-Styro Capacitor.
- ⊗ Marts-Polyester Capacitor.
- ⊙ Marts-Solid resistor: Paper Capacitor.
- A dotted line: Complete Parts.

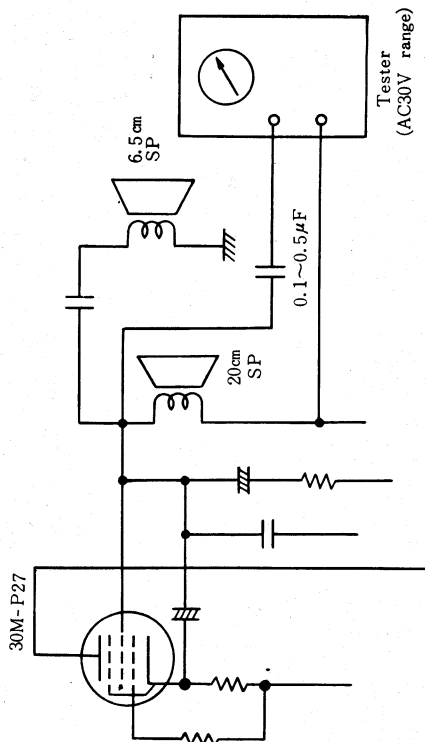


## ALIGNMENT OF MW, SW<sub>1</sub> & SW<sub>2</sub>

Alignment is required for reason of unsatisfactory performance caused by an exchange of parts, in such case an alignment may effectively be carried out in accordance with the following.

1. Alignment of IF stage
  - A. Setting of knobs
    - Selecting switch ..... MW
    - Volume control ..... Maximum
    - Variable capacitor ..... Maximum capacity
    - DX-Local switch ..... DX
  - B. Preparation of output meter
 

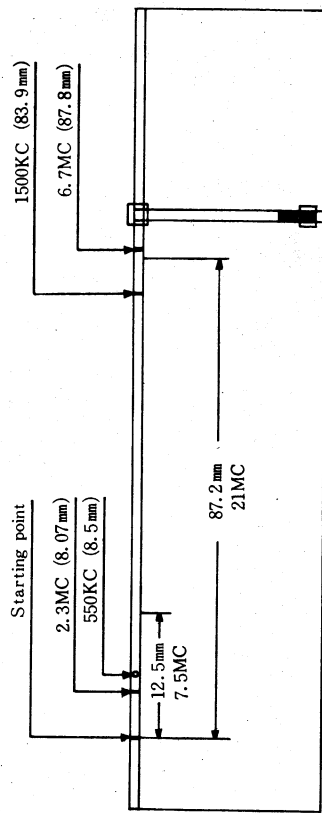
As shown in the figure below, the tubular capacitor covering 0.1~0.5μF should be placed on the left side speaker terminals and the tester should be used as the output meter (range AC 30V).



- Note :
- \* The connection of the speaker may be dislodged, in case of measurement is carried out by meter with 400Ω (10W) load resistor which is connected in place of speaker.
  - \* If the output is made excessively large in alignment, the change of the output will become less sensitive, making it difficult to make the accurate alignment. So the output should be less than 30V in any case.

### C. Procedure of IF transformer

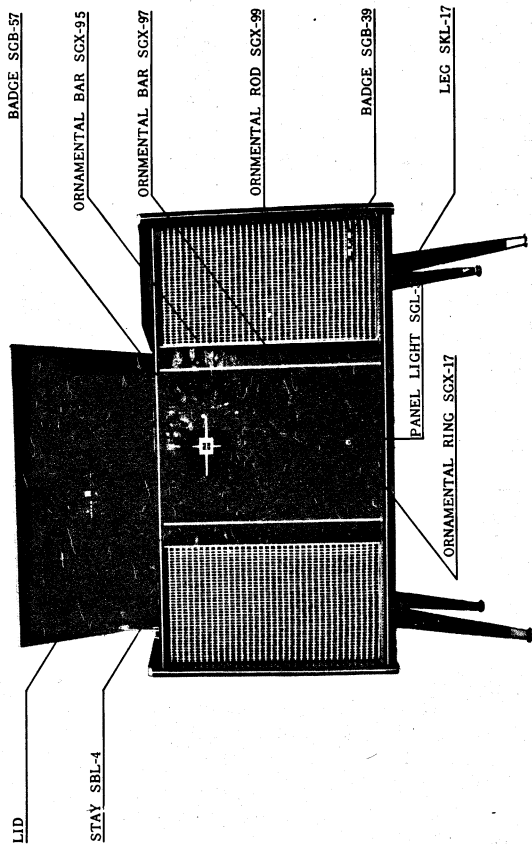
1. The output of signal generator (Hereafter, abbreviate SG) should be 455KC (400%, 30% modulation).
  2. This signal should be given between VC1 terminal and the earth.
  3. Adjust the core, upper and lower, on the IFT #1 & #2. Repeat this procedure so that the indication of the output meter attains the maximum value.  
In this case the output voltage should be less than 30V by means of adjusting the input level from SG.
- ### 2. Alignment of RF Stage
- A. Setting of knobs should be the same in case of IF alignment except selecting switch. It should be positioned at MW SW<sub>1</sub> or SW<sub>2</sub>.
  - B. Alignment of MW
    - 1) With reference to the aligning point diagram and according to the carved mark as indicated in the drawing, the dial pointer should be positioned at 550KC.
    - 2) 550KC signal from SG should be connected to the primary side of the antenna coil through the dummy antenna.
    - 3) Adjusting screw of MW Osc. coil L6 should be turned and the ferrite antenna coil L3 should be shifted for alignment so that the maximum output can be obtained.
    - 4) Next, the dial pointer should be positioned at 1500KC aligning point. The adjusting screw of the trimmer capacitor Ct3 & Ct6 should be turned to obtain maximum output.  
Note : In this case, signal from SG should be 1500KC.
    - 5) The procedure 3) & 4) should be repeated 2~3 times to obtain maximum output, respectively.



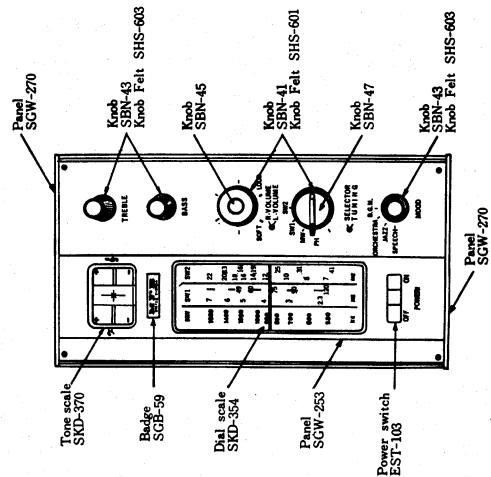
### C. Alignment of SW<sub>1</sub>

- 1) As to the diagram of aligning point and according to the carved mark as indicated in the drawing, the dial pointer should be positioned at 6.7MC.
- 2) 6.7MC signal from SG should be connected between antenna lead (orange) and earth lead (green) through the dummy antenna.
- 3) The adjusting screw of the trimmer capacitor Ct2 & Ct5 should be turned to obtain maximum output.
- 4) 2.3MC alignment: The dial pointer should be shifted to 2.3MC mark and signal from SG should be 2.3MC. Turn the adjusting screw of ANT coil L2 to obtain maximum output.
- 5) Repeat procedure 3) & 4) 2~4 times to obtain maximum output, respectively.

**CABINET MAIN PARTS LOCATION**

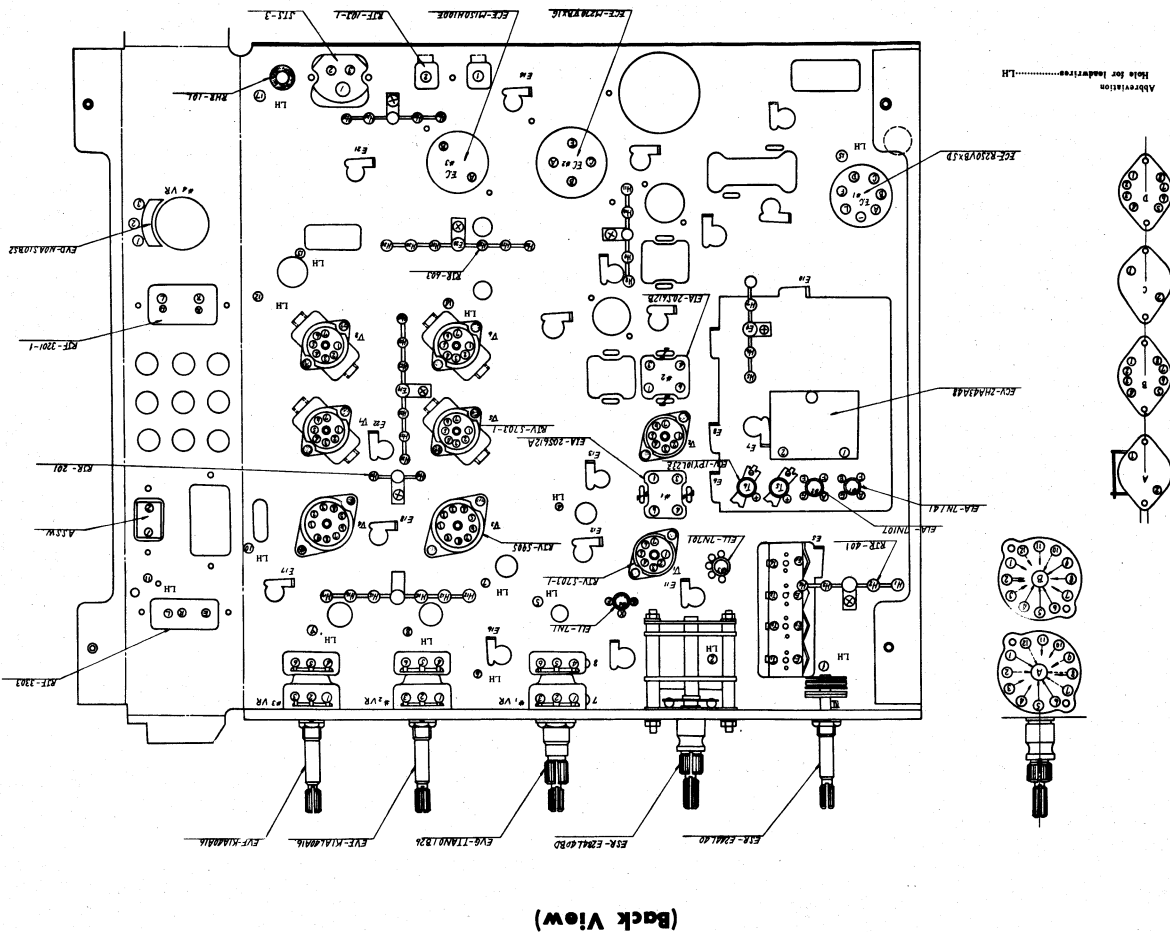
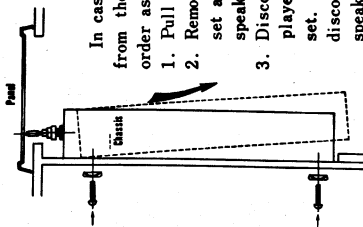


**KNOB LOCATION**



**HOW TO TAKE OFF THE CHASSIS**

- In case of taking off the chassis from the cabinet, keep the correct order as follows :
1. Pull out knobs from the set.
  2. Remove off the rear panel of the set and the wooden panel of left speaker enclosure.
  3. Disconnect lead wires of the player from the terminals of the set. There is no necessity to disconnect the lead wires of speakers and transformer.
  4. Loosen screws holding the chassis on the frame of the cabinet.
  5. Remove off the chassis taking it down slowly and sliding it out.
  6. To reassemble the chassis, reverse procedure.



(Back View)