BLOCK DIAGAM OF THE DC SERVO

Principle of Operation

The frequency generator is placed coaxially with the motor shaft. The output signal from the frequency generator is converted into a rectangular wave in the speed detecting circuit, which is then supplied to the differentiating circuit to obtain a differentiated wave form synchronized to the frequency of rotation.

The leading edge of the differentiated wave form is used for switching a transistor ON or OFF to obtain a saw-tooth wave whose wave peak is proportional to the frequency.

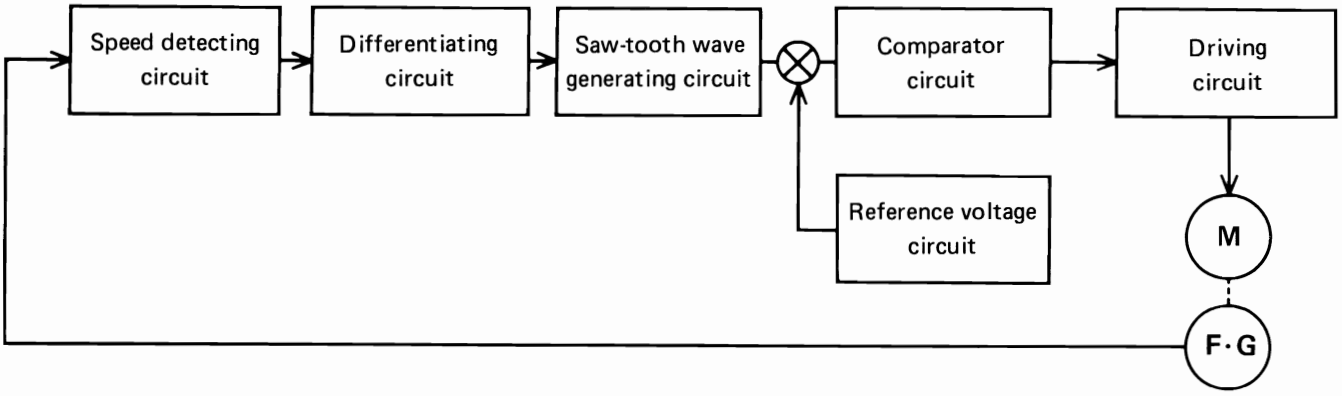
The saw-tooth wave thus generated is compared with a reference voltage obtained from a reference voltage circuit separately composed, and the portion of the saw-tooth wave exceeding the reference voltage is taken out as the control signal.

the driving signal for the motor is obtained by integrating the control signal (rectangular pulse).

Motor speed can be adjusted by changing the reference voltage.

Control frequency:

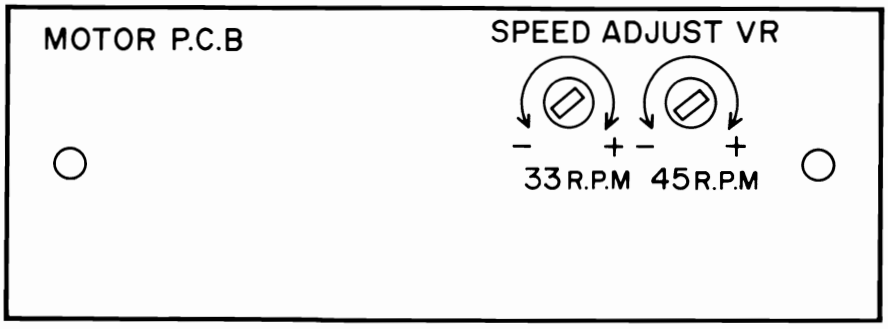
EP disk	motor speed 1520 rpm	304 Hz
LP disk	motor speed 1130 rpm	226 Hz



SPEED ADJUSTMENT

- This unit is built-in F·G· SERVO circuit and the speed has been adjusted accurately in the factory.
- If, for any reason, when you change the speed, turn these volumes with the screwdriver to the "+" direction or "–" direction.

"+" direction ..... This increases the speed.
"–" direction ..... This decreases the speed.



BOTTOM VIEW