

MOTOR UNITS  
ADJUSTMENTS

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Capacitor position . . . . .		4	1. GENERAL		
Motor gear . . . . .		2	1.01 This section is reissued to include ad- justments formerly given in other sec- tions, to include the latest engineering informa- tion, and to change the title. Since this revision is of a general nature, marginal arrows which indicate changes have been omitted.		
Motor positioning . . . . .		2	1.02 The adjustment information given in this section and the section covering general teletypewriter requirements and adjustments provide the information necessary for mainte- nance of the motor unit.		
Motor shield . . . . .		3	1.03 The illustrations in this section show the adjusting tolerances, positions of moving parts, and spring tensions.		
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2. MINIATURIZED SYNCHRONOUS MOTOR UNITS

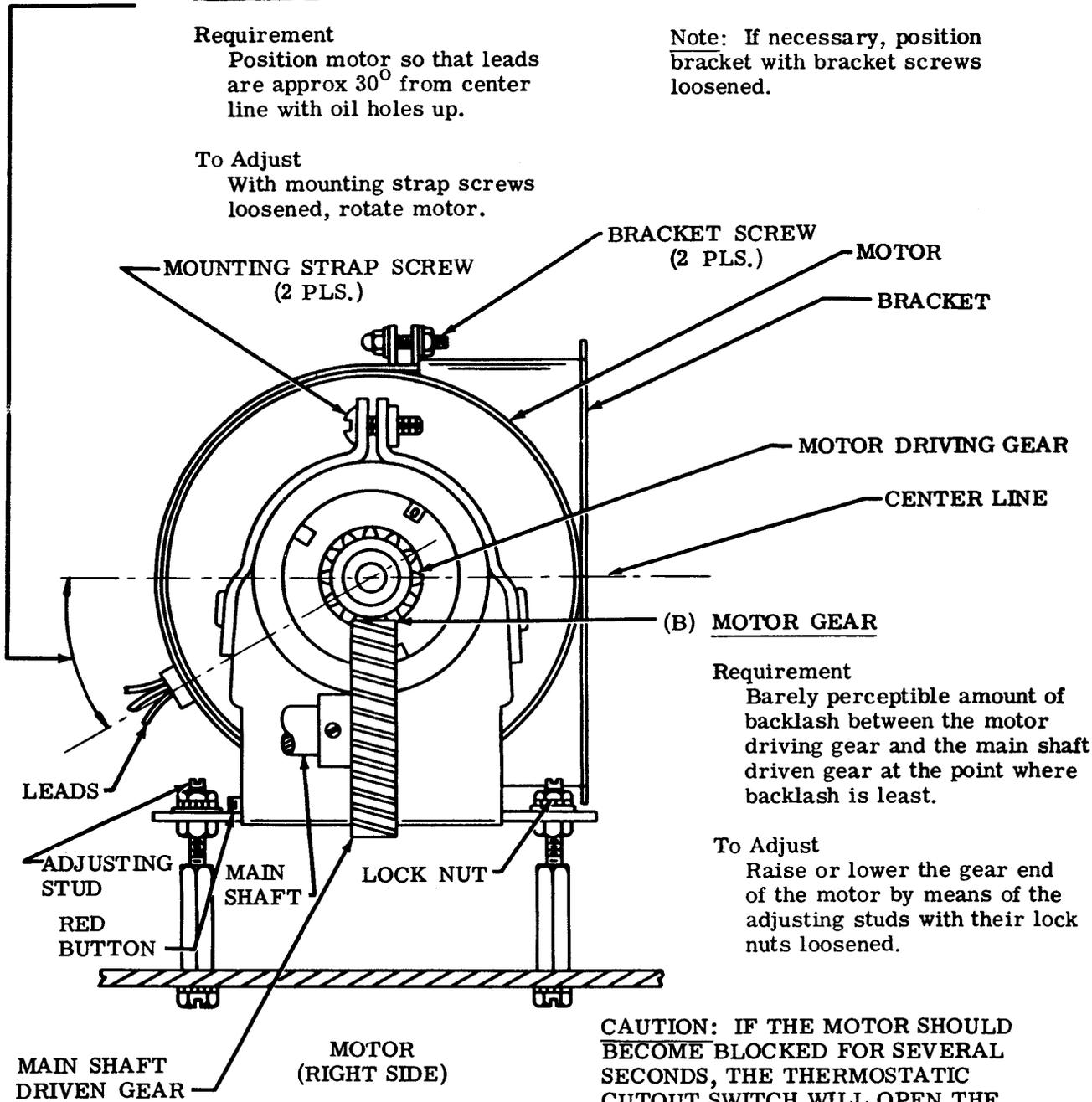
2.01 Motor Positioning

(A) MOTOR POSITIONING

**Requirement**  
Position motor so that leads are approx 30° from center line with oil holes up.

**To Adjust**  
With mounting strap screws loosened, rotate motor.

**Note:** If necessary, position bracket with bracket screws loosened.



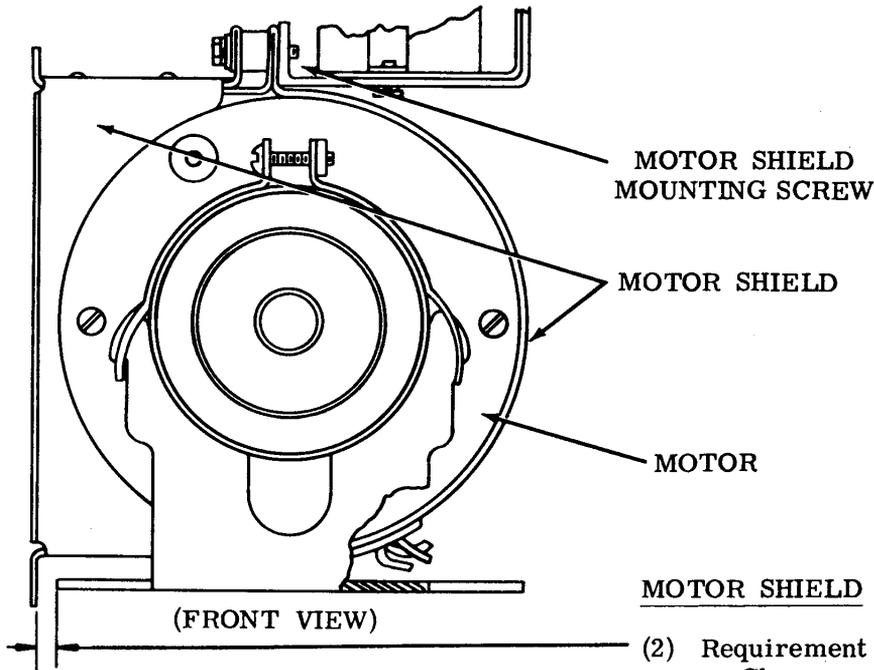
(B) MOTOR GEAR

**Requirement**  
Barely perceptible amount of backlash between the motor driving gear and the main shaft driven gear at the point where backlash is least.

**To Adjust**  
Raise or lower the gear end of the motor by means of the adjusting studs with their lock nuts loosened.

**CAUTION:** IF THE MOTOR SHOULD BECOME BLOCKED FOR SEVERAL SECONDS, THE THERMOSTATIC CUTOUT SWITCH WILL OPEN THE CIRCUIT. SHOULD THIS HAPPEN, ALLOW MOTOR TO COOL AT LEAST 5 MINUTES BEFORE MANUALLY RESETTING THE SWITCH BY DEPRESSING THE RED BUTTON. AVOID REPEATED RESETTING.

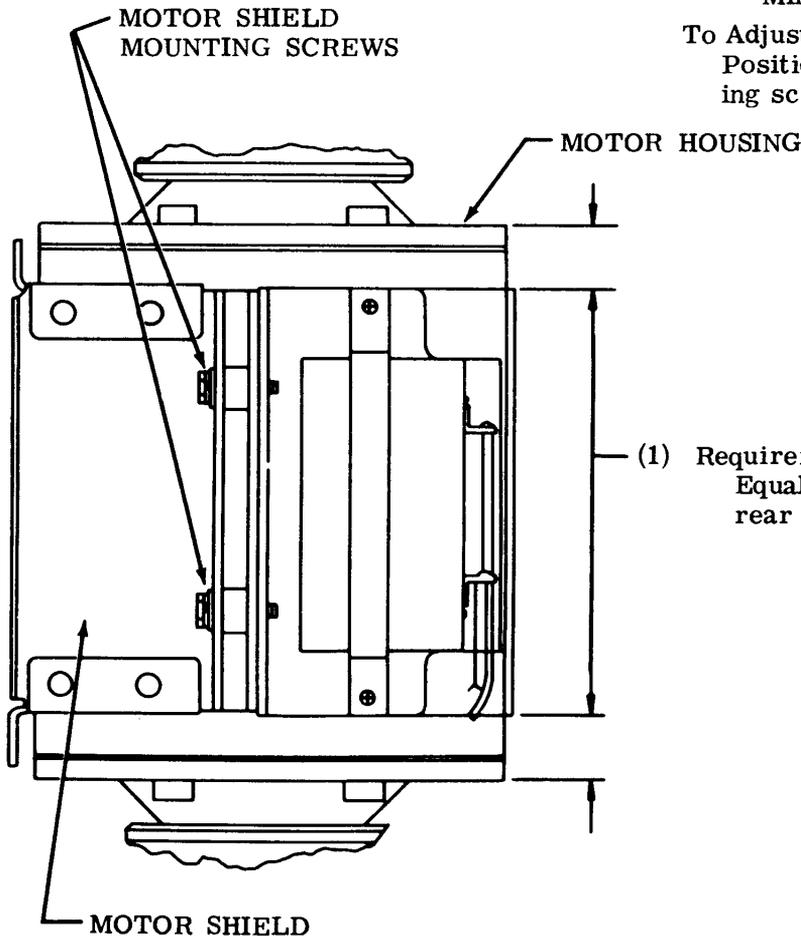
2.02 Motor Shield



MOTOR SHIELD (IF SO EQUIPPED)

- (2) Requirement  
Clearance between motor shield and motor mounting bracket should be Min 0.062 inch

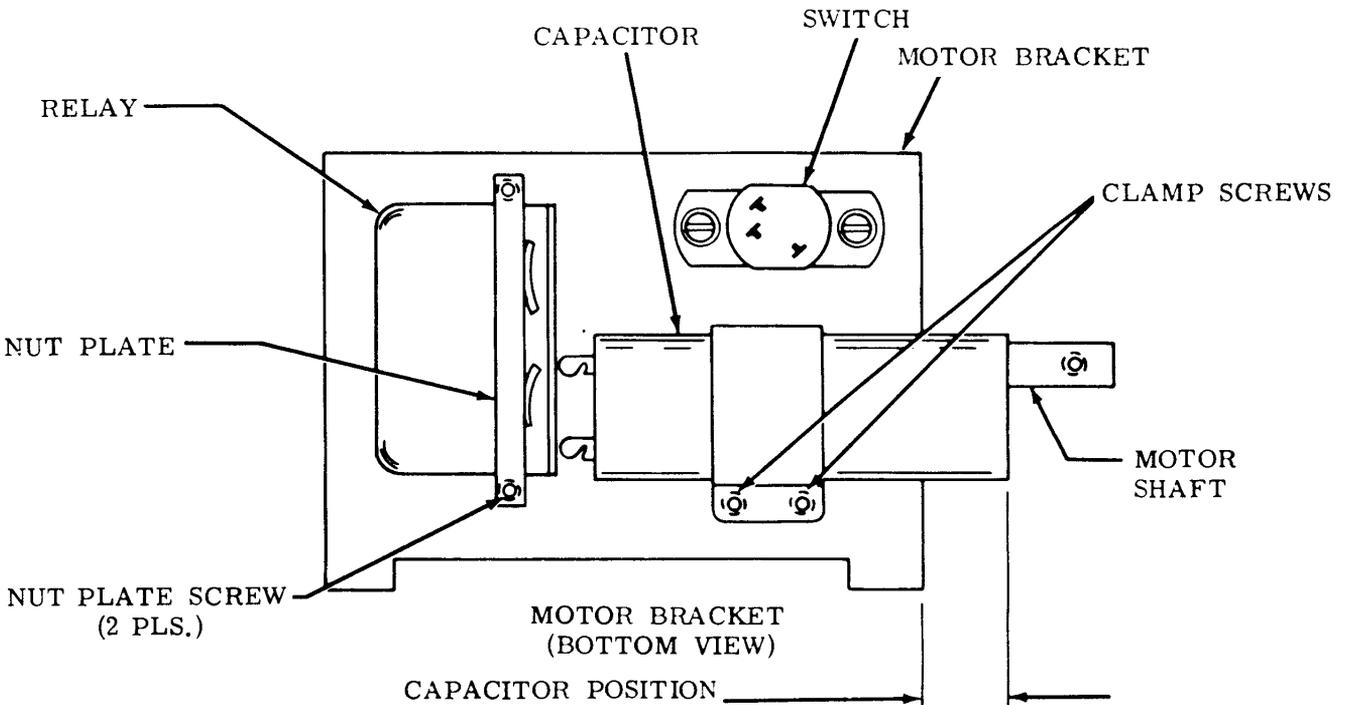
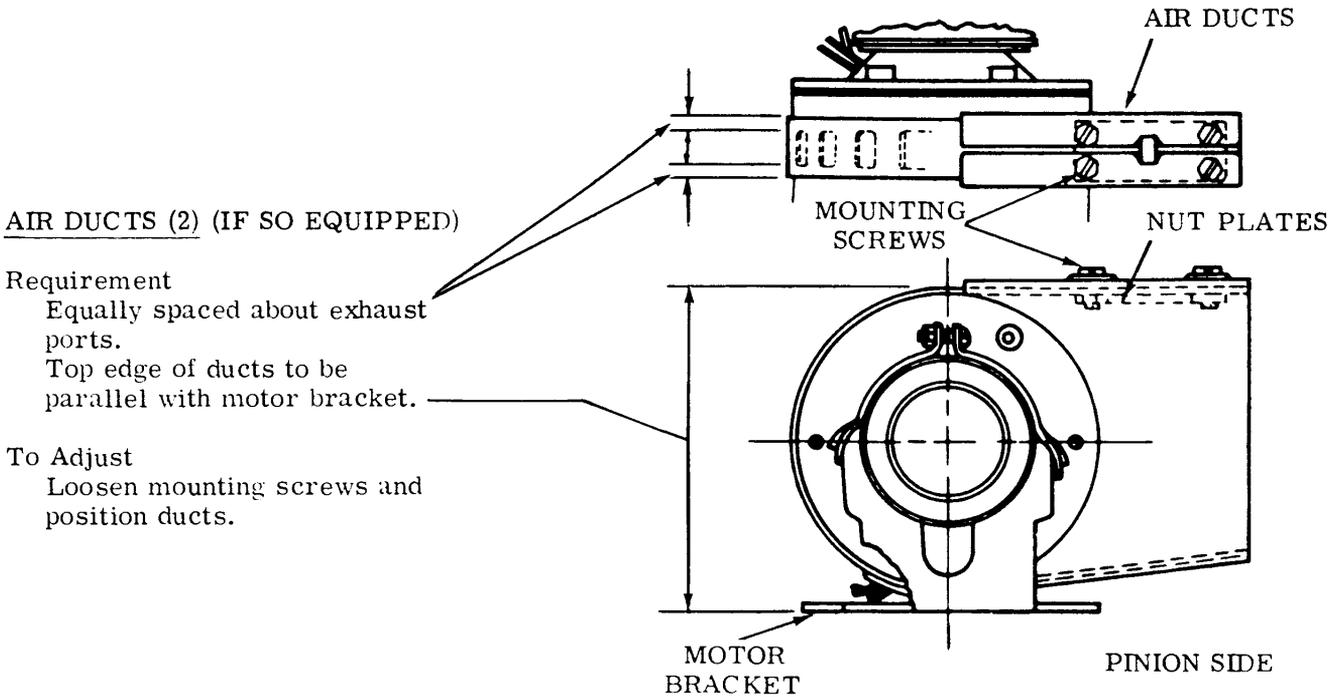
To Adjust  
Position motor shield with its mounting screws loosened.



- (1) Requirement  
Equal clearance between front and rear ends of motor and motor shield.

(TOP VIEW)

2.03 Air Ducts and Capacitor Position

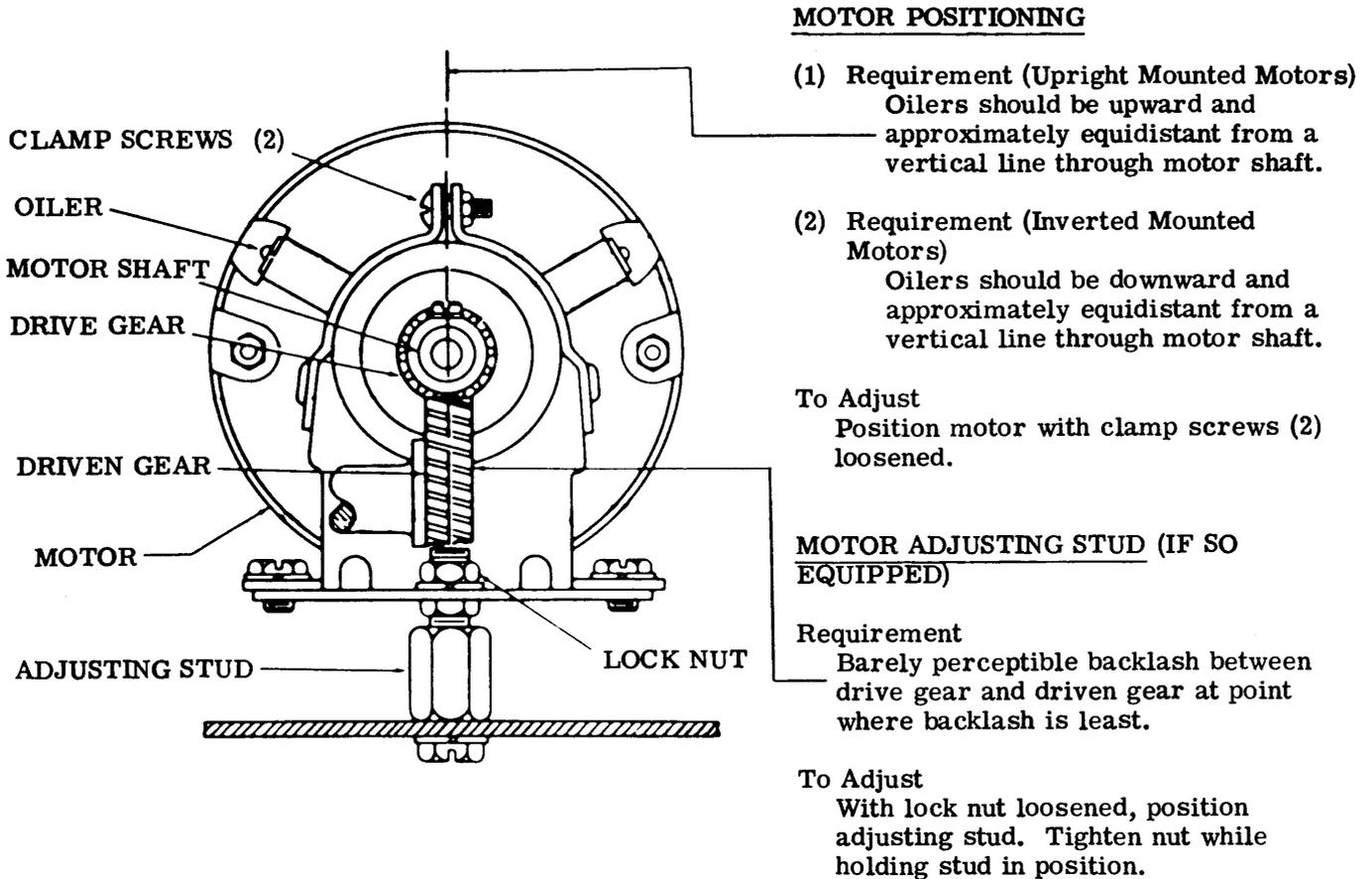


Requirement  
Max 1 2 inch between motor bracket and end of capacitor.

To Adjust  
Position relay and capacitor with motor removed from motor bracket and nut plate and clamp screws loosened.

3. STANDARD AND HEAVY DUTY SYNCHRONOUS MOTOR UNITS

3.01 Motor Positioning



**CAUTION: IF MOTOR BECOMES BLOCKED FOR SEVERAL SECONDS, THERMOSTATIC CUTOFF SWITCH (ON UNITS SO EQUIPPED) WILL BREAK CIRCUIT. SHOULD THIS HAPPEN, ALLOW MOTOR TO COOL AT LEAST 5 MINUTES BEFORE DEPRESSING RED RESET BUTTON. AVOID REPEATED RESETTING.**

4. SERIES GOVERNED MOTOR UNITS

4.01 Motor Positioning and Governor

MOTOR POSITIONING (NOT ILLUSTRATED)

Requirement

Motor should be centrally positioned in its rubber mounts so as to provide at least 0.020 clearance between the motor housing and the cradle at the governor end. The cable should also clear the grommet in the screen by at least 0.030 inch.

(A) GOVERNOR CONTACT BACKSTOP

Requirement

Clearance between the movable contact arm and its eccentric backstop.

Min 0.020 inch---Max 0.040 inch

To Adjust

Rotate the eccentric backstop with clamping screw loosened.

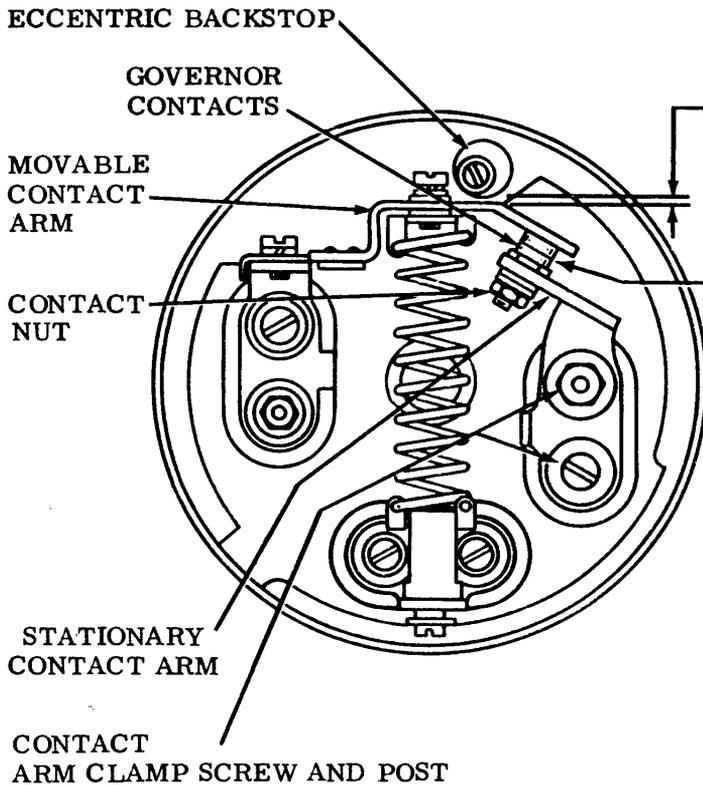
(B) GOVERNOR CONTACT

Requirement

The contacts should meet squarely and not overlap more than 0.010 inch.

To Adjust

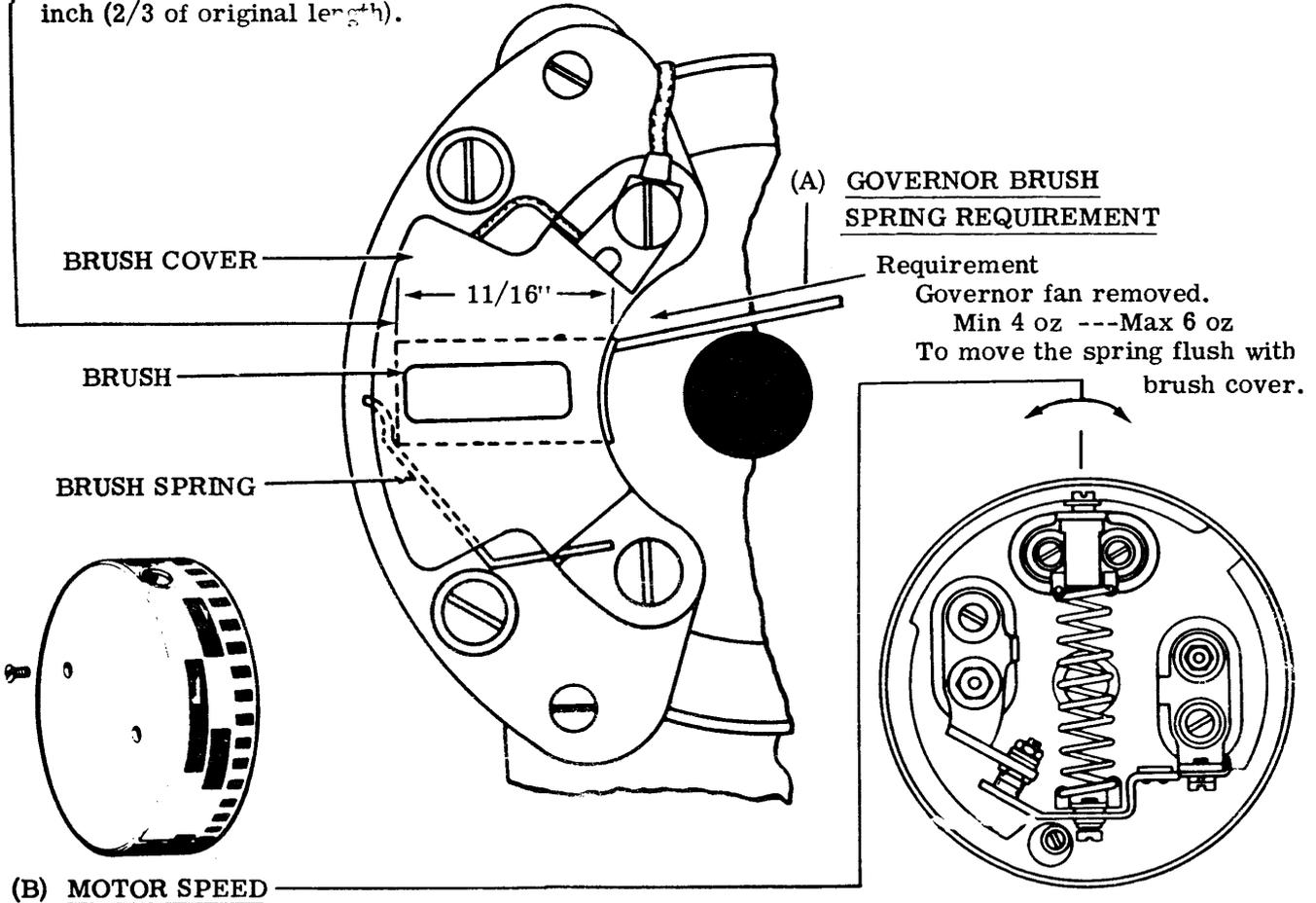
Position the stationary contact and contact arm with the clamp screw and post loosened.



**CAUTION: EXCESSIVE PRESSURE AGAINST GOVERNOR COVER ASSEMBLY DURING REMOVAL MAY DAMAGE SCREENED WINDOW.**

4.02 Motor Governor

**Note:** Replace governor brushes that have worn to a length of approximately 15/32 inch (2/3 of original length).



**Requirement**

With target illuminated and viewed through the vibrating shutters of a 120 vps turning fork the spots on the 4-spot target should appear stationary while rotating. With target illuminated and viewed through the vibrating shutters of an 87.6 vps tuning fork the spots on the 6-spot target should appear stationary while rotating and with speed slightly increased the spots on the 35 spot target should appear stationary.

**To Adjust**

Stop the motor and turn the adjusting screw as indicated on governor cover. For units with screened governor covers, stop the motor, remove the TP152035 plug from cover. Turn adjusting screw as indicated on periphery of target.

**Note:** It is possible to adjust the motor at some multiple of the correct speed. To check motor speed when used with a page printer, return typebox carriage to left margin, set up any character in selector and manually trip typebox clutch trip lever. Printing should occur as follows:

WPM	PRINTED CHARACTERS	REQUIRED TIME
60	70	10 seconds
75	44	5 seconds
100	57	5 seconds