

BELL SYSTEM PRACTICES
Teletypewriter and Data Stations

SECTION P34.004
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AT&T Co Standard

MOTORS AND GOVERNORS

28 TELETYPEWRITER

REQUIREMENTS AND PROCEDURES

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1. GENERAL

1.01 This section contains the requirements and adjusting procedures for motors and governors used in the 28 teletypewriter. The general teletypewriter requirements are given in Section P30.012.

Caution: The electric power should be disconnected before the apparatus is removed from its protective housing. Where operation of the apparatus, after its removal from the housing, is required, power should be applied with appropriate precautionary measures taken to prevent accident.

MOTORS AND GOVERNORS
28 TELETYPEWRITER
REQUIRE-
MENTS
AND PRO-
CEDURES

P34.004

1.02 This section is reissued to:

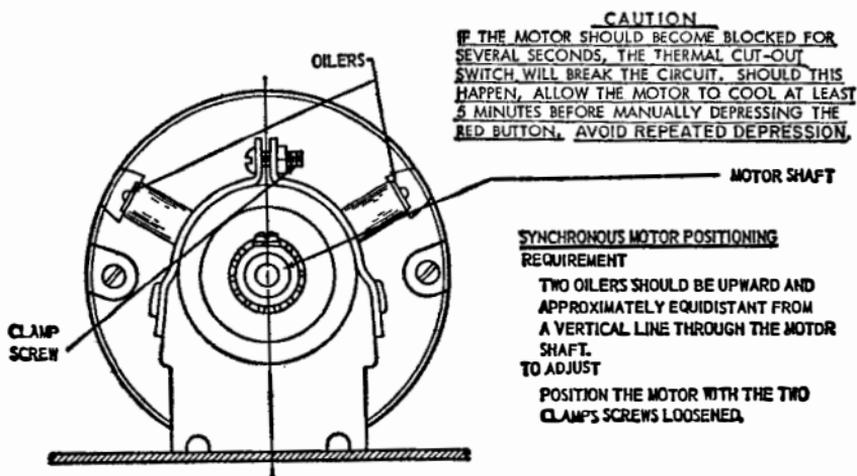
- (a) incorporate the addendum.
- (b) add to the caution in 2.02 the words on avoiding repeated depression of the red button.
- (c) revise 2.04 on the use of tuning forks.
- (d) add the reference to Bell System Practices.

1.03 Changes are indicated by marginal arrows.

2. REQUIREMENTS AND ADJUSTING PROCEDURES

2.01 The following figures show the adjusting tolerances, positions of moving parts, and spring tensions.

2.02 Synchronous Motor

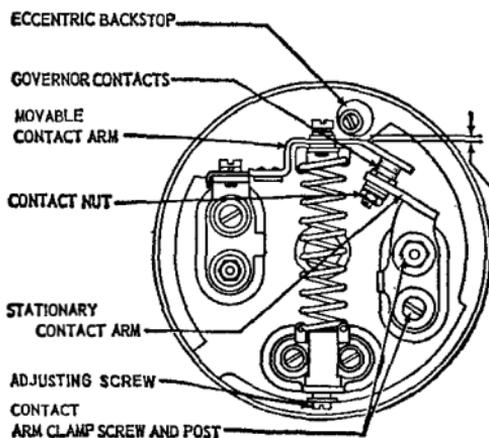


2.03 Governed Motor

GOVERNED MOTOR POSITIONING

REQUIREMENT

MOTOR SHOULD BE CENTRALLY POSITIONED IN ITS RUBBERMOUNTS SO AS TO PROVIDE AT LEAST 0.020 INCH 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

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.

B. GOVERNOR CONTACT BACKSTOP

REQUIREMENT

CLEARANCE BETWEEN THE MOVABLE CONTACT ARM AND ITS ECCENTRIC BACKSTOP.

MIN. 0.020 INCH

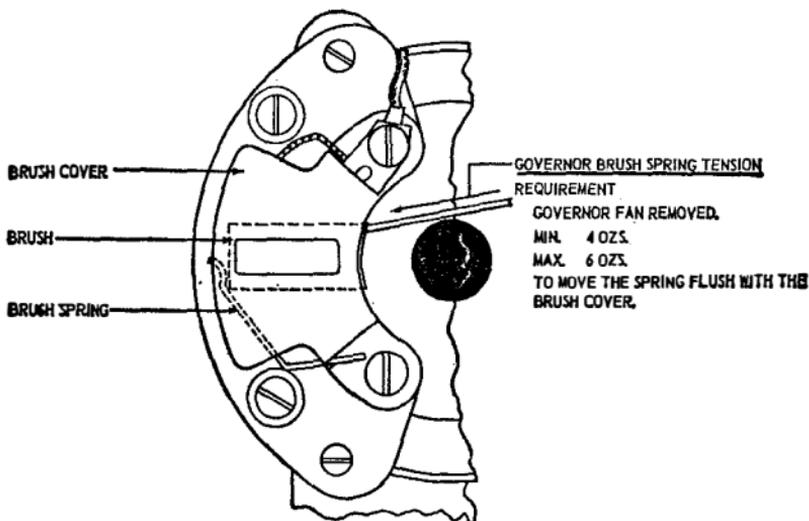
MAX. 0.040 INCH

TO ADJUST

ROTATE THE ECCENTRIC BACKSTOP WITH CLAMPING SCREW LOOSENED.

2.04 Motor Governor-brush and Motor Speed

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GOVERNED MOTOR SPEED ADJUSTMENT

REQUIREMENT

(PRELIMINARY SETTING) WITH THE TARGET ILLUMINATED AND VIEWED THROUGH THE VIBRATING SHUTTERS OF THE TPI03628 TUNING FORK (87.6 VPS), THE SPOTS ON THE 6-SPOT TARGET SHOULD APPEAR STATIONARY WHILE ROTATING.

(FINAL SETTING) NOW WITH THE SPEED SLIGHTLY INCREASED AND THE TARGET ILLUMINATED AND VIEWED THROUGH THE VIBRATING SHUTTERS OF THE FORK, THE SPOTS ON THE 35-SPOT TARGET SHOULD APPEAR STATIONARY WHILE ROTATING.

THE 4-SPOT TARGET IS FOR USE WITH A NON-BELL TUNING FORK (120 VPS).

TO ADJUST

STOP THE MOTOR AND TURN THE ADJUSTING SCREW AS INDICATED ON THE GOVERNOR COVER.

NOTE

IT IS POSSIBLE TO ADJUST THE MOTOR AT SOME MULTIPLE OF THE CORRECT SPEED. TO CHECK FOR CORRECT SPEED, HAVE THE TYPE BOX CARRIAGE AT THE LEFT MARGIN, SET UP ANY CHARACTER ON THE SELECTOR AND MANUALLY TRIP THE TYPE BOX CLUTCH TRIP LEVER. IF THE UNIT IS EQUIPPED WITH GEAR FOR 60 SPEED OPERATION, IT SHOULD PRINT 70 CHARACTERS IN 10 SECONDS; WITH 75 SPEED GEARS - 44 CHARACTERS IN 5 SECONDS; WITH 100 SPEED GEARS - 57 CHARACTERS IN 5 SECONDS.

3. REFERENCE TO BELL SYSTEM PRACTICES

Teletypewriter Apparatus, Speed Regulation

P30.020, J