1. GENERAL

1.001 This addendum supplements Section P34.004, Issue 1.

1.002 This addendum is issued to add a caution on the operation of synchronous motors.

2. REQUIREMENTS AND ADJUSTING PROCEDURES

The following paragraph replaces Paragraph 2.02 of the Section.

2.02 Synchronous Motor

CAUTION
IF THE MOTOR SHOULD BECOME BLOCKED FOR SEVERAL SECONDS, THE THERMAL CUTOFF SWITCH WILL BREAK THE CIRCUIT. SHOULD THIS HAPPEN, ALLOW THE MOTOR TO COOL AT LEAST 5 MINUTES BEFORE MANUALLY DEPRESSING THE RED BUTTON.

SYNCHRONOUS MOTOR POSITIONING REQUIREMENT
TWO OILERS SHOULD BE UPWARD AND APPROXIMATELY EQUIDISTANT FROM A VERTICAL LINE THROUGH THE MOTOR SHAFT.
TO ADJUST
POSITION THE MOTOR WITH THE TWO CLAMPS SCREWS LOOSENED.
MOTORS AND GOVERNORS
28 TELETYPewriter
REQUIREMENTS AND PROCEDURES

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3. REFERENCE TO BELL SYSTEM PRACTICES  →

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.
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. 0.010 inch
- Max. 0.040 inch

To adjust:
- Rotate the eccentric backstop with clamping screw loosened.
2.04 Motor Governor-brush and Motor Speed

GOVERNED MOTOR SPEED ADJUSTMENT

REQUIREMENT

(PRELIMINARY SETTING) With the target illuminated and viewed through the vibrating shutters of the TPI36818 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 9-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