

LINE MESSAGE REGISTERS
15 TYPE
REQUIREMENTS

1. GENERAL

1.001 This addendum supplements Section 030-333-701, Issue 1. The attached pages must be inserted in the section in accordance with the filing instructions above.

1.002 This addendum is issued to revise the clearance requirements specified in 2.04.

2. REQUIREMENTS

The following change applies to Part 2 of the section.

(a) 2.04 revised

Attached:

Page 1 dated April 1969—reissued

Page 2 dated April 1969—revised

LINE-MESSAGE REGISTERS

15 TYPE REQUIREMENTS

1. GENERAL

1.01 This section covers 15-type message registers.

1.02 Reference shall be made to Section 020-010-711 covering general requirements and definitions for additional information necessary for the proper application of the requirements listed herein.

1.03 **Asterisk(*)**: Requirements are marked with an asterisk when to check for them would necessitate dismantling or dismounting of apparatus or would affect the adjustment involved or other adjustments. No check need be made for these requirements unless the apparatus or part is made accessible for other reasons or its performance indicates that such a check is advisable.

1.04 The units wheel of 15-type registers advances one-half digit when the register operates and one-half digit when the register releases.

1.05 **Operate**: A register is said to operate if, when current is connected to its winding, the armature moves toward the core until stopped by the operating pawl, the normally open contacts close, and the units wheel advances one-half step.

1.06 **Nonoperate**: A register is said to non-operate if, when a current is connected to its winding, the armature does not move from its unoperated position.

1.07 **Release**: A register is said to release if, when the current is reduced abruptly from the operate or hold value to the release value, the armature returns to the unoperated position normally open contacts open, and the units wheel advances one-half step.

1.08 **Hold**: A register is said to hold if, after it has operated and the current through its winding is reduced abruptly from the operate to

the hold value, the armature does not move from its operated position.

1.09 To check the requirements of registers equipped with a cover, the cover must be removed. Remove the pin holding the pull-out knob on the lever by gently tapping the pin with a 1/16-inch drive pin punch and a 4-ounce riveting hammer. Exercise care not to bend the reset lever when removing or replacing the pin. Pull the pull-out knob off the reset lever and remove the cover. When checking requirements, it may also be necessary to move the register mounting plate forward or to remove the register from the mounting.

1.10 This section contains no adjusting procedures for these registers. Requirements 2.01 through 2.17 specified herein apply only up to and including installation by the telephone company.

Caution: Do not adjust line-message registers. If a line-message register does not meet the requirements, with the exception of register mounting and alignment, replace the register. Only the message register mounting and alignment may be adjusted.

2. REQUIREMENTS

2.01 **Alignment of Number Wheels** (registers equipped with cover only): Fig. 1 (A)—With the register in the unoperated position, after having been electrically operated and released, the following requirements shall be met.

(a) The top of any figure on a number wheel shall not lie above the top edge of the window.

(b) The bottom of any figure on a number wheel shall not lie below the bottom edge of the window.

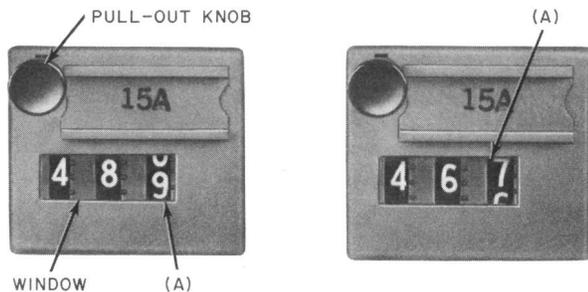


Fig. 1—Alignment of Number Wheels

These requirements are considered met if a satisfactory check is obtained after each of ten consecutive operations of the register.

Gauge by eye through the window.

2.02 Armature Operation

- (a) The operating pawl shall advance the star wheel and the units wheel by one-half digit when the register is operated.

Gauge by eye.

- (b) The operating pawl shall advance the star wheel and the units wheel by one-half digit when the armature is released.

Gauge by eye.

2.03 Reset Operation

- (a) With the reset lever fully operated and released, the register shall reset to 000 from all readings. This requirement shall be met a minimum of ten times.

Gauge by eye.

To check this requirement, the register may be set to a reading of 154 at the time of each reset by operating the register mechanically. Operate the register by pushing the armature toward the core with the KS-6320 orange stick and then releasing the armature.

- (b) **Fig. 2 (a)**—With the number wheels held in the reset position by the reset bracket fingers, the top of any zero shall not be out of alignment with the top of any other zero by more than one-half the thickness of the line forming the zero.

Gauge by eye.

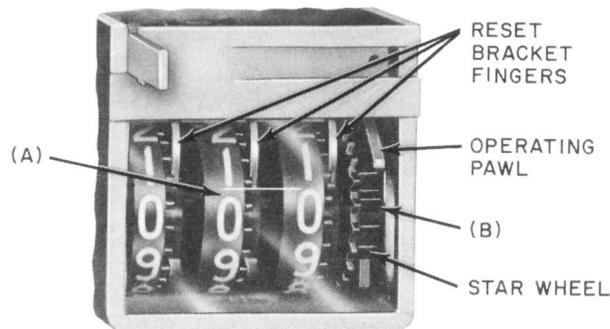


Fig. 2—Zero Alignment With Number Wheels Held in Reset Position

2.04 Reset Bracket Position

- (a) With the reset bracket in the unoperated position, at least one of the reset bracket legs shall rest against the edge of the notch in the bottom of the frame. The clearance between the other leg and its associated notch shall be

Max 0.005 inch

Use the 92U Gauge.

- (b) **Fig. 3 (A)**—With the reset lever fully operated, the clearance between the adjusting tab on the lever and the front brace shall be

◆Min.0.005 inch◆

Use the 92W gauge.

2.05 Operating Pawl Position

- (a) **Fig. 2 (B)**—With the endplay in the number wheels taken up to the left and the endplay in the armature taken up to the right, the projection, if any, of the operating pawl over the side of the star wheel shall be

Max 0.015 inch

Gauge by eye.

The operating pawl is 0.044 inch wide.

- (b) **Fig. 4 (A)**—With the endplay in the armature taken up to the right, the clearance between the operating pawl and the adjacent side of the frame shall be

Min 0.015 inch

Gauge by eye.

The operating pawl is 0.044 inch wide.