BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C42.128
SECTION C64.226
Issue 2, 7-16-45
AT&T Co Standard

COIN COLLECTORS
D-96589, D-159603 AND SIMILAR TYPES TESTS AND ADJUSTMENTS

1. GENERAL

1.01 This section covers the methods of testing and adjusting D-96589, D-96719, D-159603 and D-159604 coin collectors. Maintenance of the dial, transmitter, receiver and cords is covered in Division C30. This section does not give detailed maintenance of any special devices which may be installed on the collector.

1.02 This section is reissued to include the D-159603 and D159604 coin collectors and to revise the tests and adjustments to conform to the plan established for other multi-slot coin collectors in Sections C42.129 and C64.223.

1.03 Since these coin collectors are essentially the same as other corresponding multi-slot coin collectors except for the ground contact assembly and connections, perform tests and adjustments under the conditions outlined in Section C64.223 entitled "Service Order and Repair Work" and in accordance with the requirements and methods given in Section C42.129 entitled "Tests and Adjustments", with the modifications outlined below.

2. COIN CHUTE

2.01 See that coin chute is of the type designated in Section C42.129 as a "5 gram chute". This is essential for these coin collectors even though, as indicated below, the ground contact springs are adjusted to less than 5 grams pressure.

3. GROUND CONTACT ASSEMBLY

3.01 The following requirements should be substituted for the requirements designated "Separation of Ground Contacts" and "Ground Spring Contact Pressure" (Part 6) in the above-mentioned sections.

Ground Spring Separations and Pressures

3.02 With coin trigger and armature in normal position the force required just to open the contacts between the inner ground contact spring and the dial connecting spring

shall not be less than 1 gram. This pressure shall be measured with the No. 70F gauge as shown in Fig. 1.

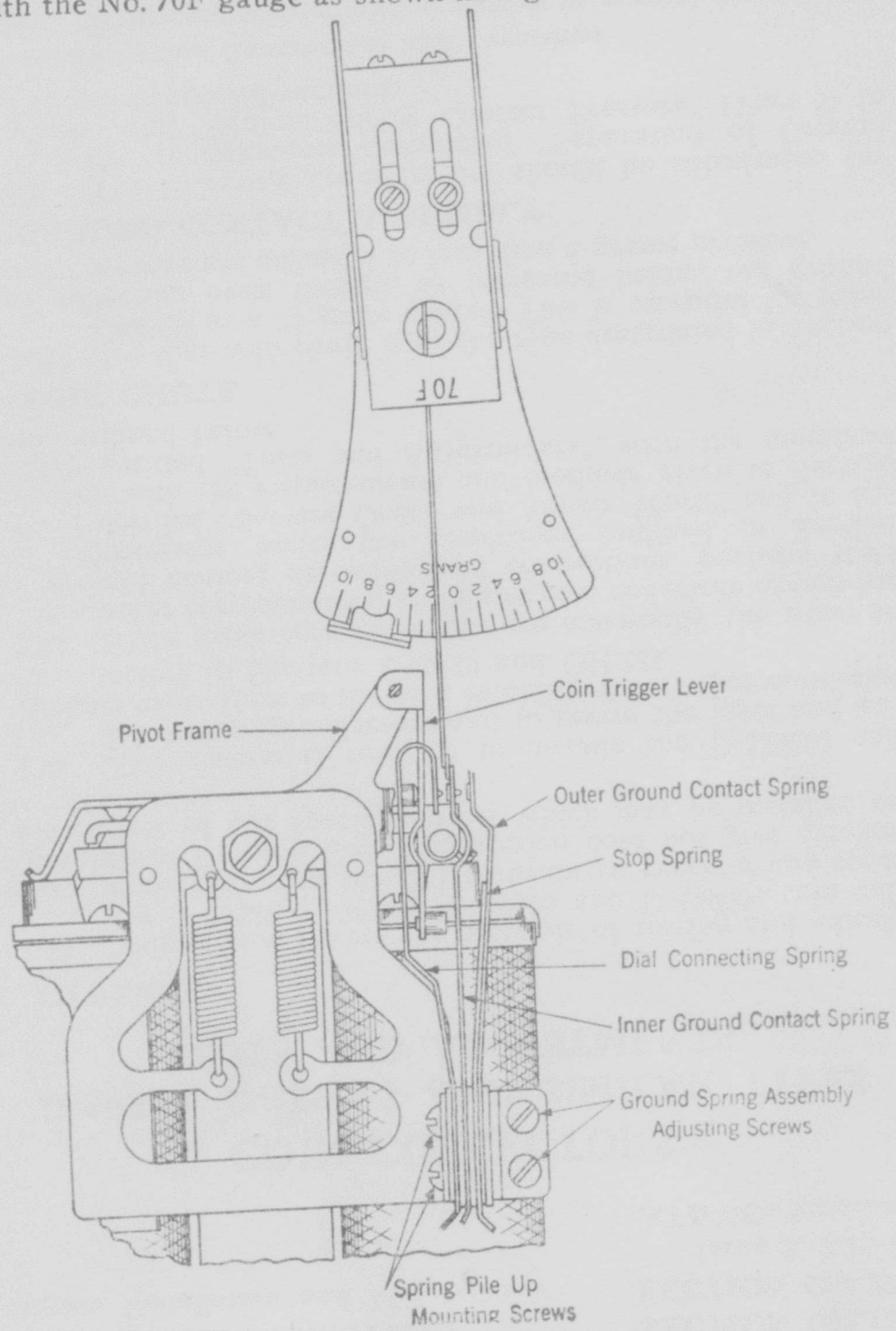

Fig. 1

3.03 With coin trigger and armature in normal position the separation between the inner and outer ground spring contacts shall not be less than .009". Use No. 126A gauge.

3.04 With coin trigger and armature in normal position, there shall be a visible clearance between the hard rubber stud on the coin trigger lever and the inner ground contact spring.

3.05 With the coin trigger tripped and the armature in the normal position, the force required just to open the contacts between the inner and outer ground contact springs shall not be less than 3 grams. This pressure shall be measured with No. 70F gauge as shown in Fig. 2.

3.06 With coin trigger tripped and armature in the normal position, the separation between the inner ground spring and the dial connecting spring contacts shall not be less than .009". Use 126A gauge.

3.07 There shall be a clearance of minimum 1/64" (judged visually) between adjacent metal parts of the dial connecting spring and the coin trigger lever at all times while the coin relay is being operated in either direction.

Ground Spring Adjustments

3.08 When adjusting ground spring contact separations and pressures in these coin collectors, the following adjustments are required in addition to the usual contact spring adjustments:

(a) With armature in the normal position see that the insulating roller is approximately in the center of the notch of the inner ground contact spring. If necessary, loosen the screws holding the ground spring contact assembly and move assembly up or down as required.

(b) With the relay in the normal position adjust inner ground contact spring until it almost touches the hard rubber stud on the coin trigger lever. Use No. 466A tool.

Caution: Do not bow the dial connecting spring so that it will come into contact with the lock bracket on the upper housing when the armature is in fully operated position.

4. FINAL TESTS

4.01 In addition to such final tests as may be made in accordance with Part 8 of the above-mentioned sections, the following tests should be made in connection with any installation or maintenance work.

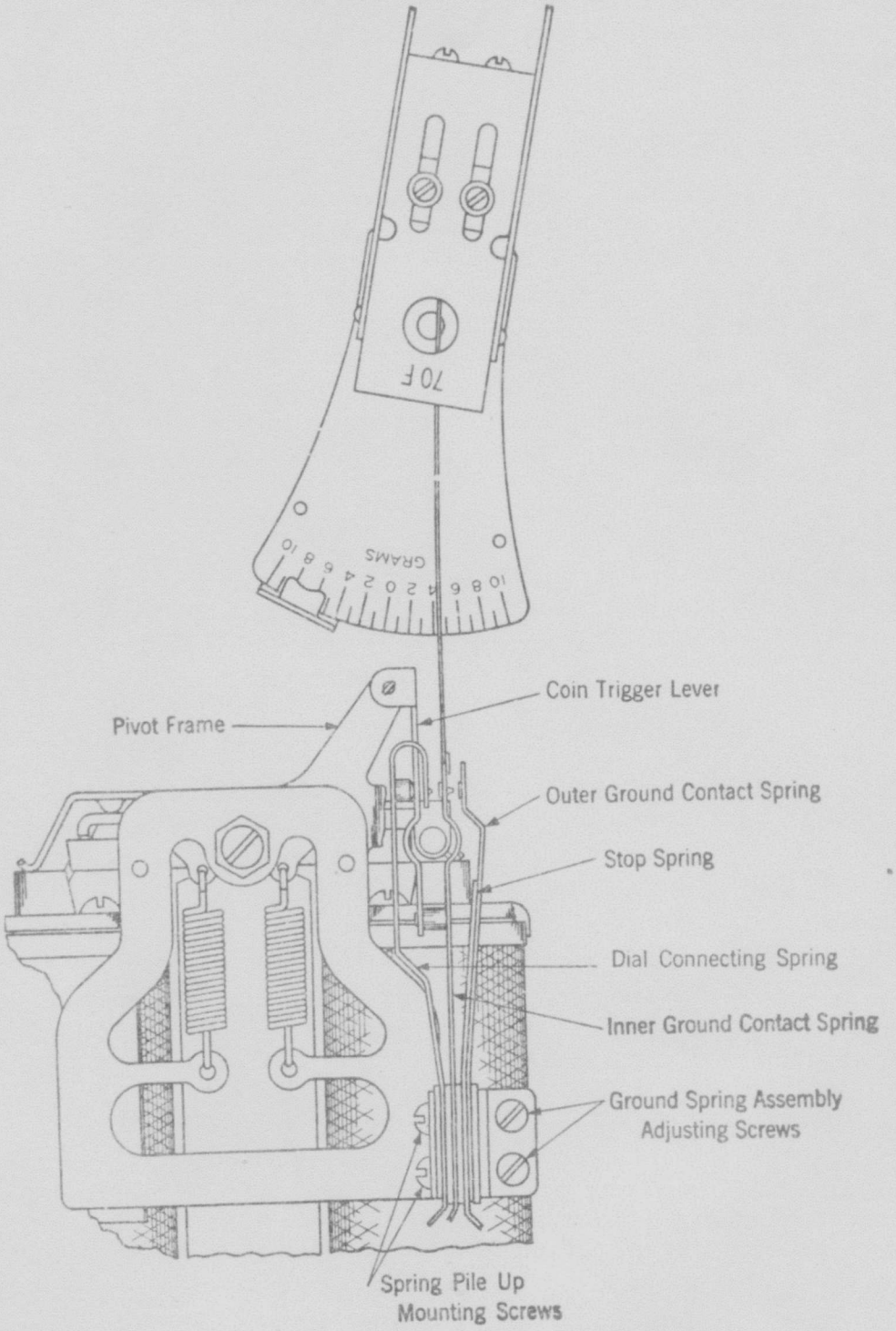
70 F
GRAMS
10 8 6 4 2 0 2 4 6 8 10
Coin Trigger Lever
Pivot Frame
Outer Ground Contact Spring
Stop Spring
Dial Connecting Spring
Inner Ground Contact Spring
Ground Spring Assembly
Adjusting Screws
Spring Pile Up
Mounting Screws

Fig. 2

4.02 After replacing ground lead on terminal block, but before replacing upper housing, strap the Y terminal of the coin collector to the screw terminal on the left coil of the relay with wire. Make sure that the trigger is not tripped. Place upper housing on coin collector and dial operator. If operator answers, improper circuit connections have been made or the dial connecting spring of the relay is not effective in shunting the dial. Remove the strap, refer to the appropriate section in Subdivision C64 for correct circuit and recheck adjustment of dial connecting spring. Correct the difficulty, reconnect the strap and repeat the test. If the operator does not answer, remove the strap and proceed with tests.

4.03 Before replacing upper housing, make sure that coin trigger is in normal position. Replace housing, deposit dime only and call operator. If operator does not answer, repeat using a nickel, and if operator answers check ground spring contact pressure (3.05). If pressure is in excess of 3 grams, reduce to 3 grams minimum. Check other ground spring requirements (3.02 to 3.07 inclusive).

4.04 Block the relay in the refund direction and disconnect temporarily the yellow wire which connects the left coil of the relay to the outer ground spring. When the upper housing is in place push it to the right as far as possible, then apply the test for crosses, holding the housing in this position. Remove relay blocking and reconnect the yellow wire when the test is completed.