

INSTRUCTIONS FOR INSTALLING THE 182290, 182291 AND
183128 MODIFICATION KITS TO CONVERT THE 33C PRINTERS
FOR AUTOMATIC READER CONTROL

1. GENERAL

a. These modification kits are used only with a late model call control unit or one which has been modified with the 182491 modification kit (see Teletype Specification 50237S). If the wiring field at the rear of the call control unit has seven connectors, it is properly wired. If it contains only six connectors, installation of modification kit 182491 is required.

b. The 183128 modification kit provides cable assemblies and parts necessary to convert the 33C Printers to provide automatic reader control.

c. The 182290 modification kit provides facilities for TD Call In to a station already equipped with the 183128 modification kit.

d. The 182291 modification kit provides facilities for TD Stop On WRU to a station already equipped with the 183128 modification kit.

e. The 183128 modification kit consists of the following parts:

2	49420	Spring	1	182151	Contact Block Assembly
2	91120	Spring	1	182693	Cable Assembly
1	121246	Cable Clamp	1	182172	Cable Assembly
2	157899	Contact Arm	1	183079	Card Assembly
2	180792	Function Pawl	1	183123	Cable Assembly
1	181570	Function Lever (X-ON)	1	183140	Cover
1	181571	Function Lever (X-OFF)	1	6351WD	Actual Wiring Diagram for 33 ASR, KSR

f. The 182290 modification kit consist of the following parts:

.1 ft.	31901RM	Electrical Wire (Orange)	1	180792	Function Pawl
.15 ft.	31906RM	Electrical Wire (Red)	1	180801	Universal Function Lever
1	49420	Spring	1	182037	Contact Switch Assembly
1	91120	Spring	1	6351WD	Actual Wiring Diagram for 33 ASR, KSR
1	157899	Contact Arm			

g. The 182291 modification kit consists of the following parts:

.25 ft.	31900RM	Electrical Wire (Black)	1	180792	Function Pawl
1	49420	Spring	1	182037	Contact Switch Assembly
1	91120	Spring	1	6351WD	Actual Wiring Diagram for 33 ASR, KSR
1	157899	Contact Arm			
1	181572	Function Lever (WRU)			

h. For parts ordering information and parts referred to see Teletype Parts Bulletin 1184B.

2. INSTALLATION

a. The 183128 modification kit:

NOTE

When preparing a tape, any control function perforated must have a fill character immediately following. This character can be rubout. The EOT function should have at least six rubout characters, as this will serve to separate messages as well as give data set the additional time it requires to act.

(1) Disconnect all cables from the printer including ground wire and TD feed contact wires. Remove the printer from the set using the instructions outlined in Teletype Bulletin 273B.

(2) Remove the 182691 cable assembly (EOT) and associated 182037 contact switch assembly. Retain the contact switch assembly.

(3) Relocate the 180817 function lever and 180792 function pawl (EOT) from slot position No. 13 to slot position No. 12.

(4) Install the following function levers and pawls into the designated positions:

<u>POSITION</u>	<u>FUNCTION LEVER</u>	<u>FUNCTION PAWL</u>
11	181571	180792
10	181570	180792

(5) Install a 91120 spring to each of the function levers and a 49420 spring to each of the function pawls. Make certain that each lever and pawl is properly located in its respective guide slot.

(6) Unsolder and discard the cable from the contact assembly. Insert two 157899 contact arms from the lower side of the contact assembly. Fasten this assembly to the function box so that the contacts will be positioned in slot Nos. 12, 11, 10. Adjusting according to Figure 1 (function box contacts).

(7) Wire the 183123 cable assembly to contact switch assembly as follows: orange wire to terminal (8), green wire to terminal (7), white wire to terminal (6), yellow wire to terminal (5) (to terminal 14 if the 182291 modification kit is also to be installed), orange-green wire to terminal (1), and black-red wire to terminal (2). See wiring diagram 6351WD.

(8) If connector No. 5 on the call control unit does not have a terminal in position 4 install 182172 cable assembly by soldering one end to terminal 9 on the OOS switch and the other inserted into position 4 on connector No. 5. Tape or tie the wire to the existing call control unit cable. Install the 182693 cable assembly into positions 4 (female) and 8 (male) of the connector on 183123 cable assembly.

NOTE

On units equipped with a form-out mechanism, disregard Paragraph (8).

(9) On units equipped with a form-out mechanism assemble the wires from the form-out timing contact to the connector of the 183123 cable assembly as follows: W-BR wire to position 8, R-S wire to position 7, W-R-Y wire to position 4.

(10) Dress the cable beneath the 181055 platen bar so as not to interfere with the cover. Tie the cable to the right side of the 180783 function casting and to the pivot shaft. Dress the cable beneath the distributor disc so as to exit at the rear right side of the printer casting.

(11) Reassemble the printer to its base by placing it in position over the vibration mounts. Make certain that the 180831 lever properly engages the HERE IS keylever. Replace the 180977 plate which connects the keyboard to the printer.

(12) Remove reader from base using the instructions outlined in Teletype Bulletin 273B. Remove the cable clamp from the 183025 (early design) or 183133 (late design) mounting bracket. Remove the 182144 contact block assembly by removing the nut and lockwasher which mount the 183026 contact block post to the 183036 mounting plate.

(13) Remove the cable clips which secure the reader cable to the printer base and remove the assembly.

(14) Install the 182151 contact block assembly. Carefully assemble the contacts in proper relation to the sensing pins. Adjust according to Teletype Bulletin 273B.

(15) Fasten the 183026 contact block post using the nut and screw previously removed.

(16) On the reader power pack located in the stand, remove the 183087 card assembly by removing one of the nylon retaining mounts. Install the 183079 card assembly.

(17) Route all cables previously removed and fasten with the cable clips. Reinstall the call control unit. Connect all cables previously disconnected.

(18) Remove the 183046 (early design) or 183135 (late design) reader cover from the typing unit cover. Assemble the 183140 cover to the typing unit cover.

b. The 182290 modification kit:

(1) Follow instructions in Paragraph 2.a.(1).

(2) Install the 157899 contact arm from the bottom in the right hand slot of the contact assembly.

(3) Install the 182037 contact switch assembly in the slots provided immediately to the right of the signal bell.

(4) Code the 180801 universal function lever for the desired polling character as follows:

(a) Break off the straight tine to obtain a marking pulse and the bent tine to obtain a spacing pulse in the desired code.

(b) The code bar sequence from front to rear is 8, 6, 7, 5, 4, 3, 1 (note that 6 and 7 are out of order).

(5) Install the coded function lever and a 91120 spring in slot number 9 of the function box casting.

(6) Install the 180792 pawl and 49420 spring in slot 9 of the function box casting. Adjust according to Figure 1 (function box contacts).

(7) Wire the 31901RM orange strap between terminals (8) and (11). Wire the 31906RM red strap between terminals (5) and (10). See wiring diagram 6351WD.

(8) Tie cable adequately.

NOTE

If modification kit 182291 is already installed the 182037 contact assembly is not required.

c. The 182291 modification kit:

- (1) Follow instructions in Paragraph 2.a.(1).
- (2) Install the 157899 contact arm from the bottom in the center slot of the contact assembly.
- (3) Follow the instructions in Paragraph 2.b.(3).
- (4) Install the 181572 function lever and 91120 spring in slot 8 of the function box.
- (5) Install the 180792 pawl and 49420 spring in slot 8 of the function box casting. Adjust according to Figure 1 (function box contacts).
- (6) Move the yellow wire on terminal (5) to terminal (14). See wiring diagram 6351WD.
- (7) Wire the 31900RM black strap between terminals (5) and (15).
- (8) Tie cable adequately.

NOTE

If modification kit 182290 is already installed the 182037 contact assembly is not required.

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3. ADJUSTMENTS

NOTE

When adjusting, be sure that the contact arm lines up with the contact function pawl.

FUNCTION BOX CONTACTS

To Check

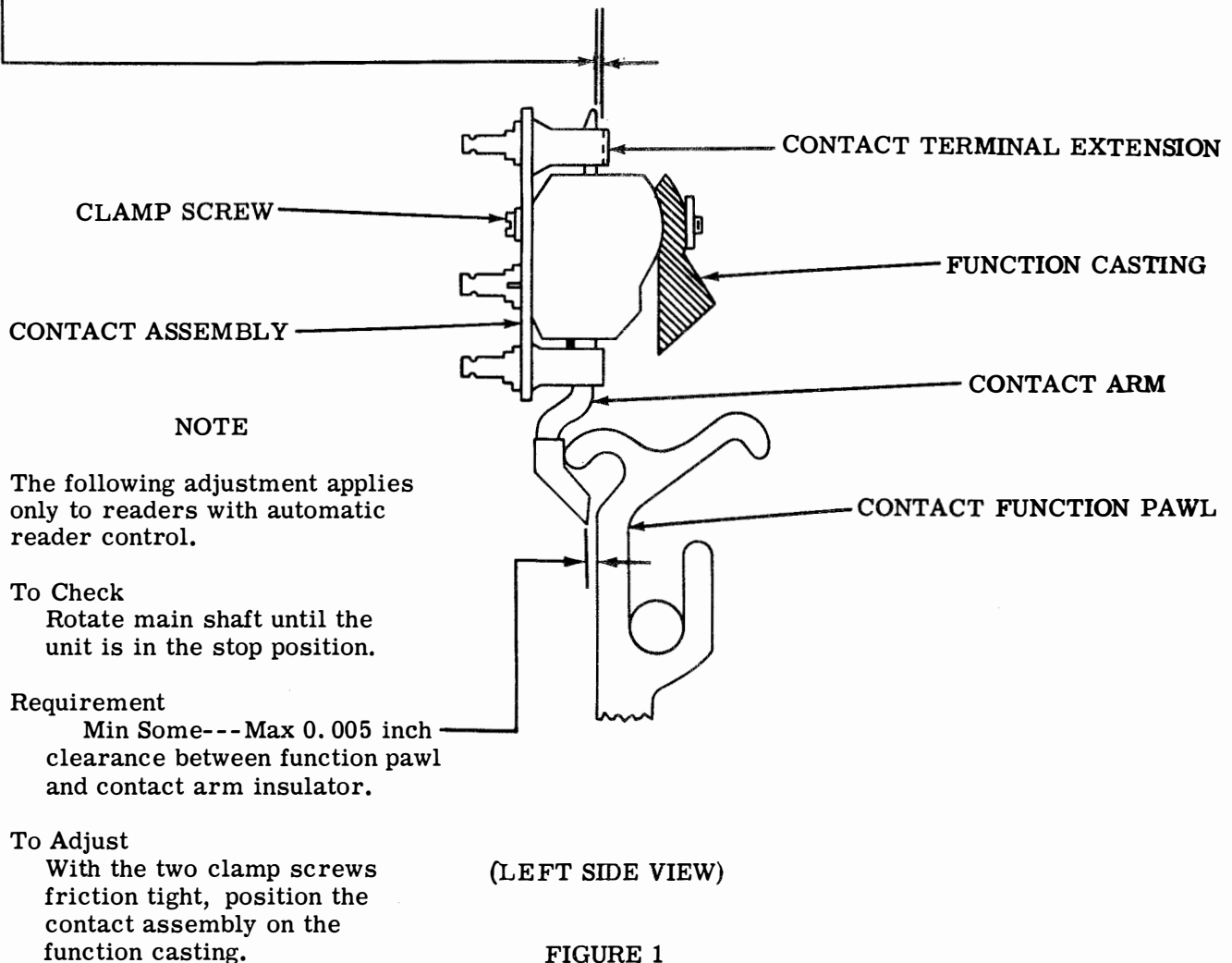
Set up code combination in selector that is to operate the contact function pawl, and rotate the main shaft until the function bail is in its highest position.

Requirement

Min 0.010 inch---Max 0.020 inch clearance between the front surface of the contact arm and the rear surface of the contact terminal extension.

To Adjust

With two clamp screws loosened friction tight, position the contact assembly on the function casting.



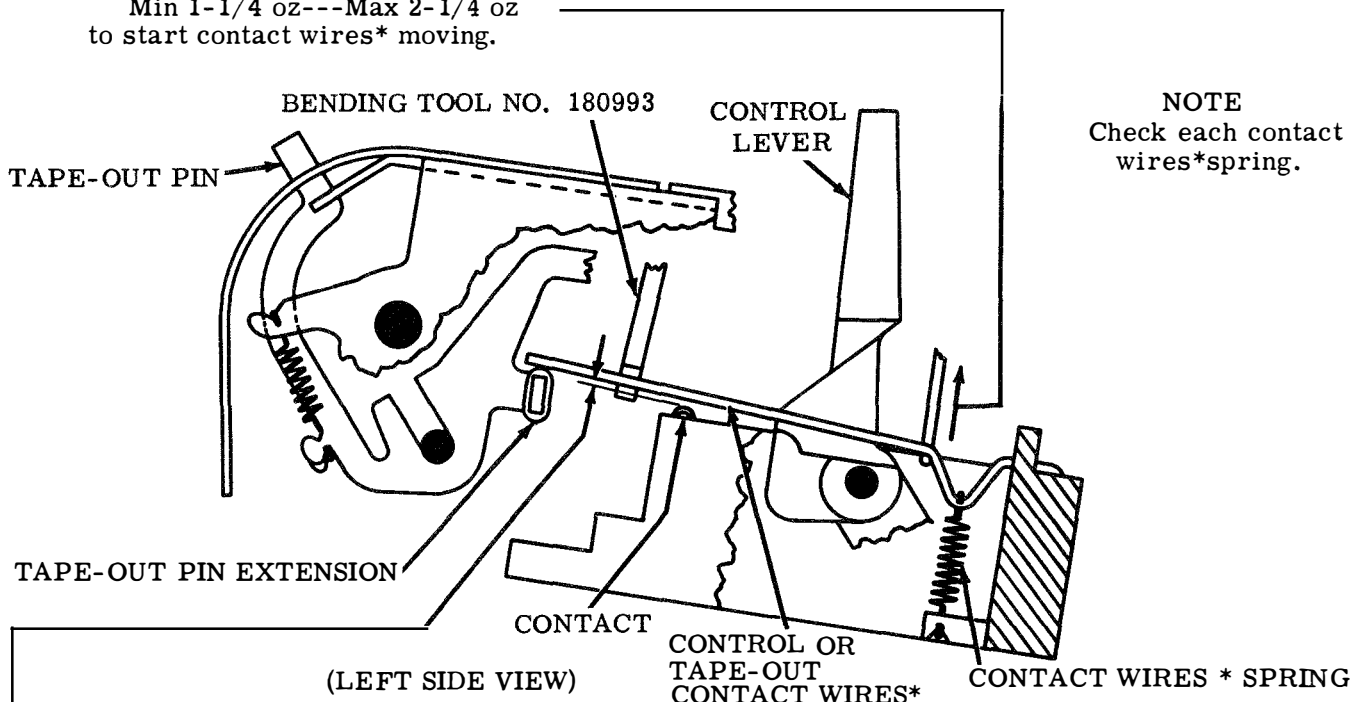
CONTACT WIRES* SPRING

To Check

Place control lever in START position and fully depress tape-out pin.

Requirement

Min 1-1/4 oz---Max 2-1/4 oz
to start contact wires* moving.



CONTROL (OR TAPE-OUT) CONTACT WIRES*

Requirement

With tape-out pin fully up (Note: For readers without automatic reader control, place the control lever in START position.)

Min 0.015 inch---Max 0.025 inch
clearance between control (or tape-out) contact wires* and contact.

To Adjust

Bend control (or tape-out) contact wires* between the contact and the tape-out pin extension with bending tool No. 180993.

*NOTE

The location of the contact wires is shown below:

READERS WITH AUTOMATIC READER CONTROL

READERS WITHOUT AUTOMATIC READER CONTROL

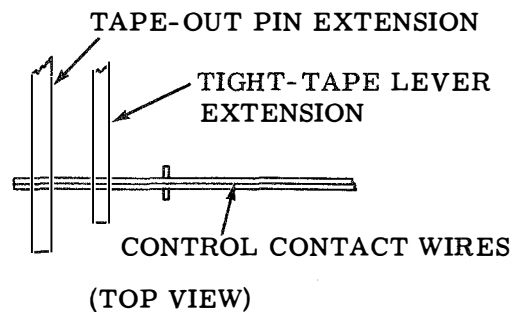
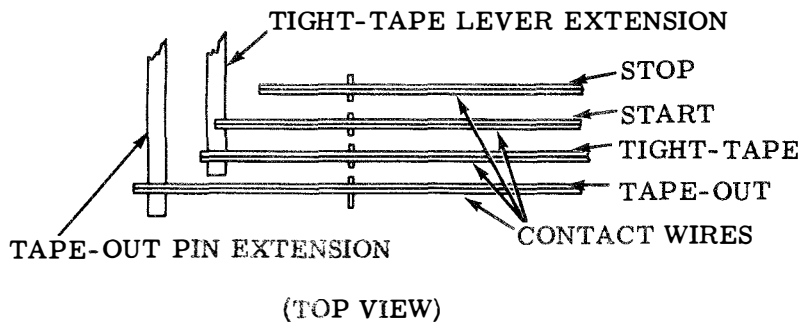


FIGURE 2

NOTE

The following adjustment applies only to readers with automatic reader control.

START CONTACT WIRES

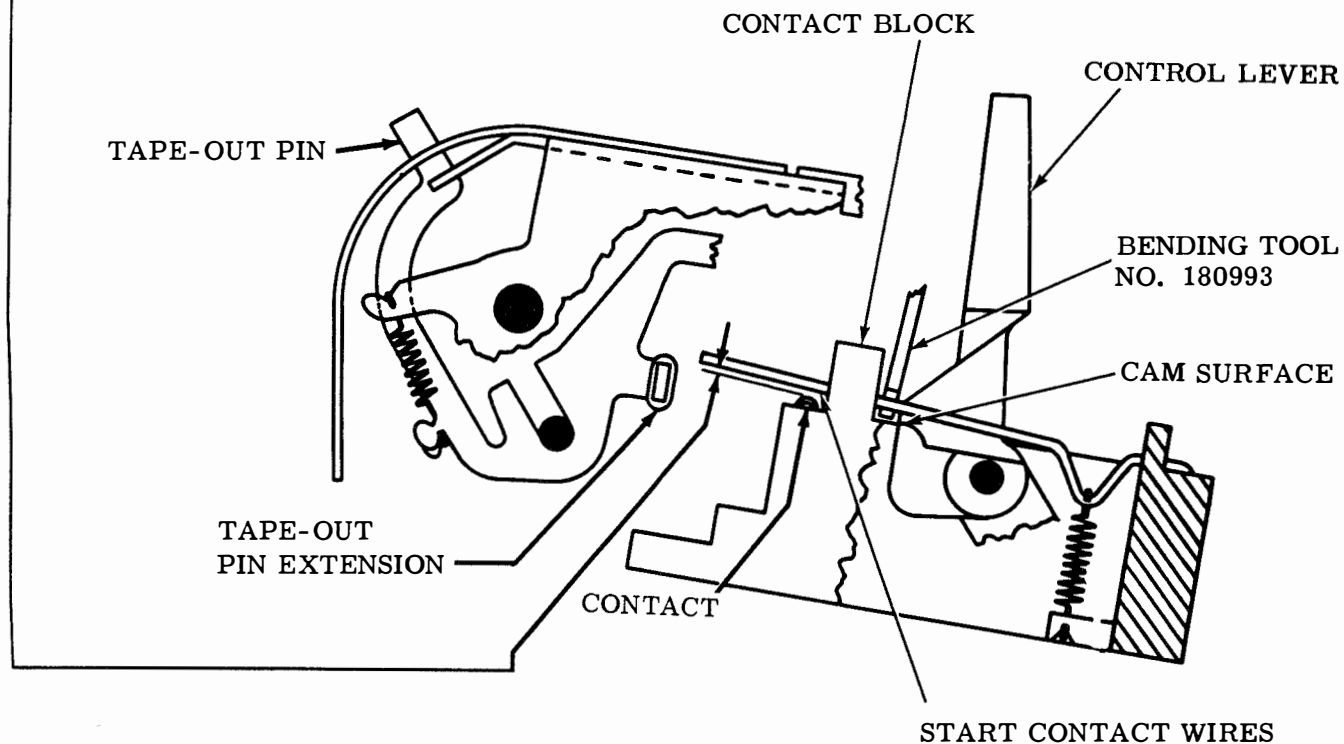
Requirement

With the control lever in the neutral position (resting in a position midway between START and STOP positions)

— Min 0.035 inch---Max 0.055 inch
clearance between the start contact wires and their contact.

To Adjust

With the control lever in the FREE position, bend start contact wires between contact block and control lever cam surface with bending tool No. 180993.



(LEFT SIDE VIEW)

FIGURE 3

CONTROL DETENT SPRING

Requirement

Place control lever in STOP position (Note: For readers with automatic reader control, place the control lever in the neutral position.)

Without* Min 5 oz---Max 9 oz

With* Min 12 oz---Max 16 oz
to start control detent lever moving.

*Automatic reader control

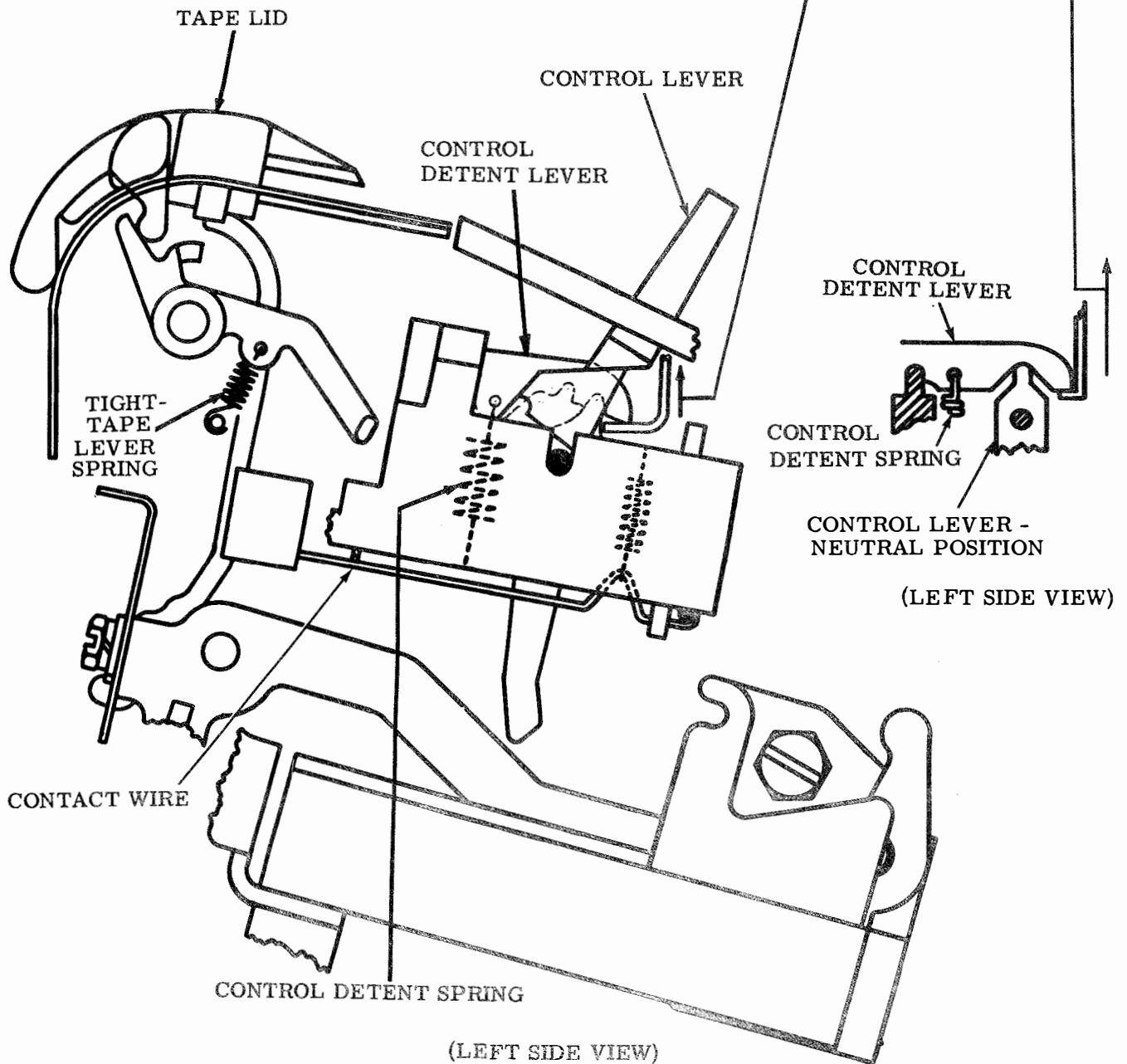


FIGURE 4

TAPE-OUT PIN SPRING

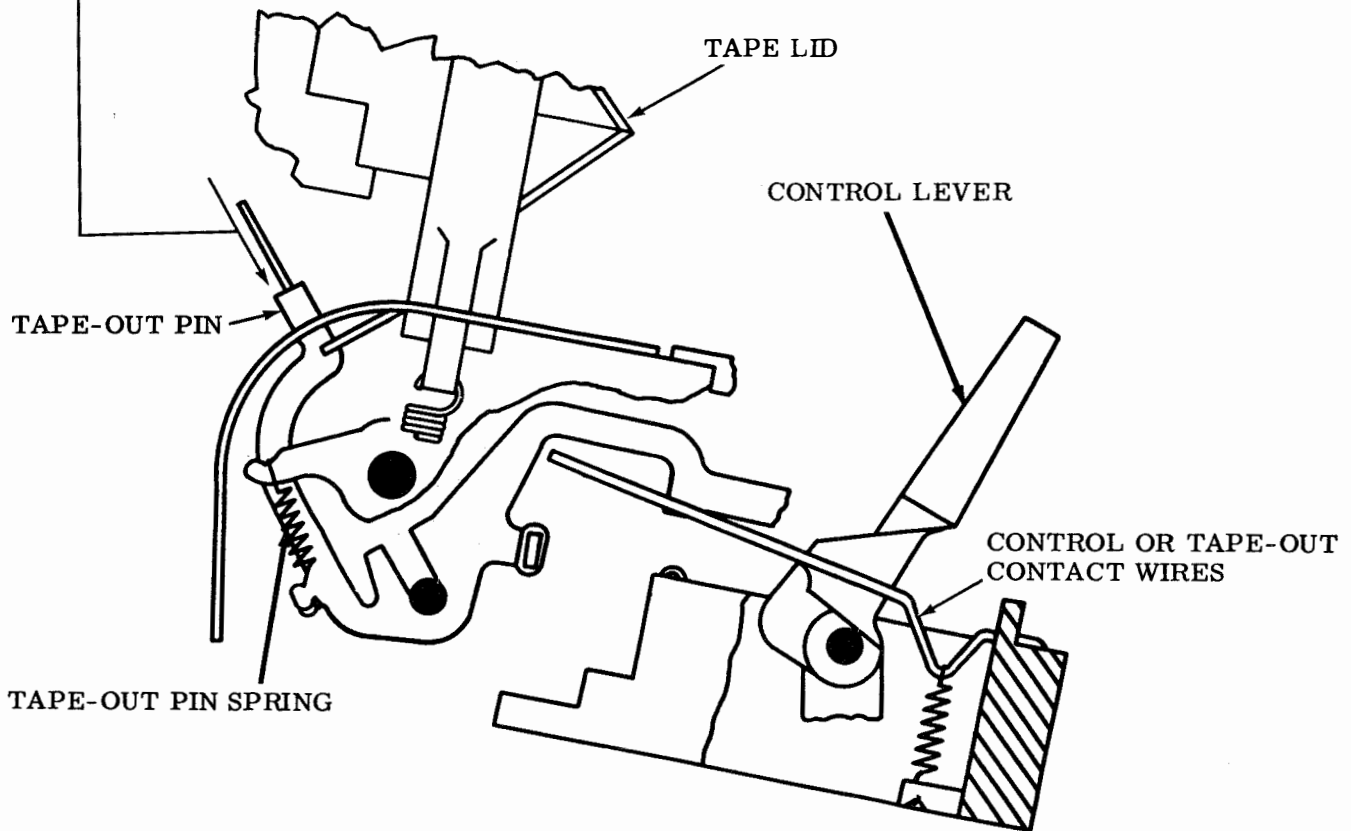
Requirement

With tape lid open and control contact wires held away from the tape-out pin extension

Min 1-3/4 oz---Max 3-3/4 oz
to start tape-out pin moving.

NOTE

On readers equipped with automatic reader control, hold the tape-out contact wires away from the tape-out pin extension.



(LEFT SIDE VIEW)

FIGURE 5

ADDENDUM TO SPECIFICATION 50238S, ISSUE 2, FEBRUARY, 1965 - INSTRUCTIONS FOR INSTALLING 182290, 182291, AND 183128 MODIFICATION KITS TO CONVERT 33C PRINTERS FOR AUTOMATIC READER CONTROL

Page 1, Par. 1. e.

Omit: 1 6351WD Actual Wiring Diagram for
33 ASR, KSR

Add: 1 7884WD Actual Wiring Diagram for
33 Printer - UP801

1 7887WD Actual Wiring Diagram for
Automatic Reader - UX801

1 7888WD Actual Wiring Diagram for
Call Control Unit - UCC3

Page 1, Par. 1. f.

Change: 1ft. 49420 Spring

To read: 1 49420 Spring

Omit: 1 6351WD Actual Wiring Diagram for 33ASR, KSR

Add: 1 7884WD Actual Wiring Diagram for 33 Printer - UP801

Page 2, Par. 1. g.

Omit: 1 6351WD Actual Wiring Diagram for 33 ASR, KSR

Add: 1 7884WD Actual Wiring Diagram for 33 Printer - UP801

Page 3, Par. 2. a. (7), last line

Change: 6351WD.

To read: 7884WD.

Page 3, Par. 2. a. (8), second line

Change: terminal 9

To read: terminal 10

Add after last line:

See wiring diagram 7884WD.

Page 4, Par. 2. a. (18), second line

Change to read:

---the typing unit cover and discard the reader cover. Assemble the 183140 cover to the typing unit cover.

Page 4, Par. 2. b. (7), second line

Change: 6351WD.

To read: 7884WD.

Page 5, Par. 2. c. (5), first line

Change: slot 9

To read: slot 8

Page 5, Par. 2. c. (6), second line

Change: 6351WD.

To read: 7884WD.

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