

28F, 28G, 28LA, AND 28LB

TRANSMITTER-DISTRIBUTOR UNITS

DISASSEMBLY AND REASSEMBLY

CONTENTS	PAGE
1. GENERAL	1
2. DISASSEMBLY AND REASSEMBLY	1
Center-plate assembly	6
Clutch-trip assembly	6
Cover plate	1
Distributor-block assembly	3
Distributor-shaft assembly	3
Feed wheel (units equipped with one feed wheel)	3
Feed wheels (units equipped with two feed wheels)	5
Frame assembly	6
Front (snap) panel	1
Idler-gear assembly	3
Oil reservoir	3
Pushlevers and latchlevers	5
Sensing assembly	6
Sensing pins	5
Sensing-shaft assembly	3
Storing switch assembly	5
Switch-actuating mechanism (start-stop and/or tight- tape switch)	5
Tape guide plate	3
Tape-out and tape-lid switch assembly	3
Top plate	1
Transmitter-distributor unit removal from the base	3

1. GENERAL

1.01 This section contains the specific disassembly instructions for the 28F, 28G, 28LA, and 28LB transmitter-distributor units and, where necessary, contains the detailed reassembly information. The material herein, together with that in the section covering general disassembly and reassembly instructions for teletypewriter apparatus, provides the complete disassembly and reassembly information for maintenance of the units.

1.02 This section is reissued to add instructions for the disassembly of nontransfer-type storing switch contacts and to bring the other information generally up to date. Since

this is a general revision of the section, the marginal arrows ordinarily used to indicate changes have been omitted.

1.03 To reassemble, reverse the disassembly procedures. Where additional information is required a Reassembly Note is added.

1.04 The covers may be removed for inspection and minor repair of the unit. A complete disassembly, however, will necessitate the removal of the unit from its subbase to disconnect the power and facilitate the disassembly procedure.

2. DISASSEMBLY AND REASSEMBLY

2.01 Front (Snap) Panel: To remove the front panel, pull outward on the lower right and lower left rear corners of the front panel and slide the panel forward.

Reassembly Note: To replace the panel, mate the front panel slides with the frame slides. Push slowly toward the rear, applying even pressure at each edge of the front plate.

2.02 Cover Plate: To remove the cover plate lift the left end upward and slide the plate toward the left to disengage the spring clip. (See Figure 1.)

Reassembly Note: Replace cover plate on unit by lowering the right edge to anchor the spring clip under the top plate. Then press the left end downward to engage the detents.

2.03 Top Plate: To remove the top plate, loosen the front and rear mounting screws and lift the plate upward. (See Figure 1.)

Reassembly Note: To replace the top plate, guide the mounting screws into their respective notches on the front and rear plates. Align the sensing pins and feed wheel with their respective slots. If the plates do not align, refer to the adjusting procedures given in the section covering requirements for the 28F, 28G, 28LA, and 28LB transmitter-distributor units.

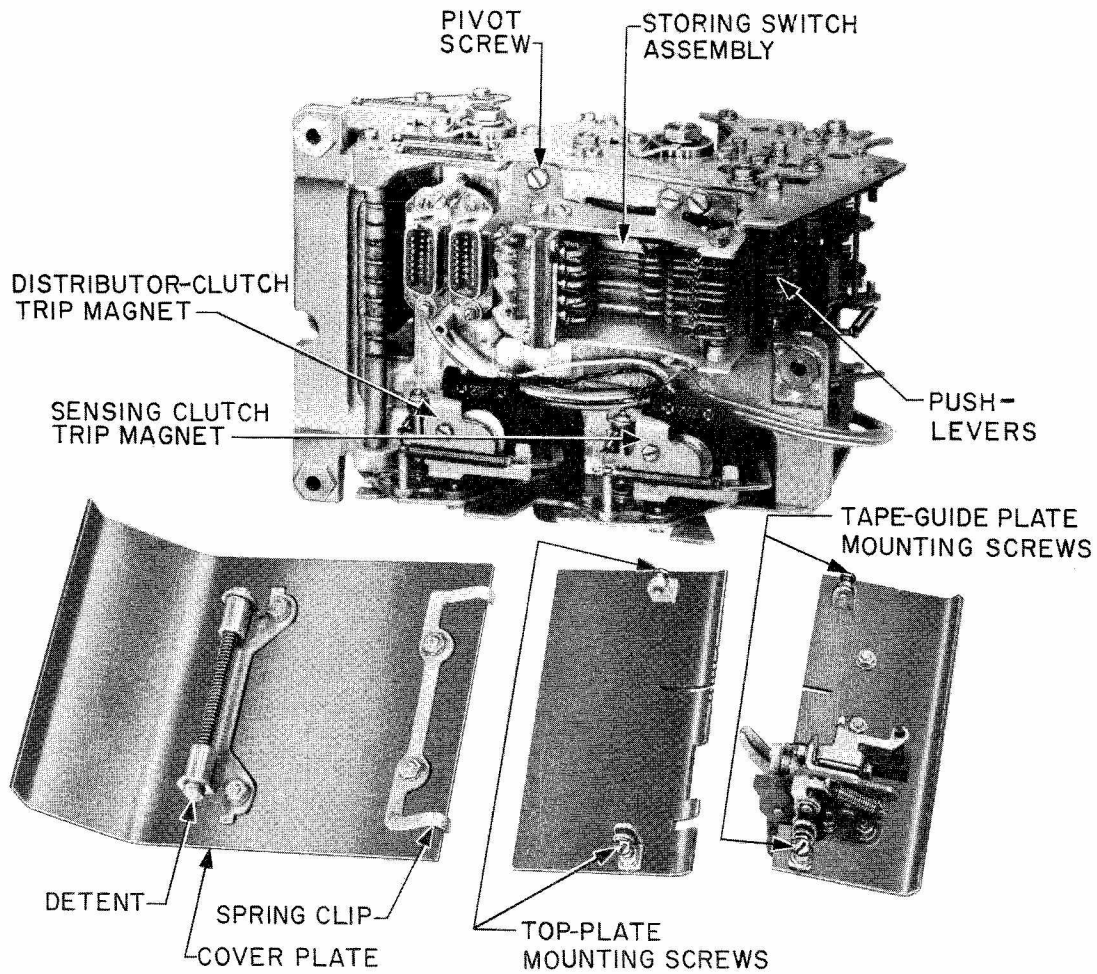


Figure 1 - Sensing and Transmitting Mechanism - Bottom View

2.04 **Tape-guide Plate:** To remove the tape-guide plate, loosen the front and rear mounting screws and slide the plate upward. (See Figure 1.)

Reassembly Note: To replace the tape-guide plate, guide the mounting screws into their respective notches in the front and rear plates. Guide the tape-out pin into its hole and locate the sensing pins against the left edge of the tape-guide plate.

2.05 **Transmitter-Distributor Unit Removal From the Base:** To remove the transmitter-distributor unit from its base, proceed as follows:

- (1) Disconnect the cable connectors; if the unit is so equipped.
- (2) Remove the two left mounting screws and the one right mounting screw which secure the unit to the base.
- (3) Slide the unit forward and lift upward to disconnect the latches and electrical connectors.

2.06 **Tape-out and Tape-lid Switch Assembly:** To remove the tape-out and tape-lid switch assembly on units so equipped, proceed as follows:

- (1) With the cover and top plate removed, remove the spring attached to the bracket on the guide post on which the switch assembly pivots.
- (2) Loosen the screw which secures the guide post to the rear plate.
- (3) Remove the screw and lockwasher from the front end of the post. The post can now be removed far enough to release the switch assembly.
- (4) Remove the adjusting screw from the lower end of the switch bracket. Withdraw the guide post and switch assembly, using care not to distort the switch leaf springs.

Reassembly Note: When reassembling the tape-out and tape-lid switch assembly, use care so as not to disturb the adjustments.

2.07 **Oil Reservoir:** With the transmitter-distributor unit removed from its base,

unhook the springs attached to the underside of the crossbar. Remove the four screws that secure the crossbar to the front and rear plates and lift the oil reservoir assembly upward. (See Figure 2.)

2.08 **Distributor Block Assembly:**

- (1) On units with a cable connector on the rear plate, remove the nuts that secure the connector to the plate, remove the three screws that secure the assembly, and lift the assembly out.
- (2) On units with cable terminations at the connector on the bottom of the casting, remove the three screws that secure the assembly, and lift the assembly out far enough to permit servicing.

Reassembly Note: Check and, if necessary, remake the distributor block assembly adjustments given in the section covering the requirements and adjustments for the 28F, 28G, 28LA, and 28LB transmitter-distributor units.

2.09 **Idler Gear Assembly:** To remove the idler gear, remove the locknut that secures the shaft to the rear plate. Remove this assembly before removing the sensing and distributor shaft assemblies.

2.10 **Distributor Shaft Assembly:** To remove the distributor shaft, remove the three mounting screws that secure each bearing clamp to the front and rear frames. (See Figure 2.)

Reassembly Note: Observe the alignment requirement given in the section containing the requirements and adjustments for the 28F, 28G, 28LA, and 28LB transmitter-distributor units.

2.11 **Sensing Shaft Assembly:** To remove the sensing shaft, remove the three mounting screws that secure each bearing clamp to the front and rear plates. (See Figure 2.)

Reassembly Note: Observe the alignment and adjusting procedures given in the section containing the requirements and adjustments for the 28F, 28G, 28LA, and 28LB transmitter-distributor units.

2.12 **Feed Wheel Assembly (On Units Equipped With One Feed Wheel):** To remove the feed wheel assembly, remove the nut which secures the feed-wheel mounting post to the front plate. Remove the post, with wheel, from the unit.

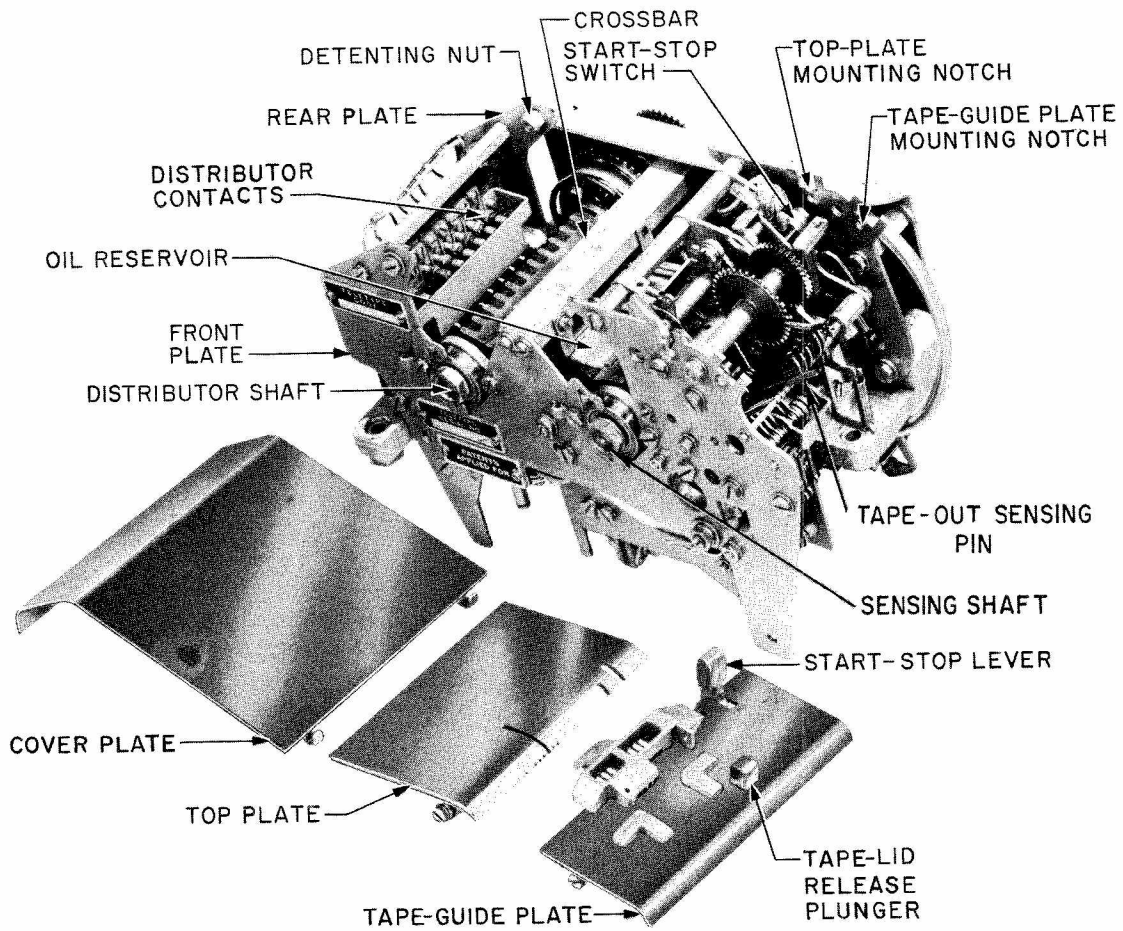


Figure 2 - Sensing and Transmitting Mechanism - Top View

Reassembly Note: When replacing the feed wheel assembly, make sure the shoulder of the mounting post will not interfere with the top-plate or guide-plate front mounting brackets when these plates are replaced.

2.13 Feed Wheels (On Units Equipped With Two Feed Wheels):

(1) Lower Feed Wheel: To remove the feed wheel, back off the nut that secures the cantilever post sufficiently to raise the post and slide the feed wheel off.

(2) Upper Feed Wheel: To remove the upper feed wheel, proceed as follows:

(a) Side-plate-mounted Feed Wheel: Remove the upper, front side plate. Remove the drive screw, slide out the feed-wheel shaft, and remove the feed wheel.

(b) Top-plate-mounted Feed Wheel: Remove the top plate, together with the feed wheel, bearings, and the run-out solenoid. Remove the front feed-wheel bearing and drive screw, and slide out the feed-wheel shaft. Remove the feed wheel, being careful not to break or damage the electrical connections to the solenoid.

Reassembly Note: After reinstalling the upper feed wheel, check and, if necessary, remake the upper feed wheel adjustments as specified in the section containing the requirements and adjustments for the 28F, 28G, 28LA, and 28LB transmitter-distributor units.

2.14 Storing Switch Assembly:

(1) Nontransfer-type Contacts: Remove the two screws that secure the cable connector to the bracket beneath the casting and the four mounting screws that secure the assembly to the casting. Remove the switch assembly taking care not to damage the contact lever slides.

Reassembly Note: In reinstalling the storing switch assembly, replace the left front screw first and use it as a pivot point when aligning the slides with their respective pushlevers and latchlevers.

(2) Transfer-type Contacts: If the unit is equipped with a cable connector, remove the two screws that secure the connector to the bracket beneath the casting and the four

mounting screws that secure the storing switch assembly to the main casting. Withdraw the switch far enough to permit servicing without disconnecting any electrical connections, if possible. When withdrawing the switch, take care not to damage the contact lever slides.

Reassembly Note: When reinstalling the storing switch assembly, replace the left front screw first and use it as a pivot point when aligning the slides with their respective pushlevers and latchlevers. Check and, if necessary, remake the storing switch assembly adjustments as specified in the section containing the requirements and adjustments for the 28F, 28G, 28LA, and 28LB transmitter-distributor units.

2.15 Pushlevers and Latchlevers:

(1) With the storing switch assembly removed, remove the pushlever springs and remove the pushlevers by sliding them downward.

(2) With the storing switch assembly removed, remove the latchlever springs and the spring post attached to the front plate. Remove the latchlevers by rotating them counterclockwise and lifting upward.

2.16 Sensing Pins:

(1) Remove tape-guide plate, spring bracket, sensing finger guide, and storing switch assembly.

(2) Position the sensing bail eccentric shaft to move the sensing bail to the left (toward the sensing cam sleeve) and rotate the sensing shaft until the sensing bail is in its uppermost position.

(3) Remove all the sensing pin springs. Rotate the bellcranks downward and remove each sensing pin assembly.

Reassembly Note: When replacing the sensing pins, make sure the sensing bail is in position as outlined above.

2.17 Switch-actuating Mechanism (START-STOP and/or Tight-tape Switch):

(1) Switch Slidearm Assembly: To remove the switch slidearm assembly, remove the two screws, one nut, and spacer which secure the intermediate plate to the center

plate and remove the nut which secures the bail mounting plate to the center plate. Remove the intermediate plate and then remove the bail and slidearm assembly.

(2) Tape-out Switch: To remove the tape-out switch, remove the mounting screws that secure the switch to the front plate. Loosen the screw that secures the supporting post to the center plate and remove the screw far enough to allow post removal.

2.18 Center Plate Assembly: To remove the center plate assembly, remove the two screws which secure the supporting post in position. Remove the screw, lockwasher, and flat washer from the rear of the shaft that secures the center plate assembly to the front plate. Pull away by lifting up on the center plate (the center plate is hooked over the pivot shaft), and working it out to the right.

2.19 Sensing Assembly: To remove the sensing mechanism, remove the stripper-bail pivot shaft by loosening the nut, set collars, and the two retaining rings. Slide the shaft

out and remove the latch stripper bail, pusher bail, and feed lever assemblies. Remove the sensing bail.

2.20 Clutch Trip Assembly:

(1) Remove the mounting screws and nuts.

(2) On units where the wiring is not long enough to permit servicing, remove the electrical connector mounting screws and remove the assembly, with the connector, switches, and associated cabling.

(3) On units where the wiring is long enough to permit most servicing, the electrical connections need not be disturbed; if necessary, however, unsolder the leads at the magnet coils.

2.21 Frame Assembly: To remove the frame assembly, remove all screws and nuts that secure the eccentric shaft to the side frame and casting. Remove all screws mounting the front and rear plates to the casting and disassemble completely.