

TP193825 BACKSPACE MAGNET ASSEMBLY

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K, 28LA Perforator-Transmitter-Bases.

OBJECT: To provide more reliable operation and simplify adjusting procedure.

REASON FOR REISSUE: To revise information under "CHANGE" which was incorrectly specified. TP119648 retainer is changed to read TP119649 retainer.

CHANGE: 1. The TP159966 backspace magnet assembly used in the backspace mechanism is replaced by the TP193825 backspace magnet assembly.

TP159966 Backspace Magnet Assembly

1 — TP224M Coil, Magnet	2 — TP151152 or TP151737 Screws
2 — TP2034 Flat Washers	1 — TP151442 Screw
1 — TP2191 Lockwasher	1 — TP152893 Screw
1 — TP3599 Nut	1 — TP159965 Arm
4 — TP3640 Lockwashers	1 — TP159973 Bracket
2 — TP3650 Flat Washers	1 — TP159974 Eccentric
1 — TP70878 Spring	1 — TP159975 Bail
1 — TP110743 Lockwasher	1 — TP159976 Armature
1 — TP119648 Retainer	1 — TP159977 Hinge
2 — TP119649 Retainers	1 — TP159978 Shaft
2 — TP125215 Screws	1 — TP159979 Arm
	1 — TP159980 Post

TP193825 Backspace Magnet Assembly

1 — TP224M Coil, Magnet	1 — TP151152 Screw
2 — TP2034 Flat Washers	1 — TP151632 Screw
1 — TP2191 Lockwasher	2 — TP151737 Screws
4 — TP3640 Lockwashers	1 — TP158760 Spring Post
2 — TP3650 Flat Washers	1 — TP159976 Armature
1 — TP55063 Spring	1 — TP193804 Armature
1 — TP119649 Retainer	1 — TP193821 Bracket
2 — TP125215 Screws	1 — TP193822 Clamp
	1 — TP193824 Latch

2. Requirement is added to Section 573-119-700, Section 573-118-700 and Section 573-117-700, after the last adjustment for the backspace mechanism.

See FIGURE 1.

The parts are shown in Teletype Bulletins 1167B, page 2-28, change 6; 1169B, page 2-16, change 7, and page 3-32, change 6; 1172B, page 15, change 3; 1166B, page 2-19, change 6.

IDENTIFICATION: See "CHANGE".

SECTION 573-117-800.01

INTERCHANGEABILITY: New and old style assemblies are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect. Replacement parts for old style assemblies will be available on sales orders.

W.E.CO. STOCK OF OLD STYLE PARTS: Old style parts may be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

MANUAL AND POWER DRIVE BACKSPACE MECHANISM
(LATEST DESIGN)

MAKE THE FOLLOWING STANDARD ADJUSTMENTS.

FOR CHADLESS TAPE

- (1) RAKE
- (2) FEED PAWL CLEARANCE
- (3) RETURN LATCH
- (4) FEED PAWL

FOR FULLY PERFORATED TAPE

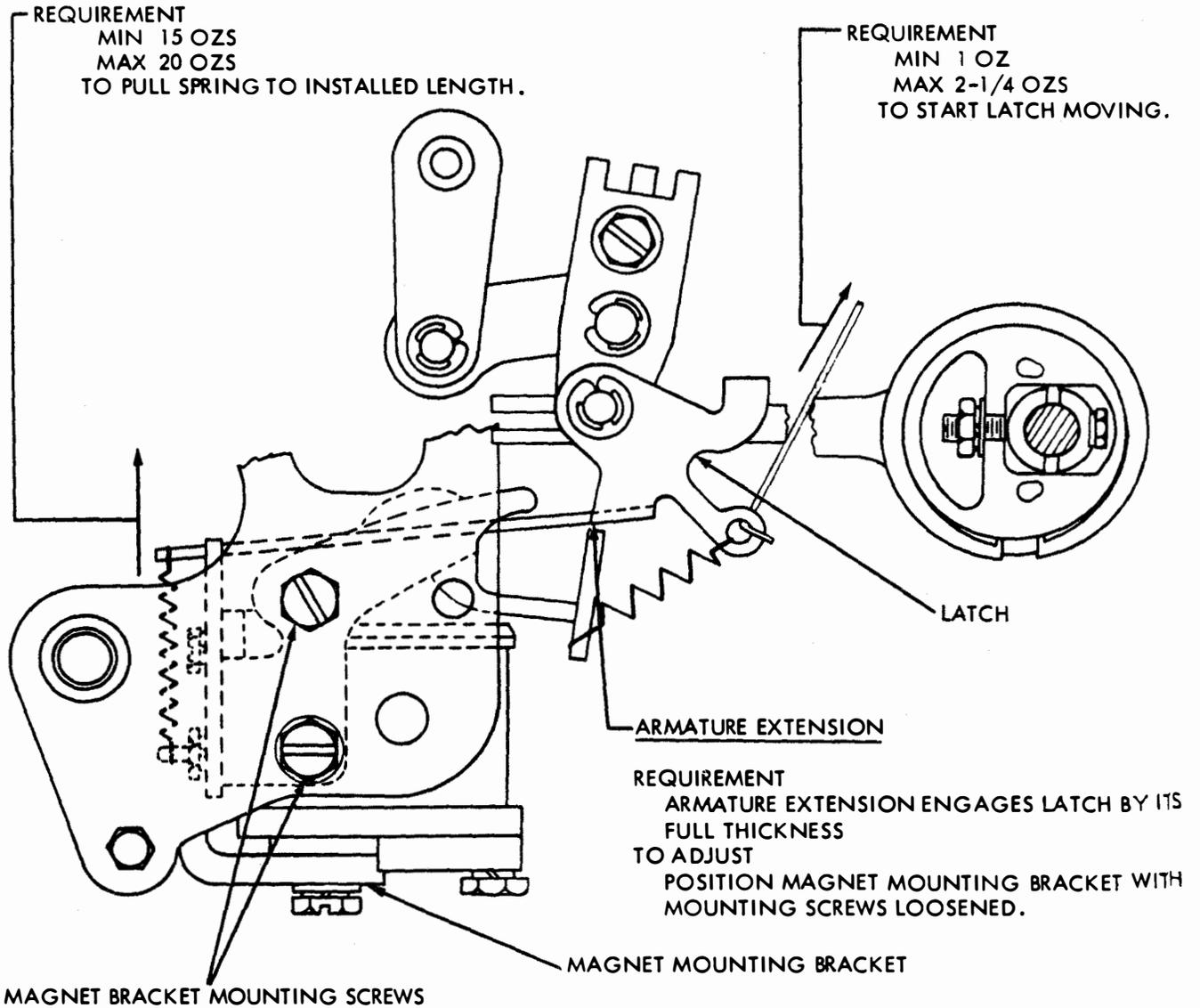
- (1) BACKSPACE RATCHET
- (2) BACKSPACE PAWL CLEARANCE
- (3) FEED PAWL DISABLING

ARMATURE SPRING

REQUIREMENT
MIN 15 OZS
MAX 20 OZS
TO PULL SPRING TO INSTALLED LENGTH.

LATCH EXTENSION SPRING

REQUIREMENT
MIN 1 OZ
MAX 2-1/4 OZS
TO START LATCH MOVING.



REQUIREMENT
ARMATURE EXTENSION ENGAGES LATCH BY ITS
FULL THICKNESS
TO ADJUST
POSITION MAGNET MOUNTING BRACKET WITH
MOUNTING SCREWS LOOSENED.

FINAL POWER OR MANUAL (FOR CHADLESS TAPE)
SAME AS STANDARD ADJUSTMENT

FIGURE 1. MANUAL AND POWER DRIVE BACKSPACE MECHANISM
FOR CHADLESS OR FULLY PERFORATED
TAPE (LATEST DESIGN)

TP193825 BACKSPACE MAGNET ASSEMBLY

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K, 28LA Perforator-Transmitter-Bases.

OBJECT: To provide more reliable operation and simplify adjusting procedure.

CHANGE: 1. The TP159966 backspace magnet assembly used in the backspace mechanism is replaced by the TP193825 backspace magnet assembly.

TP159966 Backspace Magnet Assembly

1 — TP224M Coil, Magnet	2 — TP151152 or TP151737 Screws
2 — TP2034 Flat Washers	1 — TP151442 Screw
1 — TP2191 Lockwasher	1 — TP152893 Screw
1 — TP3599 Nut	1 — TP159965 Arm
4 — TP3640 Lockwashers	1 — TP159973 Bracket
2 — TP3650 Flat Washers	1 — TP159974 Eccentric
1 — TP70878 Spring	1 — TP159975 Bail
1 — TP110743 Lockwasher	1 — TP159976 Armature
1 — TP119648 Retainer	1 — TP159977 Hinge
2 — TP119649 Retainers	1 — TP159978 Shaft
2 — TP125215 Screws	1 — TP159979 Arm
	1 — TP159980 Post

TP193825 Backspace Magnet Assembly

1 — TP224M Coil, Magnet	1 — TP151152 Screw
2 — TP2034 Flat Washers	1 — TP151632 Screw
1 — TP2191 Lockwasher	2 — TP151737 Screws
4 — TP3640 Lockwashers	1 — TP158760 Spring Post
2 — TP3650 Flat Washers	1 — TP159976 Armature
1 — TP55063 Spring	1 — TP193804 Armature
1 — TP119648 Retainer	1 — TP193821 Bracket
2 — TP125215 Screws	1 — TP193822 Clamp
	1 — TP193824 Latch

2. Requirement is added to Section P34.650, Issue 3 (Plant Series Section 573-119-700); Addendum P34.651, Issue 1 (Plant Series Section 573-118-700); Section P34.660, Issue 3 (Plant Series Section 573-117-700) and Teletype Bulletins 247B, dated May 1962; 250B, dated June 1962; 256B, dated June 1962, after the last adjustment for the backspace mechanism.

See FIGURE 1.

The parts are shown in Teletype Bulletins 1167B, page 2-28, change 6; 1169B, page 2-16, change 7, page 3-32, change 6; 1172B, page 15, change 3; 1166B, page 2-18, change 6.

SECTION 573-117-800.01

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style assemblies are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect. Replacement parts for old style assemblies will be available on sales orders.

W.E.CO. STOCK OF OLD STYLE PARTS: Old style parts may be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

MANUAL AND POWER DRIVE BACKSPACE MECHANISM
(LATEST DESIGN)

MAKE THE FOLLOWING STANDARD ADJUSTMENTS.

FOR CHADLESS TAPE

- (1) RAKE
- (2) FEED PAWL CLEARANCE
- (3) RETURN LATCH
- (4) FEED PAWL

FOR FULLY PERFORATED TAPE

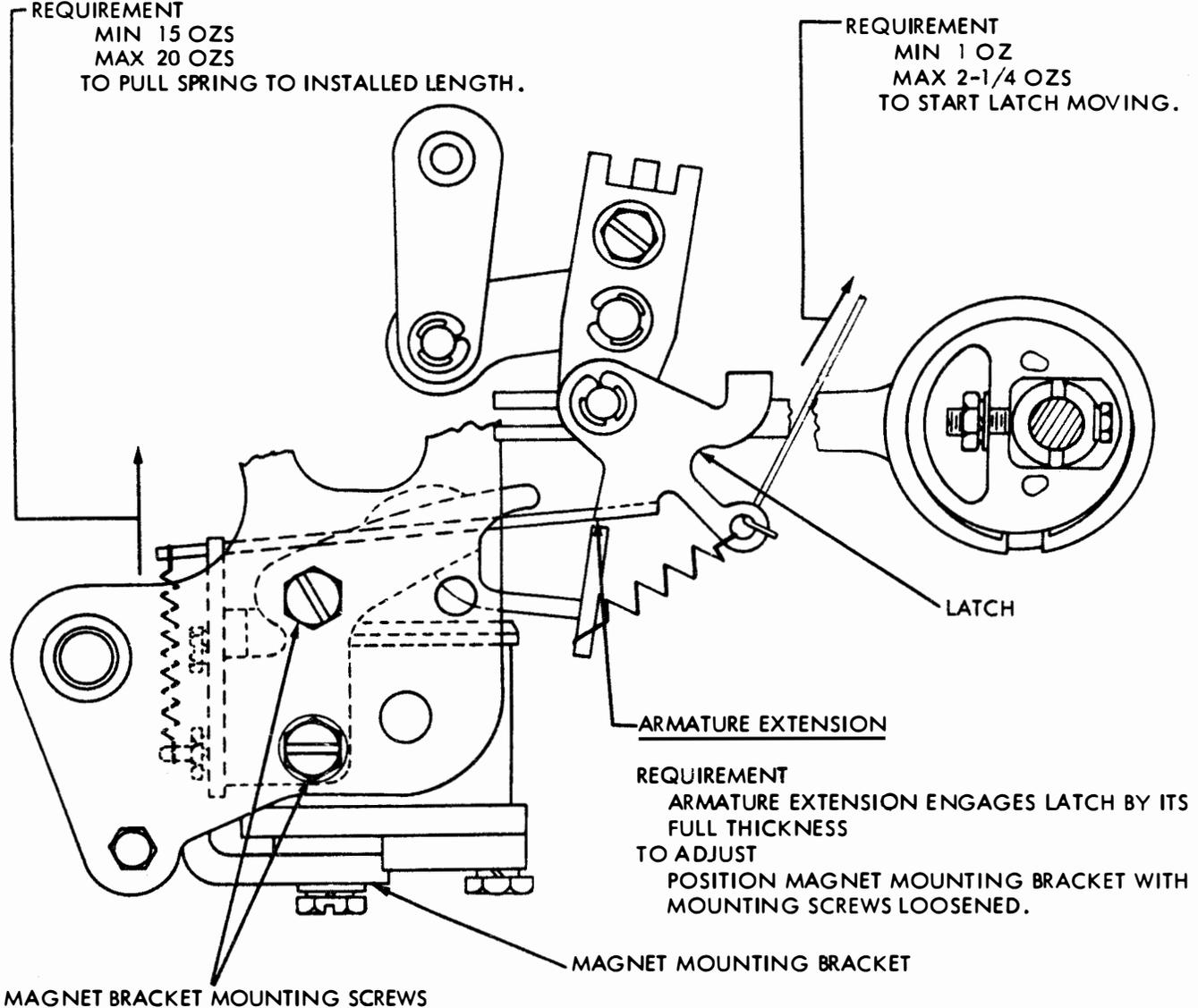
- (1) BACKSPACE RATCHET
- (2) BACKSPACE PAWL CLEARANCE
- (3) FEED PAWL DISABLING

ARMATURE SPRING

REQUIREMENT
MIN 15 OZS
MAX 20 OZS
TO PULL SPRING TO INSTALLED LENGTH.

LATCH EXTENSION SPRING

REQUIREMENT
MIN 1 OZ
MAX 2-1/4 OZS
TO START LATCH MOVING.



REQUIREMENT
ARMATURE EXTENSION ENGAGES LATCH BY ITS
FULL THICKNESS
TO ADJUST
POSITION MAGNET MOUNTING BRACKET WITH
MOUNTING SCREWS LOOSENED.

FINAL POWER OR MANUAL (FOR CHADLESS TAPE)
SAME AS STANDARD ADJUSTMENT

FIGURE 1. MANUAL AND POWER DRIVE BACKSPACE MECHANISM
FOR CHADLESS OR FULLY PERFORATED
TAPE (LATEST DESIGN)

TP144992 SHAFT AND TP151630 SCREW

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K and 28LA Perforator Transmitter Bases, TP144749 Bearing Bracket Assembly.

OBJECT: To facilitate manufacture.

CHANGE: The TP144992 stub shaft w/bearing has been modified by reducing the length of thread at the end of the shaft from 1/2 inch to 1/4 inch. The TP156632 screw associated with this shaft has been replaced by a TP151630 screw.

Note: Some TP144992 shafts are equipped with a TP84082 screw instead of the TP156632 screw. Either one of these screws is replaced by the TP151630 screw.

The TP144992 stub shaft w/bearing and TP156632 screw are shown in Bulletin 1169B, page 1-6, change 8.

IDENTIFICATION: See "CHANGE".

Old style TP156632 screw — 6-40 x 3/8 inch hex

New style TP151630 screw — 6-40 x 1/4 inch hex

INTERCHANGEABILITY: New and old style shafts are interchangeable. New style screws can be used with new or old style shafts. Old style screws can only be used with old style shafts.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change shall be incorporated as soon as manufacturing conditions permit.

W.E.CO. STOCK OF OLD STYLE PARTS: May be used.

APPLICATION TO APPARATUS IN THE FIELD: There is no advantage in using new style parts.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

TP160581 LEVER

APPARATUS AFFECTED: 28LA Perforator-Transmitter-Base and 28B and 28C Reperforator-Transmitter Units.

OBJECT: To minimize wear of the TP160581 lever associated with the TP160579 cam in the 28LA perforator-transmitter-base.

CHANGE: The entire end of the cam follower of the TP160581 lever has been case-hardened to a depth of .0075 inch. Formerly only the cam surface of the cam follower was case-hardened to a depth of .004 inch. In addition, a finish requirement of "32 RMS maximum" has been added to the cam follower surface.

The TP160581 lever is shown in Bulletin 1172B, page 8, change 3, and in Bulletin 1166B, page 2-12, change 5.

IDENTIFICATION: Old style TP160581 levers are nickel-plated. New style TP160581 levers have a black oxide finish.

INTERCHANGEABILITY: New and old style levers are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: Shall not be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory operation need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All 28LA perforator-transmitter-bases shall be equipped with new style parts if parts involved require replacement or if parts are disassembled for other reasons. 28B and 28C reperforator-transmitter units may be equipped with new or old style parts.

TP193973 TAPE GUARD

APPARATUS AFFECTED: All Typing Reperforator Units; 28H Reperforator Unit; All 28 Reperforator-Transmitter Units; 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1 and 28K Perforator-Transmitter-Bases; 35A Typing Reperforator Unit; 35AK Typing Reperforator Set; TP193988, TP193989, TP193992, TP193993 Modification Kits on Slack Tape Mechanisms.

OBJECT: To provide additional adjustment margin when positioning the tape guard.

CHANGE: The mounting hole at the end of the long projection on the TP193973 tape guard is increased from 0.191 inch to 0.250 inch diameter. Because of the increased size of the mounting hole, the TP7002 flat washer (0.312 inch diameter) is replaced by a TP125015 flat washer (0.375 inch diameter). The TP193973 tape guard (or platform) is shown in Teletype Specification 50247S, Issue 1, Figures 1 and 2.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New style and old style parts are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change shall be incorporated as soon as manufacturing conditions permit. This is expected to be about December 31, 1964.

W.E.CO. STOCK OF OLD STYLE PARTS: May be used.

APPLICATION TO APPARATUS IN THE FIELD: New style parts should be incorporated if required to meet specified adjustments.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: The units may be equipped with new or old style parts.

TP156740 SCREW

APPARATUS AFFECTED: All 28 Perforator-Transmitter-Bases; all 35 Perforator-Transmitter-Bases.

OBJECT: To provide a screw with adequate thread engagement.

CHANGE: The TP151722 or TP151631 screw used to fasten the TP159955 drive link to the TP159954 adjusting link is replaced with a TP156740 screw.

The TP151722 or TP151631 screw is shown in Teletype Bulletins 1167B, page 2-28, change 6; 1172B, page 15, change 3; 1166B, page 2-19, change 5; 1169B, pages 2-16, change 7, and 3-32, change 6; 1187B, page 5-10, original.

IDENTIFICATION: The TP156740 screw is 7/32 inch long; the TP151631 screw is 5/16 inch long; the TP151722 screw is 3/16 inch long.

INTERCHANGEABILITY: New and old style screws are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished for other applications.

APPLICATION TO APPARATUS IN THE FIELD: Where desired, the new style parts may be incorporated.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts.

TP159995 LIFTER ARM

APPARATUS AFFECTED: 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, 28J-1, 28K, 28L, 28M Typing Reperforator Units; 28LA, 28LA-1 Tape Typing Units; 28D, 28E, 28G-1, 28K Perforator-Transmitter-Bases; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2 Reperforator-Transmitter Units; 35A, 35B Tape Typing Units; 35A Typing Reperforator Unit; 35B, 35D Perforator-Transmitter-Bases; TP159995 Lifter Arm.

OBJECT: To improve the alignment between the roller on the TP159995 lifter arm and the cam on the TP162350 rocker bail.

CHANGE: The TP159995 lifter arm is modified by removing the 0.031 inch offset.

The TP159995 lifter arm is shown in Teletype Bulletins 1167B, page 2-18, change 6; 1169B, page 3-28, change 6; 1188B, page 2-19, original.

IDENTIFICATION: New style lifter arms have a straight section adjacent to the stud; old style lifter arms have an offset section adjacent to the stud.

INTERCHANGEABILITY: New and old style parts are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change will be put into effect as soon as manufacturing conditions permit which is expected to be by November, 1964.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

TP159656 PUNCH BLOCK ASSEMBLY
TP159657 GUIDE AND DIE ASSEMBLY

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J and 28J-1 Perforator-Transmitter-Bases; 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J and 28K Typing Reperforator Units; 28A, 28D through 28D-6, 28E, 28F, 28F-1, 28F-2 Reperforator-Transmitter Units; TP159656 Punch Block Assembly; TP159657 Guide and Die Assembly.

OBJECT: To provide more clearance for the TP156869 ribbon guide.

CHANGE: The TP156004 die plate (part of the TP 159656 or TP159657 assemblies) is modified by removing 0.031 inch of material from the side opposite the punch holes for a distance of approximately 1 inch.

The TP159656 or TP159657 assemblies are shown in Bulletins 1167B, page 2-40, change 6; 1169B, page 3-8, change 6; and 1172B, page 11, change 3. The TP156869 ribbon guide is shown in 1167B, page 2-9, change 6; and 1169B, page 3-16, change 6.

IDENTIFICATION: See "CHANGE". On new style parts, the longer portion adjacent to the projection is approximately 15/64 inch wide compared to 17/64-inch width of old style parts.

INTERCHANGEABILITY: New and old style parts are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change will be put into effect as soon as manufacturing conditions permit.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

TAPE FEEDING ADJUSTMENT

APPARATUS AFFECTED: All 28 Typing Reperforator Units; 28H Reperforator Unit; all 28 Reperforator-Transmitter Units; 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K Perforator-Transmitter-Bases; 28A, 28B, 28C, 28D, 28E Typing Reperforator Bases; 28A Reperforator-Transmitter Stand.

35A Typing Reperforator Unit; 35A Typing Reperforator Base.

REASON FOR REISSUE: To revise information under *W.E.CO. STOCK OF OLD STYLE PARTS* and *APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS.*

OBJECT: To provide improved tape feeding.

CHANGE: All 28 typing reperforator units; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2 reperforator-transmitter units.

35A Typing Reperforator Unit.

A slack tape mechanism is added as follows:

1. The TP162350 rocker bail is replaced by a TP195235 rocker bail. The TP195235 rocker bail has a TP153239 roller fastened to its stud by means of a TP119648 retaining ring.
2. The TP156475 or TP176640 tape guard is replaced by a TP193973 tape guard. The TP193973 tape guard is fastened to an added TP193966 bracket w/stud by means of two TP151722 screws, TP2191 lockwashers and TP7002 flat washers.
3. A tape depressor mechanism consisting of a TP193974 tape depressor, TP193970 clamp plate w/pad and TP195231 spring, fastened to the TP193966 bracket w/stud by means of a TP119650 retaining ring, is added.
4. A TP193968 post is added to the TP193966 bracket w/stud and is fastened by means of a TP153537 screw and TP2191 lockwasher.

NOTES: 1. Units in the field may be modified by installing the TP193988 modification kit which contains the above parts with the exception of the TP195235 rocker bail. The kit includes a TP193972 extension which is installed on the present rocker bail.

2. The installation instructions are covered in Specification 50,247S.

The TP162350 rocker bail is shown in Teletype Bulletins 1167B, page 2-3, change 6, and 1188B, page 2-3, original.

The TP156475 and TP176640 tape guards are shown in Teletype Bulletin 1167B, page 2-14, change 6.

***Issue 1 was not released to the field.**

SECTION 573-117-800.08

The TP176640 tape guard is shown in Teletype Bulletin 1188B, page 2-15, original.

28D, 28K Perforator-Transmitter-Bases. A slack tape mechanism and rigid tape guide parts are added as follows:

1. The TP162350 rocker bail is replaced by a TP195235 rocker bail. The TP195235 rocker bail has a TP153239 roller fastened to its stud by means of a TP119648 retaining ring.
2. The changes in the tape guard and the addition of the tape depressor mechanism and slack tape parts is the same as covered in paragraphs 2 through 4 for the 28 typing reperforator units.
3. The TP154319 tape guide is replaced by the TP193983 tape guide w/roller; the two TP151630 screws used for fastening are replaced by two TP151632 screws.
4. A TP193987 tape guide bracket having a TP195233 roller, TP193969 post, TP2191 lock-washer, TP153537 screw and TP119652 retaining ring is added to the typing reperforator.

NOTES: 1. Units in the field may be modified by installing the TP193988 modification kit, which contains the parts for the slack tape mechanisms with the exception of the TP195235 rocker bail. The kit contains a TP193972 extension which is installed on the present rocker bail. The units will also require the TP194076 modification kit to provide parts for the rigid tape path.

2. Installation instructions for the TP193988 and TP194076 modification kits are covered in Specifications 50,247S and 50,260S respectively.

The TP154319 tape guide and TP151630 screws are shown in Teletype Bulletin 1169B, page 1-48, change 7.

28E, 28G-1 Perforator-Transmitter-Bases. A slack tape mechanism and rigid tape guide parts are added as follows:

1. The TP162350 rocker bail is replaced by a TP195235 rocker bail. The TP195235 rocker bail has a TP153239 roller fastened to its stud by means of a TP119648 retaining ring.
2. A TP152400 selector mounting plate is added and is fastened by means of a TP3598 nut and TP2191 lockwasher on the present TP156472 spring post and a TP151632 screw and TP2191 lockwasher on the left side.
3. A TP193973 tape guard, fastened to a TP193966 bracket w/stud by means of two TP151722 screws, TP2191 lockwashers and TP7002 flat washers is added.
4. A tape depressor mechanism, consisting of a TP193974 tape depressor, TP193970 clamp plate w/pad and TP195231 spring, fastened to the TP193966 bracket w/stud by means of a TP119650 retaining ring is added.
5. A TP193968 post is added to the TP193966 bracket w/stud and is fastened by means of a TP153537 screw and TP2191 lockwasher.
6. The TP154319 tape guide is replaced by the TP193983 tape guide w/roller; the two TP151630 screws used for fastening are replaced by two TP151632 screws.

7. A TP193987 tape guide bracket having a TP195233 roller, TP193969 post, TP2191 lockwasher, TP153537 screw, and TP119652 retaining ring is added to the typing perforator.

NOTES: 1. Units in the field may be modified by installing the TP193992 modification kit, which contains the above parts for the slack tape mechanism with the exception of the TP195235 rocker bail. The kit contains a TP193972 extension, which is installed on the present rocker bail. The units will also require the TP194076 modification kit to provide parts for the rigid tape path.

2. Installation instructions for the TP193992 and TP194076 modification kits are covered in Specifications 50,247S and 50,260S respectively.

The TP162350 rocker bail is shown in Teletype Bulletin 1169B, page 3-4, change 6.

The TP154319 tape guide and TP151630 screws for fastening are shown in Teletype Bulletin 1169B, page 1-48, change 7.

28A, 28B, 28G, 28H, 28J, 28J-1 Perforator-Transmitter-Bases. A slack tape mechanism and rigid tape guide parts are added as follows:

1. The TP158941 rocker bail is replaced by a TP193976 rocker bail. The TP193976 rocker bail has a TP153239 roller fastened to its stud by means of a TP119648 retaining ring.
2. Other changed and added parts are the same as covered in paragraphs 2 through 6 for the 28E and 28G-1 perforator-transmitter-bases.

NOTES: 1. Units in the field may be modified by installing the TP193989 modification kit to provide slack tape. The units will also require the TP194076 modification kit to provide parts for the rigid tape path.

2. Installation instructions for the TP193989 and TP194076 modification kits are covered in Specifications 50,247S and 50,260S respectively.

The TP158941 rocker bail is shown in Teletype Bulletin 1169B, page 2-2, change 7.

28H Reperforator Unit; 28B, 28C, 28G Reperforator-Transmitter Units. A slack tape mechanism is added as follows:

1. The TP158941 rocker bail is replaced by a TP193976 rocker bail. The TP193976 rocker bail has a TP153239 roller fastened to its stud by means of a TP119648 retaining ring.
2. The TP176640 tape guard is replaced by a TP193973 tape guard. The TP193973 tape guard is fastened to an added TP193966 bracket w/stud by means of two TP151722 screws, TP2191 lockwashers and TP7002 flat washers.
3. A tape depressor mechanism consisting of a TP193974 tape depressor, TP193970 clamp plate w/pad and TP195231 spring, fastened to the TP193966 bracket w/stud by means of a TP119650 retaining ring is added.
4. A TP193968 post is added to the TP193966 bracket w/stud and is fastened by means of a TP153537 screw and TP2191 lockwasher.

NOTES: 1. Units in the field may be modified by installing the TP193993 modification kit.

2. The installation instructions are covered in Specification 50,247S.

The TP158941 rocker bail is shown in Teletype Bulletin 1172B, page 13, change 3.

The TP176640 tape guard is shown in Teletype Bulletin 1172B, page 8, change 3.

28F Perforator-Transmitter-Base. A slack tape mechanism and rigid tape guide parts are added as follows:

1. The TP158941 rocker bail is replaced by a TP193976 rocker bail. The TP193976 rocker bail has a TP153239 roller fastened to its stud by means of a TP119648 retaining ring.
2. The change in the tape guard and the addition of the tape depressor mechanism are the same as covered in paragraphs 2 through 4 for the 28H reperforator unit and the 28B, 28C, 28G reperforator-transmitter units.
3. The TP154319 tape guide is replaced by the TP193983 tape guide w/roller, the two TP151630 screws used for fastening are replaced by two TP151632 screws.
4. A TP193987 tape guide bracket having a TP195233 roller, TP193969 post, TP2191 lockwasher, TP153537 screw and TP119652 retaining ring is added to the reperforator.

NOTES: 1. Units in the field may be modified by installing the TP193993 modification kit to provide slack tape. The units will also require the TP194076 modification kit to provide parts for the rigid tape path.

2. Installation instructions for the TP193993 and TP194076 modification kits are covered in Specifications 50,247S and 50,250S respectively.

The TP158541 rocker bail is shown in Teletype Bulletin 1172B, page 13, change 3.

The TP154319 tape guide and TP151630 screws for fastening are shown in Teletype Bulletin 1169B, page 1-48, change 7.

28C Typing Reperforator Base. Rigid tape path parts are as follows:

1. The TP161803 tape guide is replaced by the TP194082 tape guide.
2. The TP151630 screw used to fasten the TP161803 tape guide is replaced by a TP151632 screw.
3. The two TP151723 screws used to mount the TP163587 connector bracket are replaced by two TP151632 screws; two TP125015 flat washers are added to the assembly.
4. A TP194081 tape guide is added and is fastened by the two TP151632 screws.

NOTES: 1. Remove the TP161804 tape guide from the reperforator unit mounted in the auxiliary position; retain the fastenings.

2. Units in the field may be modified by installing the TP194077 modification kit. The installation instructions are covered in Specification 50,260S.

The TP161803, TP161804 tape guides; TP151630, TP151723 screws are shown in Teletype Bulletin 1167B, page 1-14, change 6.

28B Typing Reperforator Base.

1. The TP161529 tape guide, two TP151632 screws, TP2191 lockwashers, TP151610 flat washers are eliminated from the three tape containers.

NOTE: 1. It may be necessary to retain the mounting hardware for a cable clamp, if present, when modifying units in the field.

The TP161529 tape guide, TP151632 screws, TP2191 lockwashers, TP151610 flat washers are shown in Teletype Bulletin 1167B, page 1-11, change 6.

28A, 28D Typing Reperforator Bases. Rigid tape path parts are as follows:

1. The TP156470 or TP163868 tape guide is replaced by a TP195658 tape guide assembly.

The TP156470 and TP163868 tape guides are shown in Teletype Bulletin 1167B, page 1-4, change 6.

35A Typing Reperforator Base. Rigid tape path parts are as follows:

1. The TP193837 tape guide is replaced by a TP195658 tape guide assembly.

The TP193837 tape guide is shown in Teletype Bulletin 1188B, page 4-21, original.

28E Typing Reperforator Base. Rigid tape path parts are as follows:

1. The TP161925 tape guide is replaced by a TP194170 tape guide.
2. The TP161926 tape guide is replaced by a TP194171 tape guide.

The TP161925 and TP161926 tape guides are shown in Teletype Bulletin 1167B, page 6-5, change 5.

28A Reperforator-Transmitter Stand. Rigid tape path parts are as follows:

1. A 6-40 tapped hole has been added to the lower front crossmember of the TP159200** frame approximately 23/64-inch from the front edge and 1-1/2-inch from the left side.
2. A tape guide assembly consisting of a TP158717 bracket, TP158720 roller, TP158719 shaft and two TP119652 retaining rings is mounted by means of a TP151657 screw, TP2191 lockwasher and TP7002 flat washer in the 6-40 tapped hole covered in paragraph 1.

NOTES: 1. Units in the field may be modified by installing the TP194169 modification kit. The parts are the same as listed above except the kit includes parts to clamp the bracket to the crossmember of the stand.

2. Installation instructions are covered in Specification 50,260S.

3. The tape unreels from the top of the supply roll and is directed upward toward the base by the tape guide roller. The tape is then routed through the roller on the end of the tape arm.

The TP159200** frame is shown in Teletype Bulletin 1168B, page 1-2, change 3.

GENERAL NOTES

New style or modified perforator and reperfector units require new style or modified bases and stands.

New style or modified bases and stands require new style or modified perforators and reperfector units.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style units are interchangeable in pairs only as noted in "CHANGE".

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is expected to go into effect as soon as manufacturing conditions permit which is expected to be by December of 1964.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished for other applications.

APPLICATION TO APPARATUS IN THE FIELD: Where desired, the new style parts may be incorporated. If this feature is not required it may be disabled.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts.

254M MAGNET COIL

APPARATUS AFFECTED: All 28 Reperforator-Transmitter Units; all 28 Typing Units; all 28 Typing Reperforator Units; all 28 Sequence Selector Units; and 28D, 28F, and 28K Perforator-Transmitter-Bases.

OBJECT: To facilitate manufacture and provide a more durable coil that will be less susceptible to physical damage caused by handling.

CHANGE: The new style and the old style 254M coils are electrically the same. On the old style coils, the terminal lugs are in a horizontal position with respect to the coil flange and on the new style coils, the terminal lugs are in a vertical plane.

Note: When the old style coil is replaced by a new style coil, the terminals on the associated cable assembly shall be re-formed to conform to the new terminal lug position. This may be accomplished with a pair of pliers.

For location of the 254M coils, refer to the following parts Bulletins: 1149B, page 3-35, change 11; 1160B, page 2-4, change 1; 1167B, page 2-15, change 6; and 1172B, page 7, change 3.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: The 254M old style and new style magnet coils are not individually interchangeable, but are interchangeable in pairs.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: The new style coils shall be furnished when manufacturing conditions permit and after the present supply of coils is exhausted. This is expected to be about June, 1965.

W.E.CO. STOCK OF OLD STYLE PARTS: The old style coils may be furnished until supply is exhausted.

APPLICATION TO APPARATUS IN THE FIELD: Old style coils giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with old or new style coils.

TP151632, TP151732, AND TP153538 SCREWS

APPARATUS AFFECTED: All 28 Typing Reperforator Units; all 28 Reperforator-Transmitter Units; 28A, 28B, 28E, 28G, 28G-1, 28H, 28J, 28J-1, and 28K Perforator-Transmitter-Bases.

35A Typing Reperforator Unit and 35A, 35A-X3, 35B, 35D, and 35D-X3 Perforator-Transmitter-Bases.

TP193988, TP193989, TP193992, and TP193993 Slack Tape Modification Kits (50247S, issue 1).

OBJECT: To provide the proper length screw for mounting the upper leg of the TP193966 bracket with stud to the TP152400 selector mounting plate.

CHANGE: The TP151722 screw (6-40 by 3/16 hex.) listed in the following modification kits is replaced as follows:

<i>Modification Kit</i>	<i>New Screw</i>
TP193988	TP153538 (6-40 by 7/16 hex.)
TP193989 and TP193992	TP151632 (6-40 by 3/8 hex.)
TP193993	TP151732 (6-40 by 11/32 fl)

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style screws are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished for other applications.

APPLICATION TO APPARATUS IN THE FIELD: Old style screws giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units shall be equipped with new style screws.

TP199506 GASKET

APPARATUS AFFECTED: 28H Reperforator Unit; 28L, 28M Typing Reperforator Units; 28K Perforator-Transmitter-Base; TP173770 Punch Assembly.

33C-1 through 33C-5, 33F-1 through 33F-5 Teletypewriter-Sets; TP182983 Punch Assembly.

35A, 35D Perforator-Transmitter-Bases; 35A Typing Reperforator Unit; TP170210 and TP192897 Punch Block Assemblies.

OBJECT: To prevent chad leakage between the punch block and the chad chute.

CHANGE: The TP199506 gasket is added to the top surface of the TP173770, TP182983, TP170210 and TP192897 punch assemblies.

The TP173770 punch assembly is shown in Teletype Bulletin 1167B, page 2-40, change 6.

The TP182983 punch assembly is shown in Teletype Bulletin 1184B, page 5-4, change 3, and Section 574-125-800, issue 1.

The TP170210 punch assembly is shown in Teletype Bulletin 1187B, page 5-12, original. The TP192897 punch block assembly is shown in Teletype Bulletin 1188B, page 2-21, original.

IDENTIFICATION: The TP199506 gasket is 0.125 inch thick adhesive-backed polyurethane approximately $\frac{1}{4}$ inch wide, $1\frac{5}{8}$ inches long with a cutout portion to clear the holes in the die plate.

INTERCHANGEABILITY: Not involved.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is expected to go into effect by May, 1965.

W.E.CO. STOCK OF OLD STYLE PARTS: Not involved.

APPLICATION TO APPARATUS IN THE FIELD: Where desired, the new style parts may be incorporated.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with the TP199506 gasket.

TP171259 BLOCKING PAWL SPRING

APPARATUS AFFECTED: 28LA Perforator-Transmitter-Base.

OBJECT: To increase the pull-up margin for the selector magnets to provide more reliable operation at the low-voltage limits.

CHANGE: The TP160642 blocking pawl spring associated with the TP162960 blocking pawl is replaced by a TP171259 blocking pawl spring.

See Bulletin 1166B, page 2-12, change 5.

The *Blocking Pawl Springs* requirement adjustment to start the blocking pawl moving is changed.

<i>From</i>	<i>To</i>
Min. 1-1/2 ozs.	Min. 1/2 oz.
Max. 3 ozs.	Max. 1-1/4 ozs.

See Section 573-120-700, issue 2, paragraph 2.01.

IDENTIFICATION:

<u>Spring</u>	<u>Length</u>	<u>Approx. Turns</u>
TP160642	0.445 inch	31
TP171259	0.437 inch	32

INTERCHANGEABILITY: The TP160642 spring and the TP171259 spring are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: The old style TP160642 spring shall not be furnished.

APPLICATION TO APPARATUS IN THE FIELD: This change should be incorporated on all re-perforators, where required, for proper operation.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: If the re-perforators are disassembled for any reason, the units shall be equipped with the TP171259 springs.

TP159657 GUIDE AND DIE PLATES AND
TP159656 PUNCH BLOCK ASSEMBLY

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, and 28J-1 Perforator-Transmitter-Bases; 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, and 28K Typing Reperforator Units; 28A, 28B, 28C, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2, and 28G Reperforator-Transmitter Units.

OBJECT: To insure perfect alignment between the guide and die plates.

CHANGE: The TP159657 guide and die plates of the TP159656 punch block assembly are redesigned to provide a hole instead of a slot for the dowel.

The TP159656 punch block assembly and the TP159657 guide and die plates are shown in Bulletins 1167B, pages 2-5 and 2-40, change 6; 1169B, page 2-8, change 7, and page 3-8, change 6; and 1172B, page 11, change 3.

IDENTIFICATION: The new style guide and die plates have two dowel holes.

INTERCHANGEABILITY: The punch block assemblies with old or new style guide and die plates are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: The punch block assembly with the new style guide and die plates shall be furnished when manufacturing conditions permit. This is expected to be about February, 1965.

W.E.CO. STOCK OF OLD STYLE PARTS: Punch block assemblies with old style guide and die plates may be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Punch block assembly with old style guide and die plates giving satisfactory service need not be changed.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with punch block assemblies having new or old style guide and die plates.

TP159281 AND TP159284 PINIONS

APPARATUS AFFECTED: 28B-1, 28C-1, 28E-1 and 28F-1 Sets of Gears; TP159281 and TP159284 pinions.

OBJECT: To provide pinions with improved wear characteristics.

CHANGE: The molybdenum disulphide filler formerly used in the TP159281 nylon pinion (75 speed) and TP159284 nylon pinion (100 speed) has been removed.

NOTE: The TP159281 pinion is part of 28B-1 and 28E-1 sets of gears.

The TP159284 pinion is part of 28C-1 and 28F-1 sets of gears.

The pinions are shown in the following Bulletins:

TP159281 Pinion

1149B, page 1-17, change 9
1160B, page 1-3, change 1
1167B, page 6-18, change 4
1169B, page 1-44, change 9

TP159284 Pinion

1149B, page 1-17, change 9
1160B, page 1-3, change 1
1167B, page 6-18, change 4
1169B, page 1-44, change 9
1187B, page 7-7, original

IDENTIFICATION: Old style TP159281 and TP159284 pinions have a dark gray appearance. New style TP159281 and TP159284 pinions have a milky white appearance.

INTERCHANGEABILITY: New and old style pinions are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change shall be incorporated as soon as manufacturing conditions permit. This is expected to be about March, 1965.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

TP154008 CODEBAR GUIDE

APPARATUS AFFECTED: 28A, 28B, 28B-1, 28B-2, 28C, 28C-1, 28D, 28E, 28F, 28G, 28H, 28K, and 28L Teletypewriter Bases; 28LA, 28LB, and 28LC Tape Teletypewriter Bases; 28E Typing Reperforator Base; and 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K, and 28LA Perforator-Transmitter-Bases.

OBJECT: To add information on the modification of the TP154008 codebar guide as required for the 35-type teletypewriter equipment.

CHANGE: The upper formed edge of the TP154008 codebar guide is removed.

The TP154008 codebar guide is shown in Bulletins 1149B, page 2-6, change 9; 1167B, page 6-9, change 4; and 1169B, pages 1-12 and 1-13, change 8.

IDENTIFICATION: The old style codebar guide has three formed edges. The new style codebar guide has two formed edges, one on each side.

INTERCHANGEABILITY: The new and old style codebar guides are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: There is no advantage in making this change.

APPLICATION AT W.E. CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style codebar guides.

TP159516 LETTERS FUNCTION BLADE

APPARATUS AFFECTED: 28A through 28G, 28J through 28M Typing Reperforator Units; 28H Reperforator Unit; 28LA, 28LA-1, 28LB Tape Typing Units; 28A, 28B, 28D through 28G, 28G-1, 28H, 28J, 28J-1, 28K, and 28LA Perforator-Transmitter-Bases.

OBJECT: To prevent interference with the TP176466 blank-delete function blade when the TP179133 blank-delete modification kit is used.

CHANGE: The TP159516 letters function blade is modified by breaking off the single tine that is not in line with the other tines.

The TP159516 letters function blade is shown in Teletype Bulletins 1167B, page 2-12, change 6; and 1169B, page 3-22, change 6.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New style and old style blades are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change will be incorporated as soon as manufacturing conditions permit. This is expected to be during the second quarter of 1965.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished on units which do not have the TP179133 blank-delete modification kit.

APPLICATION TO APPARATUS IN THE FIELD: There is no advantage in using new style parts.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units shall be equipped with new style parts if the TP179133 blank-delete modification kit is used.

TP162850 HANDLE

APPARATUS AFFECTED: 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, 28K, 28L, 28M Typing Reperforator Units 28LA, 28LA-1 Tape Typing Units; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2 Reperforator-Transmitter Units; 28D, 28K Perforator-Transmitter Bases; TP179133 Modification Kit; TP162850 Handle.

OBJECT: To facilitate manufacture by using the same handle on all units.

CHANGE: 1. The TP162850 handle is modified by adding a 6-40 tapped hole.

2. The TP176445 handle (having the 6-40 tapped hole) is being canceled.

3. The TP176445 handle now furnished in the TP179133 blank delete modification kit is replaced by the TP162850 handle. This is a number change only since the modified TP162850 handle and the canceled TP176445 handle are identical.

The TP162850 handle is shown in Teletype Bulletin 1167B, page 2-17, change 6, and page 2-41, change 6. The TP179133 modification kit is covered in Specification 50,058S.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New style handles are interchangeable with old style handles.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: There is no advantage in using new style parts.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

TP156484 PRINTING LATCH MOUNTING BRACKET

APPARATUS AFFECTED: 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, 28K, 28L, 28M Typing Reperforator Units; 28LA, 28LA-1 Tape Typing Units; 28A, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2 Reperforator-Transmitter Units; 28D, 28E, 28E-1, 28G-1, 28K, 28L Perforator-Transmitter-Bases; TP156484 Printing Latch Mounting Bracket.

OBJECT: To eliminate a possible interference between the TP173981 print hammer accelerator and the TP156869 or TP173755 ribbon guide.

CHANGE: 1. The TP156484 printing latch mounting bracket is modified by lengthening the present mounting slot approximately 1/16 inch and by changing the 0.144-inch diameter hole to a 0.144-inch by 1/4-inch slot.

2. The requirements given in Section 573-117-700, issue 3, paragraph 2.63; Section 573-118-700, issue 6, paragraph 2.29; and Teletype Bulletins 250B, page 1-57, change 3; 247B, page 1-55, change 5, for the *PRINTING TRIP LINK* are changed to add the following:

The following procedure is used on units equipped with adjustable printing latch mounting brackets.

Printing Latch Adjustment

Requirements

- (1) Rocker bail in its extreme left position. SOME ----- 0.015-inch clearance between the print hammer accelerator and the printing latch at the closest point when the accelerator is manually lifted.
- (2) Rocker bail in its extreme right position. There should be some overtravel of the print hammer with respect to the latching surface of the printing latch, and some clearance between the print hammer accelerator and the ribbon carrier.

To Adjust

- (1) Position the rocker bail to the extreme right. Adjust the eccentric so that there is approximately 0.065-inch clearance between the print hammer accelerator and the ribbon carrier. Keep the high part of the eccentric to the left. Loosen the two printing latch mounting bracket screws until they are friction tight, and move the bracket to its extreme rear position.
- (2) Position the rocker bail to the extreme left. Move the printing latch mounting bracket slowly to the front until the print hammer accelerator just trips. Tighten the two printing latch mounting bracket screws.
- (3) With the rocker bail to the extreme left, position the printing trip link by adjusting its eccentric until there is SOME ----- 0.015-inch clearance between the printing latch and the print hammer accelerator. The high part of the eccentric should be to the left.

SECTION 573-117-800.21

The TP156484 printing latch mounting bracket is shown in Teletype Bulletin 1167B, page 2-18, change 6.

IDENTIFICATION: New style brackets have two slots for mounting; old style brackets have one slot and a 0.144-inch diameter hole.

INTERCHANGEABILITY: New style brackets are interchangeable with old style brackets.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts. On units equipped with new style brackets, the new adjustment shall be applied.

TP3870 SPRING

APPARATUS AFFECTED: 28A Perforator-Transmitter-Base.

OBJECT: To provide more reliable operation of the tape-out switch.

CHANGE: 1. The TP110437 or TP2415 springs associated with the TP156449 switch lever are replaced by a TP3870 spring.

2. The requirement given in Section 573-117-700, issue 3, paragraph 2.11, for the *SWITCH LEVER SPRING* is changed as follows:

Requirement

MIN. 8-1/2 ozs. — MAX. 10 ozs.

To pull spring to length of 1-1/4 inches.

The TP110437 spring and TP2415 spring are shown in Teletype Bulletin 1169B; page 1-62, change 5, and page 1-29, change 8, respectively.

IDENTIFICATION: The TP3870 spring has 28 turns and is approximately 5/32 inch in diameter; the TP2415 spring has 34 turns and is approximately 1/8 inch in diameter.

INTERCHANGEABILITY: The TP3870 spring and TP2415 spring are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished for other applications.

APPLICATION TO APPARATUS IN THE FIELD: Should be incorporated in all apparatus where required for proper operation.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts if parts require replacement.

**TP151728 SPRING; TP150026 AND TP151640 SHOE LEVERS; TP129289, TP150028,
TP150032, TP150033, TP154694, TP155047, TP157032, AND TP158182 DISCS**

APPARATUS AFFECTED: All 28-Type Teletypewriter Bases.

All 28-Type Typing Units.

All 28-Type Typing Reperforator Units.

28A, 28C, 28D, 28D-1, 28D-2, 28D-3, 28D-4, and 28D-6 Reperforator-Transmitter Sets.

All 28-Type Sequence Selector Units.

All 28-Type Perforator-Transmitter-Bases.

28B, 28C, 28E, 28F, 28G, 28G-1, 28H, 28H-1, 28H-2, 28H-3, 28H-4, 28H-5, and 28LA Transmitter-Distributor Units.

28A Receiving Selector.

28A, 28C, 28D, 28D-1, 28D-2, 28D-3, 28D-4, 28D-6, 28E, 28F, 28F-1, 28F-2, and 28G Reperforator-Transmitter Units.

28A, 28A-1, 28A-2, 28D, 28D-1, 28D-2, 28J, 28J-1, 28J-2, 28J-3, 28K, and 28L Distributors.

TP151728 Spring; TP150026 and TP151640 Shoe Levers; TP129289, TP150028, TP150032, TP150033, TP154694, TP155047, TP157032, and TP158182 Discs.

OBJECT: To prevent possible spring breakage.

CHANGE: The core hardness of the TP150026 and TP151640 clutch shoe levers has been changed from Rockwell C-60 to Rockwell C-30-45, and the finish changed from black-oxide to flash nickel.

The TP151728 spring associated with either the TP150026 or TP151640 shoe lever has been modified by placing a ± 15 degree relationship on the relative angular positions of the spring hook plains which are nominally 90 degrees apart.

The hardness of the case-hardened spring post which is part of the clutch discs listed below has been changed from Rockwell C-60 to Rockwell C-40 to C-50, and a 0.005 deep groove has been added.

The parts are shown in the following bulletins:

TP150026 SHOE LEVER

Bulletin 1149B	Page 1-11	Change 9
	Page 2-9	Change 11
	Page 3-19	Change 11
	Page 3-20	Change 9
Section 573-115-800	Pages 27 and 28	Issue 1
Bulletin 1159B	Page 2-4	Change 2
Bulletin 1160B	Page 2-6	Change 1
Bulletin 1161B	Page 2-12	Change 2

SECTION 573-117-800.23

Bulletin 1165B	Page 2-9	Change 4
	Page 2-10	Change 4
Bulletin 1167B	Page 2-4	Change 6
	Page 6-12	Change 4
Bulletin 1169B	Page 1-24	Change 7
	Page 4-22	Change 7
Bulletin 1170B	Page 2	
	Page 10	Change 2
Bulletin 1171B	Page 15	Change 1
	Page 16	Change 1
	Page 17	Change 1
Bulletin 1172B	Page 2	Change 3
Bulletin 1182B	Page 1-12	Original
	Page 1-13	Original
Bulletin 1185B	Page 3	Original

TP151640 SHOE LEVER

Bulletin 1149B	Page 3-20	Change 9
Bulletin 1160B	Page 2-6	Change 1
Bulletin 1167B	Page 2-2	Change 6
Bulletin 1172B	Page 2	Change 3
Bulletin 1185B	Page 3	Original
Section 573-115-800	Page 28	Issue 1

TP151728 SPRING

Bulletin 1149B	Page 1-11	Change 9
	Page 2-9	Change 11
	Page 3-19	Change 11
	Page 3-20	Change 9
Section 573-115-800	Pages 27 and 28	Issue 1
Bulletin 1159B	Page 2-4	Change 2
Bulletin 1160B	Page 2-6	Change 1
Bulletin 1161B	Page 2-12	Change 2
Bulletin 1165B	Page 2-9	Change 4
	Page 2-10	Change 4
Bulletin 1167B	Page 2-2	Change 6
	Page 2-4	Change 6
Bulletin 1169B	Page 1-24	Change 7
	Page 3-6	Change 6
	Page 3-34	Change 6
	Page 4-22	Change 7
Bulletin 1170B	Page 8	Change 2
	Page 10	Change 2

	TP151728 SPRING		DISCS
Bulletin 1171B	Page 15	Change 1	
	Page 16	Change 1	
	Page 17	Change 1	
Bulletin 1172B	Page 2	Change 3	
Bulletin 1182B	Page 1-12	Original	
	Page 1-13	Original	
Bulletin 1185B	Page 3	Original	
Bulletin 1146B	Page 6	Original	Disc TP150028
	Page 27	Original	Disc TP150028
	Page 30	Original	Disc TP150032
	Page 30	Original	Disc TP150033
Bulletin 1149B	Page 3-21	Change 9	Disc TP150032
	Page 3-19	Change 11	Disc TP150033
	Page 1-11	Change 9	Disc TP154694
	Page 2-9	Change 11	Disc TP154694
	Page 3-19	Change 11	Disc TP154694
	Page 3-20	Change 9	Disc TP154694
	Page 3-20	Change 9	Disc TP155047
	Page 3-73	Change 9	Disc TP157032
	Bulletin 1159B	Page 1-3	Change 2
Page 2-4		Change 2	Disc TP154694
Bulletin 1160B	Page 2-6	Change 1	Disc TP154694
	Page 2-6	Change 1	Disc TP155047
Bulletin 1161B	Page 2-13	Change 2	Disc TP158182
	Page 2-12	Change 2	Disc TP154694
Bulletin 1166B	Page 2-11	Change 5	Disc TP158182
Bulletin 1167B	Page 6-12	Change 4	Disc TP150028
	Page 2-2	Change 6	Disc TP154694
	Page 2-4	Change 6	Disc TP154694
	Page 6-12	Change 4	Disc TP154694
Bulletin 1169	Page 1-24	Change 7	Disc TP154694
	Page 3-6	Change 6	Disc TP154694
	Page 3-34	Change 6	Disc TP154694
	Page 4-22	Change 7	Disc TP154694
	Page 2-6	Change 7	Disc TP158182
Bulletin 1170	Page 8	Change 2	Disc TP154694
	Page 10	Change 2	Disc TP154694
	Page 9	Change 2	Disc TP158182
	Page 11	Change 2	Disc TP158182
Bulletin 1171	Page 15	Change 1	Disc TP154694
	Page 16	Change 1	Disc TP154694
	Page 17	Change 1	Disc TP154694
Bulletin 1172	Page 2	Change 3	Disc TP154694
	Page 4	Change 3	Disc TP154694
	Page 3	Change 3	Disc TP158182
	Page 4	Change 3	Disc TP158182

SECTION 573-117-800.23

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style parts are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change shall be incorporated as soon as manufacturing conditions permit. This is expected to be about June, 1965.

W.E.CO. STOCK OF OLD STYLE PARTS: Shall not be used.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts if parts involved require replacement or if parts are disassembled for other reasons.

**TP162886 SCREW, TP90951 LOCKWASHER
AND TP154246 AND TP176467 CONTACT BRACKETS**

APPARATUS AFFECTED: 28A, 28B, 28C, 28D, 28E, 28F, 28G, 28J, and 28K Typing Reperforator Units; 28D, 28K, and 28L Perforator-Transmitter-Bases; TP159360 and TP162242 Modification Kits (Signal Bell contact on Upper Case "S"); TP179133 Modification Kit (Blank Delete).

OBJECT: To eliminate an interference between the head of the right front screw in the function box and the TP195235 rocker bail on units with factory-installed slack tape mechanism.

CHANGE: 28A through 28G, 28J, and 28K Typing Reperforator Units; 28D, 28K, and 28L Perforator-Transmitter-Bases:

1. The right front TP152893 or TP151152 screw fastening the TP159487 function box front plate to the TP156300 post is replaced by a TP162886 screw.
2. The TP114876 flat washer used on the above screw, if present, is eliminated.
3. The TP3640 lockwasher used on the above screw, if present, is replaced by a TP90951 lockwasher.
4. The TP154246 signal bell contact bracket is modified.

TP159360 and TP162242 Modification Kits (Signal Bell Contact on Upper Case "S"):

1. One of the two TP152893 screws is replaced by a 162886 screw.
2. One of the two TP114876 flat washers is eliminated.
3. The TP154246 signal bell contact bracket is modified.

TP179133 Modification Kit (Blank Delete):

1. One of the two TP152893 screws is replaced by a TP162886 screw.
2. One of the two TP114876 flat washers is eliminated.
3. The TP176467 contact bracket (part of the TP178905 contact assembly) is modified.

The TP152893 or TP151152 screw; TP114876 flat washer; and TP3640 or TP90951 lockwasher are shown in Teletype Bulletins 1167B, pages 2-12, 2-24, change 6, and pages 2-12, 2-24, 2-44, change 7; and 1169B pages 2-16, 2-26, change 8.

The TP154246 signal bell contact bracket is shown in Teletype Bulletins 1167B, page 2-24, change 6, and page 2-24, change 7; and 1169B, page 2-26, change 8.

The TP176467 blank delete contact bracket is shown in Teletype Bulletin 1167B, page 2-44, change 7.

The TP159360 and TP162242 modification kits are covered in Specification 5878S; the TP179133 modification kit is covered in Specification 50,058S.

SECTION 573-117-800.24

IDENTIFICATION:

1. The TP162886 screw is 7/32 inch in length, with a 0.047-inch head thickness, and has a black oxide finish; the TP152893 screw is 1/4 inch in length, with a 0.062-inch head thickness, and is chrome-plated; the TP151152 screw is 3/16 inch in length, with a 0.062-inch head thickness, and is chrome-plated.

2. The TP90951 lockwasher is the internal shakeproof type; the TP3640 lockwasher is the non-tangling split type.

3. New style TP154246 and TP176467 contact brackets have one of their mounting legs swaged from 0.050 inch to 0.035 inch thick.

INTERCHANGEABILITY: New style parts are interchangeable with old style parts.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: Fastenings may be furnished for other applications. Old style contact mounting brackets shall not be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Should be incorporated in all apparatus where interference is encountered.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts where interference is encountered. All modification kits shall have the new style contact mounting brackets and hardware.

**TP144996 PLATE, TP112498 SCREW, TP154198 WINDOW AND TP151391 LABEL SET,
AND TP93191 SCREW**

APPARATUS AFFECTED: 28D1 Teletypewriter Base and 28B1 and 28E1 Perforator-Transmitter-Bases.

OBJECT: To provide a designation card holder.

CHANGE: The TP170329 plate which mounts to the left side of the keyboard base and its four associated TP179170 mounting screws are replaced by a TP144996 plate and four TP112498 screws. A TP154198 window and TP151391 label set has been added to mount on the TP144996 plate by two TP93191 screws.

The parts are shown in Bulletin 1169B, pages 1-10 and 1-11, change 8.

IDENTIFICATION: See "CHANGE". Also, the TP170329 left plate is made of plastic; the TP144996 left plate is made of steel.

The TP179170 screw is 6-40 x 3/4 inch round head.
The TP112498 screw is 6-40 x 3/4 inch flat head.

INTERCHANGEABILITY: New and old style parts are not individually interchangeable, but are interchangeable in sets.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be used for other applications.

APPLICATION TO APPARATUS IN THE FIELD: Where desired, the new parts may be installed.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: Units may be equipped with new or old style parts.

TP193987 TAPE GUIDE BRACKET

APPARATUS AFFECTED: 28A, 28B, 28B-1, 28C, 28D, 28E, 28E-1, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K, 28L Perforator-Transmitter-Bases; TP194076 Modification Kit; TP193987 Tape Guide Bracket.

OBJECT: To prevent a loop of tape from forming which can result in an interference with the print hammer on the typing unit when mounted in an ASR Set.

CHANGE: The TP193987 tape guide bracket is modified to add an "L" shaped arm.

The TP193987 tape guide bracket is shown in Specification 50,260S covering the TP194076 modification kit to provide rigid tape path.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style brackets are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: Should not be furnished after new style parts become available.

APPLICATION TO APPARATUS IN THE FIELD: Should be incorporated in all apparatus.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units and modification kits shall be equipped with new style parts as soon as new style parts can be obtained from Teletype.

TP163015 PINION

APPARATUS AFFECTED: 28D, 28E, 28E-1, 28G-1, 28K, 28L Perforator-Transmitter-Bases; TP163015 Pinion.

OBJECT: To prevent a possible interference between the TP163015 pinion and the TP151640 or TP150026 shoe release lever.

CHANGE: The TP163015 pinion is modified by removing 1/32 inch of material from the width of the toothed portion on the hub side.

The TP163015 pinion is shown in Teletype Bulletins 1167B, page 2-26, change 7; and 1169B, page 2-2, change 8.

IDENTIFICATION: New style pinions have a toothed portion approximately 25/64 inch wide; old style pinions have a toothed portion approximately 27/64 inch wide.

INTERCHANGEABILITY: New style pinions are interchangeable with old style pinions.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: May be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style parts giving satisfactory service need not be replaced.

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with new style parts if an interference is encountered.

**TP310153 ELECTRICAL WIRE ASSEMBLY; TP180904 TERMINAL TAB;
TP180675 SCREW; TP144764, TP176700, AND TP158000 BASES;
ALSO TP199361 MODIFICATION KIT**

APPARATUS AFFECTED: 28A, 28B, 28D, 28E, 28F, 28G, 28G-1, 28H, 28J, 28J-1, 28K Perforator-Transmitter-Bases; TP144764, TP176700, and TP158000 Bases; TP199361 Modification Kit.

OBJECT: To insure a more reliable grounding arrangement and to facilitate connecting and disconnecting of the ground wire.

CHANGE: The TP144764, TP176700, and TP158000 bases have been modified by the addition of a 0.115 diameter hole (adjacent to the lower left motor mounting screw) for mounting a terminal tab by means of a self-tapping screw. See Figure 1.

The TP151569 ground strap connected between the TP158196 right base rail and the cabinet has been replaced with a TP310153 wire assembly consisting of 15 inches of No. 18 wire (green) equipped with a closed type lug on one end and a push type lug at the other end. The closed type lug mounts on the TP158682 plate (cabinet frame ground). The push type lug mates with the new TP180904 terminal tab mounted on the base.

A TP199361 modification kit consists of the following parts for the new grounding arrangement.

- 1—TP310153 Electrical Wire Assembly
- 1—TP180904 Terminal Tab
- 1—TP180675 No. 6 Hex Head Self-Tapping Screw

The wiring diagrams in Section 573-117-400, issue 5, covering 28-type perforator-transmitter-bases will be reissued to include the ground.

The TP158000 base is shown in Bulletin 1169B, page 1-2, change 7. The TP144764, and TP176700 bases are shown in Bulletin 1169B, page 1-4, change 7. The TP158682 plate is shown in 1169B, page 5-3, change 8.

IDENTIFICATION: See "CHANGE".

INTERCHANGEABILITY: New and old style ground assemblies are interchangeable.

CLASSIFICATION FOR APPARATUS FURNISHED BY TELETYPE: This change is now in effect.

W.E.CO. STOCK OF OLD STYLE PARTS: TP151569 grounding strap shall not be furnished.

APPLICATION TO APPARATUS IN THE FIELD: Old style grounding arrangement operating satisfactory need not be replaced.

SECTION 573-117-800.29

APPLICATION AT W.E.CO. DIST. HOUSE REPAIR SHOPS: All units shall be equipped with the new grounding arrangement if parts involved require replacement or if units are disassembled for other reasons.

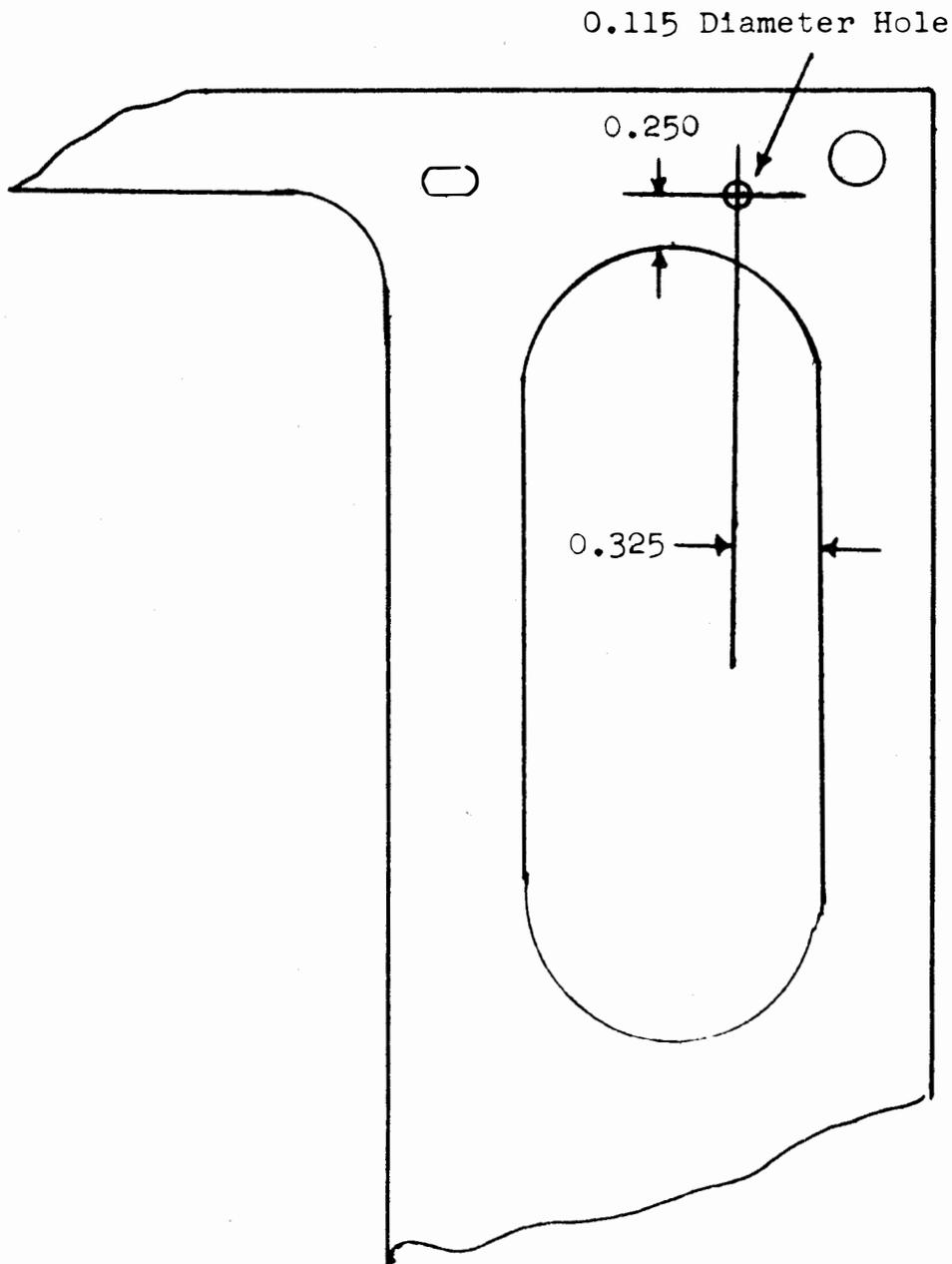


Fig. 1 — TP144764, TP176700 or TP158000 Base