

## INSTRUCTIONS FOR INSTALLING MODIFICATION KITS ON MODEL 28 MULTIPLE REPERFORATOR BASE (LMRB) TO PROVIDE BELT AND SPROCKET DRIVE FOR MULTIPLE MOUNTED REPERFORATORS

\*The chart below pertains to Bell System only:

Teletype Unit	Teletype Code	Bell System Reference	Bell Code
Typing Reperforator Base	LMRB201 BZ	Typing Reperforator Base	28B
Modification Kit to Provide Belt and Sprocket Drive	161680	Sprocket and Belt Set	28K
	162213		28L
	162217		28M

### 1. GENERAL

a. This modification adapts the base for operation of the typing reperforator at a desired speed. The speed change can be made in two ways; either at the motor or at the typing reperforator. Similar speeds are maintained on all typing reperforators when gear changes are made at the motor. Belt and sprocket combination changes at each of the typing reperforators will allow each typing reperforator to run at a speed independent of the other.

#### (1) WPM Speed changes (See Table 1.)

(a) When changing speeds at the motor a quantity of three (3) 161680 Modification Kits for each LPR plus one of the motor gear sets listed in Table 1 are needed with each Multiple Reperforator Base.

(b) A quantity of three (one of each LPR) modification kits plus a quantity of one (1) of the 161530 Motor Gear Set is needed for each Multiple Reperforator Base. The three (3) Kits may be the same for identical speeds at each typing reperforator or they may be three (3) different kits so that typing reperforator can operate at a speed independent of the other typing reperforator. See Table 1.

#### (2) Baud Speed changes (See Table 2.)

(a) The 172992 Modification Kit, furnished with the LMRB202 base, provides the proper gears, sprockets and belts for 50 and 75 Baud reperforator speeds. Speed changes are made by changing the motor pinion and cross shaft sprockets. All reperforators therefore operate at the same receiving speed of either 50 or 75 Baud. The belts and reperforator sprockets remain the same for either speed. See Table 2 for proper gear and sprocket combinations. The cross shaft sprockets with the 172992 Modification Kit for 75 Baud are installed at the factory. The 164335 Modification Kit provides gears and sprockets for 50 BAUD receiving speed. The 164336 Modification Kit provides gears and sprockets for 75 BAUD receiving speed. The 173584 Modification Kit provides the sprockets for 45.5 Baud speed with the 164336 Modification Kit providing the necessary gears.

(b) The 173023 Modification Kit provides the proper sprocket and belt for 84.7 Baud receiving speed (on non-typing reperforators only) when used with the 164335 Modification Kit which provides the necessary remaining reperforator sprockets and motor pinion and mating gear. When the 164337 Motor Pinion and 164338 Mating Gear are used each reperforator can then operate at either 50 or 84.7 Baud Speed.

\*Indicates general revision.

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NOTE

For further information on associated parts referenced to but not covered in this specification, refer to Teletype Parts Bulletin 1167B which shows the complete disassembly of the kits and includes illustration of the parts.

2. INSTALLATION (See Figure 1)

NOTE

References made to left or right, up or down, front or rear apply to the unit in its normal operating position as viewed from the front.

a. Belt and Sprocket Drive Disassembly

(1) To remove the 161687 Gear Guard, remove the two 151630 Screws and 2191 Lock Washers. Retain all of the removed parts.

(2) Remove left timing belt.

(3) Remove and retain the 151631 Screw, 2191 Lock Washer, and 111427 Washer from the left end of the 161506 Shaft.

(4) Remove the 151721 Screw, 2191 Lock Washer, 7002 Flat Washer, and 3598 Nut from the 162215 or 162220 Sprocket Hubs. Remove the 151442 Screw, 2191 Lock Washer, and 7002 Flat Washer from the 161509 Sprocket Hub. Slide the left sprocket assemblies to the left and off the 161506 Shaft.

(5) Remove the left 163765 Retainer from the 161506 Shaft.

(6) Remove the two 151631 Screws and 2191 Lock Washers that mount the 161513 Clamp and 161514 Plate to the 161507 Bearing Mounting Plate. Retain parts removed.

(7) Slide the 161520 or the 162222 Timing Belts off the center and right sprockets.

(8) Remove and retain the 151442 or the 151721 Screw, 2191 Lock Washer, and 7002 Flat Washer from the center and right 161509, 162215 or the 162220 Sprocket Hubs.

(9) Move the shaft assembly partly through the right 161507 Bearing Plate and then move the two timing belts and sprockets assemblies to the left until they slide off the left end of the 161506 Shaft.

b. Belt and Sprocket Reassembly.

NOTE

Use the reverse procedure in reassembling the desired sprocket assemblies and timing belts.

(1) Assemble the retainer sprocket and hub with the three 150089 Screws and 110743 Lock Washers entering the 161511, 162216 or 162221 Belt Retainer, the sprocket, and into the sprocket hub. It will be easier to slide the sprocket or gear assemblies on to the shaft if their three assembly screws are friction tight. Slide the right and center sprocket assemblies on to the shaft with the hub end to the right. Tighten the three (3) sprocket assembly screws.

(2) Secure the sprocket assembly to the 161506 Shaft with the 151442 or 151721 Screw, 2191 Lock Washer, two 7002 Flat Washers and 3598 Nut.

(3) Replace the right and center timing belts (161520 or 162222).

(4) Insert the 161506 Shaft through the left 151634 Bearing.

(5) Replace the left 163765 Retaining Ring.

(6) Replace the left sprocket assembly and timing belt (161520 or 162222).

(7) Replace the 161513 Clamp, 161514 Plate to the 161507 Bearing Mounting Plate using the two (2) retained 151631 Screws and 2191 Lock Washers.

#### \*WARNING NOTE

The next paragraph must be followed exactly or damage may result to the equipment. Make certain the 176419 Retaining Ring is properly seated in its groove on the shaft. See Figure 1.

(8) When replacing the 151631 Screw, 2191 Lock Washer, and 111427 Flat Washer at left end of the 161506 Shaft leave the mounting screw that secures the adjacent sprocket assembly to the shaft friction tight. Tighten the 151631 Screw at the left and right end of the shaft first. This will take up the end play of the 151634 Bearing between the 176419 Retaining Ring and the sprocket hub at both ends of the shaft. Secure the left sprocket assembly to the shaft by tightening the mounting screw.

(9) The 156400 or 162218 Sprocket is secured to the hub of typing reperforator unit. The hub, sprocket mounting screws and lock washers are part of the typing reperforator unit.

(10) The timing belts may require readjusting. Refer to timing belt adjustment in typing reperforator Bulletin 247B.

#### c. Pinion and Gear (Table 1 or 2)

When required replace the present pinion and gear with the desired pinion and gear (See Table 1 or 2).

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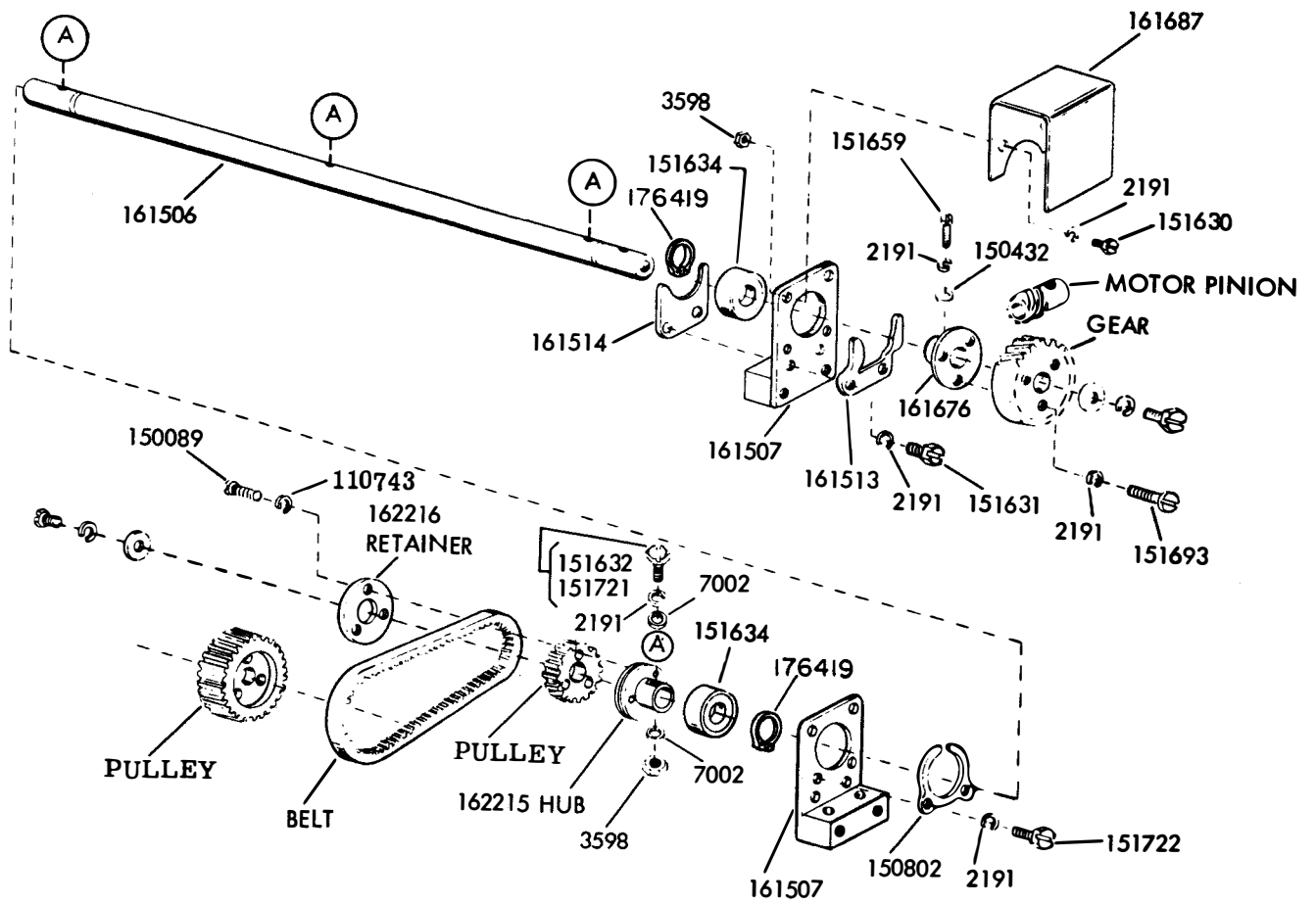


FIGURE 1

TABLE 1

## SPEED CHANGES FOR MULTIPLE MOUNTING UNITS (7.42 UNIT CODE)

SPEED CHANGE AT MOTOR (USE 161680 MOD. KIT AT EACH LPR)	W. P. M.	60	75	100
	O. P. M.	368	460	600
	GEAR SET	161530	161533	161536
	GEAR	161531	161534	161537
	PINION	161532	161535	161538
SPEED CHANGE AT LPR (USE 161530 GEAR SET AT MOTOR)	MOD. KIT	161680	162213	162217
	HUB	161509	162215	162220
	CROSS SHAFT SPROCKET	161510-16T	162214-20T	162219-27T
	RETAINER	161511	162216	162221
	BELT	161520	161520	162222
	LPR SPROCKET	156400-28T	156400-28T	162218-29T

TABLE 2

## BAUD SPEED FOR MULTIPLE REPERFORATOR (7.00 UNIT CODE)

MOTOR	BAUD	45.5	50	75	84.7	50 & 75
	GEAR	164340	164338	164340	(164338)	164338 164340
	PINION	164339	164337	164339	(164337)	164337 164339
LPR (3)	MOD. KIT	173584	164335	164336	173023	172992
	HUB	161509	161509	162215	162220	161509 162215
	CROSS-SHAFT SPROCKET	161510	161510	162214	162219	161510 162214
	RETAINER	161511	161511	162216	162221	162216
	BELT	162222	161520	161520	162222	161520
	LPR SPROCKET	173583	156400	156400	(156400)	156400