INSTRUCTIONS FOR INSTALLING THE 176176 MODIFICATION KIT ON A MODEL 28 LOW SPEED TAPE HANDLING STAND TO PROVIDE A BELT DRIVE

1. GENERAL

a. The 176176 Modification Kit when installed on a Model 28 Low Speed Tape Handling Stand (LTHS) provides a belt drive in place of the felt clutch. Operation is as follows:

Incoming tape is passed under the tight tape arm and through a maze which acts as a chad depressor and "brake" before passing onto the tape winder reel. The "brake" serves to offset the inertia built up in the reel, thus stopping the reel when the clutch is disengaged. In addition, it applies a constant tension to the tape to insure compact winding. When the incoming tape becomes slack, the tight tape arm is lowered through the action of its spring moving the pivoting plate, which separates the driving and driven pulleys. This tightens the belt, increasing the friction between the belt and pulleys. This causes the reel to wind tape. As the slack is taken up, the tight tape arm is raised which in turn slackens the belt, reducing driving friction. The action of the brake on the tape then causes rotation of the reel to cease. With minimum tape on the reel, it runs 31 RPM or winds 325 WPM. As the reel fills, the speed proportionately decreases thus retaining an almost constant balance between the inertia built up in the reel and the braking force of the tape. These operations are repeated cyclically as tape is supplied to the winder.

b. The 176176 Modification Kit consists of:

12	2191	Washer, Lock	1	170824	Stud
1	3606	Nut	1	170825	Bearing
3	7002	Washer, Flat	1	171179	Belt
2	76461	Washer, Flat	1	172291	Screw, Shoulder
1	76474	Nut	1	172292	Plate, Bearing - Inner
1	90504	Washer, Felt	1	172293	Plate, Bearing - Outer
1	101633	Washer, Flat	1	176177	Plate, Front
3	112626	Nut	1	176178	Pulley
1	119655	Ring, Retainer	1	179204	Bracket W/Stud
2	151610	Washer, Flat	1	179206	Bracket W/Stud
2	151630	Screw	1	179208	Pulley W/Gear
3	151631	Screw	1	179209	Gear
3	151721	Screw	1	179211	Gear W/Disc (80T)
2	153537	Screw	1	179395	Rod Assembly
1	158964	Bracket	1	193661	Reservoir
1	170817	Lever	1	193662	Holder, Wick
1	170820	Plate, Mounting	1	193663	Wick

c. For part numbers referred and for parts ordering information see Teletype Model 28 Reperforator Transmitter Set Parts Bulletin 1168B.

2. INSTALLATION (Figures 1 through 4 inclusive)

a. Tape Winder

(1) Remove all parts shown in Figures 1,2, and 3. Retain all parts shown underlined.

(2) Assemble the modification kit as shown in Figure 4 with the underlined items which were previously retained. Install the 90504 Felt Washer over the 170825 Bearing.

(3) Position the 171179 Belt so that the smooth side engages the 176178 and 179208 Pulleys.

b. On the 159222 Tape Winder Reel Assembly replace the 98203 Gear with the 179211 Gear W/Disc.

c. Remove the 158964 Bearing Bracket and replace with the 158964 Bearing Bracket that has elongated mounting holes.

3. ADJUSTMENTS AND LUBRICATION

For standard adjustment and lubrication procedure refer to standardized information, for other than Bell System see Teletype Bulletin 248B. Make the following adjustments.

a. Tape Take-Up Reel Alignment

b. Pinion, Idler, Tape Gear Mesh

c. Tape Arm

d. Tape Arm Clearance

e. Tape Arm Horizontal Clearance

f. Oil Reservoir

g. Tape Supply Reel Shaft End Play

h. Tape Supply Reel Alignment

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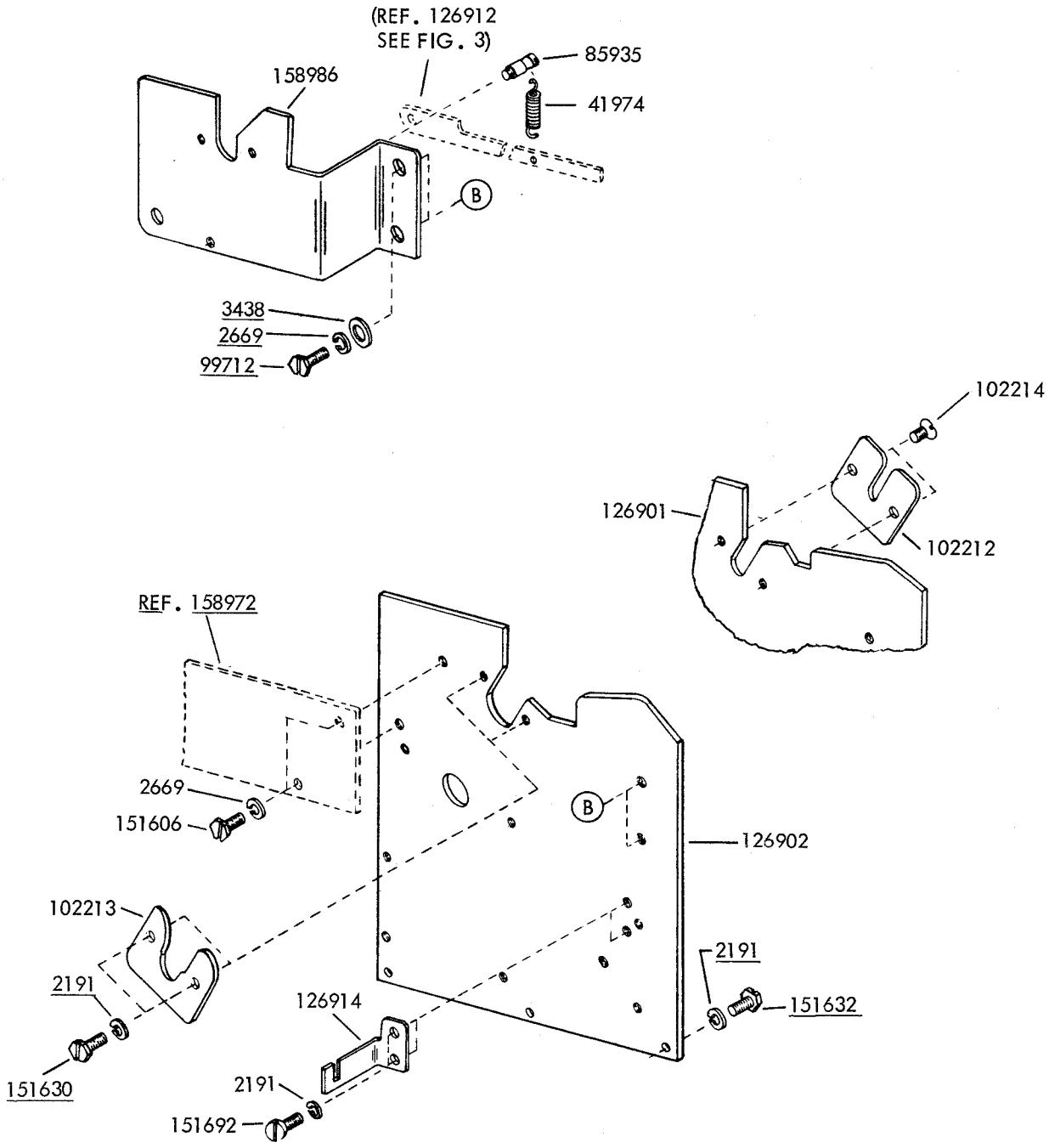

(REF. 126912
SEE FIG. 3)
158986
85935
41974
B
3438
2669
99712
102214
126901
102212
REF. 158972
2669
151606
B
126902
102213
2191
151630
126914
2191
151692
2191
151632

FIGURE 1

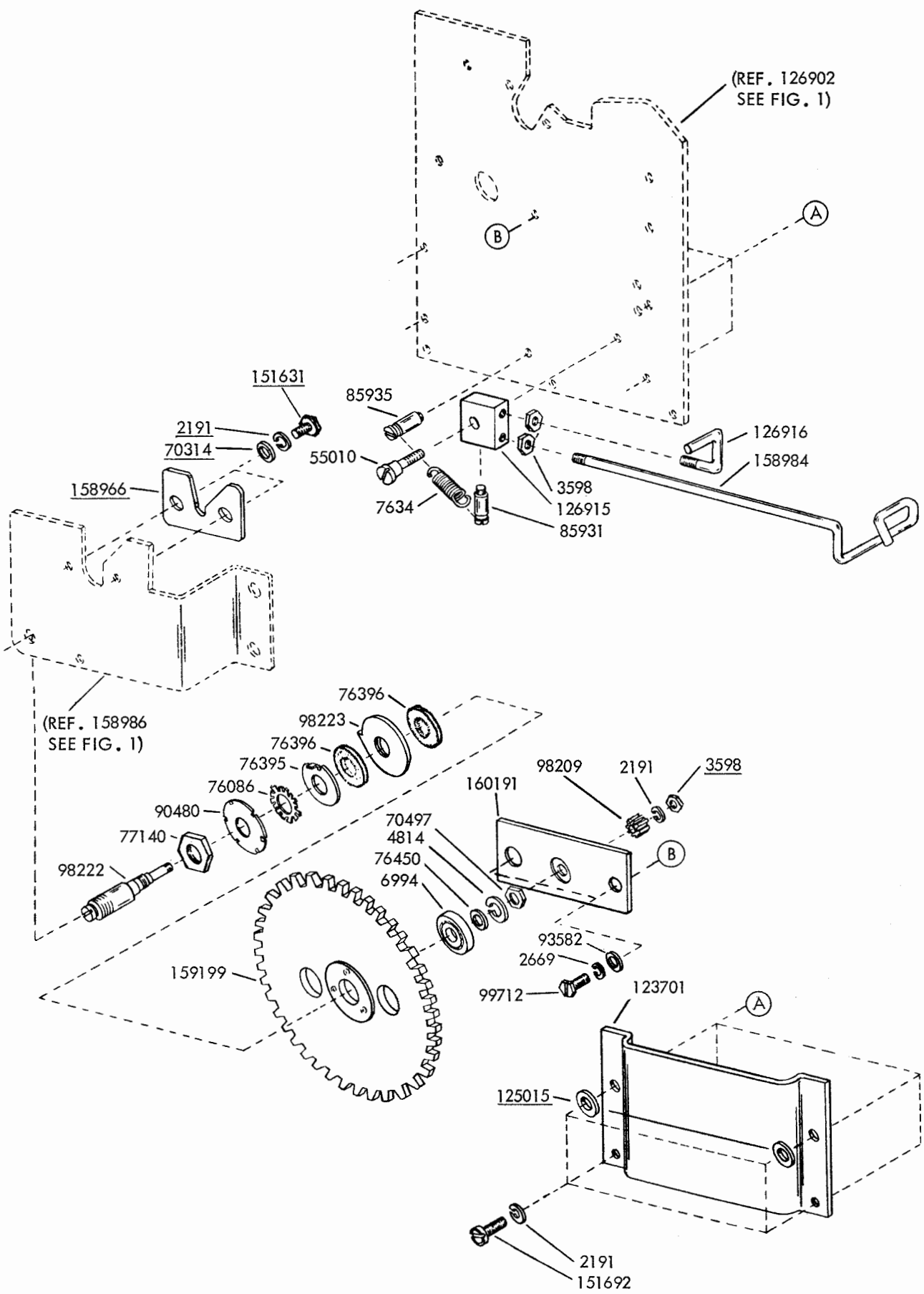

(REF. 126902
SEE FIG. 1)
A
B
151631
85935
2191
70314
55010
158966
7634
3598
126915
85931
126916
158984
(REF. 158986
SEE FIG. 1)
76396
98223
76396
76395
76086
90480
77140
98222
98209
2191
3598
160191
70497
4814
76450
6994
B
93582
2669
99712
123701
159199
A
125015
2191
151692

FIGURE 2

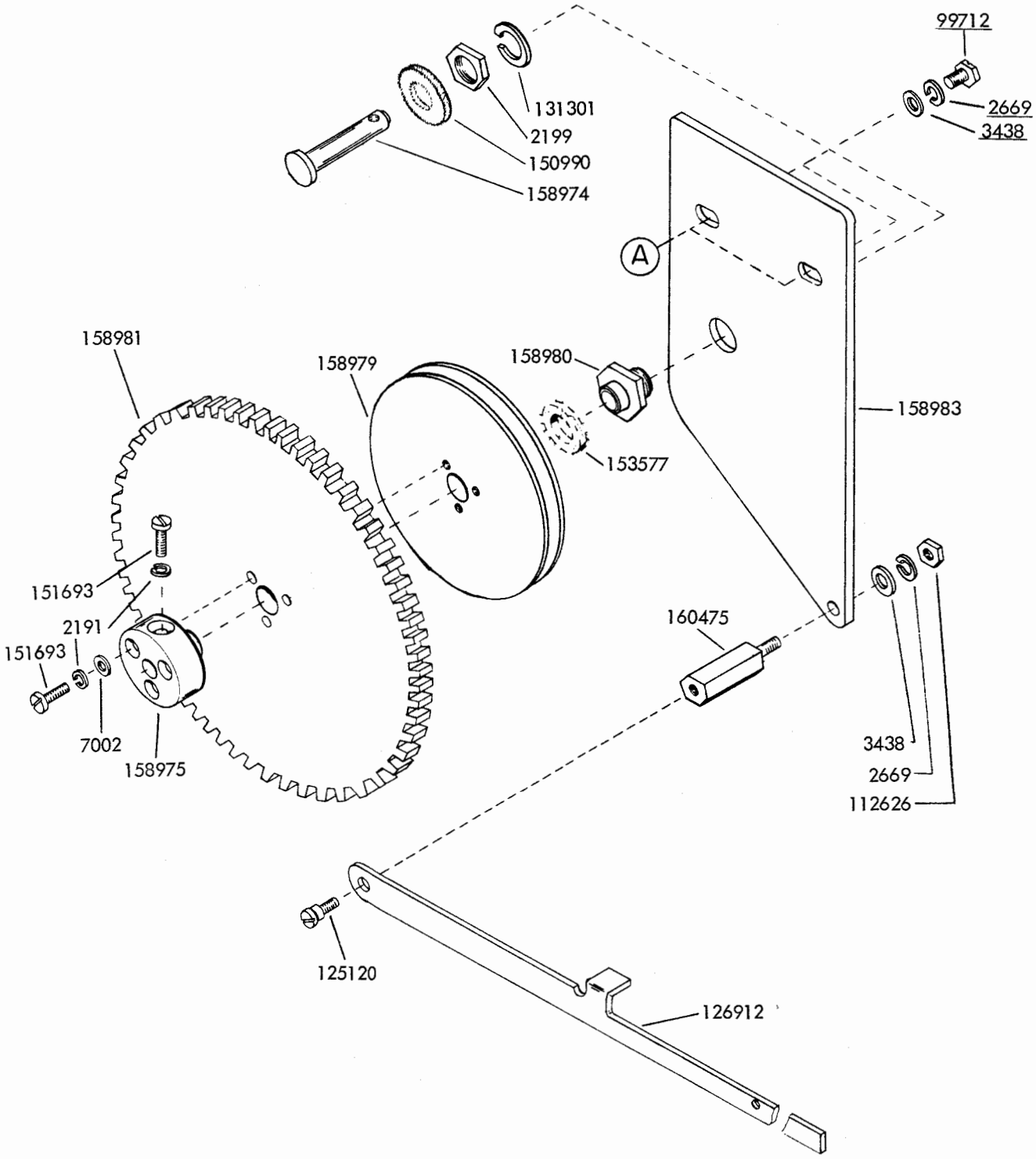
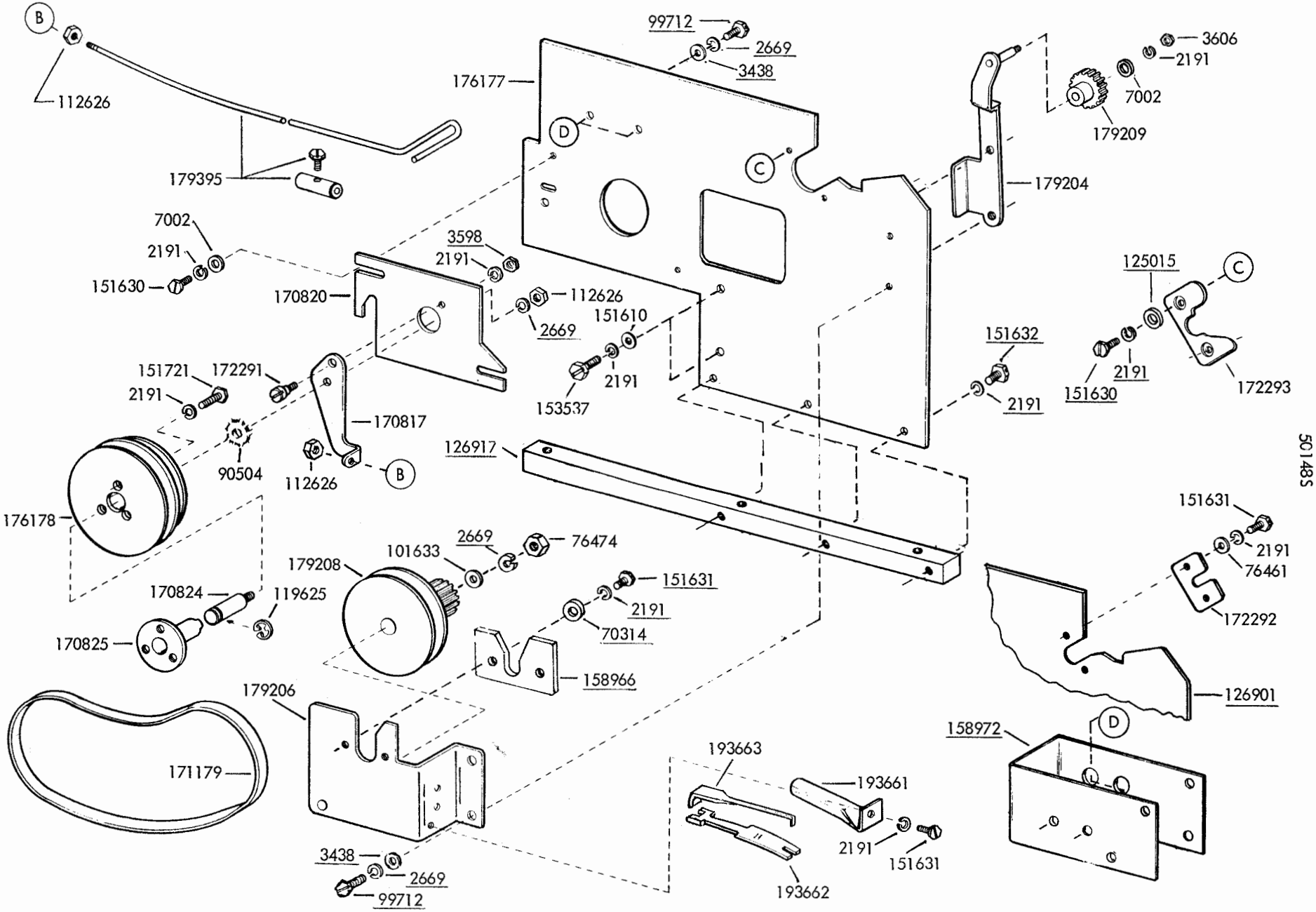

99712
2669
3438
131301
2199
150990
158974
A
158981
158979
158980
158983
153577
151693
2191
151693
7002
158975
160475
3438
2669
112626
125120
126912

FIGURE 3


B
112626
179395
99712
2669
3438
176177
D
C
3606
2191
7002
179209
179204
7002
2191
151630
3598
2191
170820
112626
2669
151610
2191
153537
151632
2191
125015
C
2191
151630
172293
151721
172291
2191
90504
170817
112626
B
126917
176178
2669
76474
101633
179208
151631
2191
70314
158966
170824
119625
170825
179206
171179
3438
2669
99712
193663
193661
2191
151631
193662
158972
D
151631
2191
76461
172292
126901
FIGURE 4
50148S