

INSTRUCTIONS FOR INSTALLING THE 402866 MODIFICATION KIT TO PROVIDE
IMPROVED RIBBON TRACKING FOR MODEL 40 80-COLUMN TRACTOR FEED PRINTER

1. GENERAL

- 1.01 The 402866 modification kit provides the parts necessary to improve ribbon tracking on a Model 40 80-column tractor feed printer.
- 1.02 Improved ribbon tracking will prevent ribbon foldover and extend ribbon life.
- 1.03 The 402866 modification kit consists of:

<u>Qty</u>	<u>Part No.</u>	<u>Description</u>
* 2	2191	Lockwasher
2	8330	Washer, flat
2	8449	Spacer
3	90790	Washer, flat
* 6	119651	Ring, retaining
2	151694	Screw
2	152893	Screw
2	184056	Screw w/lockwasher
1	402443	Bracket
** 1	402775	Plate, column indicator
3	402854	Thumbscrew
4	402862	Roller
2	402863	Roller
2	402864	Post
1	402865	Bracket
1	402867	Tag

*Spare items included for convenience purposes only.

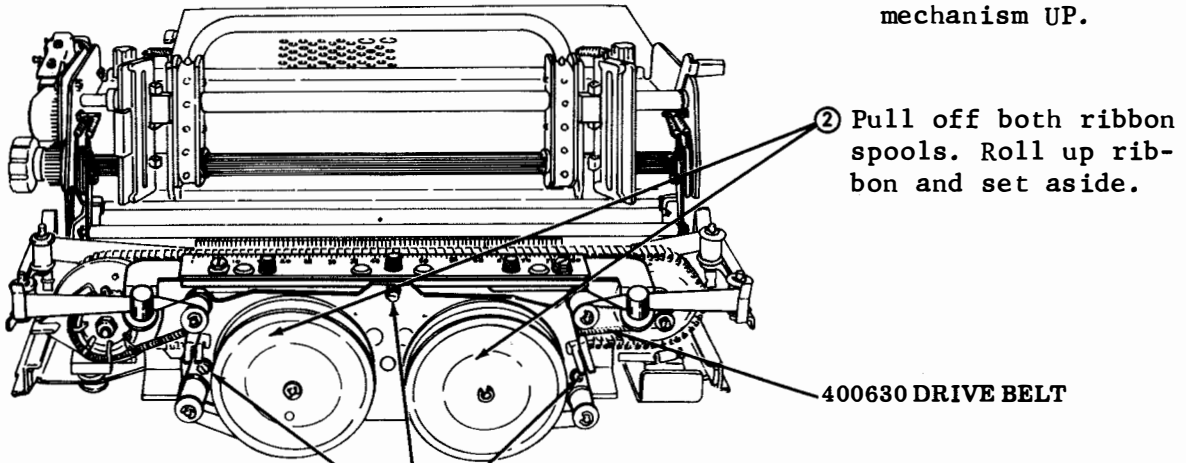
**Replacement for 402404 column indicator plate present on some early design printers. Not used when 402775 plate already present.

2. INSTALLATION

Note: The circled numbers indicate the sequence of operations to be followed during installation.

2.01 Modify ribbon feed assembly:

① Set printer in a vertical position with ribbon feed mechanism UP.

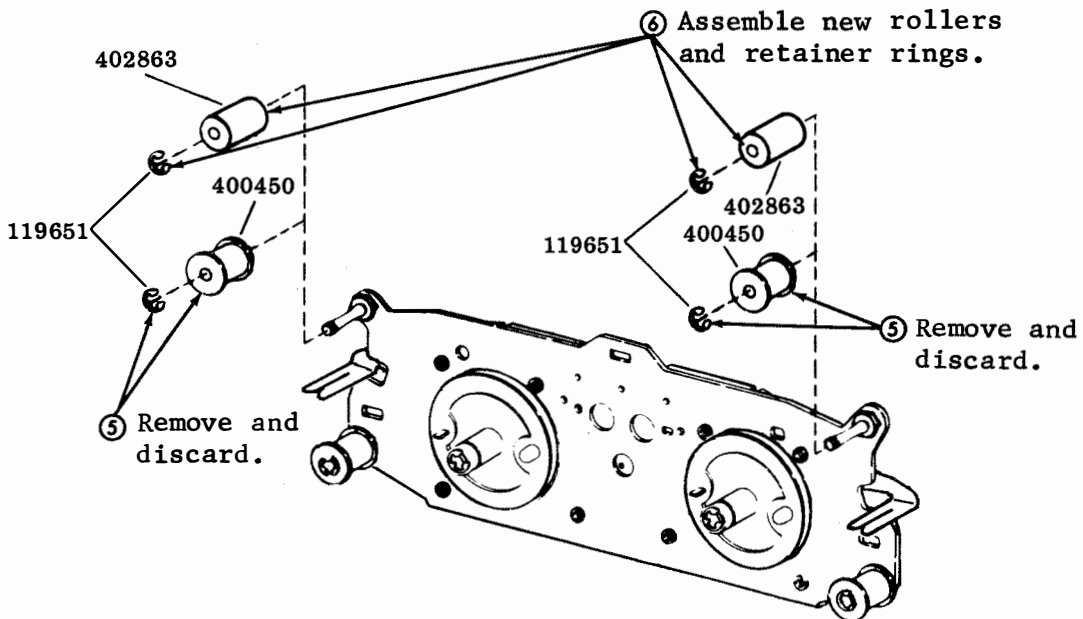


② Pull off both ribbon spools. Roll up ribbon and set aside.

400630 DRIVE BELT

④ Remove ribbon feed assembly and drive belt.

③ Remove and retain (3) 184056 screws w/lockwashers.

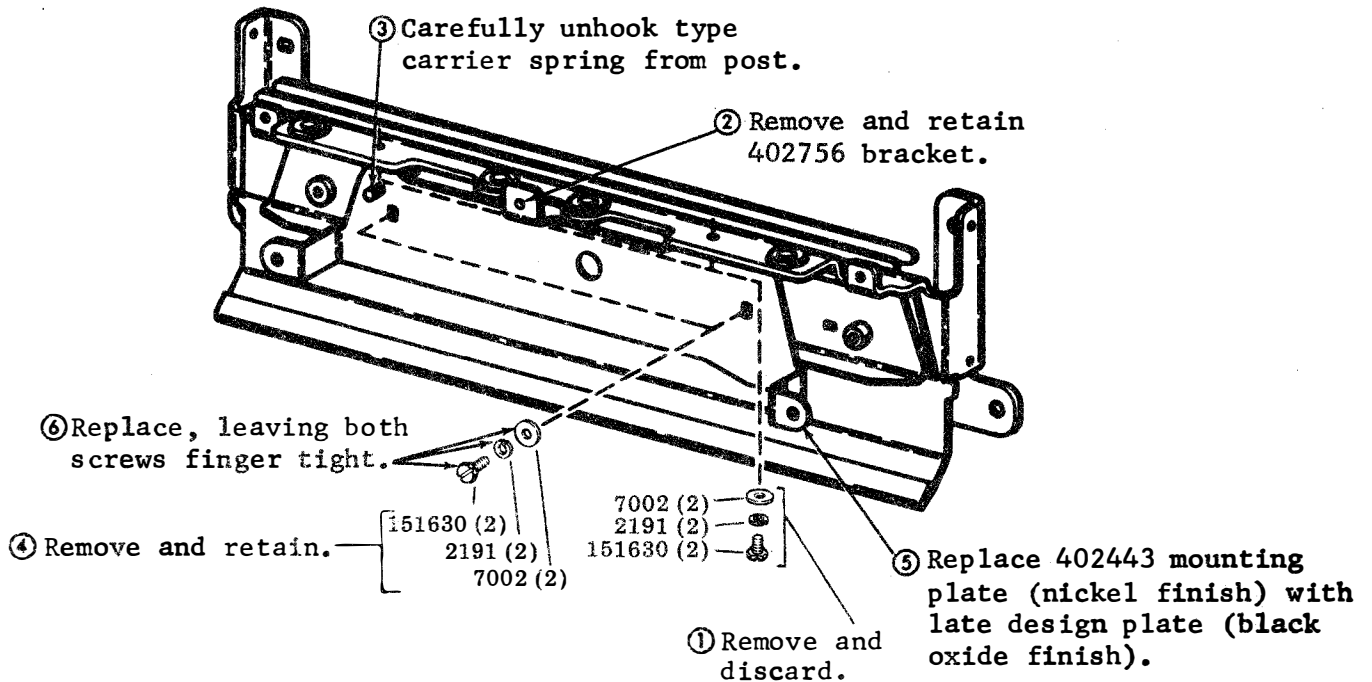


⑥ Assemble new rollers and retainer rings.

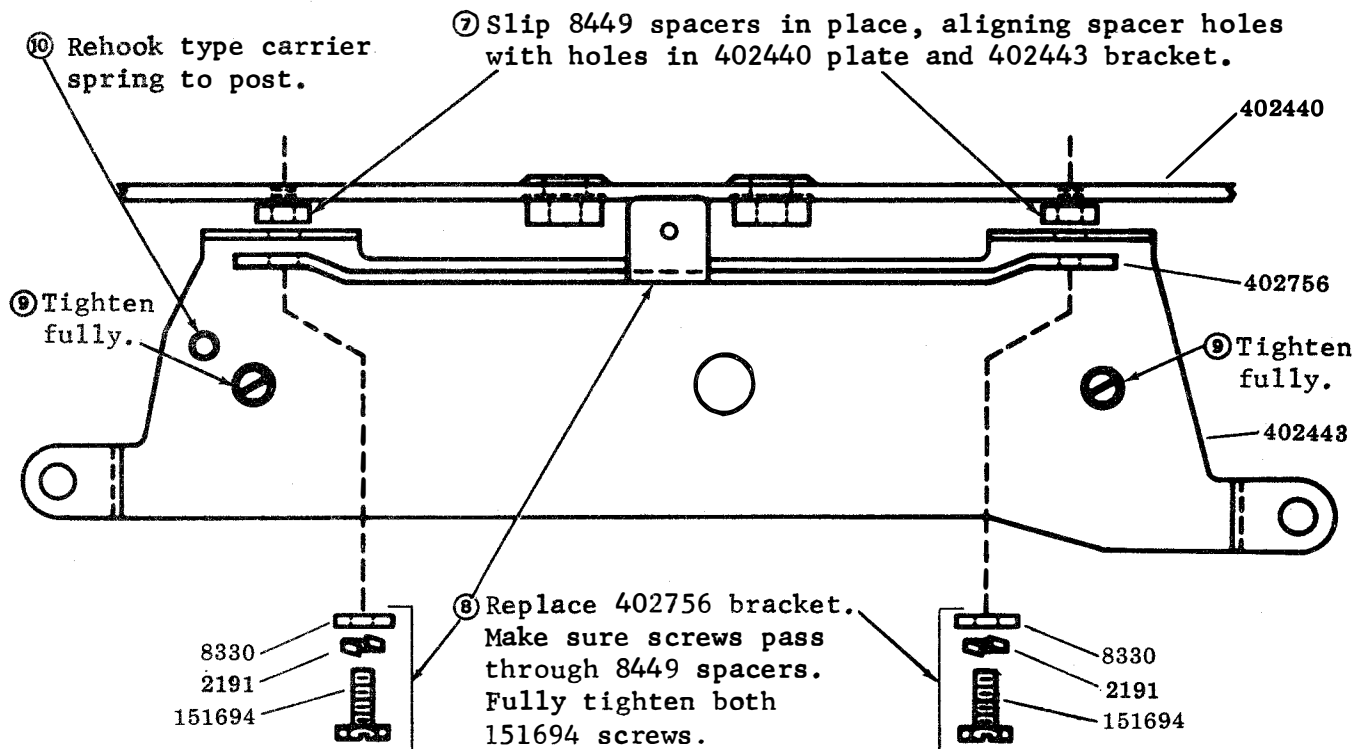
⑤ Remove and discard.

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2.02 Modify front plate assembly:

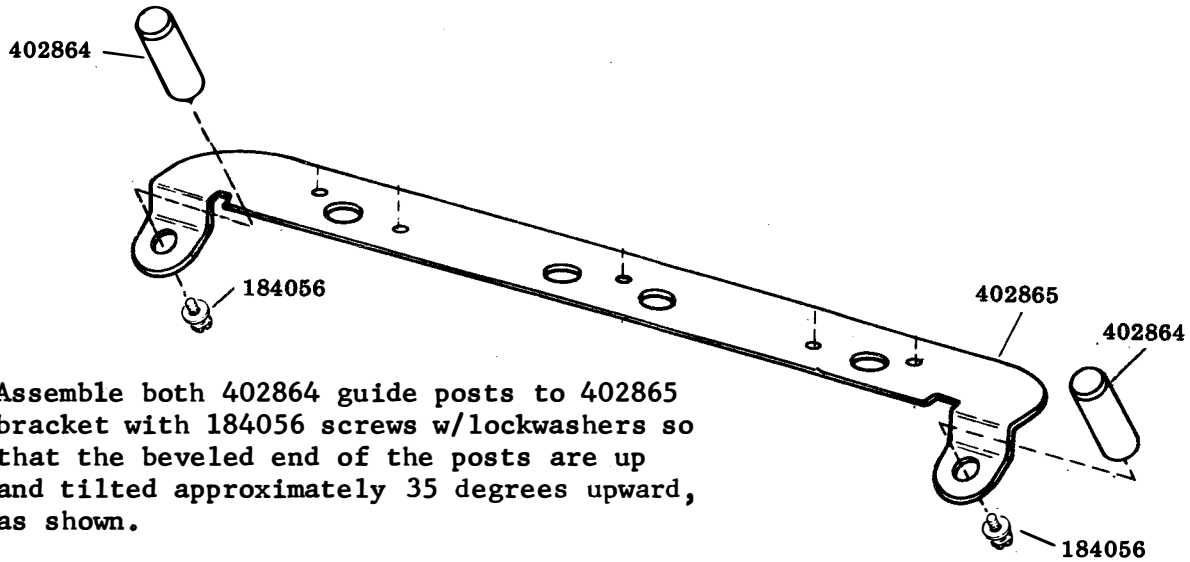


Note: At this time restore printer to its normal horizontal position.

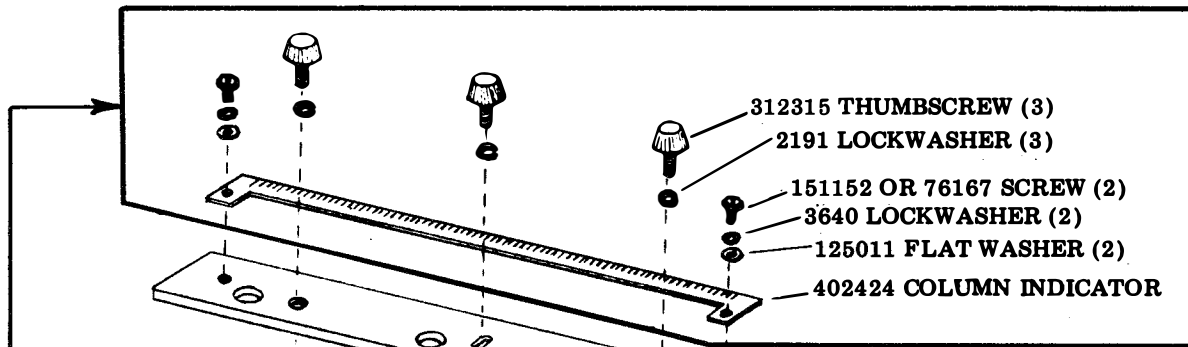


⑪ Replace ribbon feed assembly and drive belt (Steps ④ and ③ of Paragraph 2.01) and make Ribbon Feed Drive Belt Tension adjustment. See 3.01.

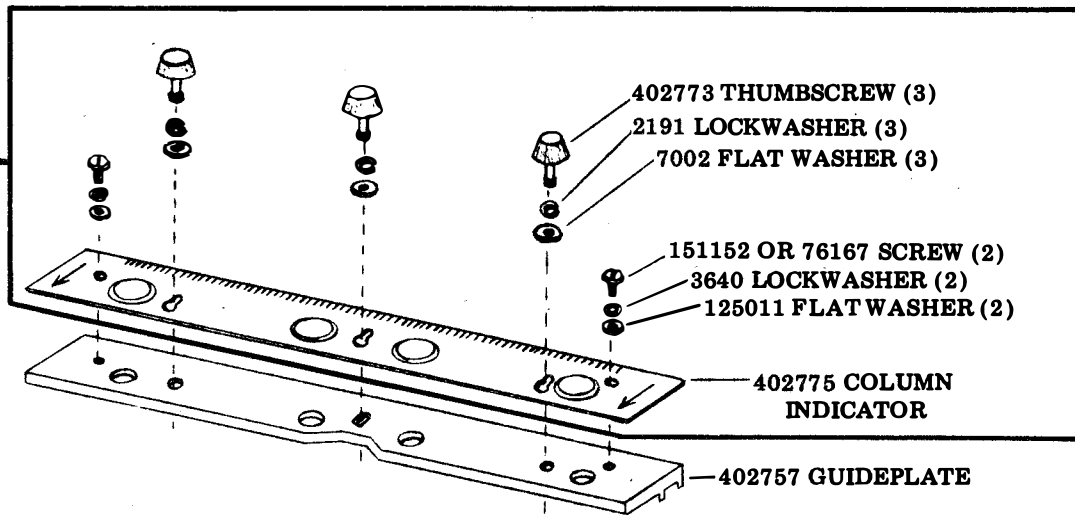
SPECIFICATION 50836S

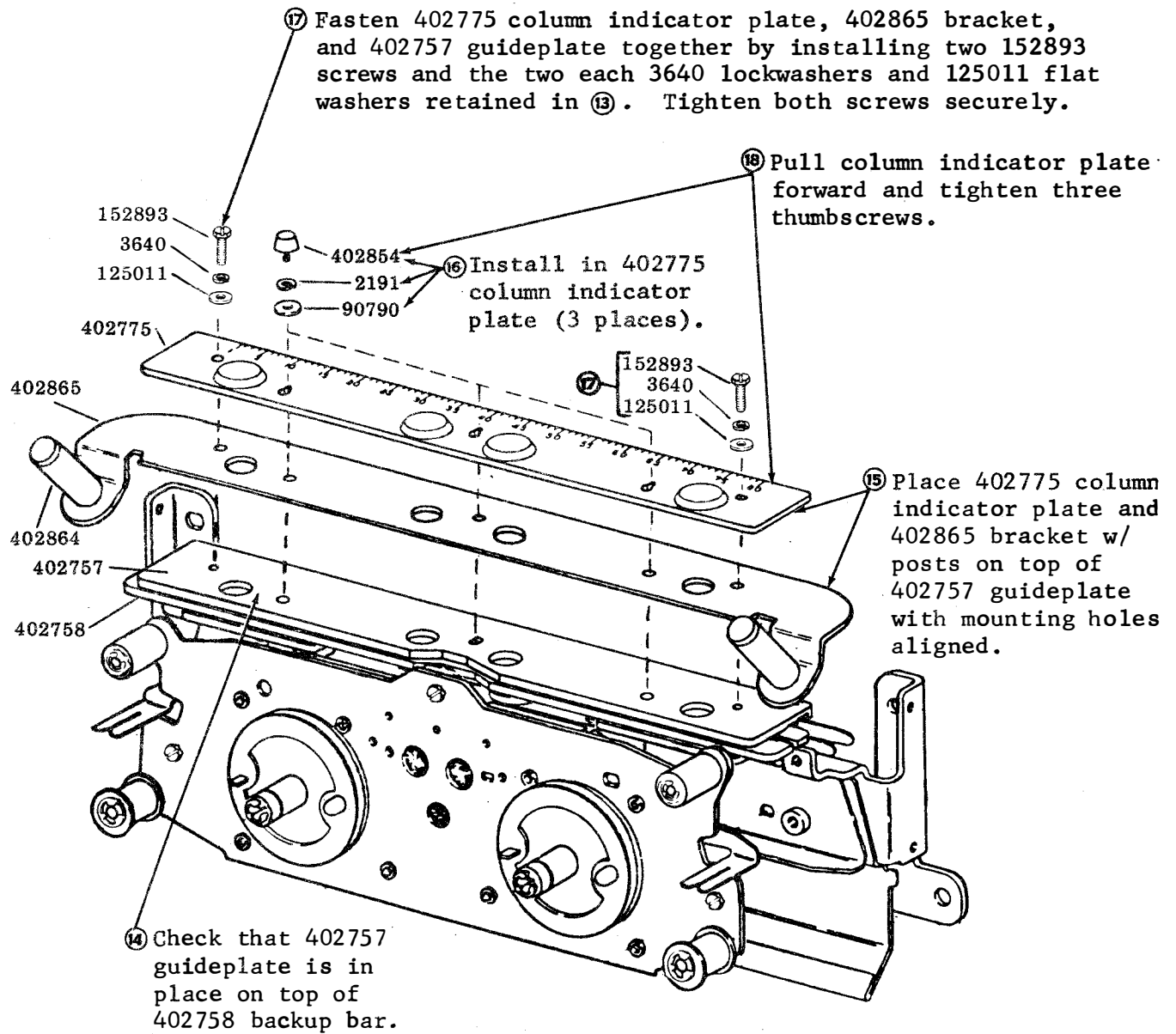


⑫ Assemble both 402864 guide posts to 402865 bracket with 184056 screws w/lockwashers so that the beveled end of the posts are up and tilted approximately 35 degrees upward, as shown.



⑬ Remove all parts inside boxed area, whichever group present. Discard all removed parts except retain (3) 2191 lockwashers, (2) 3640 lockwashers, (2) 125011 flat washers, and the 402775 column indicator plate.

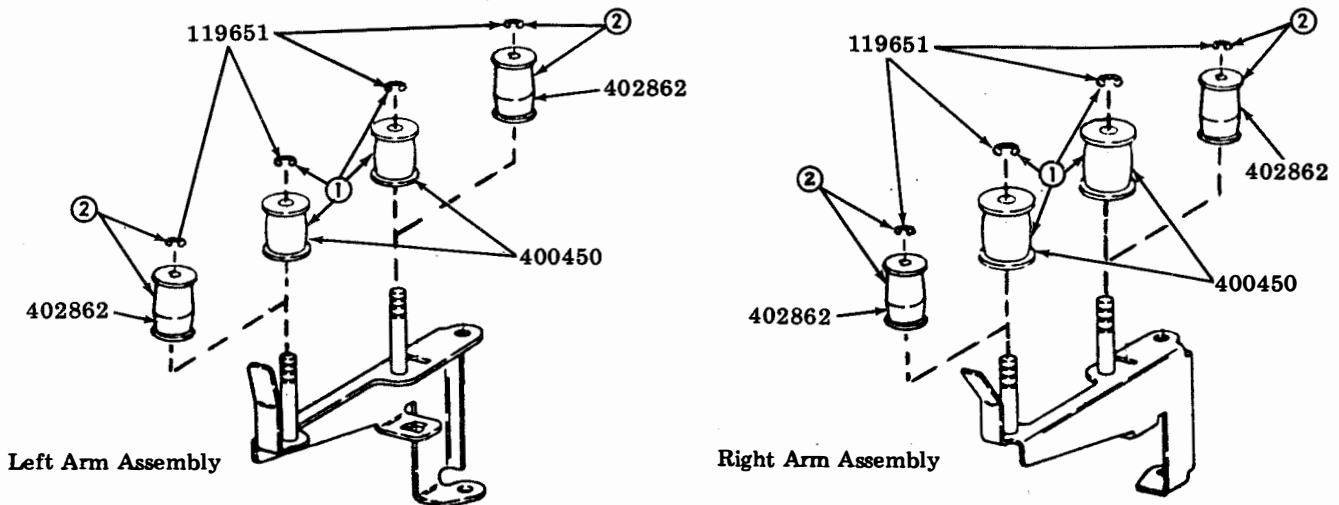




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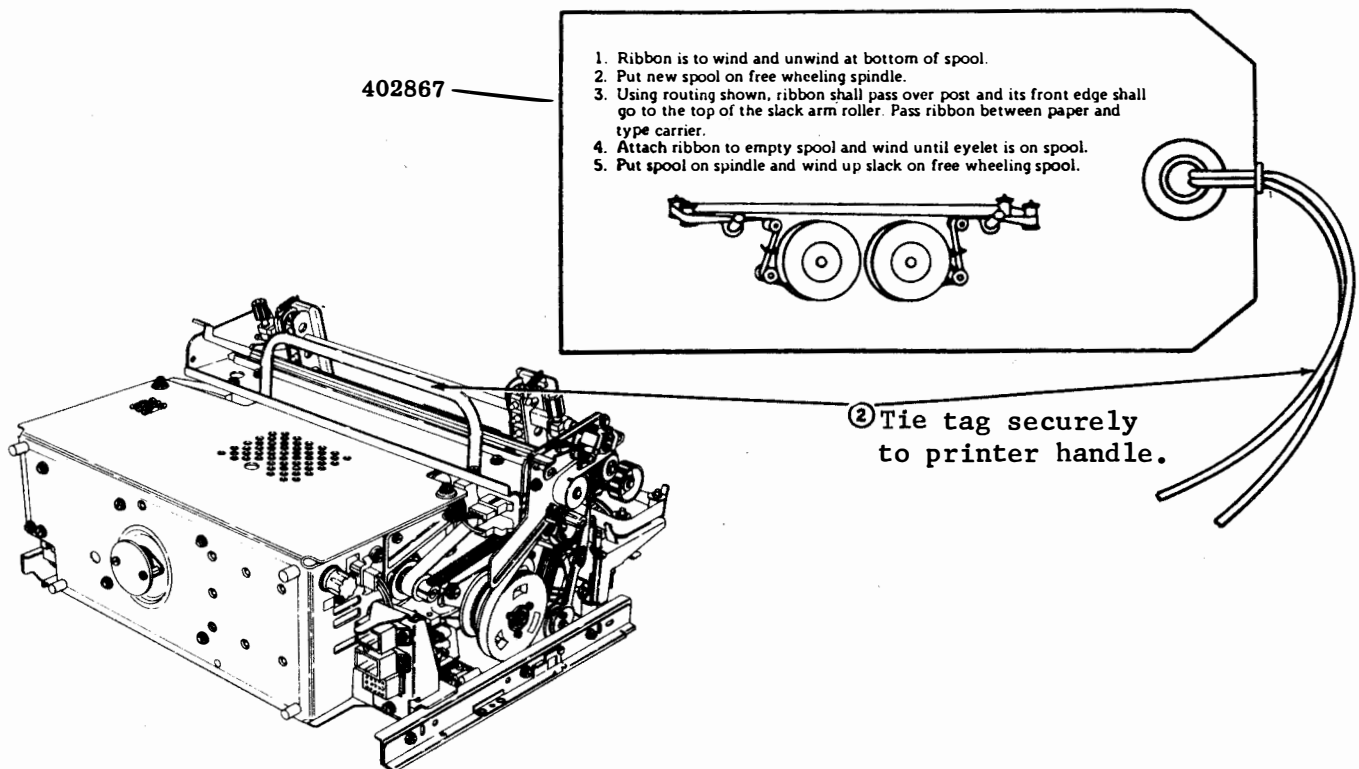
2.03 Modify ribbon guide arm assemblies:

- ① Remove and discard (4) 119651 retaining rings and (4) 400450 ribbon spools.
- ② Install (4) 402862 ribbon spools and (4) 119651 retaining rings. The ribbon spools must be installed with the groove and bulge downward.



2.04 Install new ribbon and instruction tag:

- ① Install new ribbon as detailed on 402867 tag.



3. ADJUSTMENT

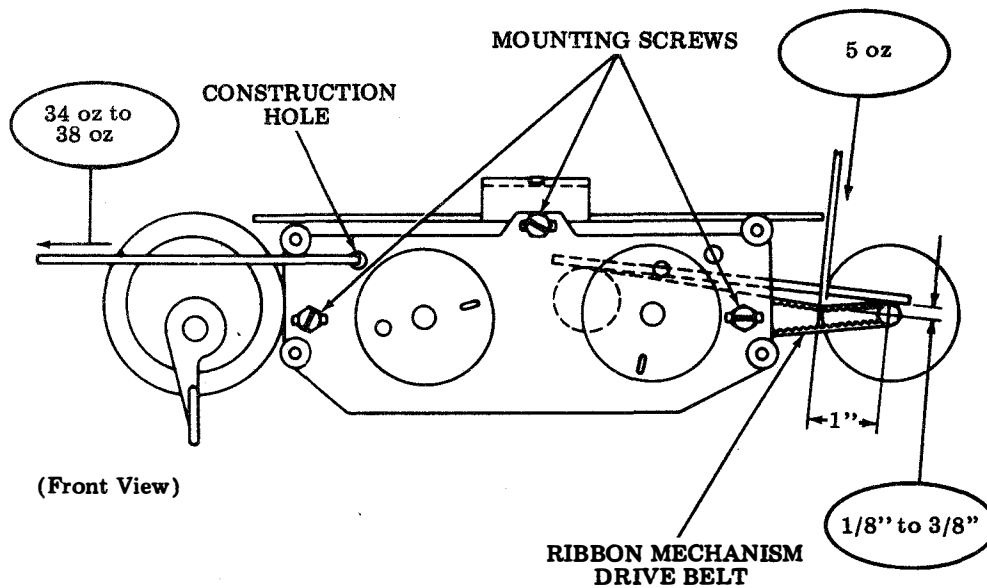
3.01 RIBBON FEED DRIVE BELT TENSION

Requirement

With a force of 5 ounces applied perpendicular to the drive belt approximately 1 inch from right pulley, belt should deflect 1/8 inch to 3/8 inch from a line tangent to both pulleys.

To Adjust

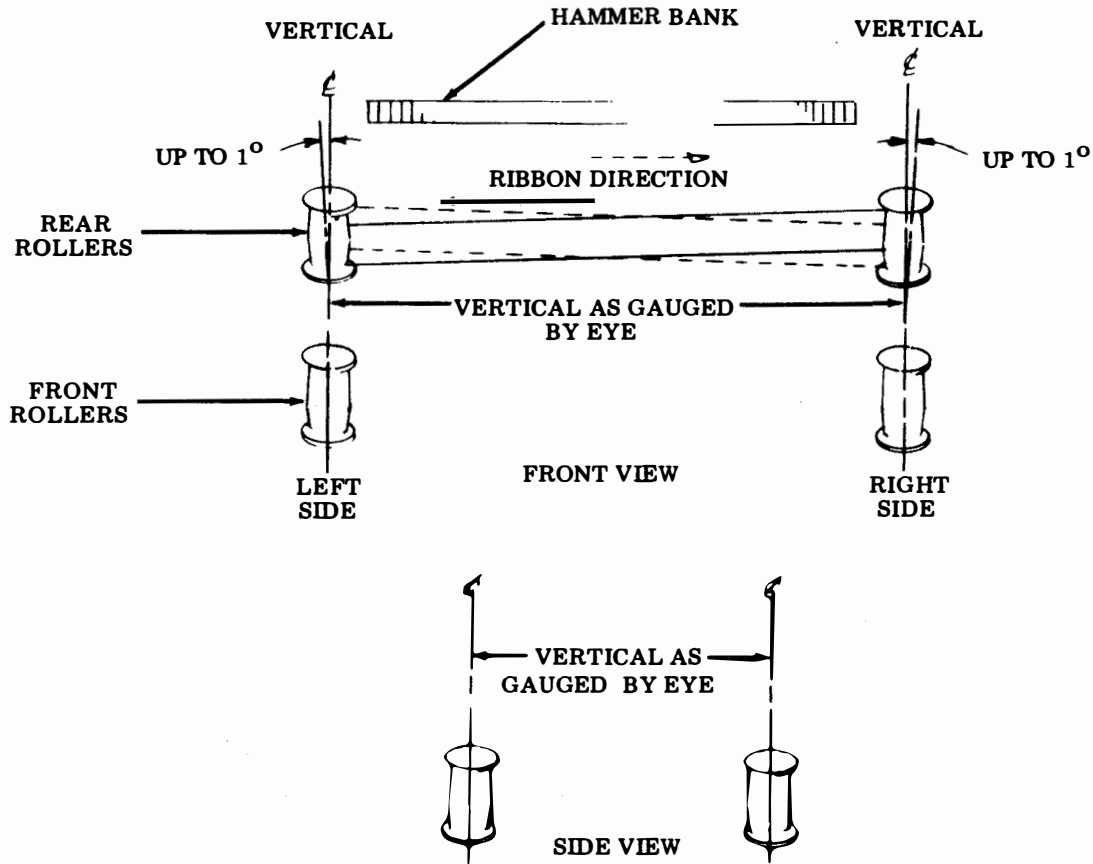
Loosen mounting screws to allow mechanism to move freely to right or left. Pull against construction hole to left with a force of 34 ounces to 38 ounces. Tighten mounting screws with tension applied.



3.02 RIBBON TRACKING

Requirement

The posts carrying the front roller must be vertical (in reference to the ribbon guide top plate) as gauged by eye. The posts carrying the rear rollers must be vertical in the front to rear direction and the right roller should lean towards the right by a slight amount (less than 1°) and the left roller should lean towards the left by a slight amount (less than 1°).



To Adjust

If rollers do not meet requirement or ribbon is not tracking properly (see Par. 5) the vertical alignment of roller posts may be refined. To lower the ribbon track increase the amount the rear rollers lean outwards. (The right roller to the right and the left roller to the left.) To raise the ribbon track do the opposite. Caution must be used not to over adjust. A 1/4 inch spin-tight socket wrench will slip over the roller post and can be used for adjusting.

4. LUBRICATION

4.01 Lubricate as outlined below upon completion of installation and after every 2000 hours of running time.

4.02 Apply lubricant to points as indicated.

(a) On small parts, a minimum amount of lubricant should be applied so that the lubricant remains on the parts and does not run off.

(b) Excessive lubricant should be removed with a dry, lint-free cloth.

(c) The following areas must be kept dry, free of all lubricant:

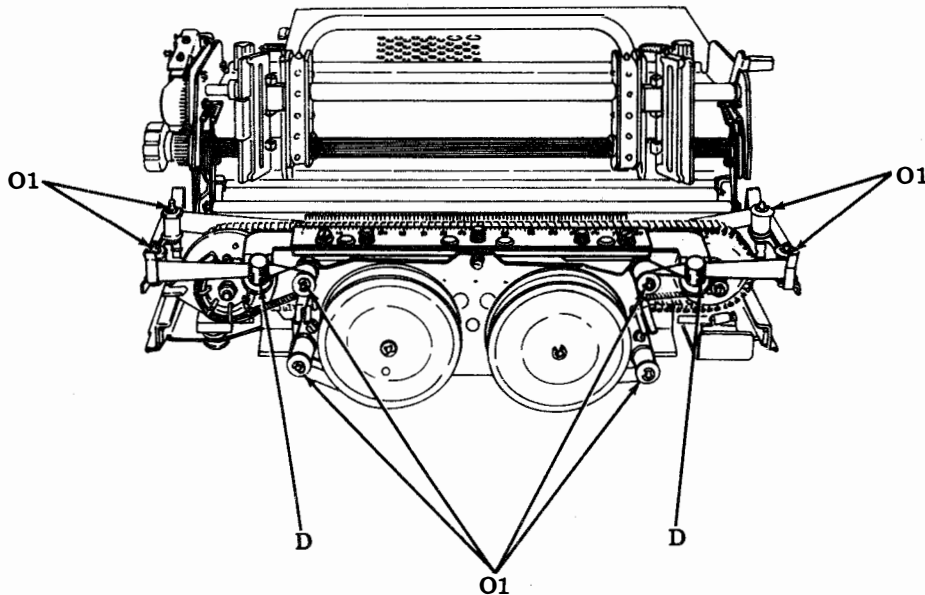
All electrical components, including terminals.

All parts normally touched by the operator, including exposed surfaces in ribbon, paper handling areas, and all large flat areas.

(d) The following symbols indicate the quantity of lubricant to be used in a specified area: Symbols O1, O2, O3, etc, refer to 1, 2, 3, etc, drops of oil. The following list of symbols applies to the lubrication instructions and the type of lubricant to be used:

O Oil 88970 (Bell System KS-7470)

D Keep dry, no lubricant permitted.



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5. TESTING

- 5.01 Install printer in cabinet and apply power to set. By operating TEST switch to the on position and while the printer is running, check the position of the ribbon on the rear rollers of the right and left ribbon guide arms.
- 5.02 If a new ribbon is being wound on the right hand spool the ribbon should ride against the lower flange of the right roller. However, it should not ride either so low as to cause a permanent curl to form in the ribbon or higher than 1/16 inch above the lower flange. For the left roller, the ribbon should ride with no curl to 1/4 inch above the lower flange.
- 5.03 If a new ribbon is being wound on the left hand spool the ribbon should ride against the lower flange of the left roller. However, it should not ride either so low as to cause a permanent curl to form in the ribbon or higher than 1/16 inch above the lower flange. For the right roller, the ribbon should ride with no curl to 1/4 inch above the lower flange.
- 5.04 If a new ribbon does not track as described the roller posts should be checked for squareness. Refer to Ribbon Tracking Adjustment Paragraph 3.02.