



12" WOODWORKING LATHE • MODEL NO 1460 • SERIAL NO 114-665 • MAY 1955 •

The Delta 12" Lathe is a ruggedly designed machine for turning wood, plastics and non-ferrous metals such as aluminum, brass and copper.

Mount the lathe on a Delta stand Cat. No. 1463 or a sturdy bench or table 30 to 32 inches high. It may be necessary to shim under the bench legs in order to make the bed level. Check the bed by putting a level across at the headstock and also across at the tailstock, also along the length of the bed in the center. In this way it is possible to detect a twist which might occur in the bed if mounted on an uneven bench top. This check-up should be made periodically to compensate for warpage which might occur in the wood bench top, causing strain in the lathe bed.

The motor may be mounted below the top of the bench, on the lower shelf or behind the headstock. Assemble motor pulley Cat. No. 932 to motor with the large step away from motor. Make sure steps on motor pulley are in line with steps on spindle pulley.

The following items are furnished with your 12" Lathe: No. 1461 tool support base, No. 690-4" tool support, No. 692-12" tool support, No. 933 drive center, No. 934 cup center, No. 936-3" face plate, No. 644-66 1/4" O.C. V-Belt and wrenches.

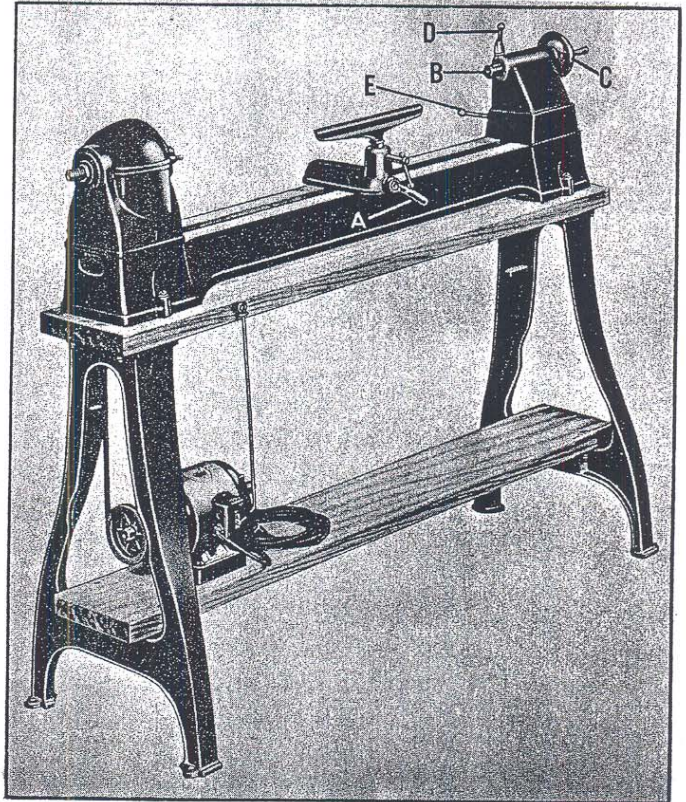


Fig. 2.

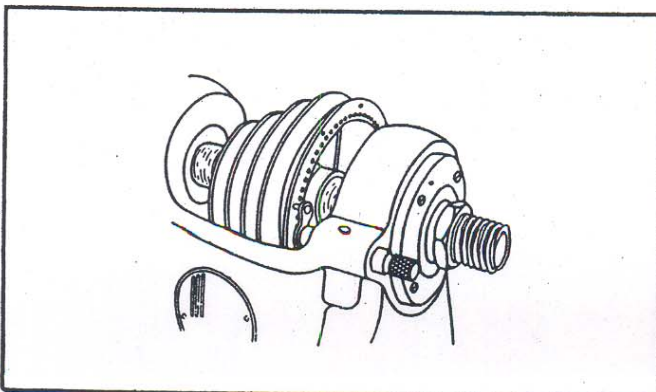
TAILSTOCK

Alignment between head and tailstock has been set accurately at the factory.

The quill (B) Fig. 2 is moved in and out of the tailstock by turning the handwheel (C), and can be locked in place with the hand lever (D). The tailstock center on chuck can be ejected by moving the quill to the complete "IN".

The tailstock is securely fastened to the bed by clamping of the eccentric shaft and lever (E) Fig. 2, which is conveniently located on the far side of tailstock. To properly adjust clamping action, tighten or loosen the self locking nuts on bottom of "U" bolt, as the case may be. These nuts are located under clamp plate in the bed ways.

The eccentric shaft (E) Fig. 2 should lock when it approaches dead center, which makes it self-locking.



THE INDEXING MECHANISM (see Fig. 1)

The indexing mechanism is for fluting or reeding. Two rows of holes are provided in the pulley rim for the index pin, the inner row having 60 holes and the outer row 8 holes. With this combination it is possible to get a large number of divisions. Index pin is mounted on a swinging link, the other end of which is fastened to the index pin body. The in and out movement, together with the swinging movement, makes it possible to engage or disengage the index pin in either row of holes.

TOOL SUPPORT AND BASE

The tool support is clamped into a V-groove in the base and can be rotated, raised or lowered. The base is clamped to the bed by using the handle (A) Fig. 2.

The handle (A) Fig. 2, of the eccentric shaft (52) Fig. 4, should lock at a point where it approaches dead center which makes it self-locking. For adjustments tighten or loosen the locknuts (49) Fig. 4.

POWER AND SPEED (see Fig. 3)

We recommend either a 1/2 H.P. or 3/4 H.P., 1725 rpm. capacitor motor. **WE DO NOT RECOMMEND A SPLIT PHASE MOTOR FOR THIS LATHE.** Your Delta dealer can furnish the correct motor for this lathe.

The motor should rotate the lathe spindle clockwise when looking at the lathe from the headstock end; that is the top of the work should turn forward, toward the operator. If the motor rotates the wrong way, follow directions on motor name plate for reversing rotation.

Using a 1725 rpm motor, with No. 932 four-step pulley on the motor shaft, the lathe will have speeds of 915, 1380, 2150 and 3260 rpm. If a larger range of speeds is needed use countershaft Cat. No. 1464. Give 16 speeds ranging from 340 rpm to 3400 rpm.

HEADSTOCK

Your lathe has a double row bearing, (24) Fig. 4, which has a self contained preload. Repairs can be made without removing the headstock from the lathe.

NOTE: All Delta 1460 Wood Lathes with serial numbers prior to 128-1312, contained two identical bearings and preload shims. With this method of construction, spindle or bearing replacement could not be satisfactorily made unless the entire headstock was returned to our factory so that the exact amount of preload could be applied to the new bearings.

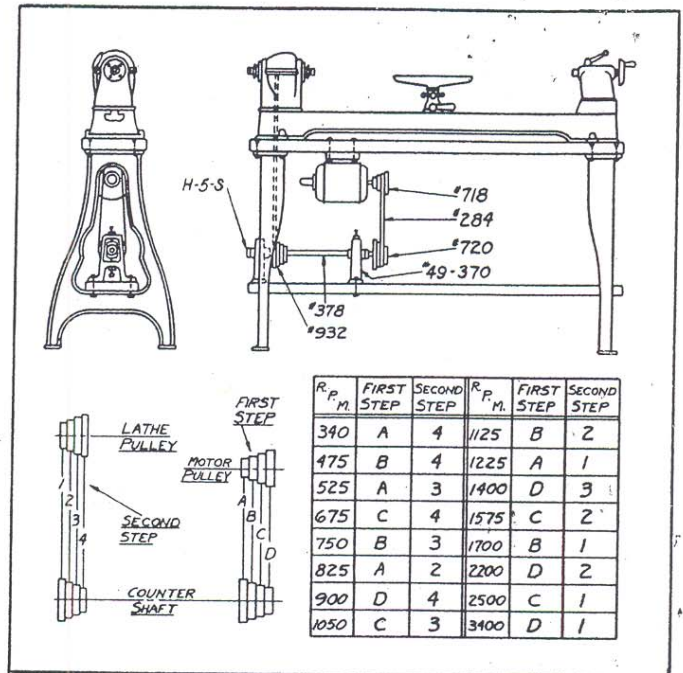


Fig. 3.

For replacement of spindle and bearings for lathes with serial numbers prior to 128-1312 it will be necessary to buy a few additional parts but once they are installed any one of them can be individually replaced in the future.

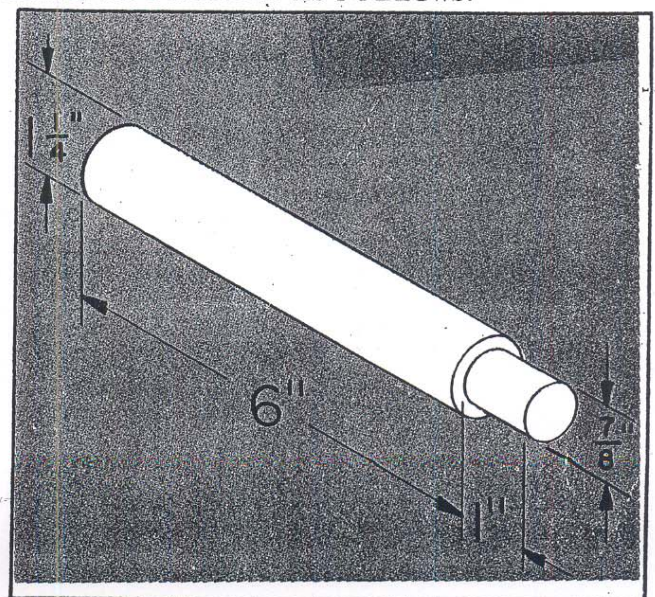
If necessary to replace the original spindle only, assuming that one or both of the original bearings are in good condition, install 434-02-385-5003 SPINDLE REPLACEMENT KIT.

If necessary to replace only one original bearing install 434-02-385-5003 SPINDLE REPLACEMENT KIT. The other original bearing can be utilized on the outboard end.

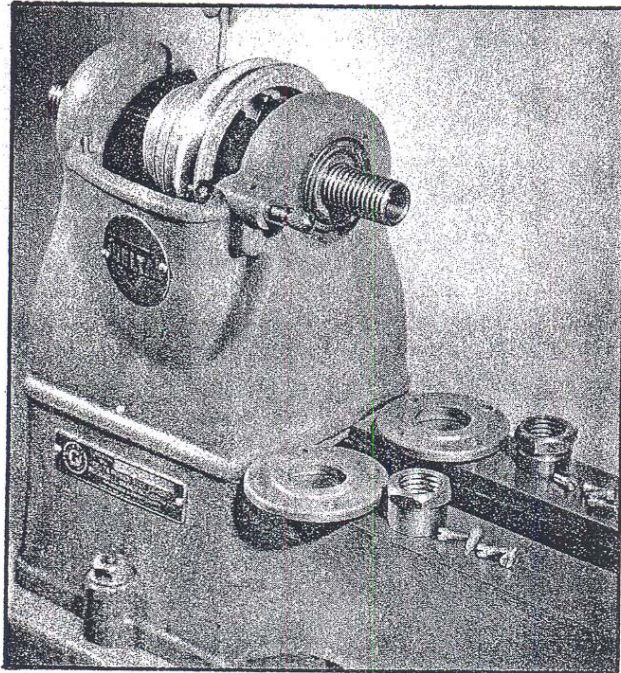
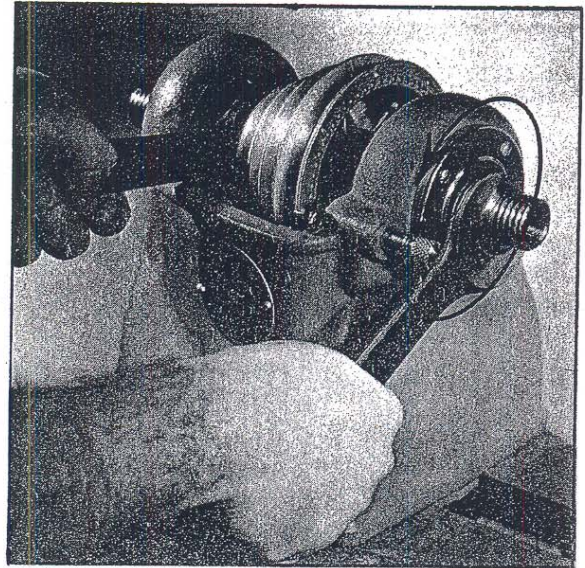
If necessary to replace both original bearings order 434-02-385-5003 SPINDLE REPLACEMENT KIT and outboard bearing SP-5360.

WHEN REPLACING SPINDLE, BELTS OR BEARINGS PROCEED AS FOLLOWS:

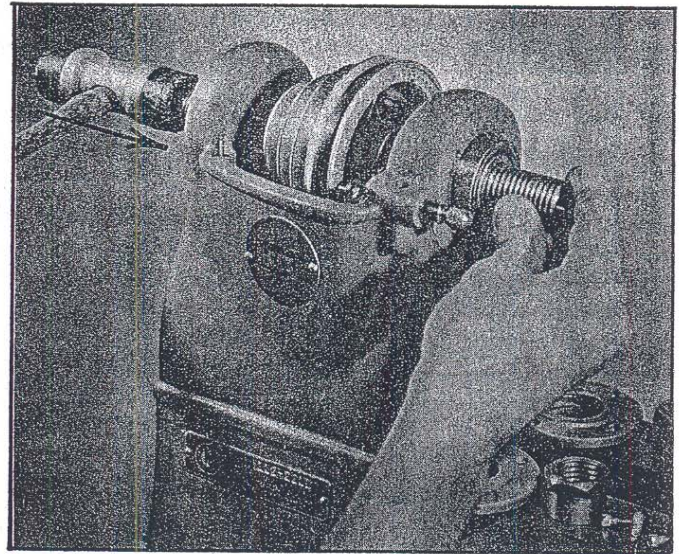
Before dismantling your lathe, that is if it is still in operating condition, turn up a simple tool of wood to be used later on to remove the outboard bearing. **BEARINGS SHOULD NOT BE POUNDED OR HAMMERED BUT GENTLY PRESSED INTO POSITION.**



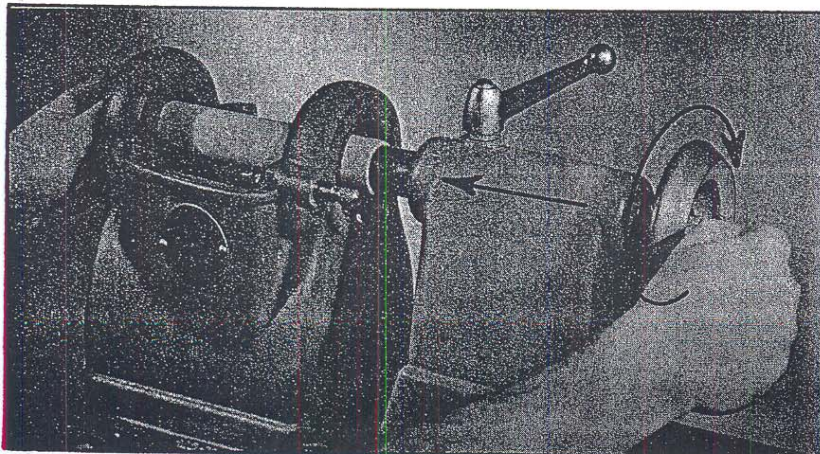
Unscrew nuts using two wrenches.



Remove bearing retainers and set screws in pulley.

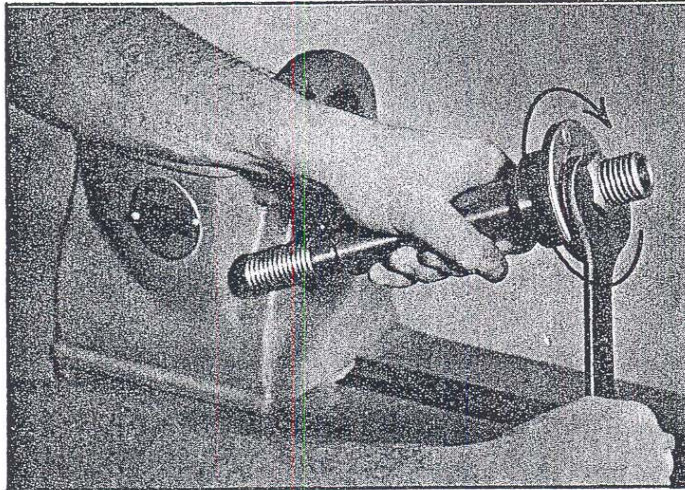
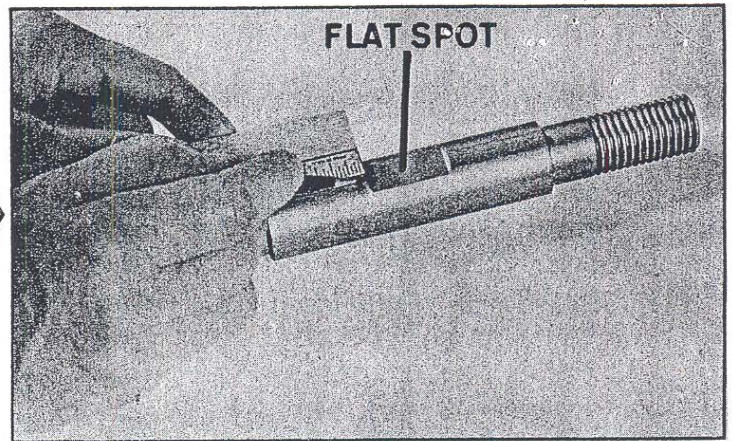


Use soft hammer or block of wood and gently tap spindle to remove.



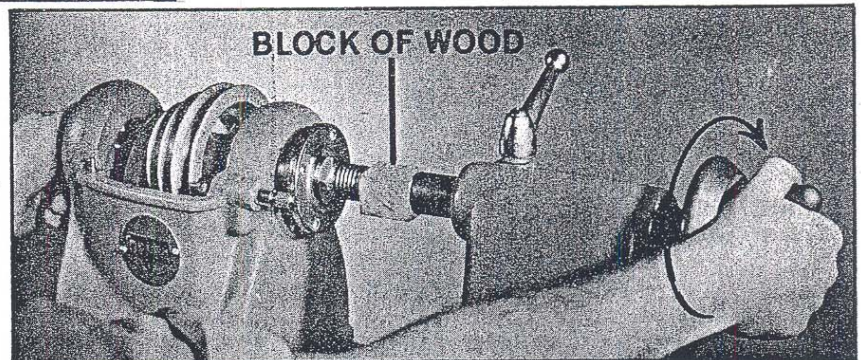
Remove outboard bearing with aid of tailstock and homemade wood tool.

Scribe line on spindle to locate flat spot. This will help pulley alignment later on.

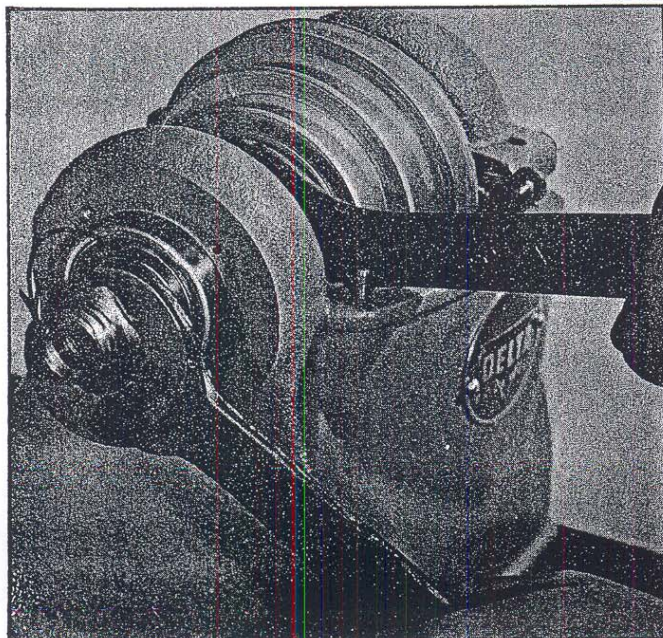


Assemble the spindle, inboard bearing, bearing retainer, and nut. NOTE: This bearing does not have a right and a left side, and may be installed from either side.

Insert spindle assembly in headstock, through spindle pulley, DON'T FORGET TO SLIP ON THE BELT, and carefully enter bearing in seat. Gently press in bearing with aid of tailstock. Be sure to protect spindle with small block of wood. Fasten bearing retainer with screws.



Align spindle and tighten set screws over "flat" on spindle. REMEMBER YOU LOCATED THIS FLAT IN A PRIOR STEP.



Insert spring washer and outboard bearing SP-5360. (Note: This bearing does not have a right or a left side, and may be installed from either side.) Screw on outboard nut and press in bearing.

Remove nut, fasten bearing retainer and replace nut.

12" WOODWORKING LATHE

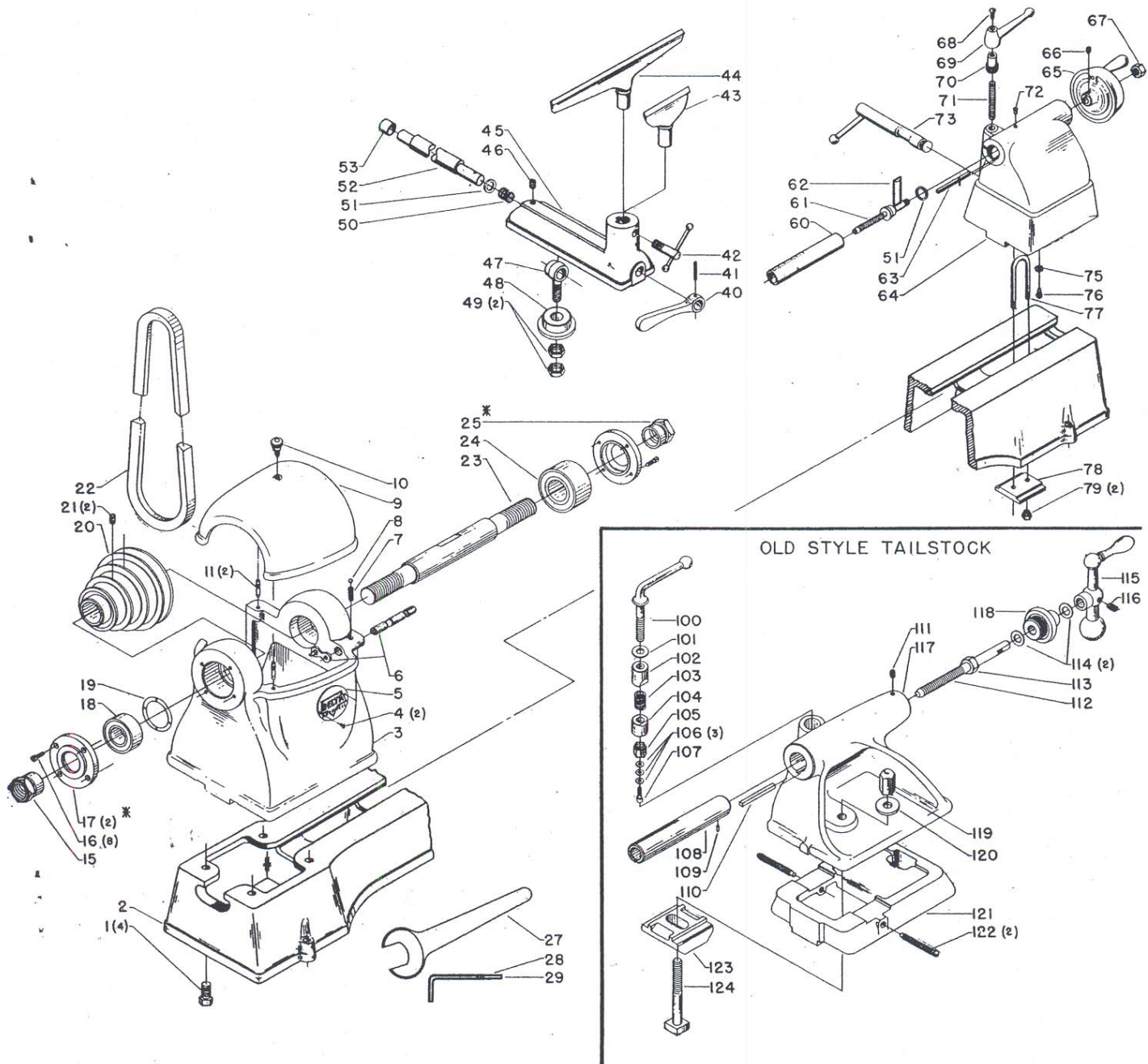


Fig. 4.

Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	SP-658	3/8-24 x 1" Hex. Hd. Screw	64	CWL-63	Tailstock
2	CBL-400	Lathe Bed	65	CWL-67-S	Handwheel, Including:
3	CBL-401	Headstock	66	SP-205	5/16-18 x 1/4" Soc. Set Scr.
4	SP-2250	#4 x 3/16 Drive Screw	67	SP-1227	1/2"-20 Hex. Jam Nut
5	CBL-486	Nameplate	68	SP-7528	1/4-20 x 1/2" Truss Hd. Scr.
6	CBL-411-S	Index Pin	69	SR-217	Clamp Handle
7	DDL-123	Spring	70	NCS-361	Serrated Nut
8	SP-27	7/32" Dia. Steel Ball	71	SP-6217	7/16-14 x 2 3/8" Soc. Set Scr.
9	CBL-404	Guard	72	SP-2486	Oiler
10	CBL-444	Thumbscrew	73	CWL-65-S	Eccentric Shaft
11	CBL-415	Pin	75	SP-1764	1/4" Lockwasher
15	CBL-410	Spindle Nut (L. H.)	76	DDL-154	Special Set Screw
16	DDL-105	#10-32 x 7/16 Fil. Hd. Scr.	77	DDL-278	"U" Bolt
* 17	434-02-079-5002	Retainer	78	CWL-64	Clamp Plate
18	SP-5360	Bearing	79	SP-1212	5/16"-24 Hex. Nut
19	SP-7352	Spring Washer			
20	CBL-407-S	Pulley, Including:			
21	SP-201	5/16-18 x 5/16" Set Screw			
22	Cat. #644	Belt			
23	434-02-085-5002	Spindle	100	DP-11-R	Handle
24	SP-5334	Bearing	101	CBL-443	29/64 x 27/32 x 1/16" Std. Washer
* 25	902-01-201-5462	Spindle Nut (R. H.)	102	CBL-418	Clamp
27	Cat. #949	Wrench	103	CBL-489	Spring
28	Cat. #194	5/32" Hex. Wrench	104	CBL-417	Clamp
29	Cat. #1534	1/8" Hex. Wrench	105	DP-617	Special Nut
40	CBL-433	Lever	106	SP-1602	3/16 x 7/16" Std. Washer
41	SP-2708	3/16 x 1 1/4" Roll Pin	107	SP-224	#10-32 x 1/2 Soc. Hd. Scr.
42	CBL-440-S	Clamp Bolt	108	CBL-416-R	Quill, Including:
43	Cat. #690	4" Tool Support	109	SP-2722	1/16 x 1/4" Roll Pin
44	Cat. #692	12" Tool Support	110	CBL-424	3/16" Sq. x 2 Key
45	CBL-425	Base	111	SP-208	1/4-20 x 1/4" Soc. Set Scr.
46	SP-102	1/4-20 x 3/8" H'dless Set Scr.	112	CBL-419	Screw
47	CBL-439	Eyebolt	113	SP-5441	1/2"-13 Hex. Jam Nut
48	CBL-436	Flange	114	DDL-161	Special Washer
49	SBS-19	5/8-18 x 3/4" Hex. Nut	115	DDL-160-S	Ball Crank Assembly, Including:
50	CBL-437	Spring	116	SP-206	5/16-18 x 5/16" Soc. Set Scr.
51	CBL-434	Washer	117	CBL-402-A	Tailstock, Including:
52	CBL-438	Shaft	118	CBL-421	Cap
53	CBL-435	Bushing	119	CBL-422	Special Nut
60	CBL-416	Quill	120	CBL-426	33/64 x 1 1/4 x 1/8" Std. Washer
61	CWL-66	Quill Adj. Screw	121	CBL-403	Support
62	SP-2617	Key	122	CBL-423	Special Screw
63	MCL-472-S	3/16 Sq. x 2 5/8 Key w/Pin	123	CBL-406	Clamp
			124	SP-2360	1/2-16 x 3 1/4" Sq. Hd. Bolt

OLD STYLE TAILSTOCK ASSEMBLY

* For replacements of the right hand spindle nut and the bearing retainers on lathes with serial numbers prior to 128-1312 order DDL-120 spindle nut and CBL-409 bearing retainer.