

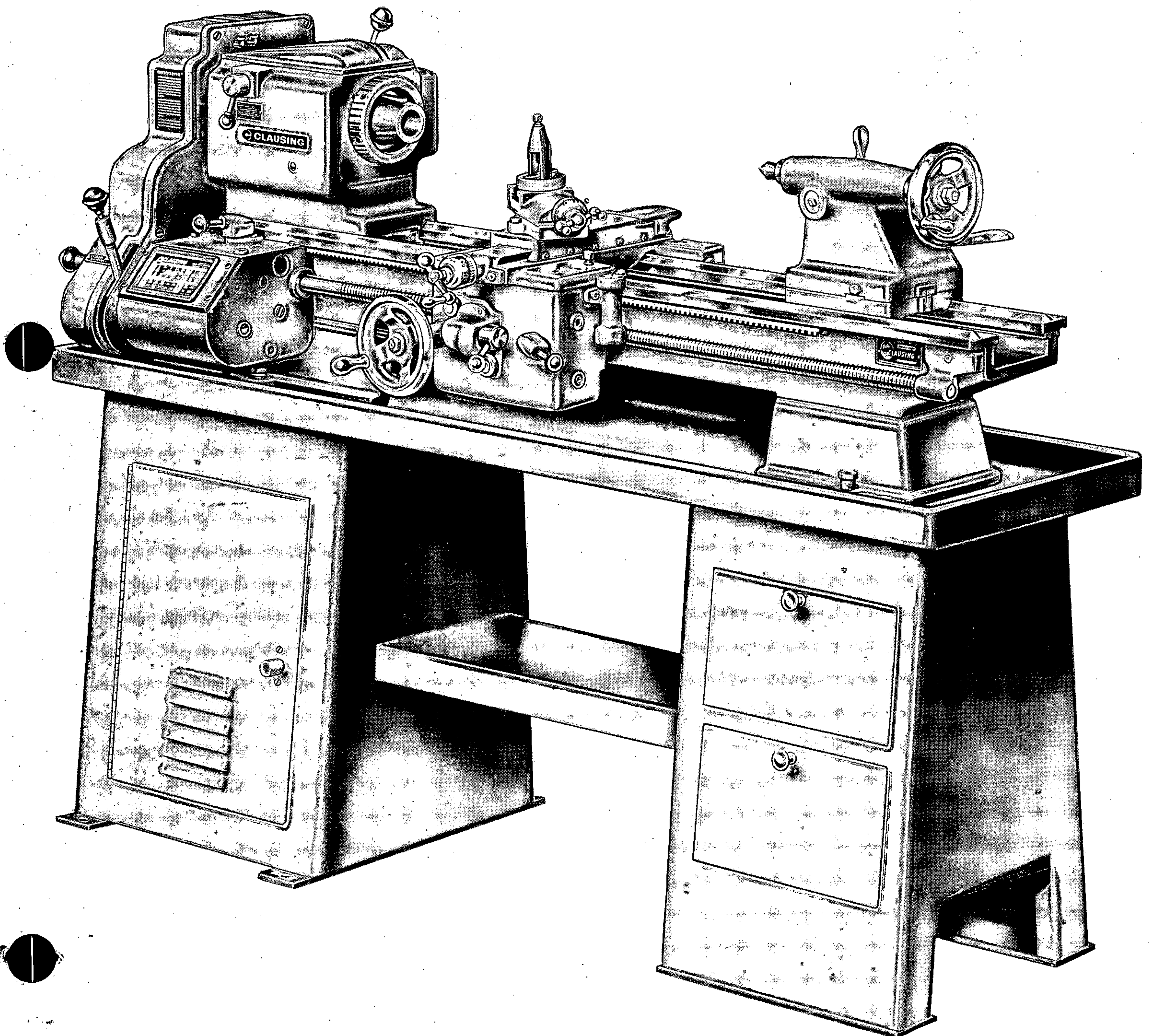
INSTRUCTIONS and PARTS

 **CLAUSING**

DIVISION, ATLAS PRESS CO.
KALAMAZOO, MICHIGAN

NO. 6300 SERIES
12³/₄ INCH LATHES
(For Lathes above Serial No. 2-4818)

FILE No. 6300XX



INSTALLING AND

6300 CLAUSING LATHE

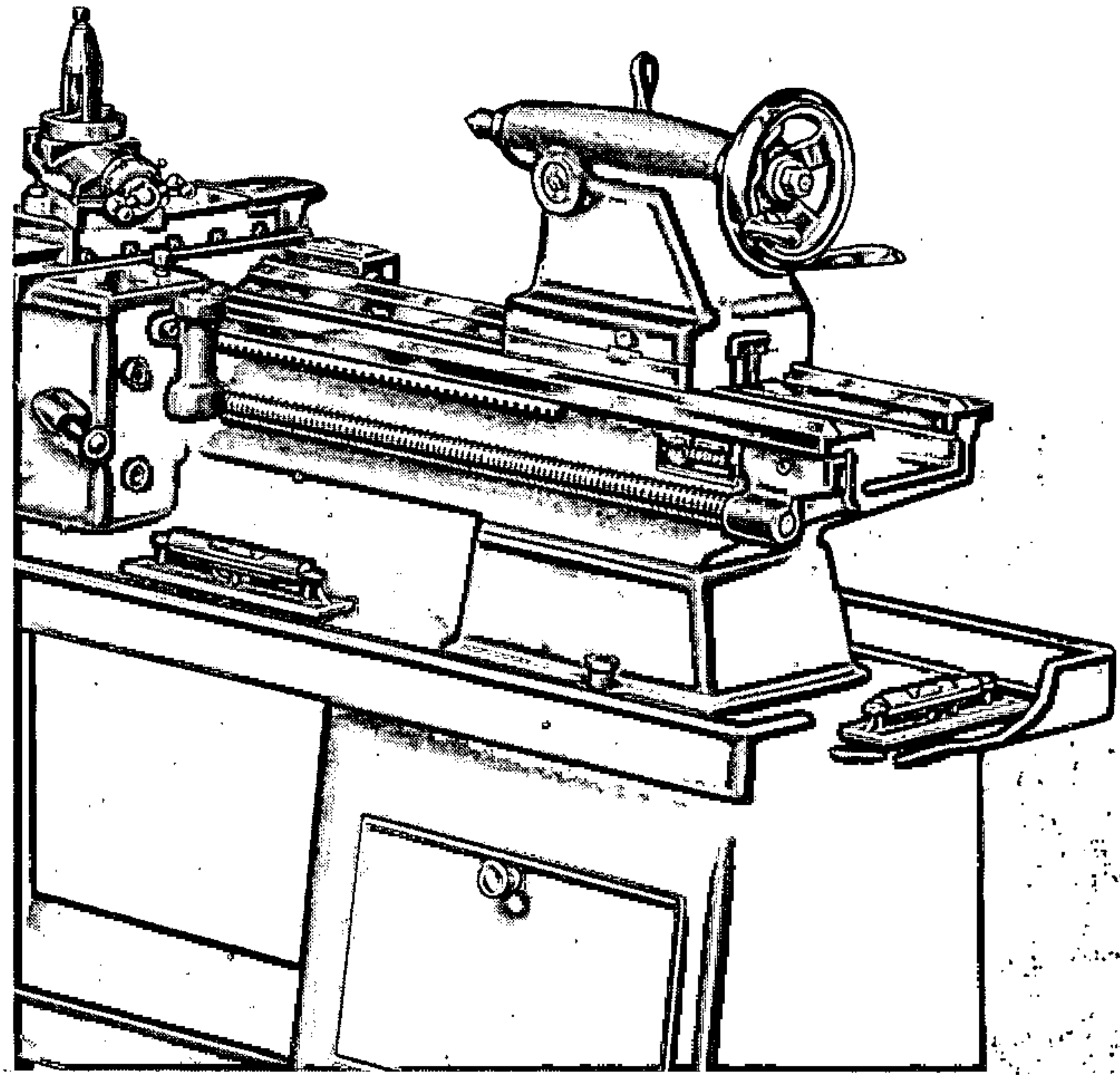
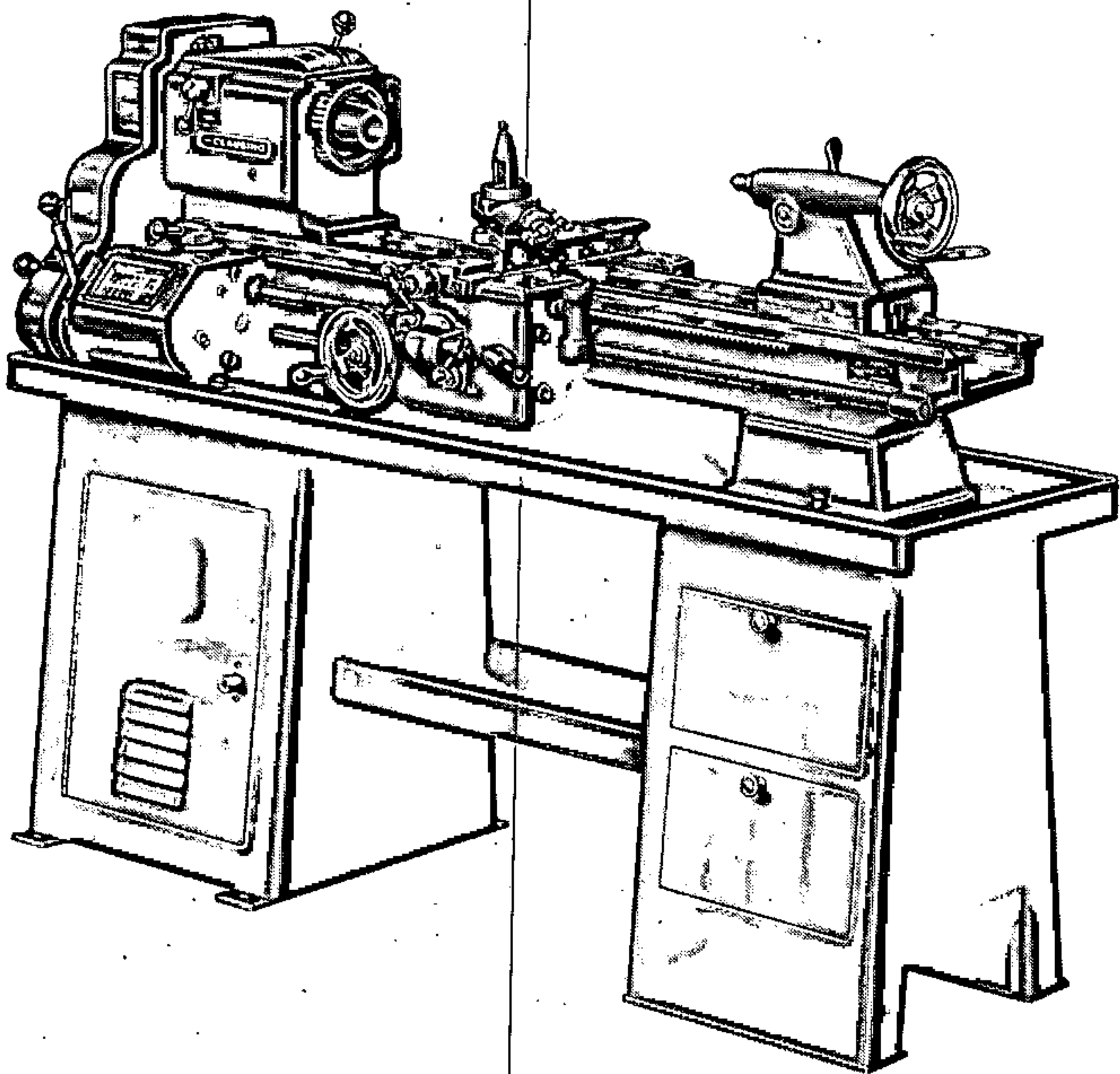


Fig. 1. Positions to check level reading on cabinet.

LATHE INSTALLATION

It is your responsibility to properly install and level the lathe — it is the first essential for accurate work and long service life. Satisfactory performance is impossible if the lathe bed is out of level as little as one thousandths of an inch. The lathe has been completely assembled and passed rigid inspection and operation tests at the factory.

1. Uncrate the lathe.
2. Remove the rust proof coating from the bed ways and other finished surfaces.
3. The skids should not be removed until the lathe has been moved to the location where it is to be used.
4. Lathe Mounting — Mount lathe on a concrete floor or base whenever possible — if wood floor is used, it should be well braced, capable of absorbing vibration and withstanding the load.

For checking the strength of the floor, a precision level should be used. If the bubble in a precision level placed on the floor shows a noticeable movement when a hand truck with an average load is moved past the location where the lathe is to be installed, the floor should be reinforced, or it should be cut away and a concrete foundation installed.

Fasten lathe to concrete by marking location of mounting holes and drilling holes large enough to receive expansion bolts, or set studs or bolts in melted lead. Use lag screws or bolts to fasten cabinet to a wood floor.

Lathe cabinet must be bolted to floor, otherwise vibration will result.

5. *Level the cabinet* — Use a precision machinists level. Place shims as required between cabinet pads and floor, to accurately level the top. Shims should be of hardwood or metal and bear under at least 75% of the cabinet pads as shown under insert Figure 2. Don't use the lathe bed ways to level the cabinet — place level on cabinet.

6. Loosen the four mounting bolts that hold lathe to cabinet. Lathe may now be leveled — see instructions **LEVELING THE LATHE**.

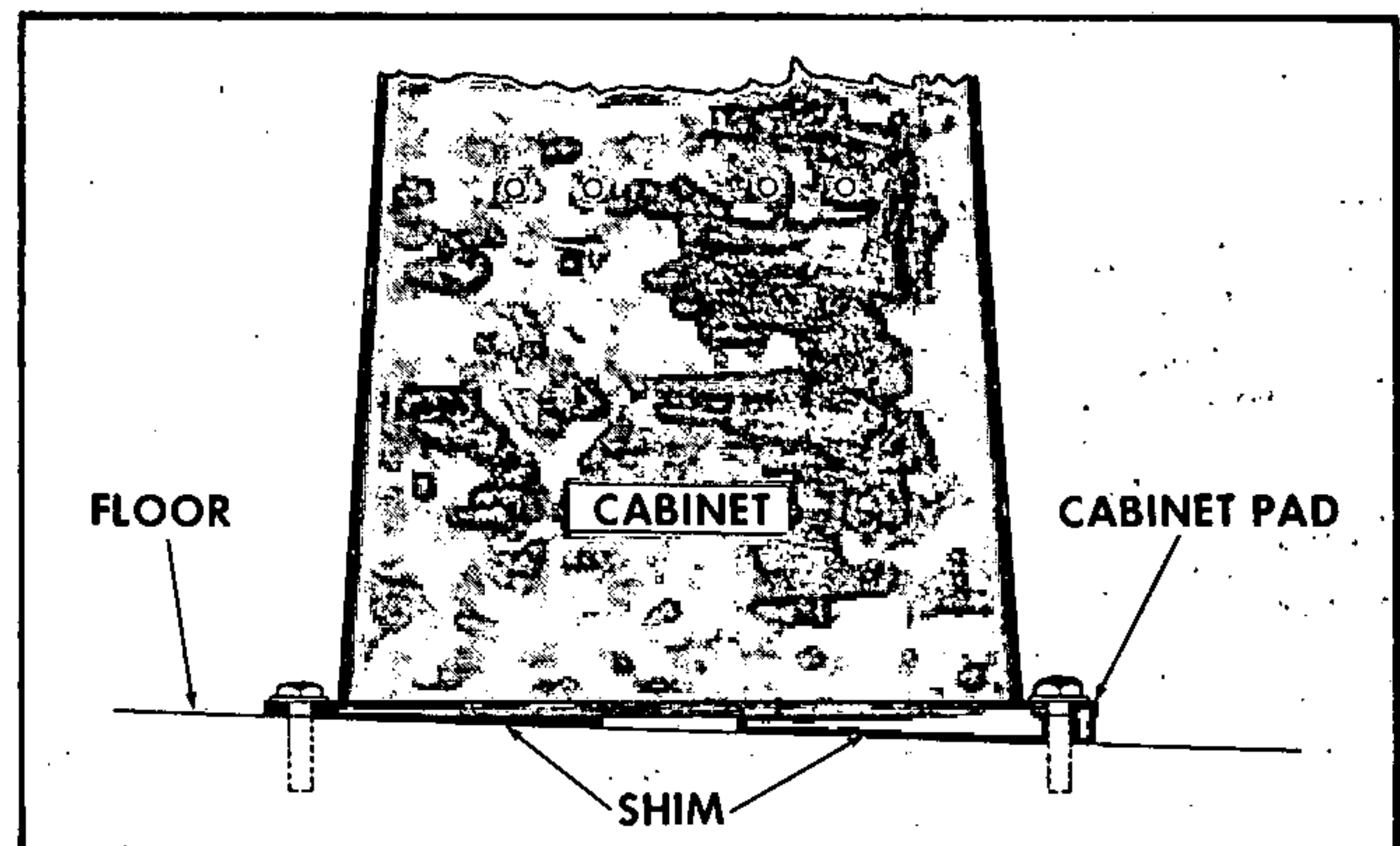


Fig. 2 Use shims made of hardwood or metal to level the cabinet. Shims should bear under at least 75% of the cabinet pads as shown above.

BE SURE YOU HAVE FOLLOWED THESE INSTRUCTIONS COMPLETELY BEFORE LEVELING THE LATHE.

LEVELING

INSTRUCTIONS

LEVELING THE LATHE

Before leveling the lathe be sure the lathe cabinet is properly leveled.

1. Screw down the four leveling screws, raising the lathe so that lathe legs at no point touch cabinet top — approximately $\frac{1}{8}$ " clearance is sufficient — See Figure 3.

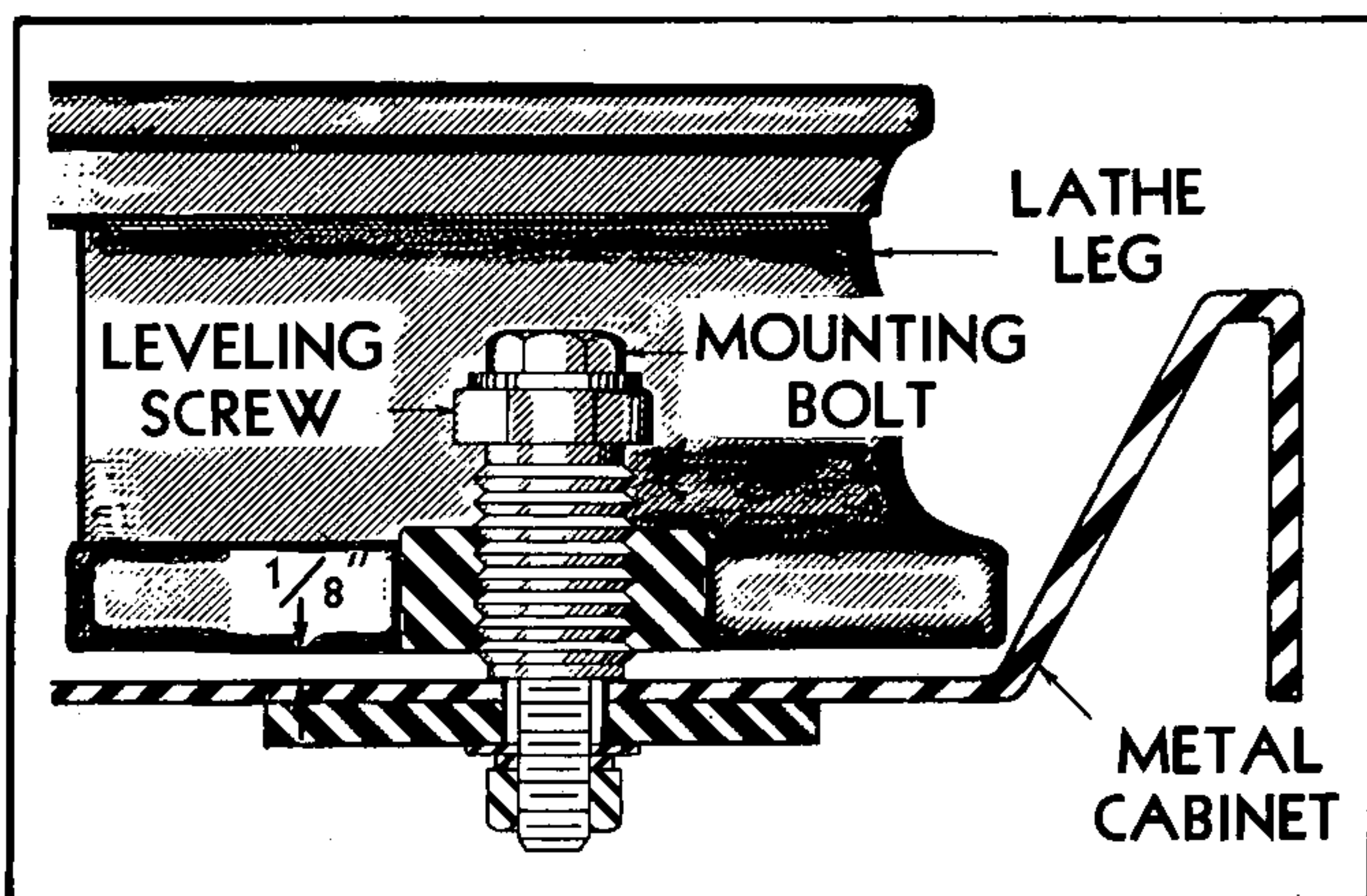


Fig. 3 The four leveling screws furnished with lathe will quickly and accurately level the lathe.

2. Use a precision machinists spirit level to level the lathe. A VERY SENSITIVE LEVEL SHOULD BE USED. Level should be at least 6" long and should show a distinct bubble movement when a .003" shim is placed under one end of level.

3. Lathe bed must be leveled longitudinally to within .002" per foot before leveling the ends. Place the level on the bed parallel with the ways near the center of the lathe.

4. Both ends of the lathe bed — the headstock end and the tailstock end — must be checked with the level placed at right angles to the lathe bed — see Figure 4. Use an accurate square to align the level. Place the level on top of the V-ways — about 3" in front of the headstock and in front of the tailstock.

Note: Clean bed ways thoroughly before leveling lathe — make sure level does not rest on burr or dent.

5. Level readings in both positions must be identical. Compensate variations of bubble readings by turning the leveling screws until lathe is level — see Figure 3.

6. Now tighten the four mounting bolts securely — see Figure 3.

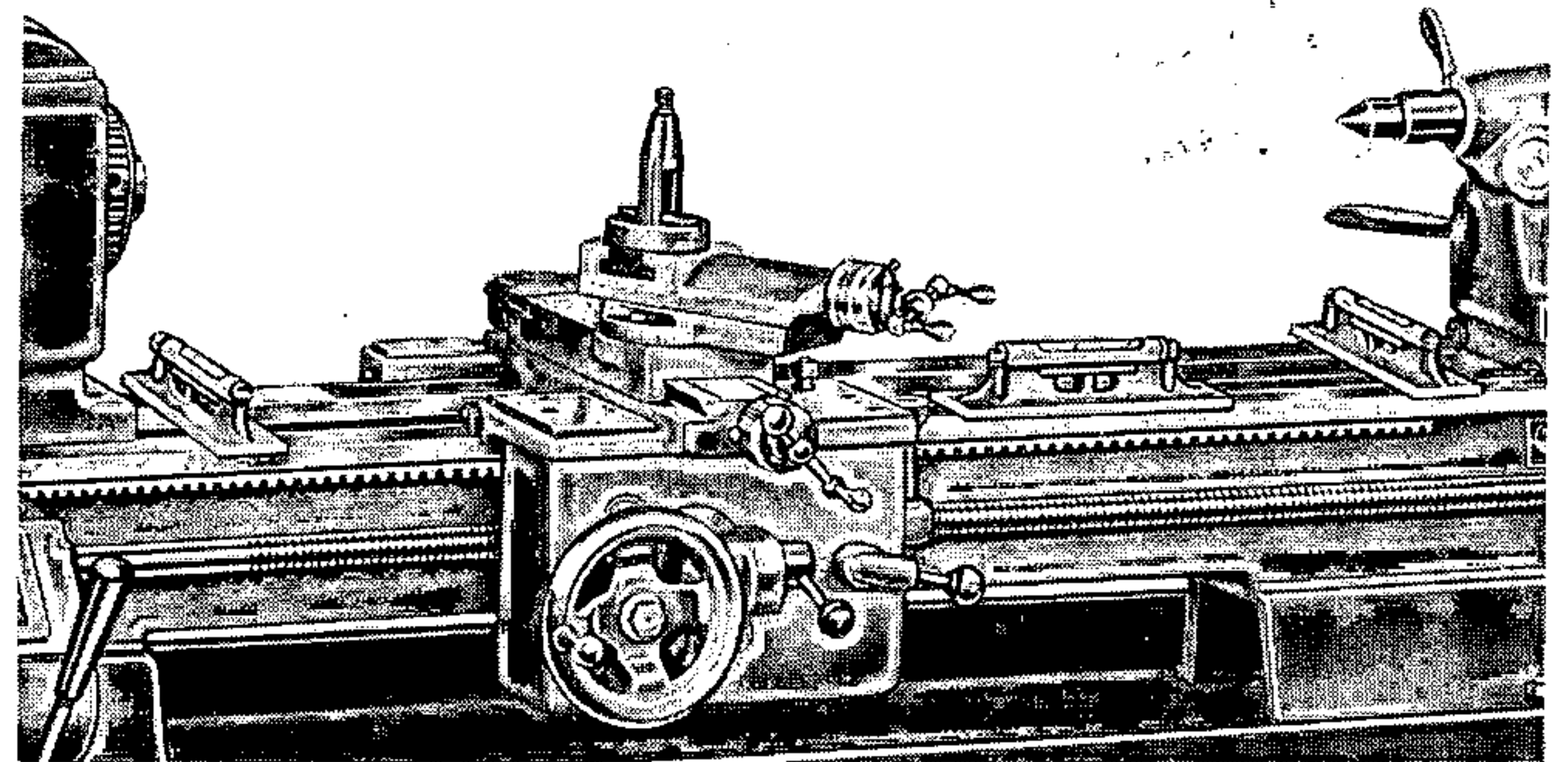


Fig. 4 Positions for checking the level reading on the lathe bed. (USE ONE LEVEL ONLY). Do not turn level end for end.

7. Again check the level of the lathe with the level. Tightening the bolts may have pulled the lathe bed out of level. If further adjustment is necessary, hold bolt head with wrench while adjusting leveling screws.

CHECK THE LEVEL OF THE LATHE AT FREQUENT INTERVALS to assure accurate turning. If the lathe is not properly leveled, it will twist the bed resulting in misalignment of the headstock and tailstock with the ways, causing lathe to chatter — turn taper — uneven wear — bore taper — face convex or concave — ruin spindle bearings and make carriage bind.

LATHE CHATTER

If your lathe should chatter, it might be due to any one of several causes.

1. Improper leveling; see LATHE LEVELING.
2. All four legs not resting solidly on the floor or on shims.
3. Work extending too far from chuck; change method of chucking or run end in steady rest.
4. Too great a distance between centers without support on slender shaft; use steady rest.
5. Inaccurately fitted chuck plate.
6. Bolts which hold chuck to chuck plate not tight.
7. End play in the spindle; adjust by means of the take up nut and collar on rear of spindle.
8. Cross slide not fitting the saddle tightly; adjust gib.
9. Compound rest gib loose; adjust.
10. Cutting edge of tool below center.
11. Dirt between one of the centers and its bushing.
12. Tool not securely clamped in tool post.
13. If using a tool holder, the set screw holding the inserted cutter should be tight.
14. Machine thrown out of balance by addition of special chucking fixtures by work of an irregular shape or weight, or by being speeded too high on some classes of work.

LUBRICATING

6300 CLAUSING LATHE

OILING THE LATHE

Use the lubrication chart furnished with the lathe as a guide for locating the oiling positions.

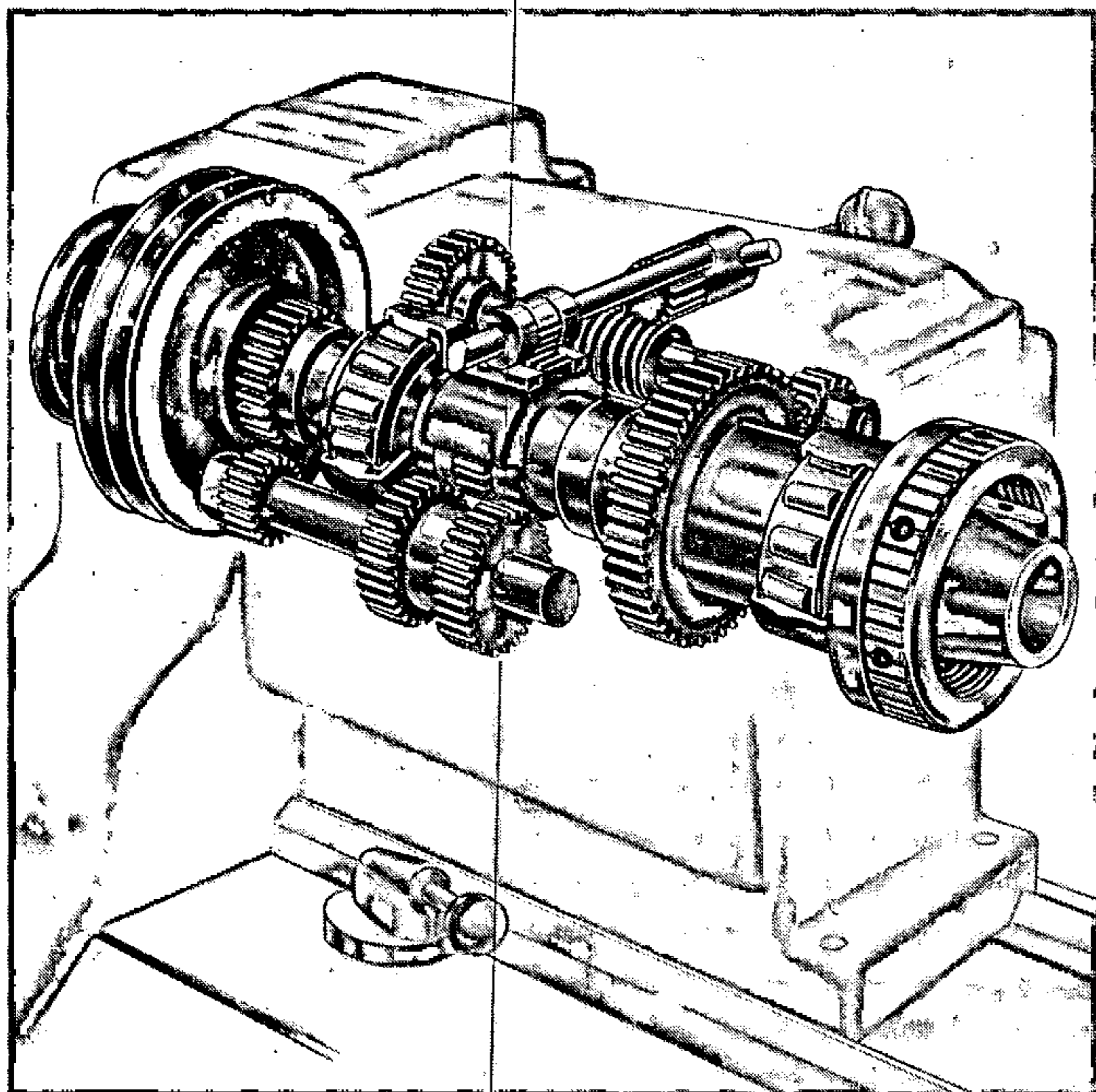


Fig. 5 The headstock is completely enclosed — all gears, shafts, bearings and spindle bearings travel in a pumped bath of oil.

HEADSTOCK — To fill oil reservoir, remove pipe plug in cover and use hole for supplying oil. Fill housing to level of indicator on front of headstock — use S.A.E. No. 20 machine oil. Maintain this oil level at all times. Replace pipe plug in headstock cover.

GEAR TRAIN — Fill the two elbow oil cups on the top rear of the headstock — between headstock and gear guard, with S.A.E. No. 20 machine oil. After that, a drop of oil is sufficient for each day of use. This lubricates the gear train bearings.

For each day of use put several drops of S.A.E. No. 20 machine oil in the oil cup at the top of the gear guard. This lubricates the gear faces of the gear train.

KEEP YOUR LATHE CLEAN — Oil and dirt form an abrasive compound which can easily damage carefully fitted bearing surfaces. Wipe the bed and all polished parts with a clean oily rag at frequent intervals. Use a brush to clean spindle, gear teeth, lead screw threads, etc.

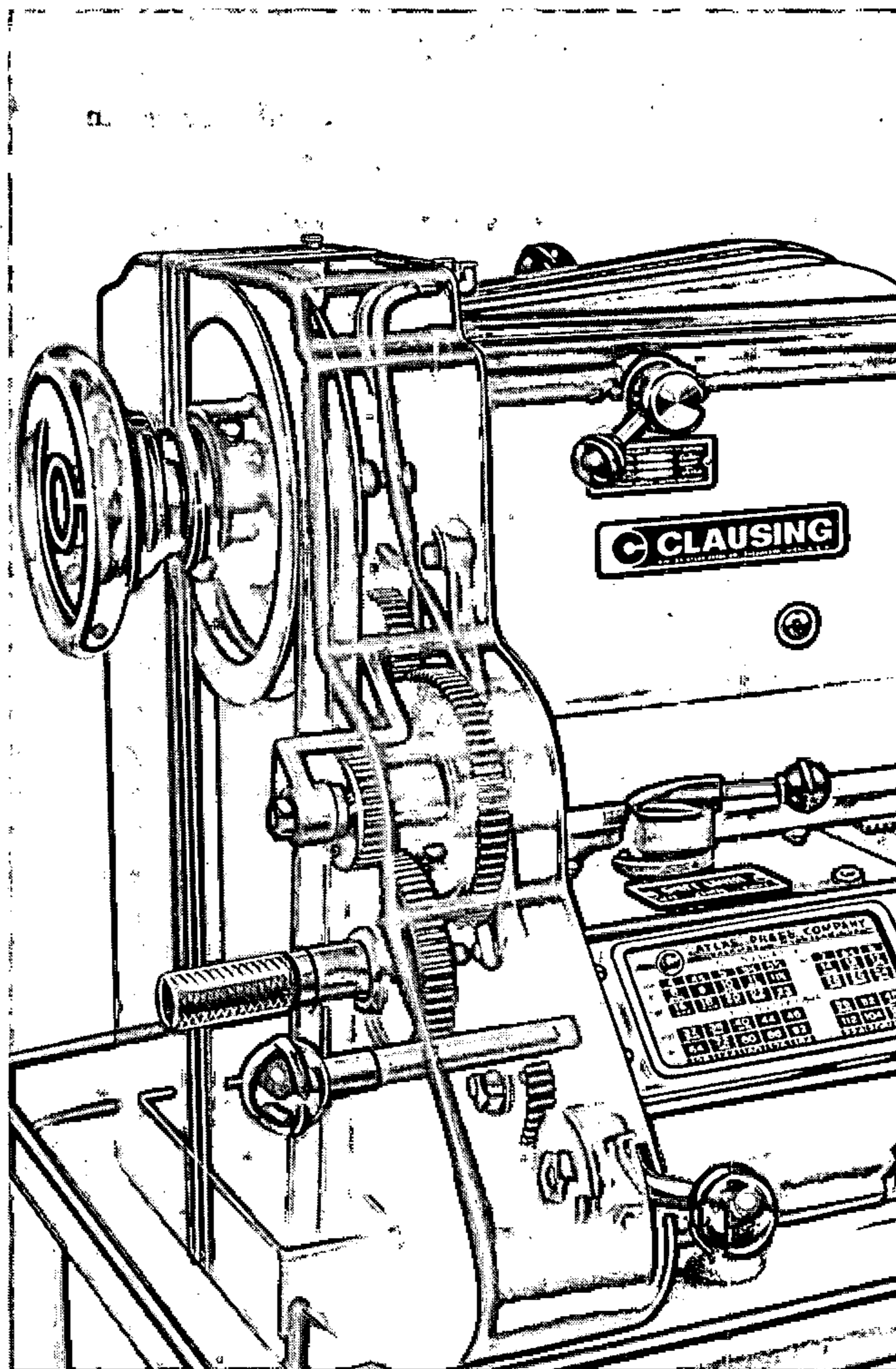


Fig. 6 Quick-change gears and shaft run in bath of oil.

GEAR BOX — To fill oil reservoir, remove pipe plug on top of gear box and use hole for supplying oil. Fill apron to level of indicator on side of gear housing — use S.A.E. No. 90 Hypoid gear lubricant. Maintain this oil level at all times. Replace pipe plug.

Occasionally place a few drops of S.A.E. No. 20 machine oil in each of the oil cups on top of the gear box to lubricate the bearings. The gear box ball bearings are protected and lubricated-for-life and do not require lubrication.

SPINDLE DRIVE PULLEY BEARING

— Fill the oil cup in the spindle drive pulley with S.A.E. No. 20 machine oil. After that a drop of oil is sufficient for each day of use. Access to the oiler is through the hole in the gear guard next to the hand-wheel.

INSTRUCTIONS

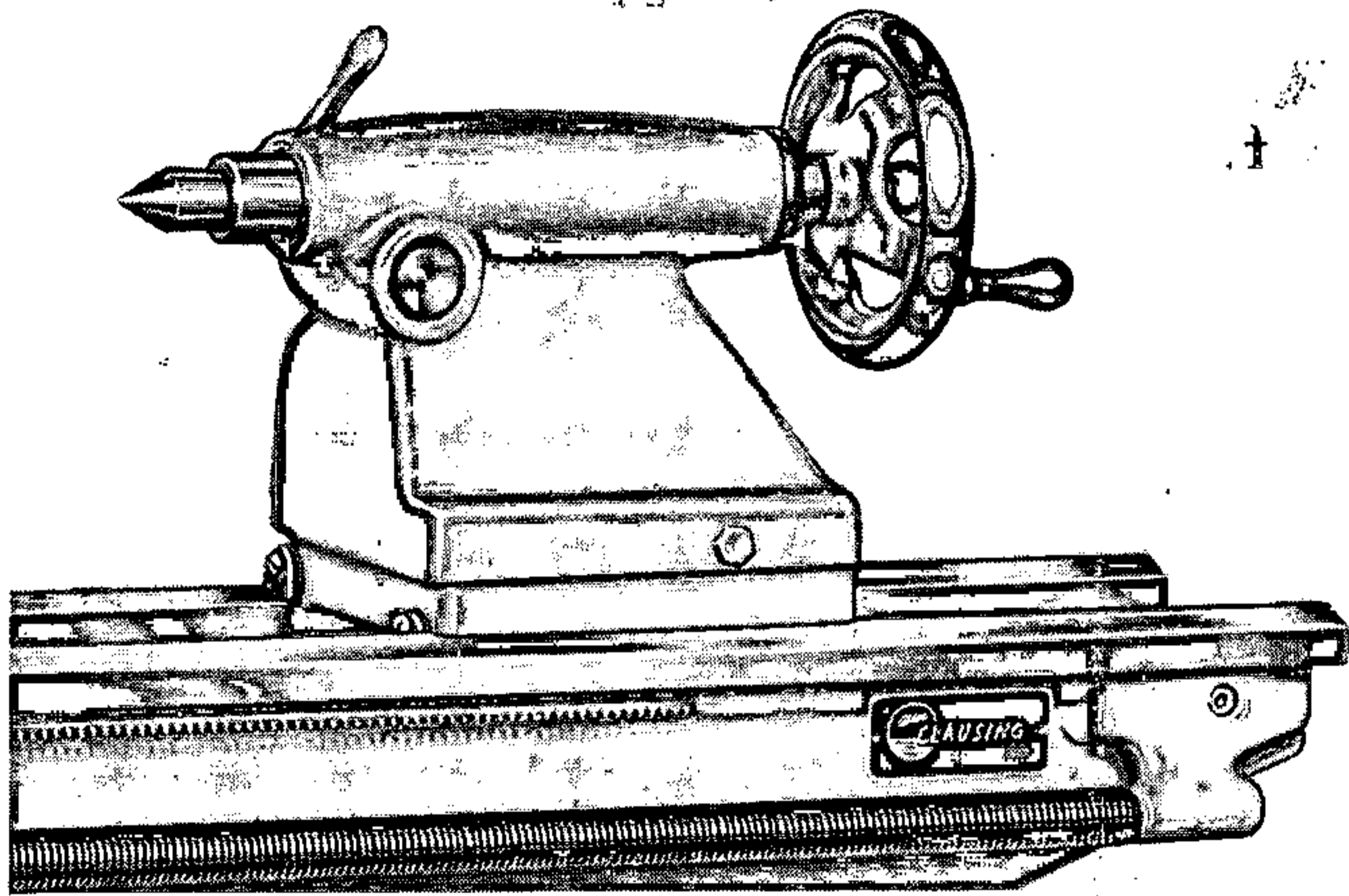


Fig. 7 Lubricate all moving parts at regular intervals.

TAILSTOCK — About once a month clean lead screw threads with kerosene and a brush, then cover with oil.

Regularly lubricate with S.A.E. No. 20 oil the right lead screw bearing, tailstock ram, and screw, felt wipers on tailstock, lead screw and lathe bed ways.

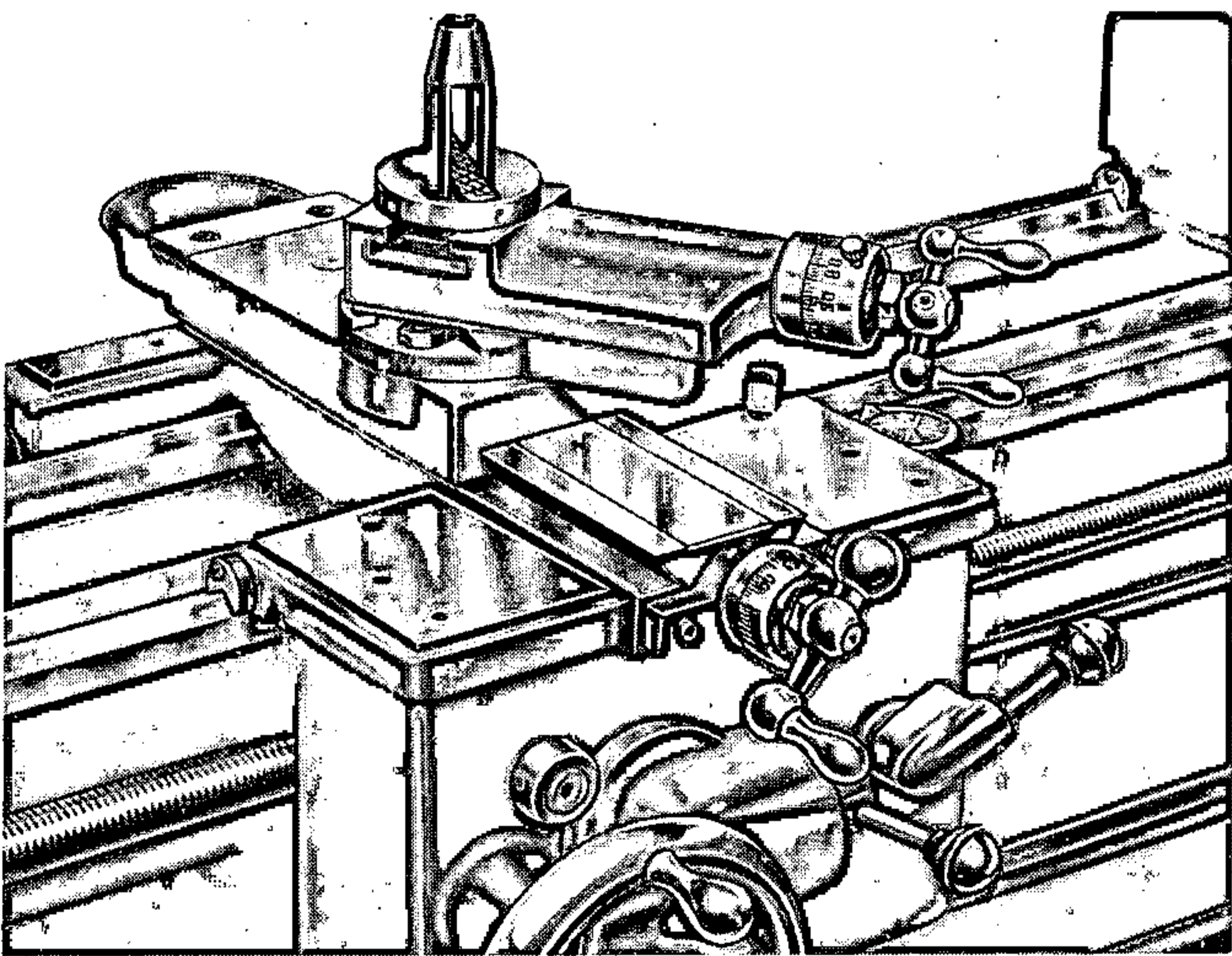


Fig. 8 Apron gears and shafts run in bath of oil.

CARRIAGE — To fill oil reservoir in apron, remove pipe plug on side of apron and use hole for supplying oil. Fill apron to level indicator on side of apron — use S.A.E. No. 90 Hypoid gear lubricant. Maintain this oil level at all times. Replace pipe plug. Regularly lubricate with S.A.E. No. 20 oil the carriage handwheel shaft, carriage and compound dovetail ways, felt wipers on carriage saddle, and rim of threading dial.

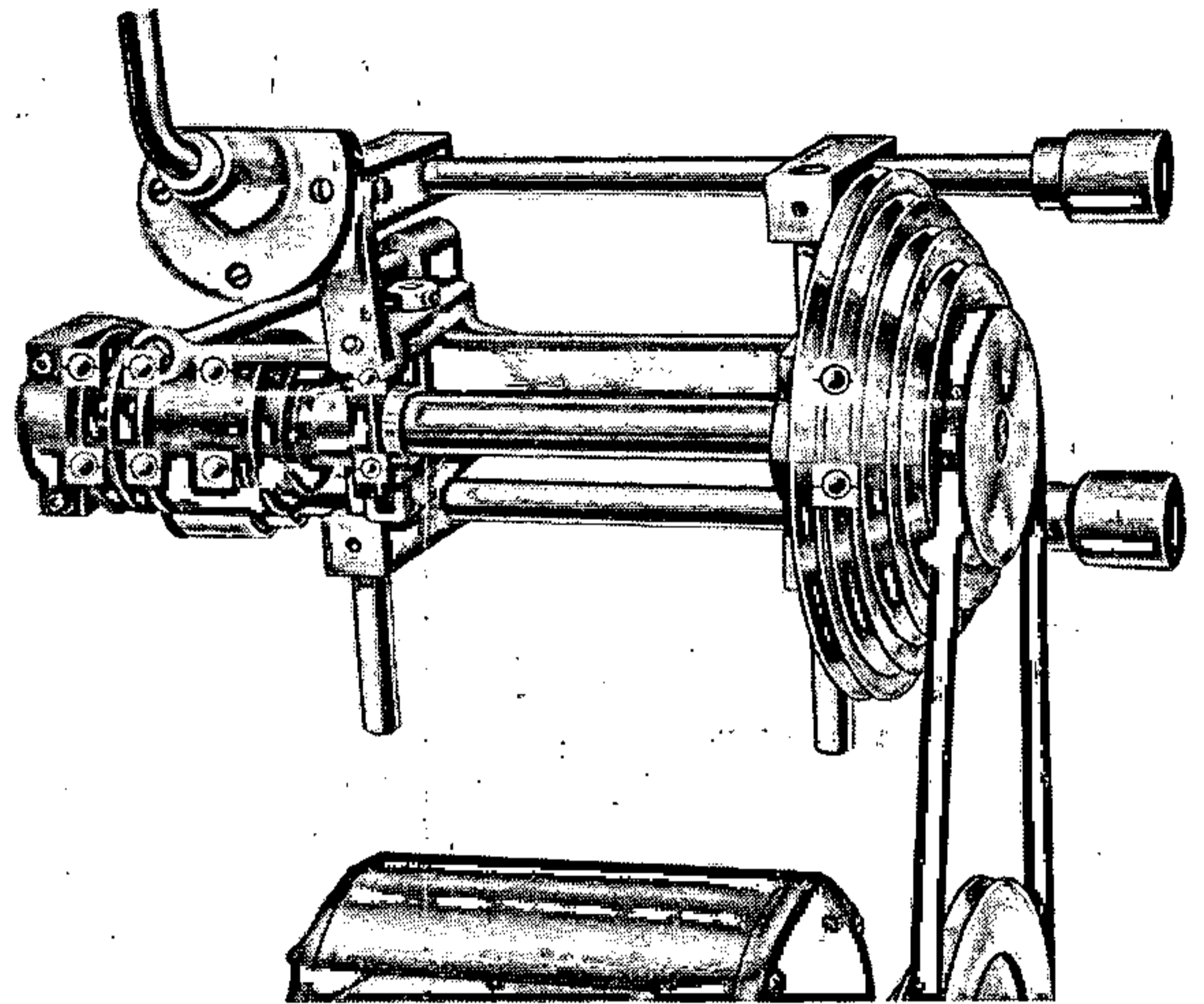


Fig. 9 The countershaft ball bearings are protected and lubricated-for-life and do not require lubrication.

COUNTERSHAFT WITH CLUTCH AND BRAKE — Regularly lubricate the clutch handle operating shafts with S.A.E. No. 20 oil.

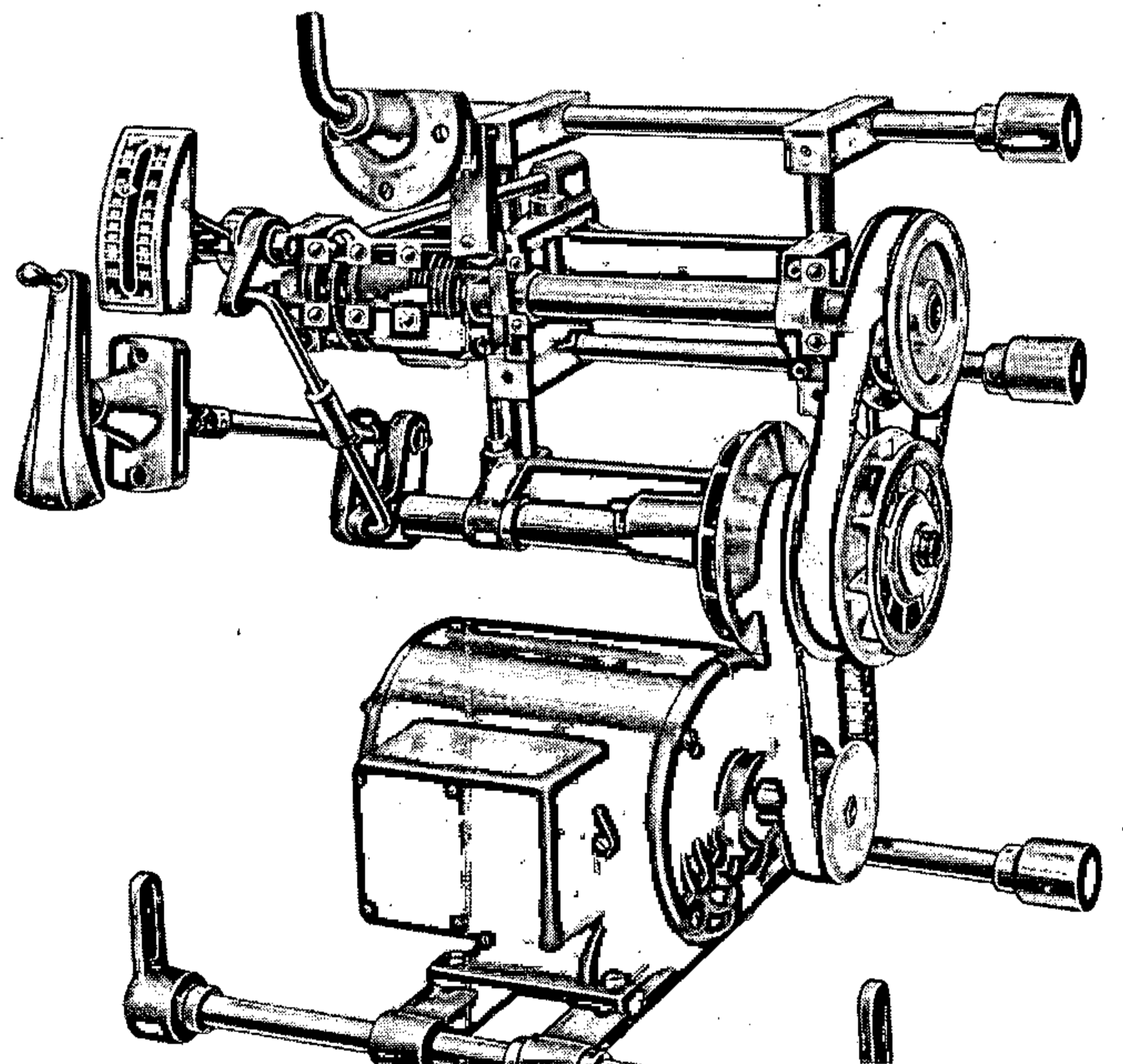


Fig. 10 Regularly lubricate handwheel shaft and screw with S.A.E. No. 20 oil.

VARIABLE SPEED DRIVE — The variable speed pulley requires only a few drops of S.A.E. No. 20 oil for every forty hours use — *do not over lubricate!* Excess oil may end up on the belts causing slippage and early belt failure.

CONTROLS AND

6300 CLAUSING LATHE

DO NOT OPERATE THE LATHE — until you are thoroughly familiar with all the controls and their functions (read carefully the instructions). Then operate the lathe in back gear — get the “feel” of the controls — set up different threads and feeds — engage the power feeds — get acquainted with the lathe before you start a job — it will save time and produce better work.

SPINDLE DRIVE

FOR DIRECT DRIVE — Move back-gear lever to the left. Then engage the spindle clutch wheel with the drive pulley by sliding it *toward* headstock, and rotating wheel if necessary.

FOR BACK GEAR DRIVE — Disengage spindle clutch wheel from driver pulley by sliding wheel in direction *away* from headstock. Next, move back gear lever to the right. Rotate spindle if gears will not mesh.

CAUTION — Always stop motor before changing from one drive to the other.

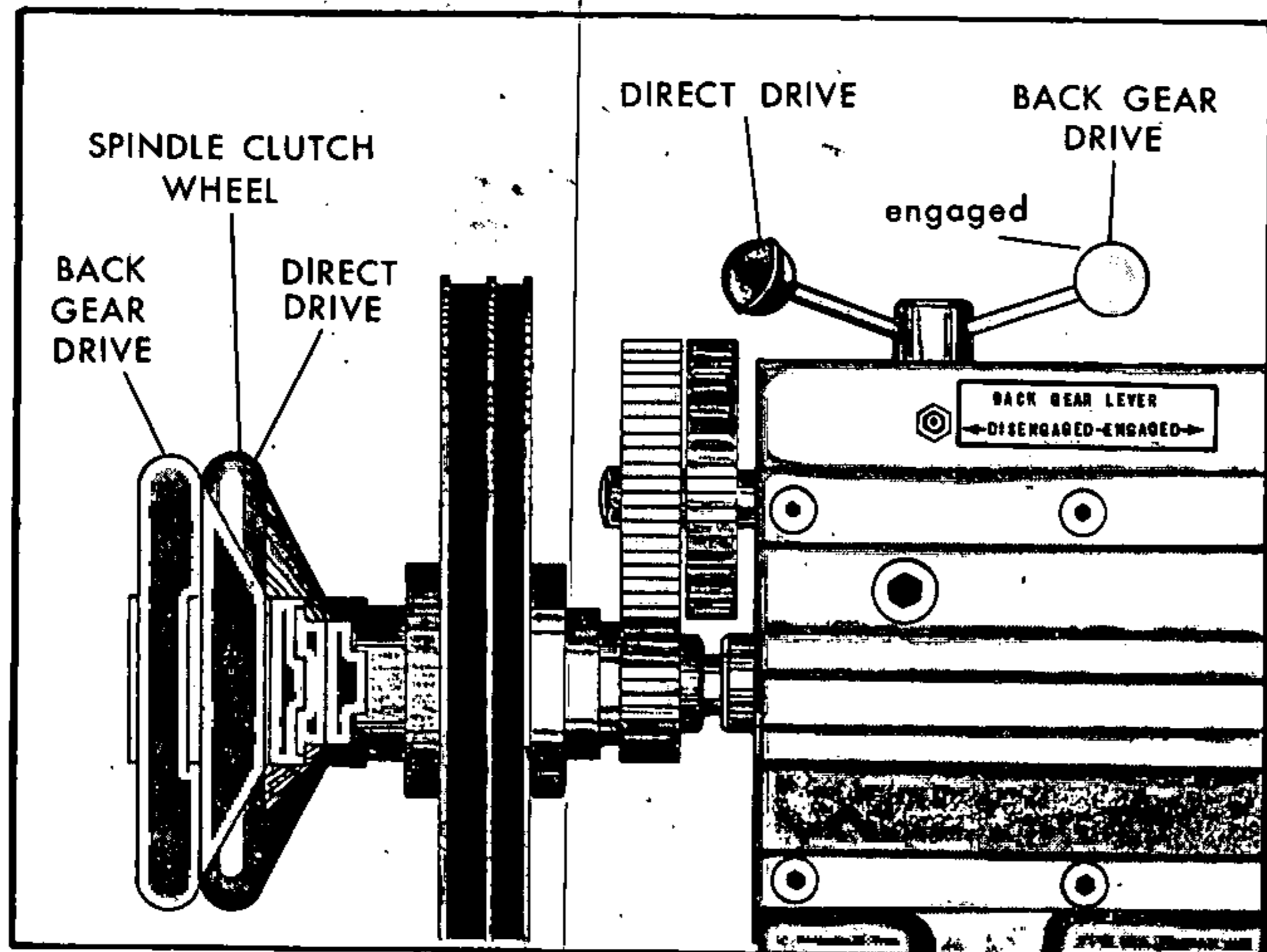


Fig.11. Positions of back gear lever and clutch wheel for spindle drive in back gear or in direct drive.

VARIABLE SPEED DRIVE

IMPORTANT

Loosen the two 5/16 set screws in motor base. Remove wood block underneath base allowing base to drop down to correct belt tension with motor running.

Then tighten the set screws. When first started, belts may whip on the variable, but will generally steady after an hour's running.

Handwheel control for instant speed changes is located on front of cabinet. Provides speeds between 43 and 222 RPM in back gear drive, and 250 to 1300 RPM in open drive, as shown on speed chart located next to control wheel.

CAUTION: DO NOT

1. Turn control wheel unless motor is running.
2. Tension belts too tight.
3. Allow belt slippage.

Failure to observe these precautions will result in burned and stretched belts or flat spots on the belts that will cause vibration.

For belt adjustment, see service section, page 10.

TEN SPEED DRIVE

IMPORTANT

Remove wooden block underneath motor base allowing base to drop down to correct belt tension, and lower belt tension lever.

Countershaft has friction clutch and brake for instant starting and stopping of the spindle without stopping the motor. Moving clutch lever to left engages spindle drive — to the right disengages it. Moving lever to extreme right tightens the brake shoe stopping the spindle.

CHANGING SPEEDS — Raise belt tension lever to loosen belts from the pulleys — lever is accessible through cabinet door. Shift belt to position desired and then lower lever to tension belt. The chart, Figure 12, lists the speeds available and how they are obtained. For clutch belt adjustment, see service section, page 10.

OPERATING INSTRUCTIONS

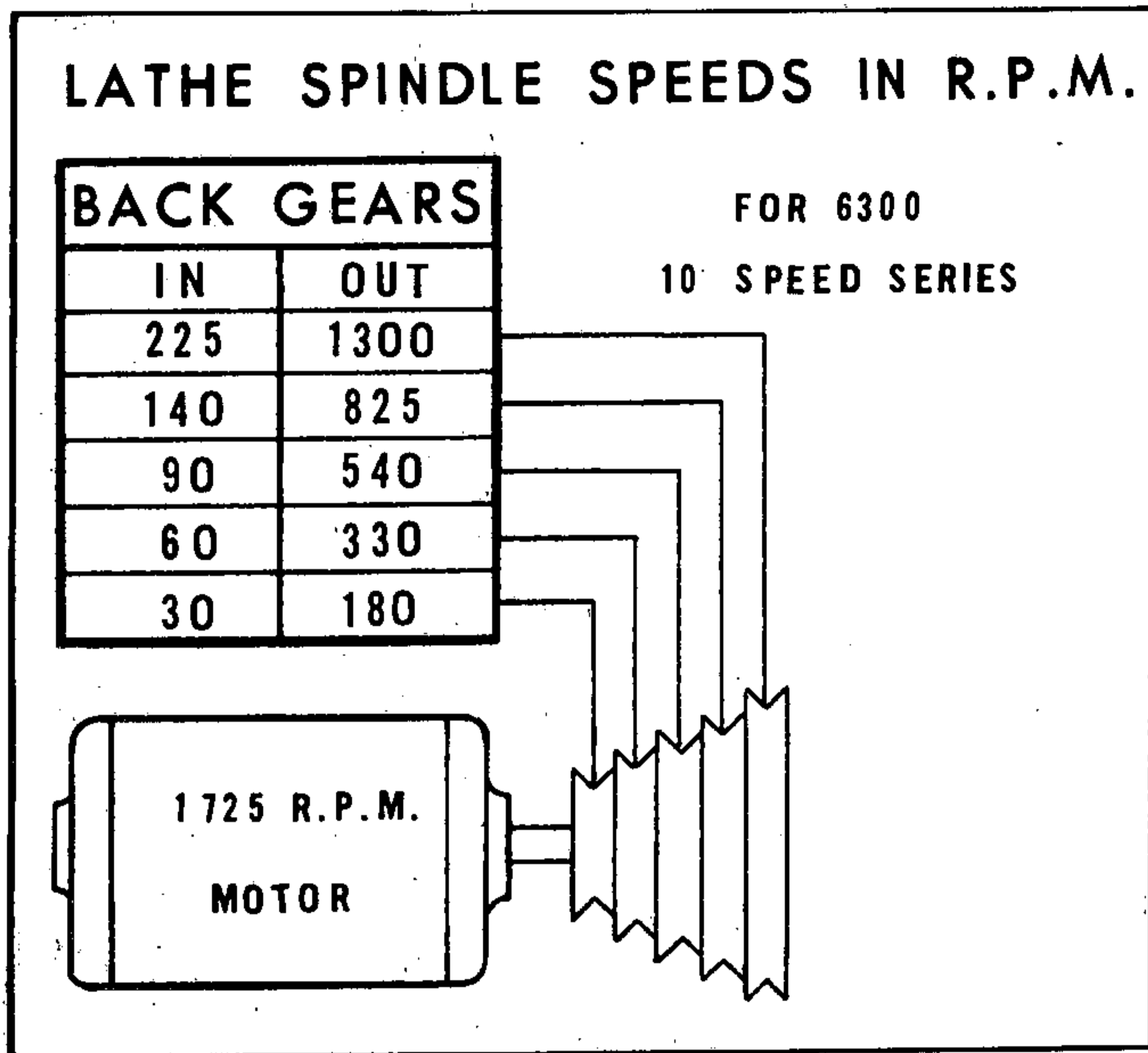


Fig. 12. Spindle speeds.

FEED REVERSE LEVER

The feed reverse lever or lead screw direction lever is located on the front face of the headstock — see Figure 13. Moving this lever to the right or left reverses rotation of the lead screw. Vertical position of lever is neutral and disengages gear train. This lever should not be moved while lathe is operating at high speeds — it may strip the gears or result in serious damage to the lathe. It is possible to quickly reverse lead screw at lower speeds if desired.

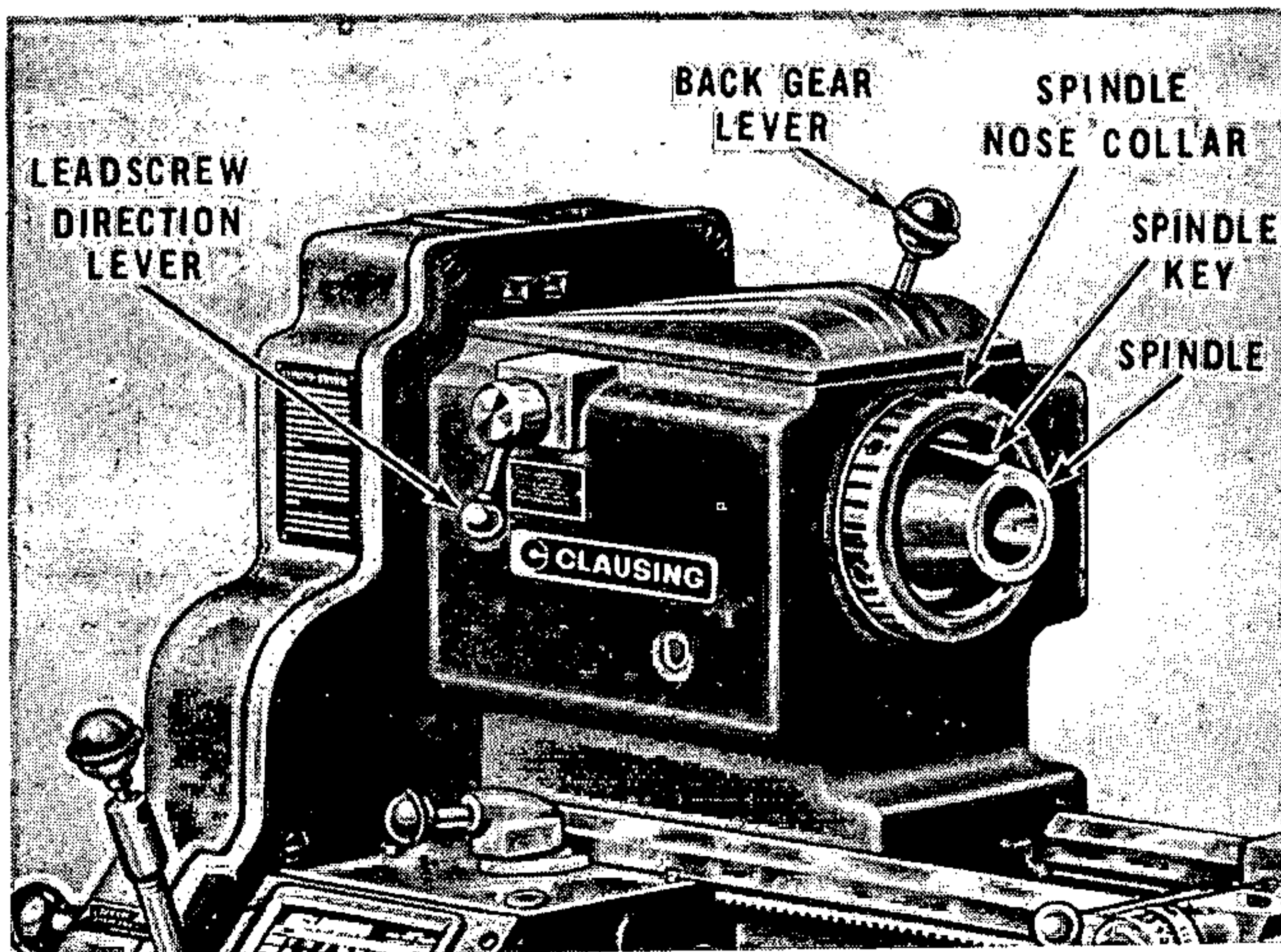


Fig. 13. Lathe headstock showing location of lead screw direction lever.

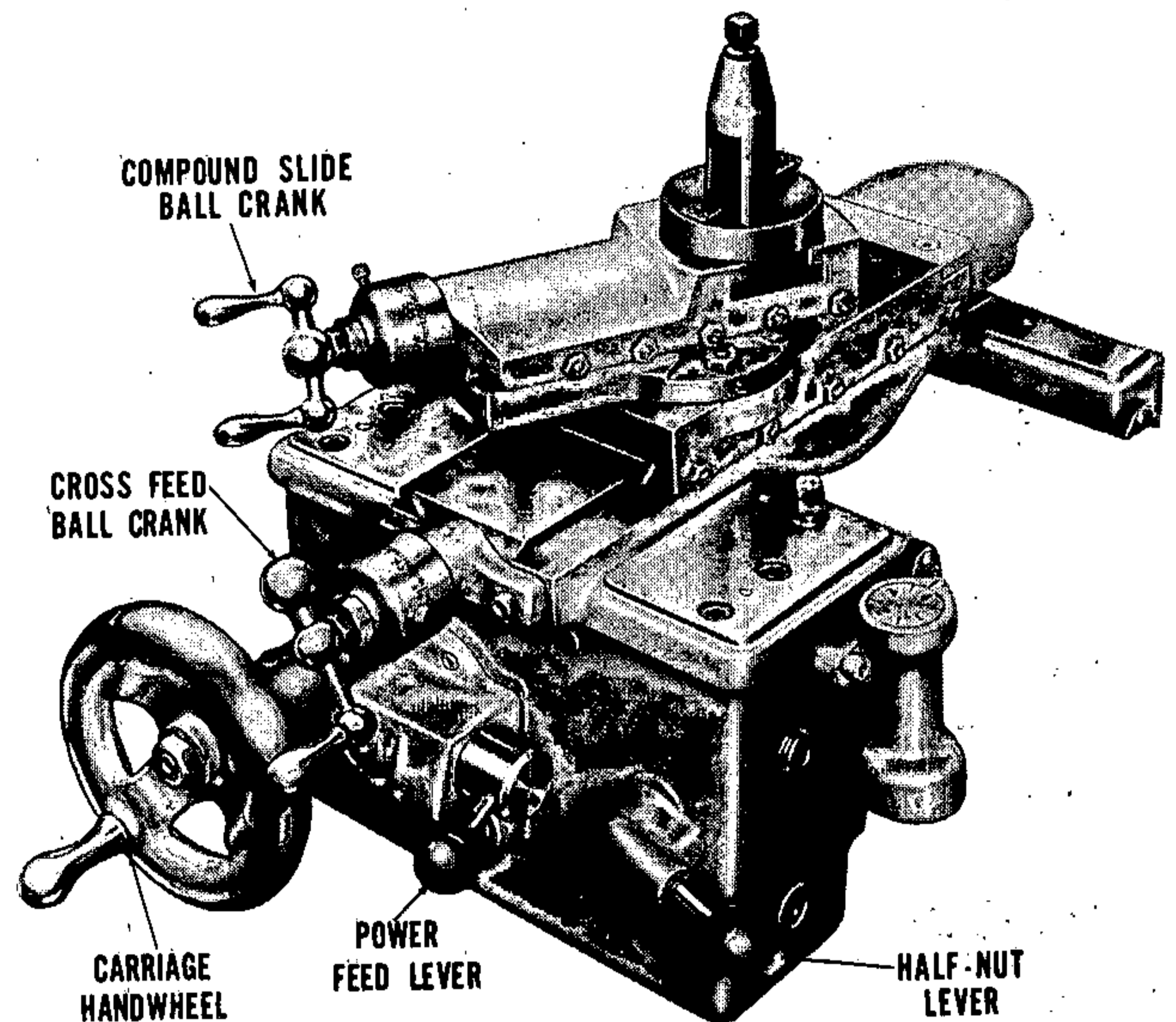


Fig. 14. Controls on the lathe carriage.

AUTOMATIC APRON

Figure 14 gives the names and positions of the carriage controls. The carriage handwheel moves the carriage along the lathe bed. The cross feed and compound slide ball cranks move the carriage slide and tool rest in and out.

IMPORTANT — Use the half-nut lever for threading only — never for feeds. It will prolong the life of the lead screw, and preserve its accuracy for threading operations.

The carriage lock screw is used to lock the carriage to the bed — use it for facing or cut-off operations only.

The power feed lever controls the operation of both power longitudinal and power cross feeds — the half-nut lever engages the half-nuts with the lead screw. When one of these levers is engaged, the other is locked and cannot be moved — DO NOT FORCE. The positions of the levers to obtain a thread or feed are illustrated in Figures 16, 17 and 18. The direction of feed is controlled by the reverse lever on front of headstock — see Figure 13.

(Continued on Next Page)

CONTROLS AND OPERATING

SELECTION OF THREADS AND FEEDS

STUDY THE CHART ON THE GEAR BOX — IT LISTS THE THREADS AND FEEDS AVAILABLE AND INDICATES THE POSITION OF THE CONTROLS FOR THREAD OR FEED DESIRED. FIGURE 15. ILLUSTRATES AND NAMES THESE CONTROLS.

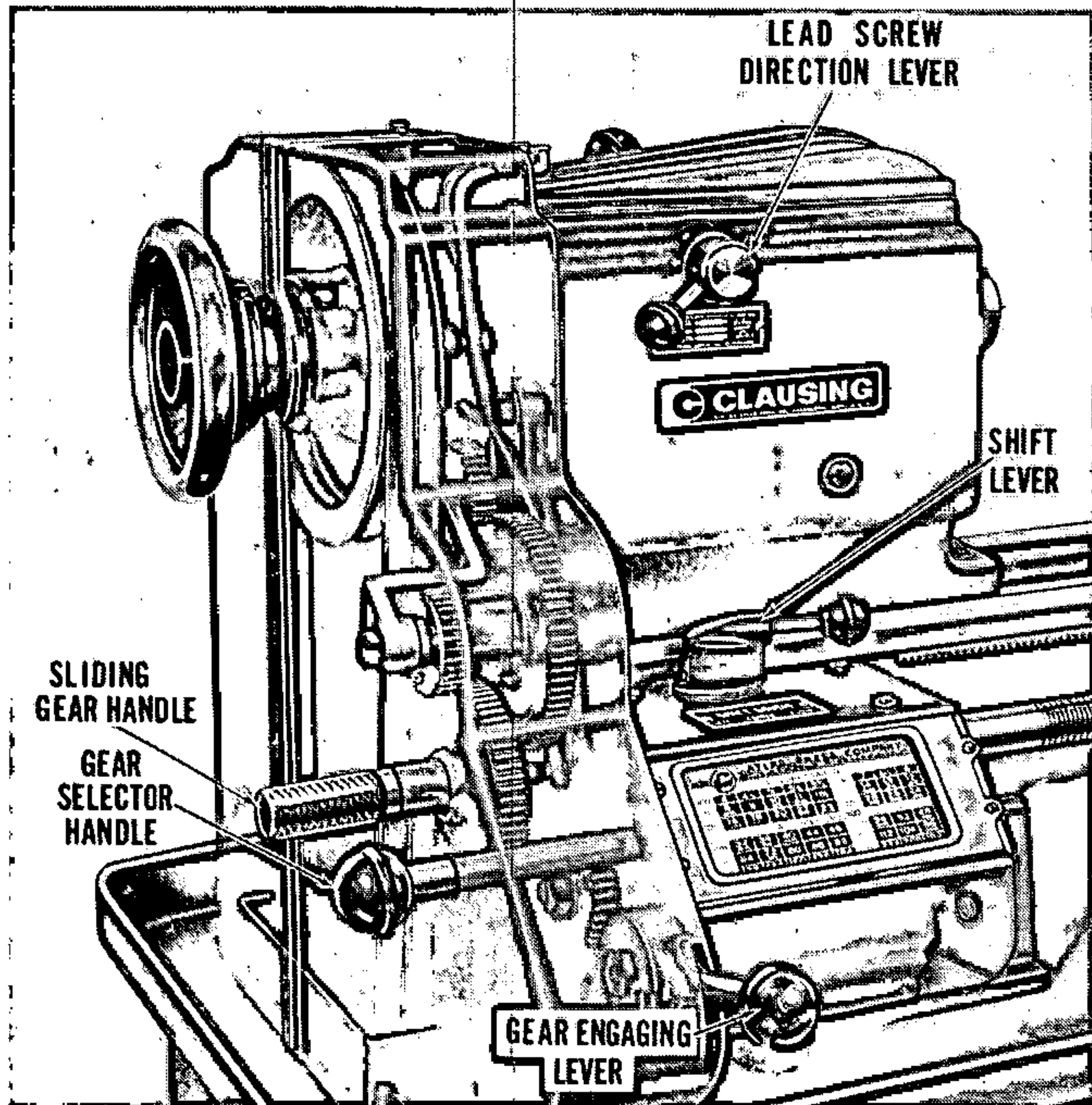


Figure 15. Shows the name and location of controls used to obtain a thread or feed.

NOTE: The gear chart shows only the carriage longitudinal feeds that are commonly used. Many other feeds can be obtained — these are shown in the table, Figure 19, along with the cross feeds available. To obtain one of these longitudinal or cross feeds, set up the lathe gear box for the equivalent thread as shown in the table. **FOR EXAMPLE** — To obtain a carriage longitudinal feed of .0033", set up the controls to cut 44 threads.

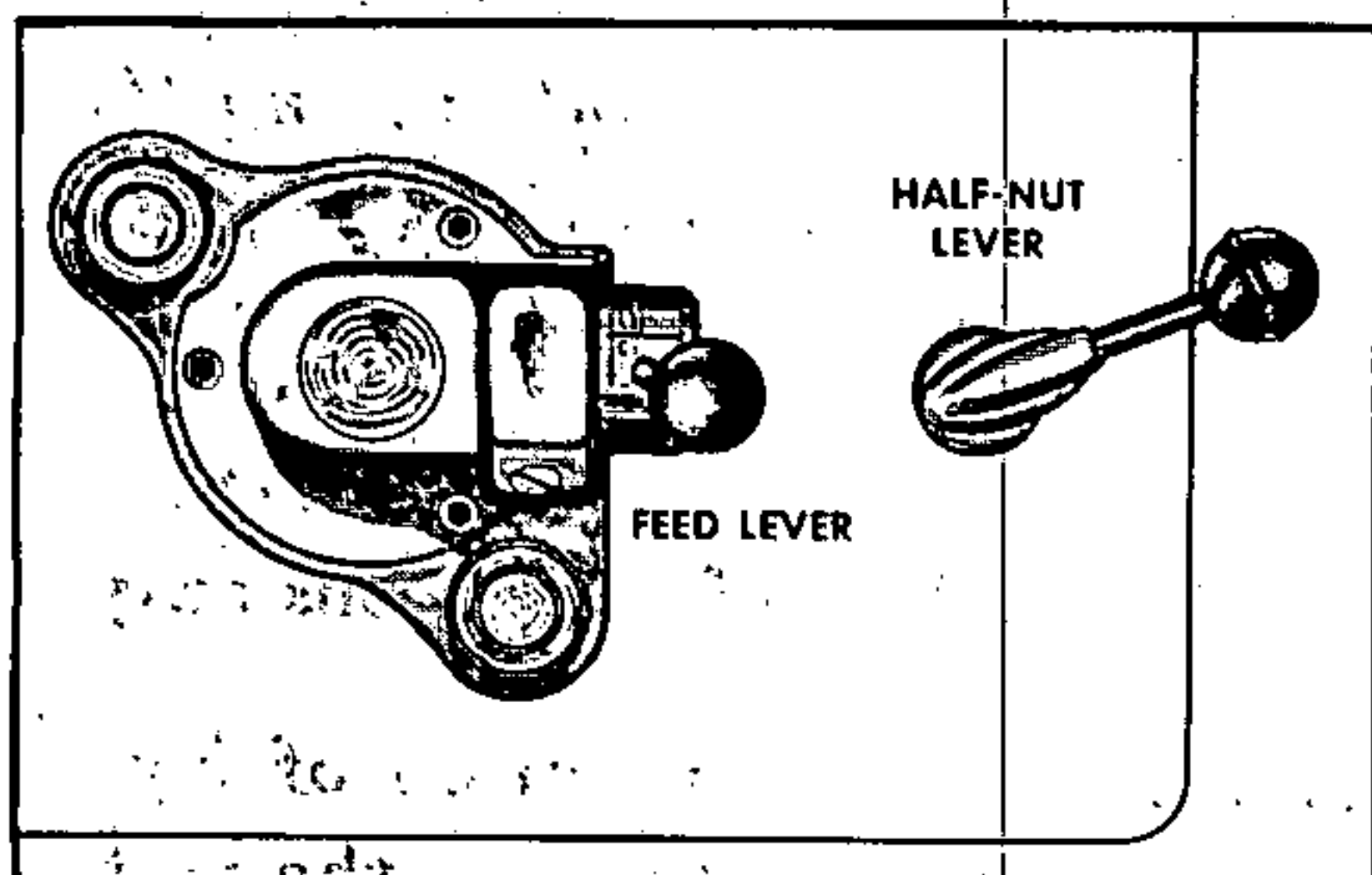


FIG. 16 THREADING

Place feed lever at the horizontal position. Shift half-nut lever upwards to engage half-nuts with lead screw. Use the half-nuts for threading only — never for feeds.

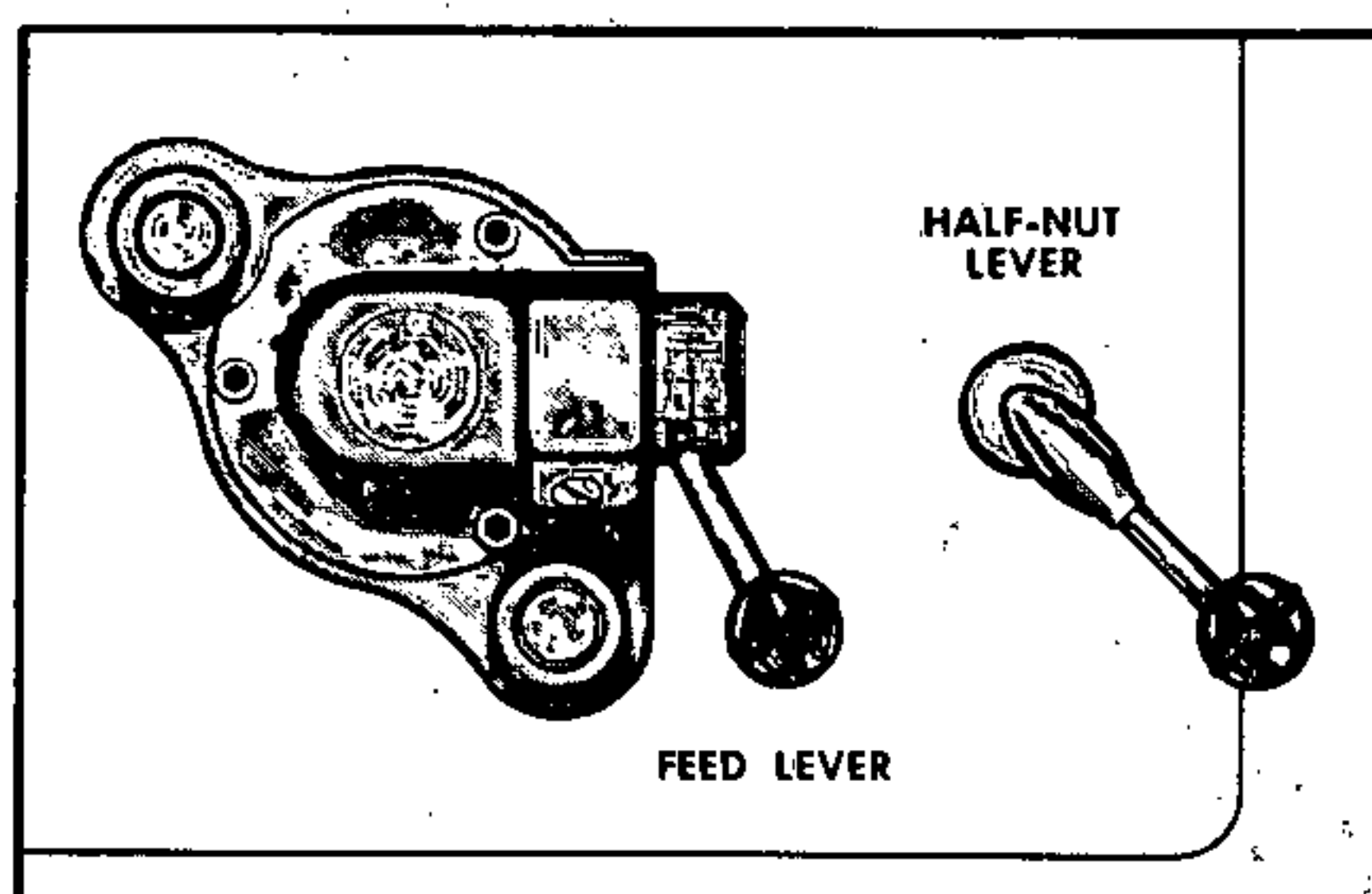


FIG. 17 POWER CROSS FEED

To engage power cross feed, place half-nut lever in the down position — the feed handle cannot be moved until half-nut lever is in this position. Move feed handle downward to the vertical position.

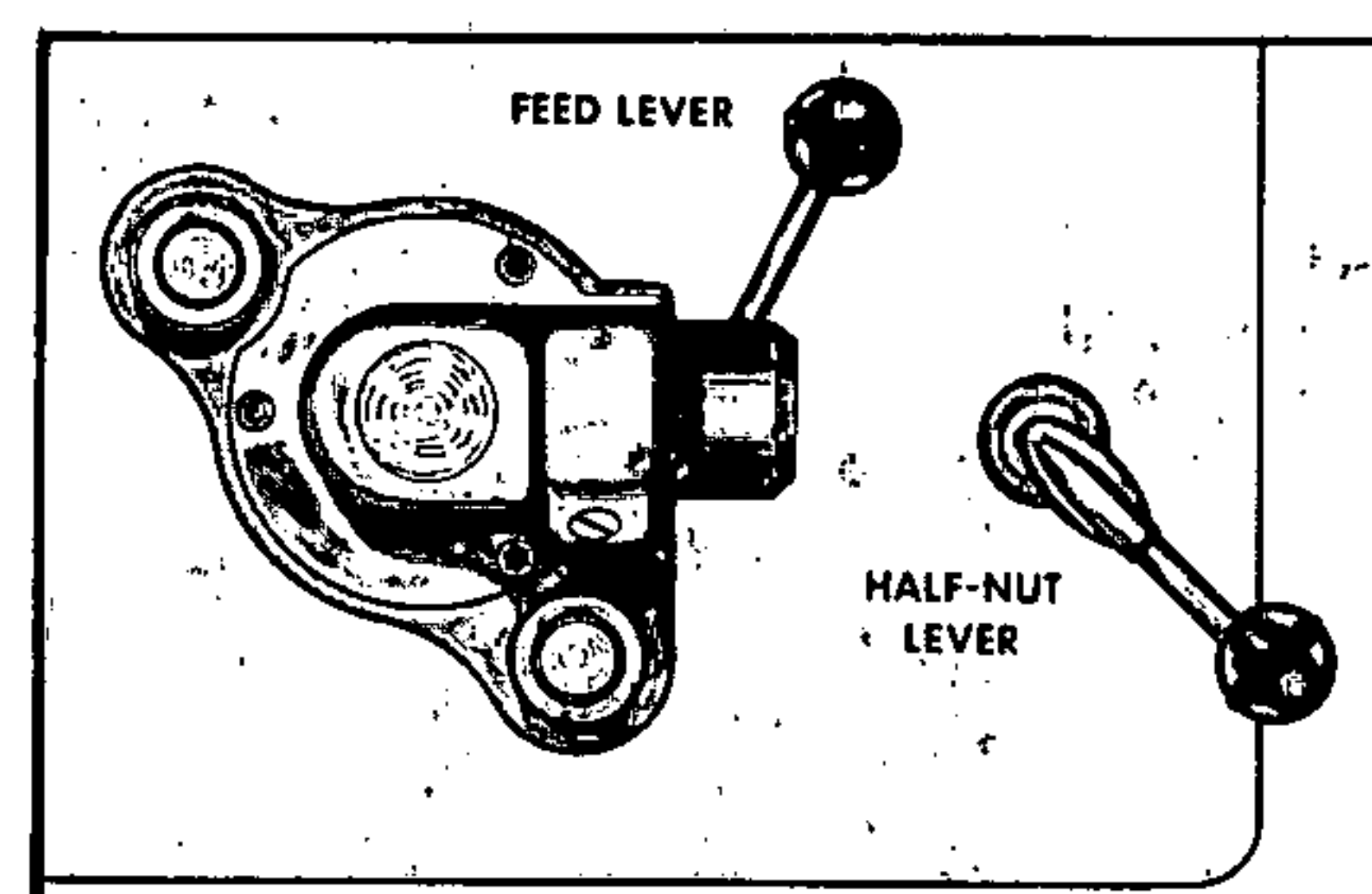


FIG. 18 LONGITUDINAL FEED

To engage longitudinal feed, first make sure half-nut lever is in the down position. Shift feed lever sideways to the right about 1/4", and then upwards to the vertical position.

SEQUENCE OF ENGAGING CONTROLS FOR THREAD OR FEED

IMPORTANT — Before setting up a thread or feed make certain the carriage feed controls are not engaged.

1. Disengage the carriage feed controls.
2. Pull out gear engaging lever knob and move lever up as far as it will go. (When this lever is in its lowest position the stack gears are locked in mesh and the gear selection handle cannot be moved.)
3. Next, slide gear selector handle until red marker on gear chart is framed in the position of the thread or feed desired.
4. Move sliding gear handle "in" or "out" as indicated on chart for thread or feed required.
5. Shift lead screw direction lever to obtain the direction of carriage travel desired.
6. To make sure gears will engage, first start motor and then move gear engaging lever down as far as it will go — until it locks in position.
7. Next, check the chart for the position of the shift lever. There are three positions — center, left and right. Shift the lever to position indicated on chart. Make sure lever is properly indexed. (It may take a few seconds for the dog gears to engage if lathe is in back gear or turning slowly.) Lathe is now ready to cut the thread or feed.

The threading dial is used in thread cutting and indicates the proper time to engage the half-nut lever so that the cutting tool will enter the same groove of the thread for each cut.

When cutting even numbered threads engage the half-nut lever at any one of the markings on the threading dial for each cut of the thread. When cutting odd numbered threads, engage the half-nut lever for the first cut and all successive cuts at either the 1 or 2 positions on the dial.

INSTRUCTIONS--CONTINUED

When cutting half-numbered threads, engage the half-nut lever at the same mark on the threading dial for each cut of the thread.

CARRIAGE FEED CHART

Thds. Per Inch	Carriage Long Feed	Cross Feed	Thds. Per Inch	Carriage Long Feed	Cross Feed
4	.0367	.00917	32	.0046	.0011
4.5	.0326	.0081	36	.0041	.0010
5	.0293	.0073	40	.0036	.0009
5.5	.0267	.0066	44	.0033	.0008
5.75	.0255	.0063	46	.0031	.00079
6	.0244	.0061	48	.0030	.00076
6.5	.0226	.0056	52	.0028	.00070
6.75	.0218	.0054	54	.0027	.00068
7	.0209	.0052	56	.0026	.00065
8	.0183	.0045	64	.0022	.00057
9	.0163	.0040	72	.0020	.00052
10	.0147	.0036	80	.0018	.00045
11	.0134	.0033	88	.0017	.00041
11.5	.0127	.0032	92	.0016	.00039
12	.0122	.0030	96	.0015	.00038
13	.0113	.0028	104	.0014	.00035
13.5	.0109	.0027	108	.00136	.00034
14	.0105	.0026	112	.0013	.000325
16	.0092	.0023	128	.0011	.00027
18	.0081	.0020	144	.00094	.000235
20	.0073	.0018	160	.00092	.000225
22	.0066	.00166	176	.00083	.00020
23	.0063	.00159	184	.00079	.000197
24	.0061	.00152	192	.00076	.000190
26	.0056	.0014	208	.00070	.000175
27	.0054	.00136	216	.00068	.00017
28	.0052	.0013	224	.00065	.00016

Fig. 19. Chart listing available threads per inch with equivalent carriage longitudinal and power cross feeds.

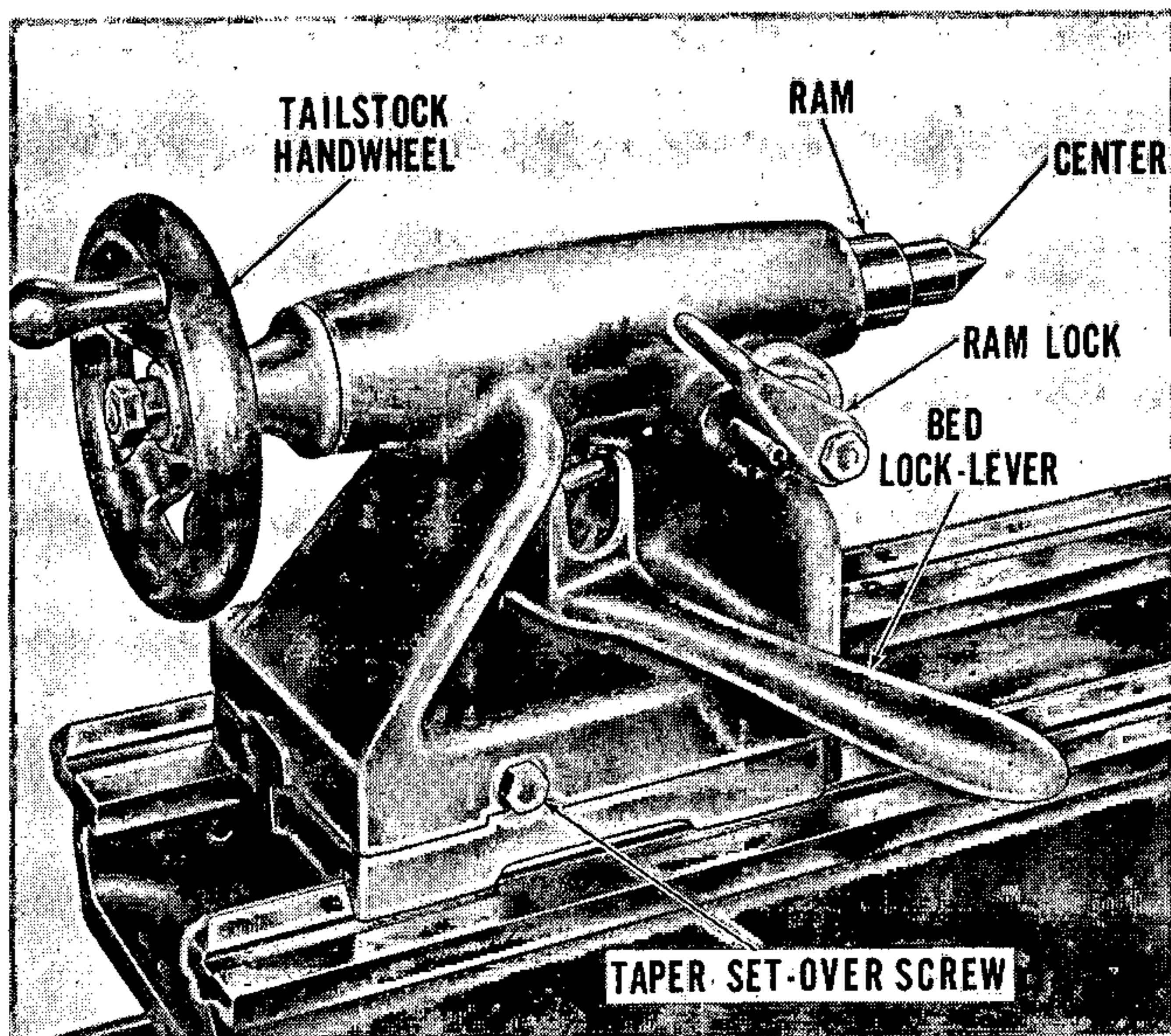


Fig. 20. Controls on lathe tailstock.

TAILSTOCK is securely locked to the bed with the lever-controlled bed lock located on the rear of the tailstock. Graduations on the ram simplify accurate boring and drilling. Ram is locked in place with the lock handle located on top of the tailstock. Before inserting the center in the tailstock ram, clean both tapers thoroughly with a dry cloth.

Tailstock can be set over 1" for taper turning by first loosening the bed clamp and then adjusting the screws on front and back of tailstock base.

MOUNTING CHUCKS AND FACE PLATES

To install a chuck or face plate — first make certain there are no chips or dirt on the tapered nose or in the threads of the spindle nose collar. Chips and dirt may score the spindle nose, preventing accurate fitting.

Rotate spindle until key is up — it's easier to line up key with key way in chuck or spindle. Lock spindle by placing back gear lever in the back gear drive (engaged) position and the handwheel in the direct drive position. Then mount chuck or face plate on spindle nose, lock in position by screwing on the spindle nose collar. Unlock spindle.

DO NOT TURN ON POWER WITH THE SPINDLE LOCKED.

TO REMOVE CHUCK OR FACE PLATE

To remove face plate or chuck — first lock spindle by placing back-gear lever in the back gear drive (engaged) position and the handwheel in the direct drive position. Place the spindle nose collar spanner wrench in one of the six holes on the collar and turn in a clockwise direction until the collar is off the face plate or chuck. Carefully remove chuck or face plate so as not to damage spindle. Unlock spindle.

CAUTION — Do not turn power on with the spindle locked — never remove chuck or face plate while lathe is running.

KEEP YOUR LATHE CLEAN

Oil and dirt form an abrasive compound which can easily damage carefully fitted bearing surfaces. Wipe the bed and all polished parts with a clean oily rag at frequent intervals. Use a brush to clean spindle threads, gear teeth, lead screw threads, etc.

SERVICE AND BELT ADJUSTMENTS

ADJUSTING CLUTCH —

Adjusting Clutch — if the countershaft clutch slips when spindle drive is engaged, adjust as follows:

First loosen the lock screw in the adjusting ring. Then turn the adjusting ring clockwise just enough to prevent slippage. Do Not adjust too tightly — spindle drive will not disengage when clutch lever is moved to the left if ring is turned too tight. Retighten lock screw.

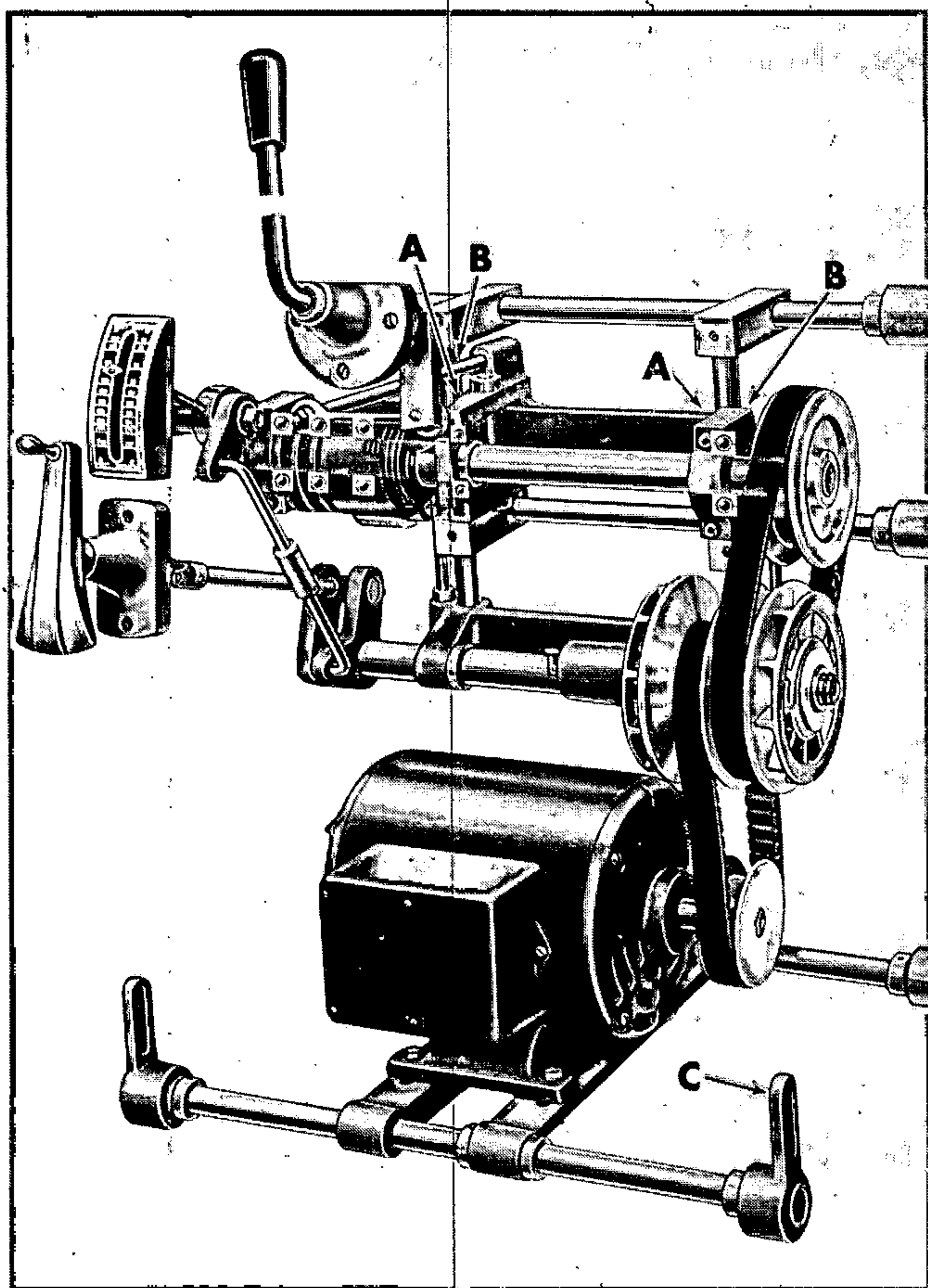


Figure 21 — Variable speed drive.

ADJUSTING SPINDLE BELT

The spindle drive belts may be adjusted by loosening the two screws in the countershaft bracket (A, fig. 21) and turning the jack screws in the cross ties (B) accessible thru rear panel of cabinet.

Adjusting motor belts — loosen cap screws holding front cross bar brackets (C) to adjust motor and motor base assembly — do this with the motor running. Allow motor weight to properly tension belts. Retighten the screws securely. Variable drive belts are properly tensioned if their tops are slightly convex, as they ride in the pulleys.

The motor must be carefully set to insure proper alignment of the pulleys and belts. The stops should not be moved to change speed range, as that would allow the belt to bottom on the variable hub, causing the variable to overheat with consequent damage to entire unit.

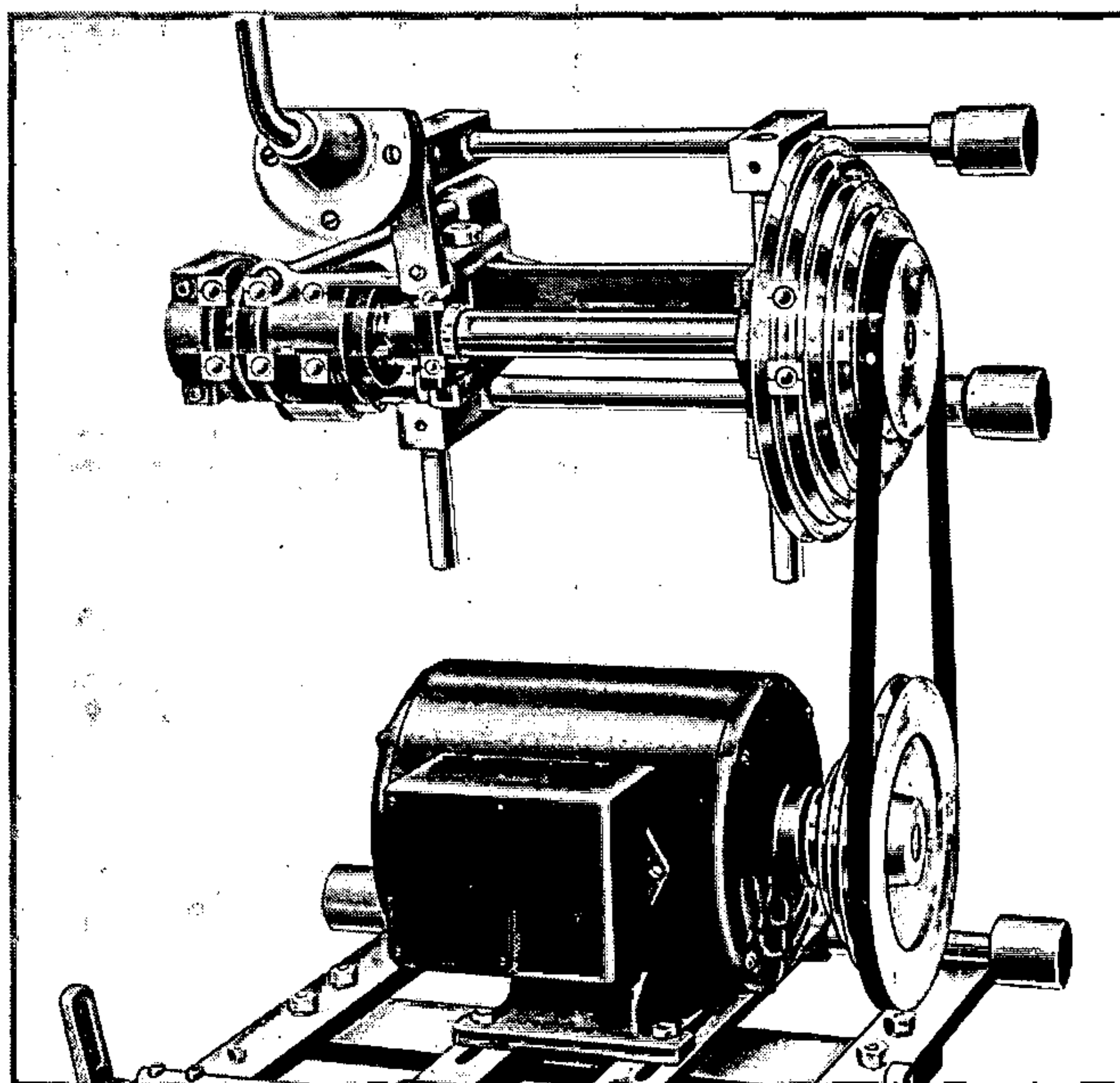


Figure 22 — Countershaft drive.

INSTRUCTIONS FOR ORDERING REPAIR PARTS

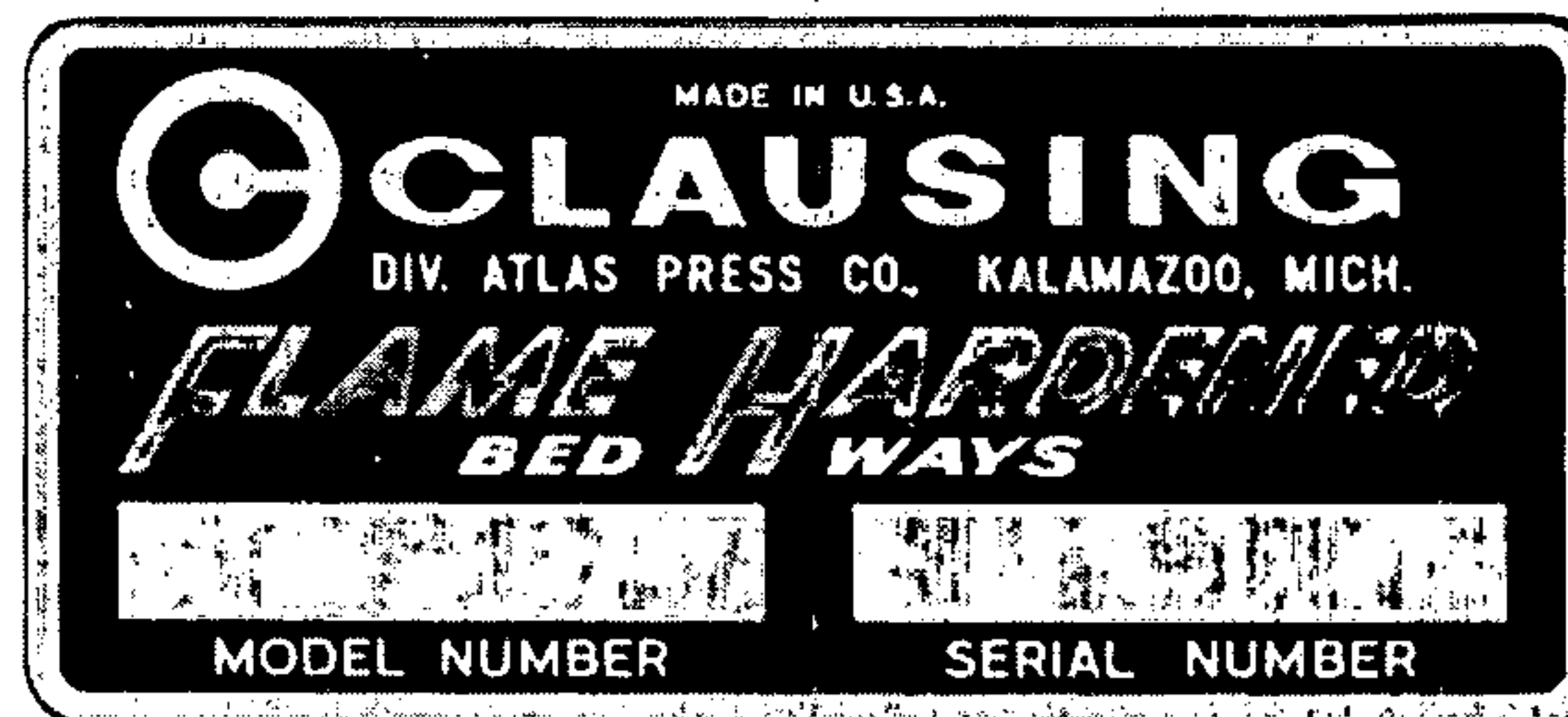
IMPORTANT — The following information must be furnished on all repair part orders:

- 1 — Quantity Required.
- 2 — PART NUMBER and NAME of Part.
- 3 — MODEL and SERIAL NUMBER.

We reserve the right to make changes in design and specification without notice.

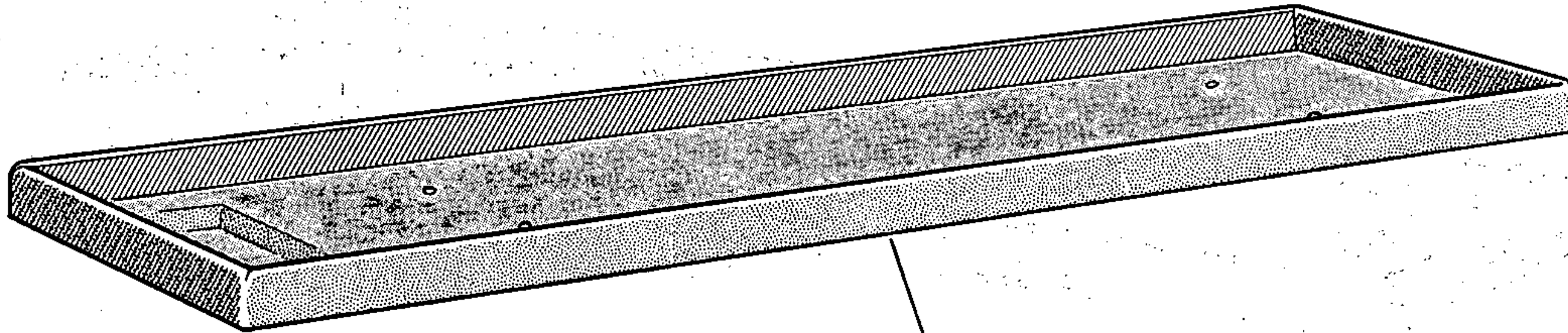
Parts shown without part numbers are standard parts and should be purchased locally.

CLAUSING DIV., ATLAS PRESS CO.



Be sure to give model and serial number of this plate. Parts prices will be quoted on request.

KALAMAZOO, MICHIGAN



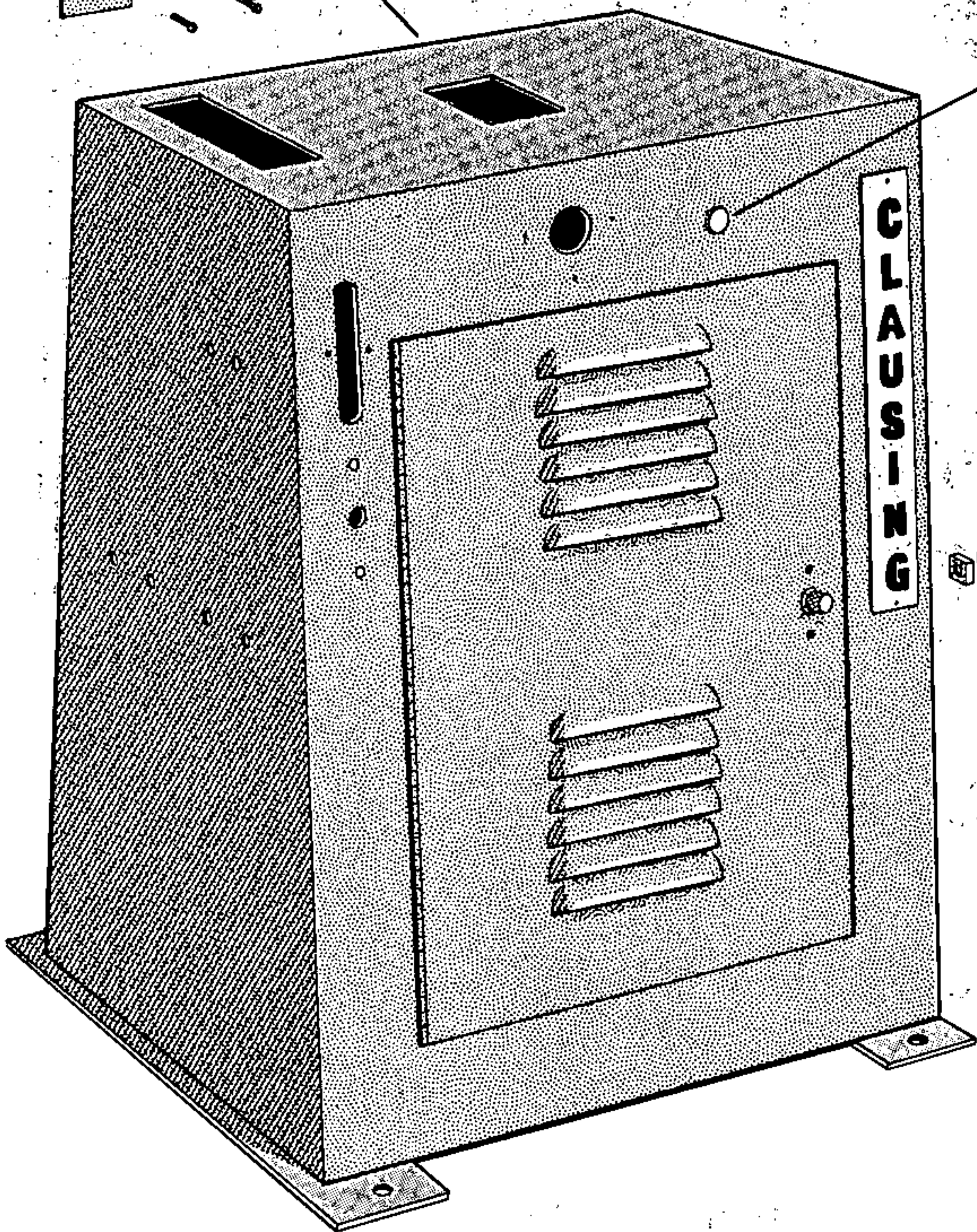
OIL PANS

PART No.	LATHE SIZE
7652	24"
7653	36"
7654	48"

122-041
COVER

990-018
PEDESTAL ASSEMBLY

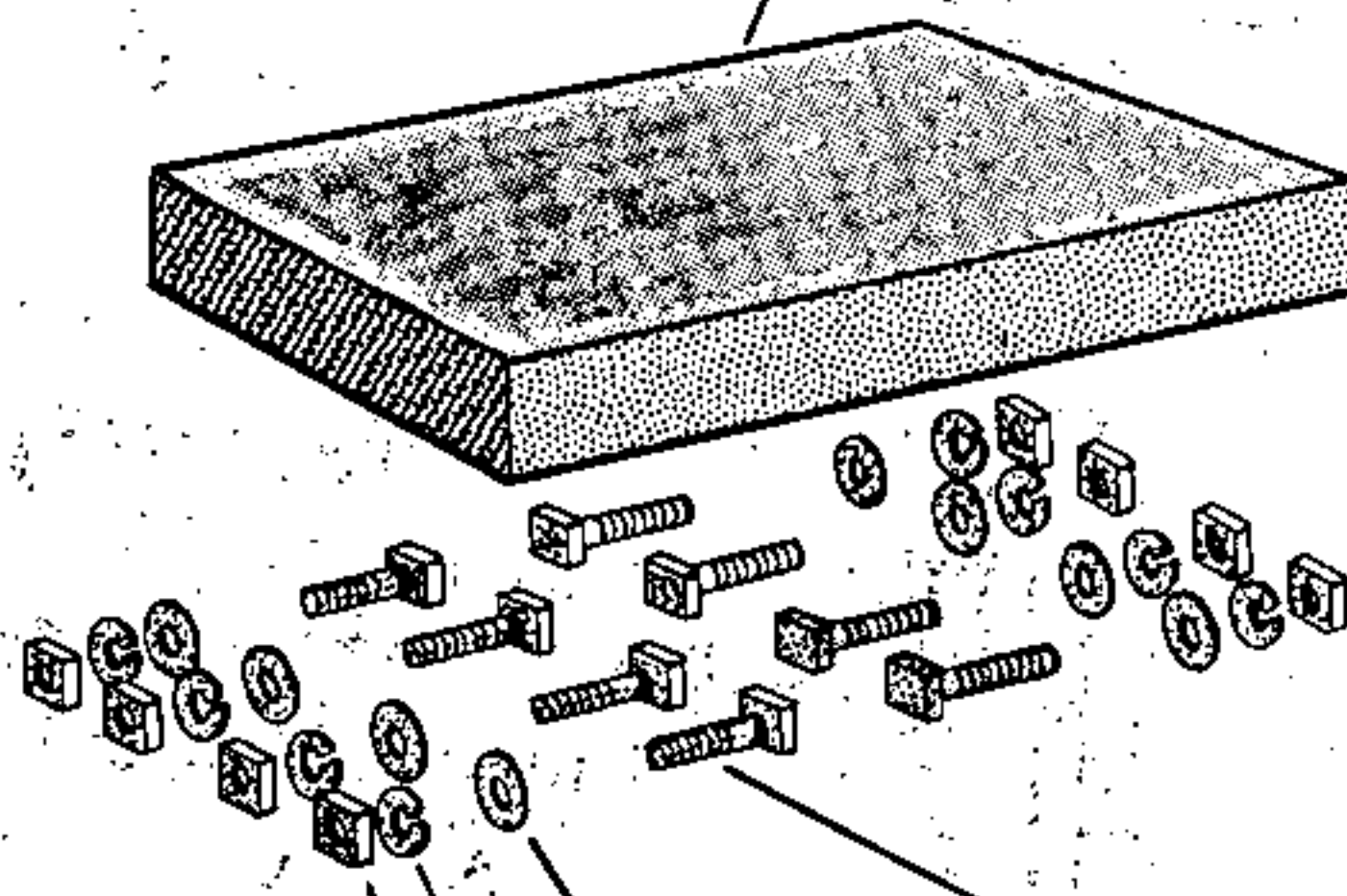
1/4" — 20 x 1/2"
RD. HD. CAP SCREW
2 Req'd.



SHELVES

PART No.	LATHE SIZE
706-005	24"
706-006	36"
706-007	48"

557-014
DOT FASTER



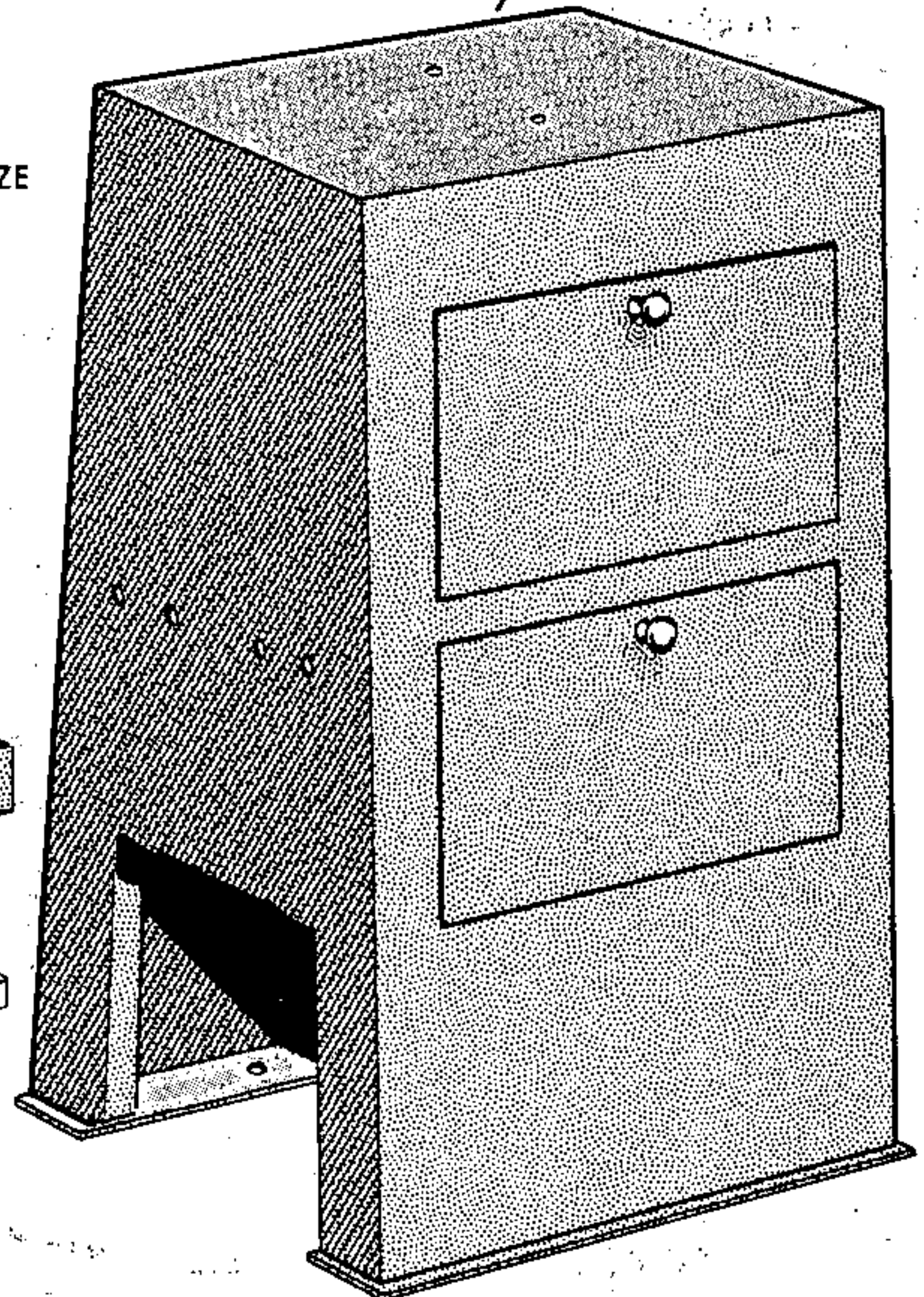
3/8" — 16 x 1"
MACHINE BOLTS

3/8" WASHER

3/8 — 16
SQUARE NUT

3/8" LOCK WASHER

990-020
PEDESTAL ASSEMBLY

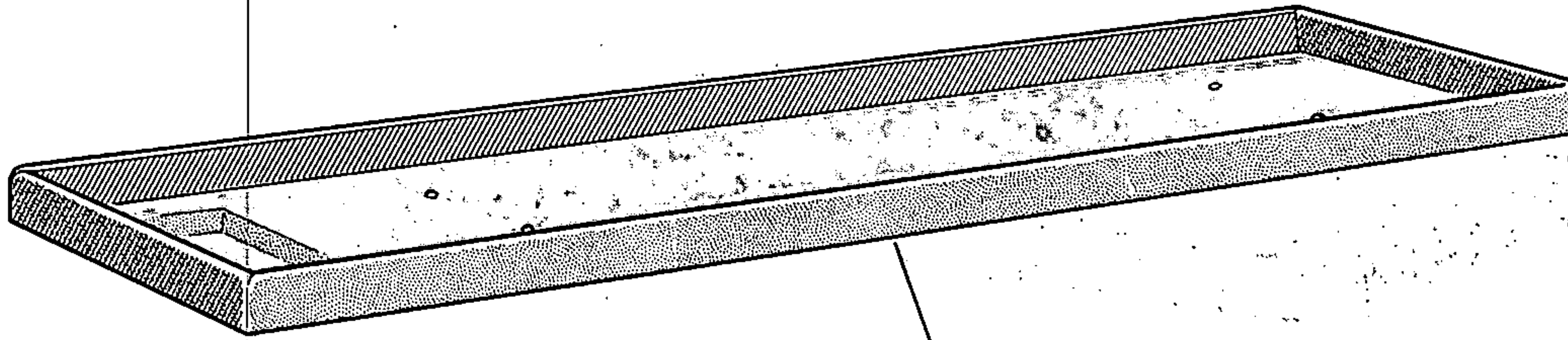


IMPORTANT

THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-4154 AND

LATHE No.	LATHE SIZE
7666	24"
7667	36"
7668	48"

LATHE CABINET ASSEMBLY



OIL PANS

PART No.	LATHE SIZE
7652	24"
7653	36"
7654	48"

990-020
PEDESTAL ASSEMBLY

122-041
COVER

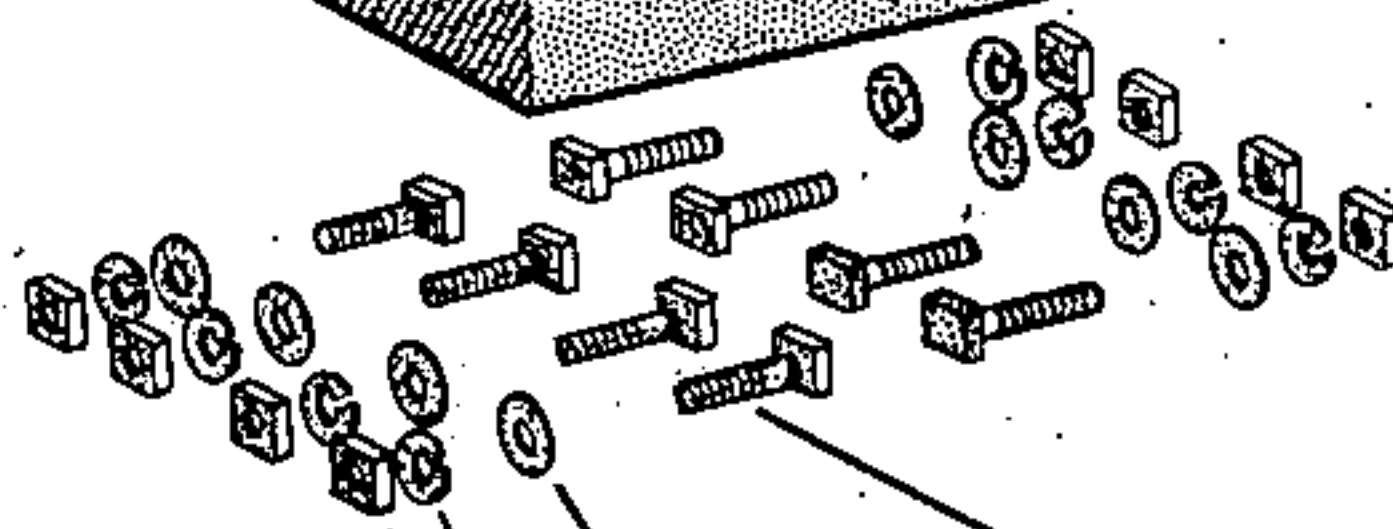
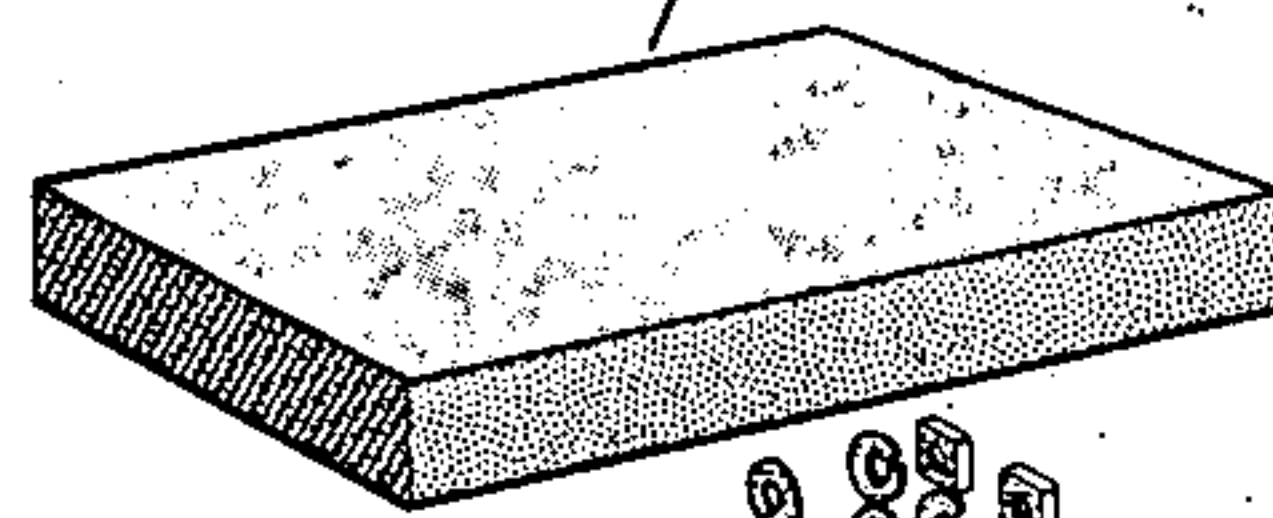
6300-28
PEDESTAL ASSEMBLY

1/4" - 20 x 1/2"
RD. HD. CAP SCREW
2 Req'd.

SHELVES

PART No.	LATHE SIZE
706-005	24"
706-006	36"
706-007	48"

557-014
DOT FASTER

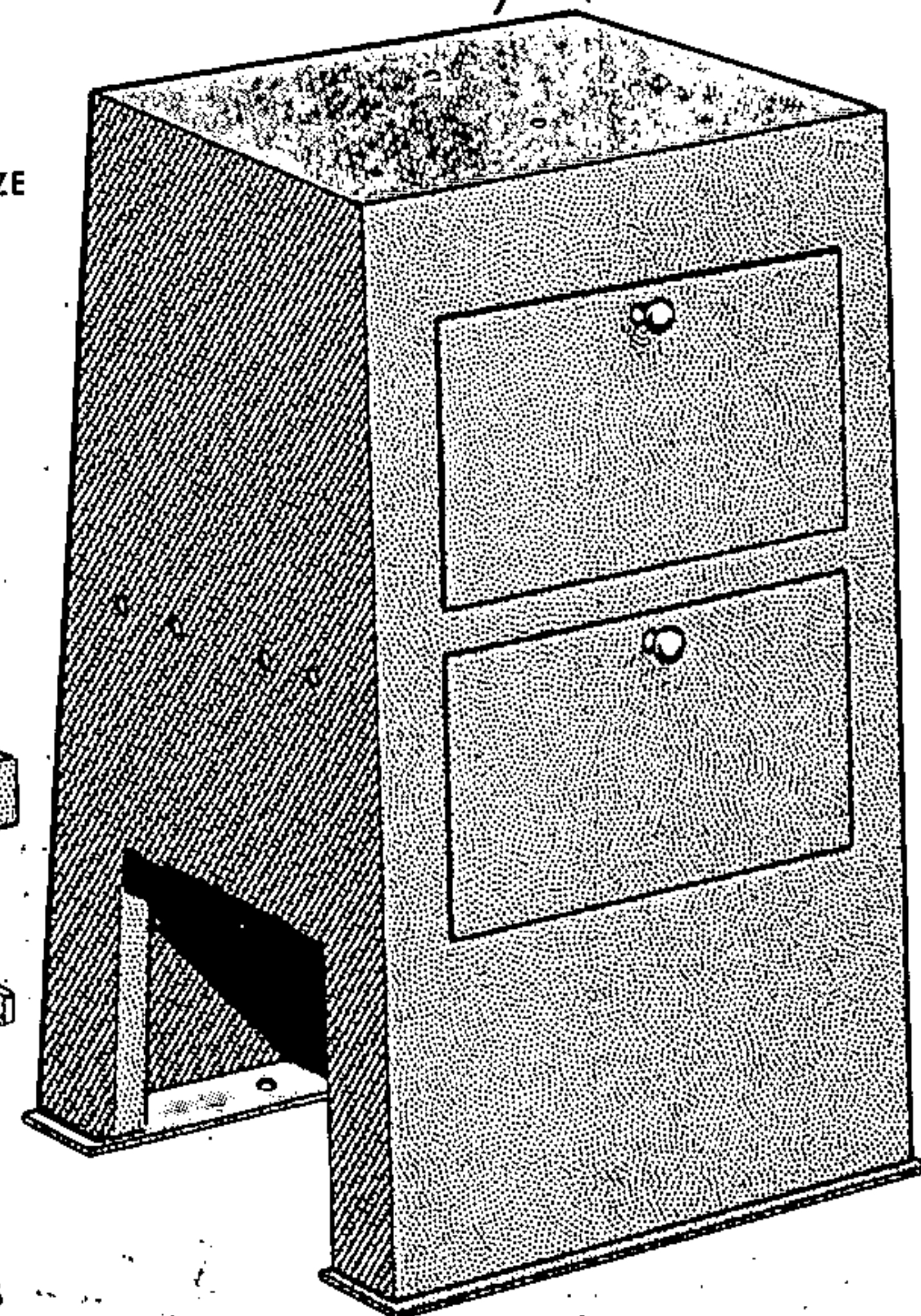


1/2" - 16 x 1"
MACHINE BOLTS

3/4" WASHER

3/8 - 16
SQUARE NUT

3/8" LOCK WASHER

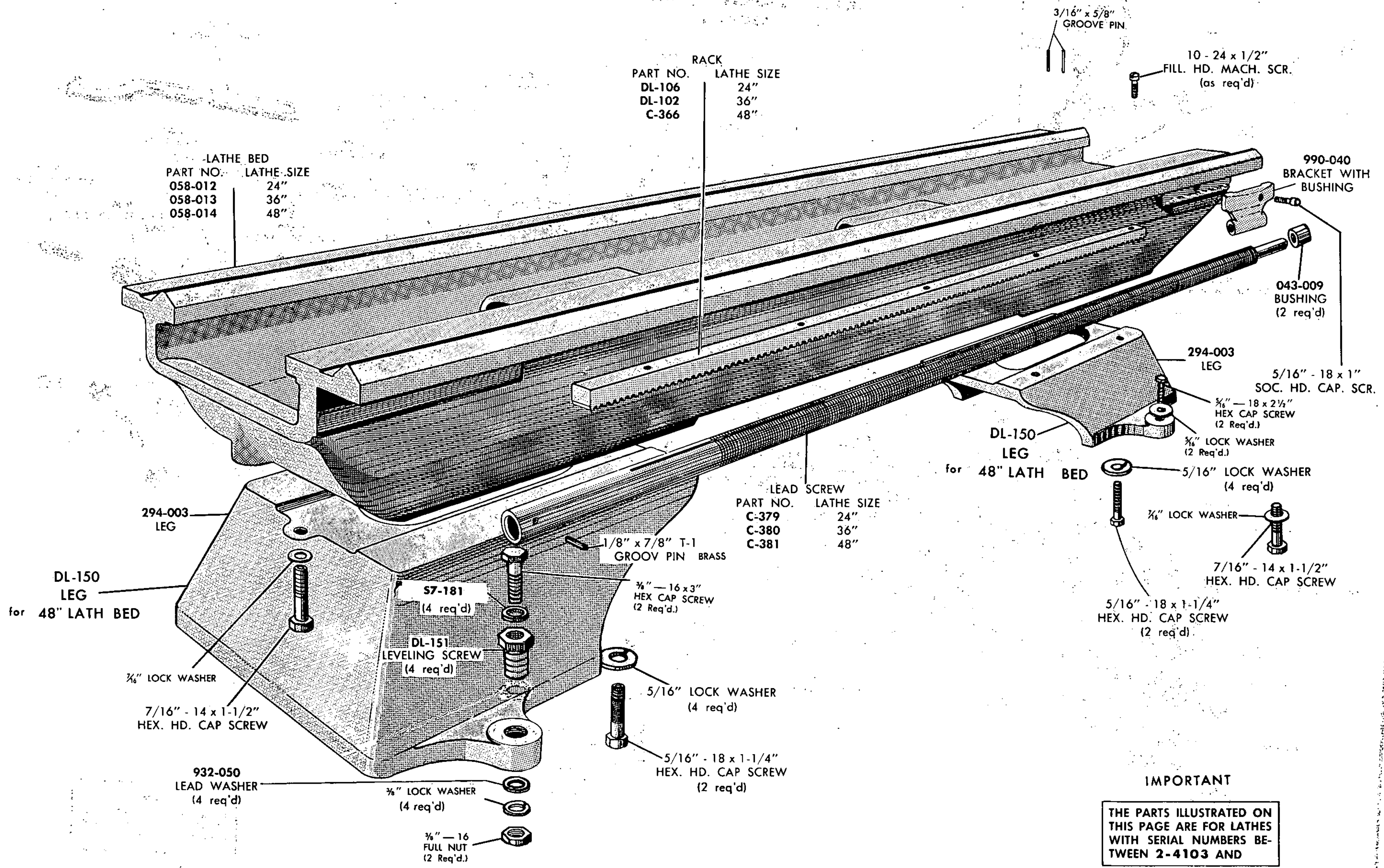


IMPORTANT
THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-5400 AND

LATHE No.	LATHE SIZE
7666	24"
7667	36"
7668	48"

LATHE CABINET ASSEMBLY

BED AND LEADSCREW ASSEMBLY



PART NO.	RACK LATHE SIZE
DL-106	24"
DL-102	36"
C-366	48"

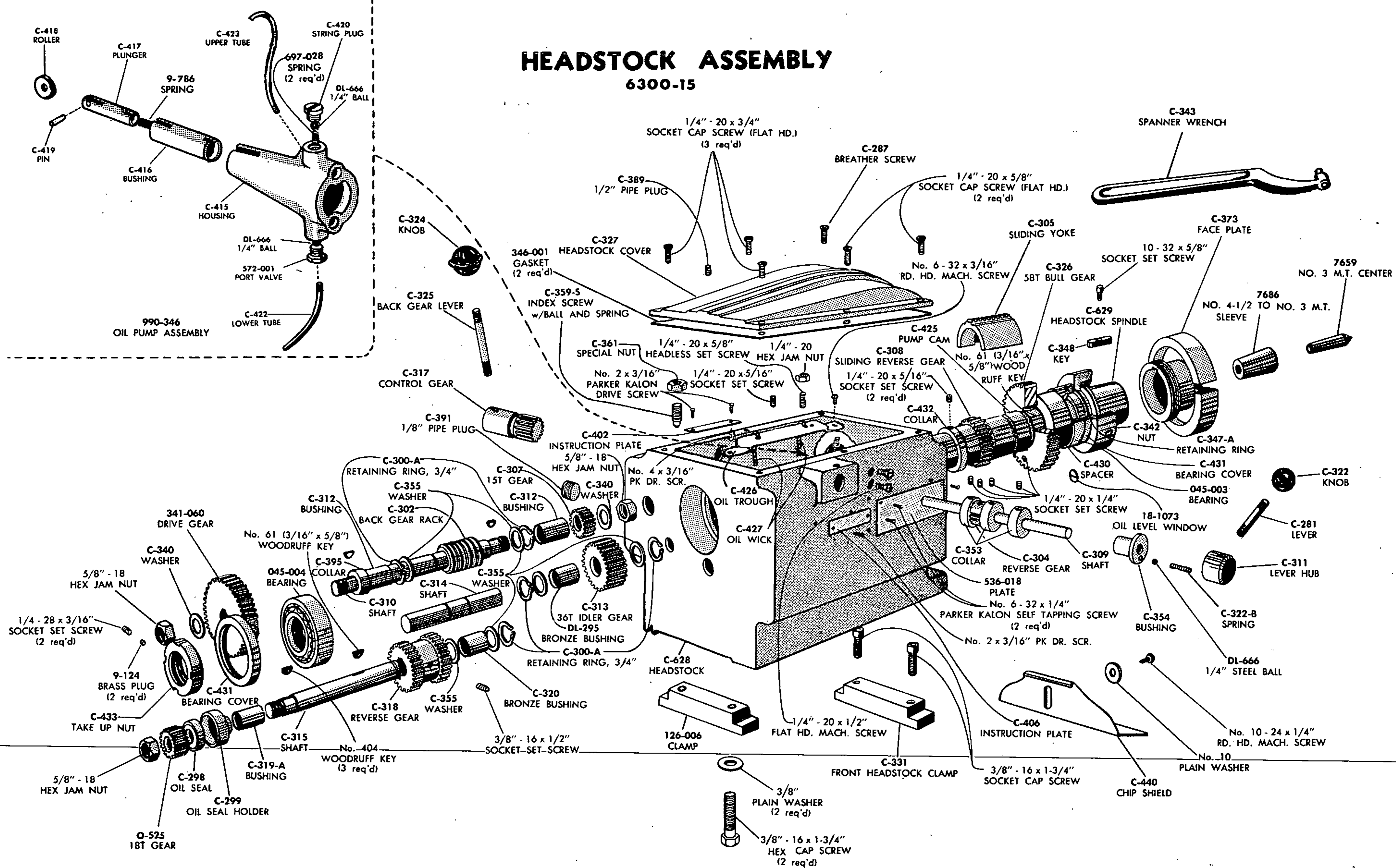
PART NO.	LATHE BED LATHE SIZE
058-012	24"
058-013	36"
058-014	48"

PART NO.	LEAD SCREW LATHE SIZE
C-379	24"
C-380	36"
C-381	48"

IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE ARE FOR LATHES WITH SERIAL NUMBERS BETWEEN 2-4103 AND

HEADSTOCK ASSEMBLY

6300-15

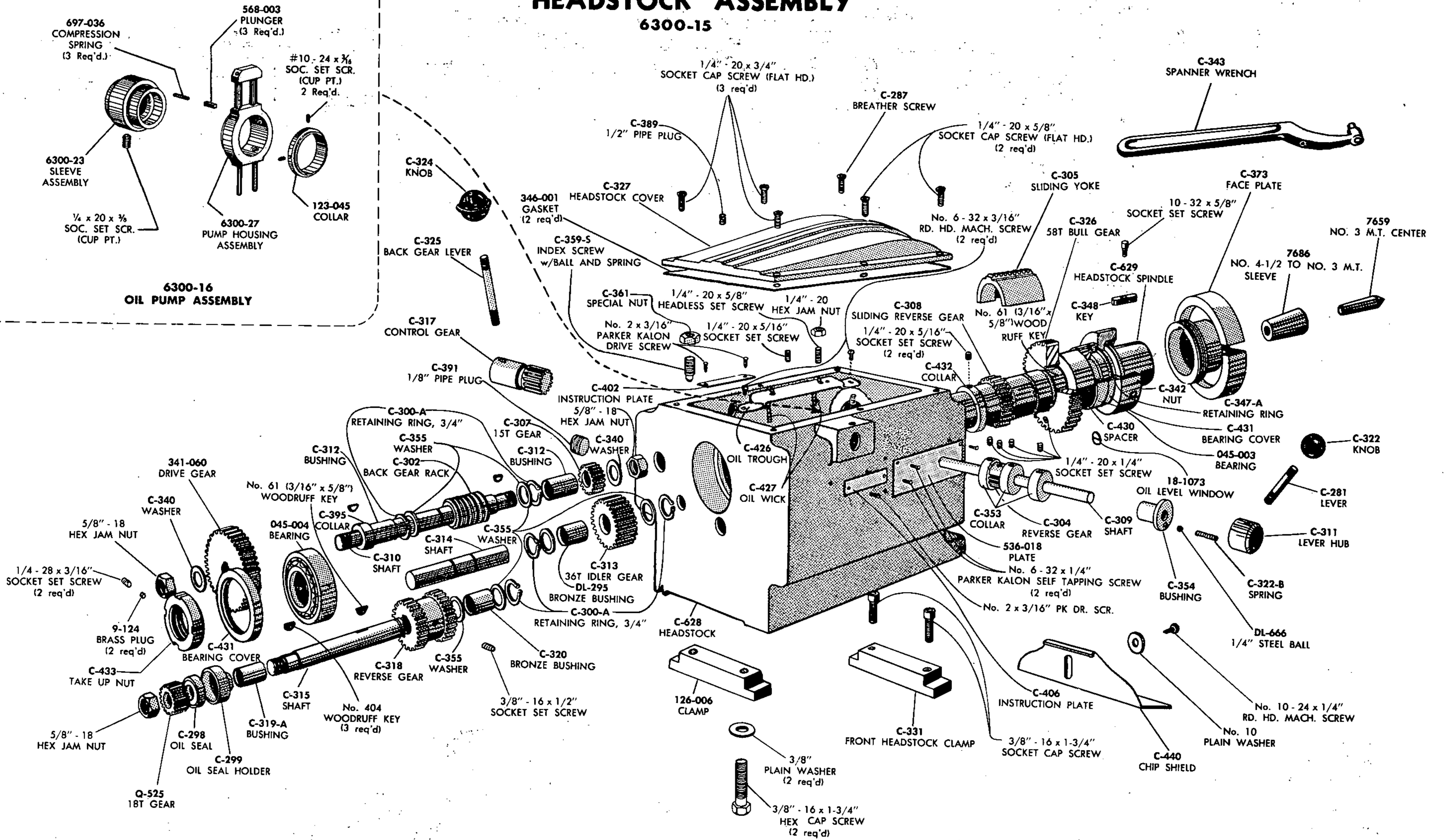


IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE
 ARE FOR LATHES WITH SERIAL NUMBERS
 BETWEEN 2-4819 AND

HEADSTOCK ASSEMBLY

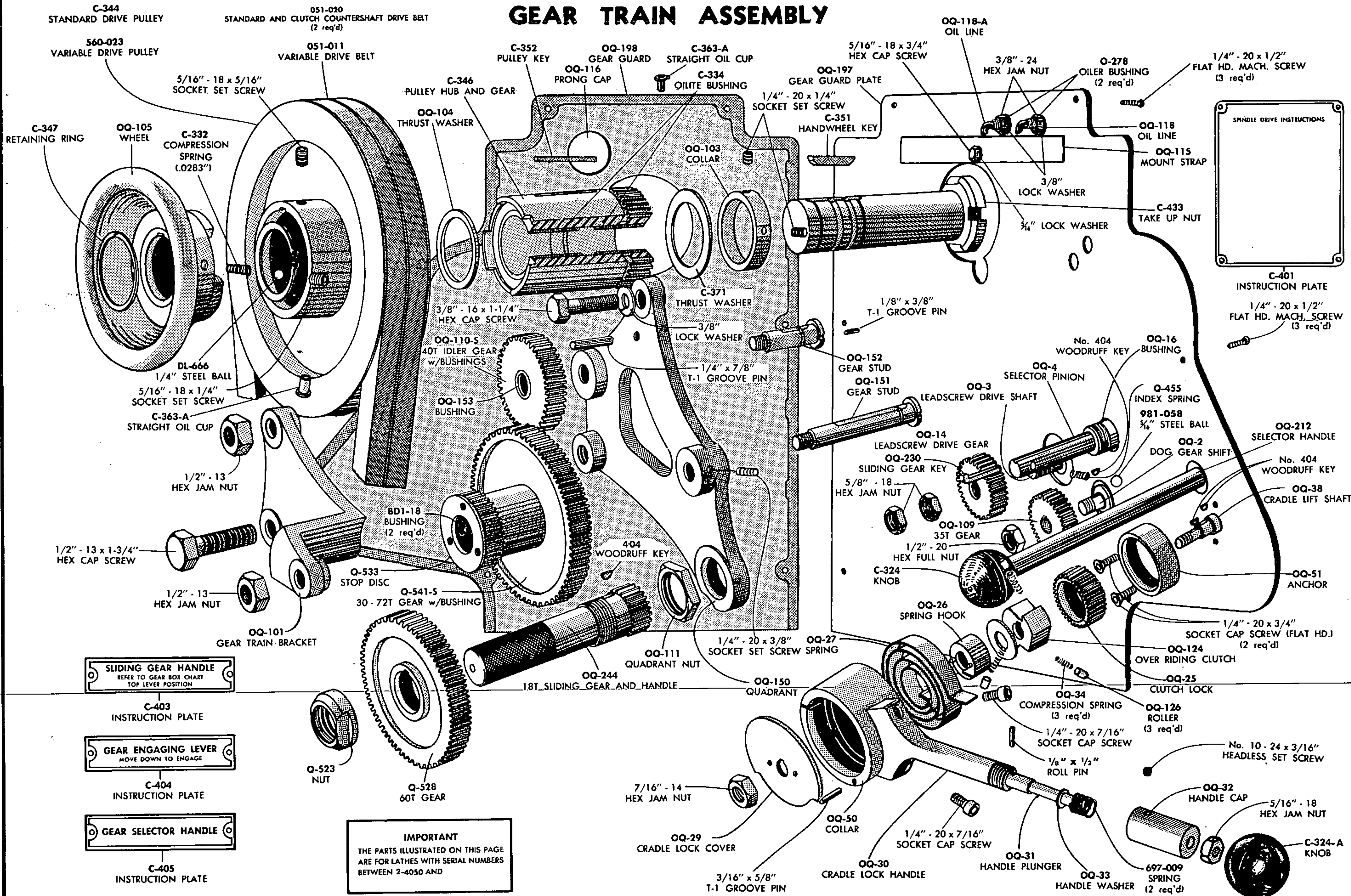
6300-15

6300-16
OIL PUMP ASSEMBLY



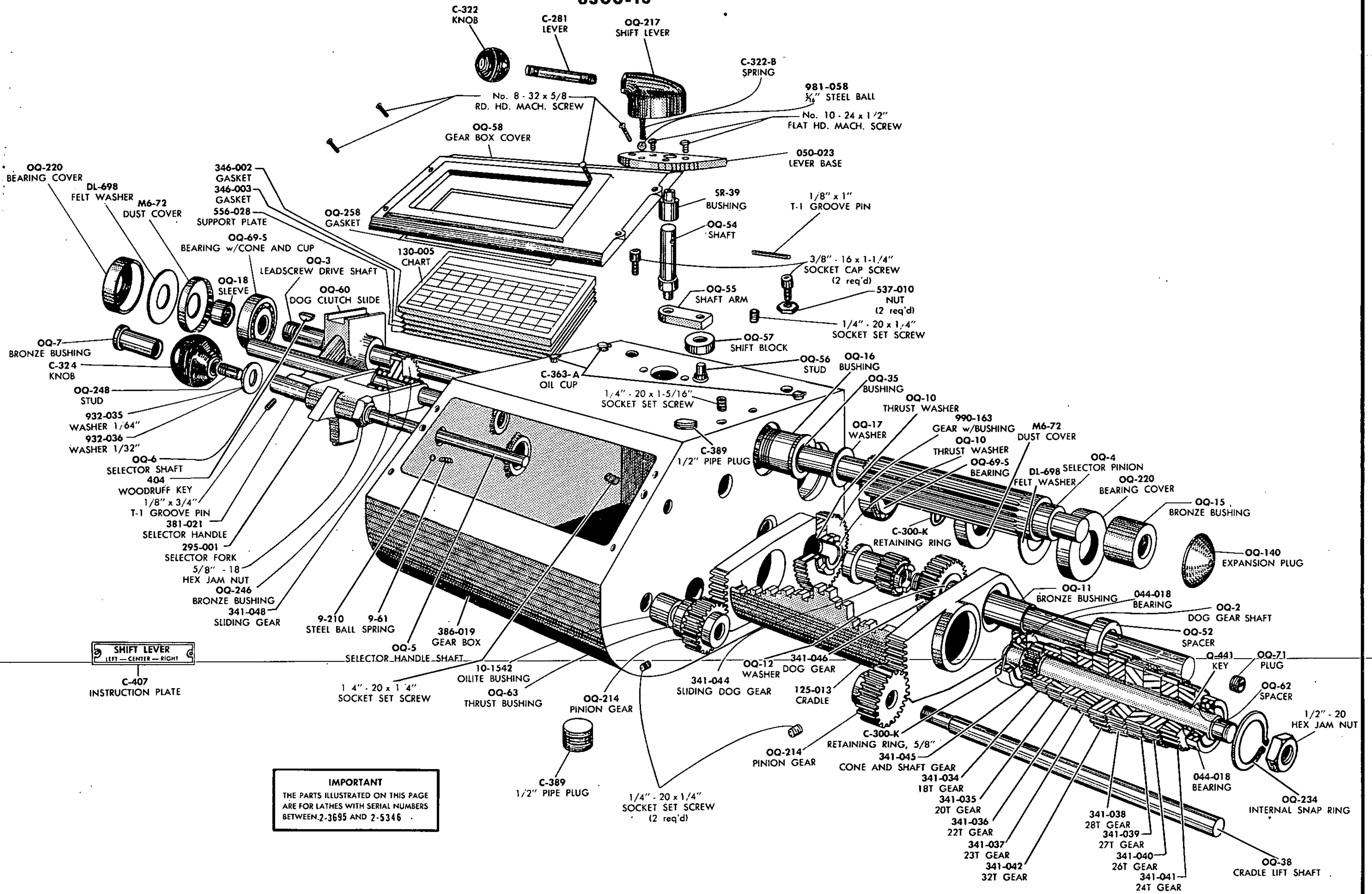
IMPORTANT
THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-5351 AND

GEAR TRAIN ASSEMBLY

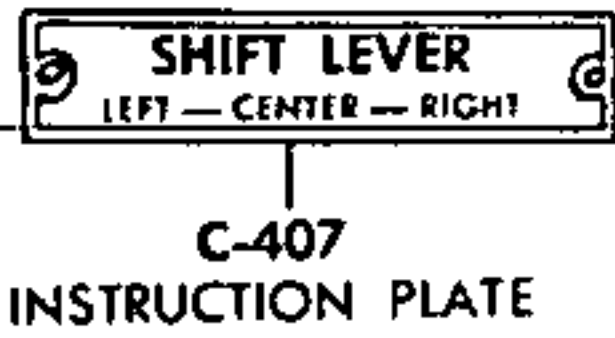


GEAR BOX ASSEMBLY

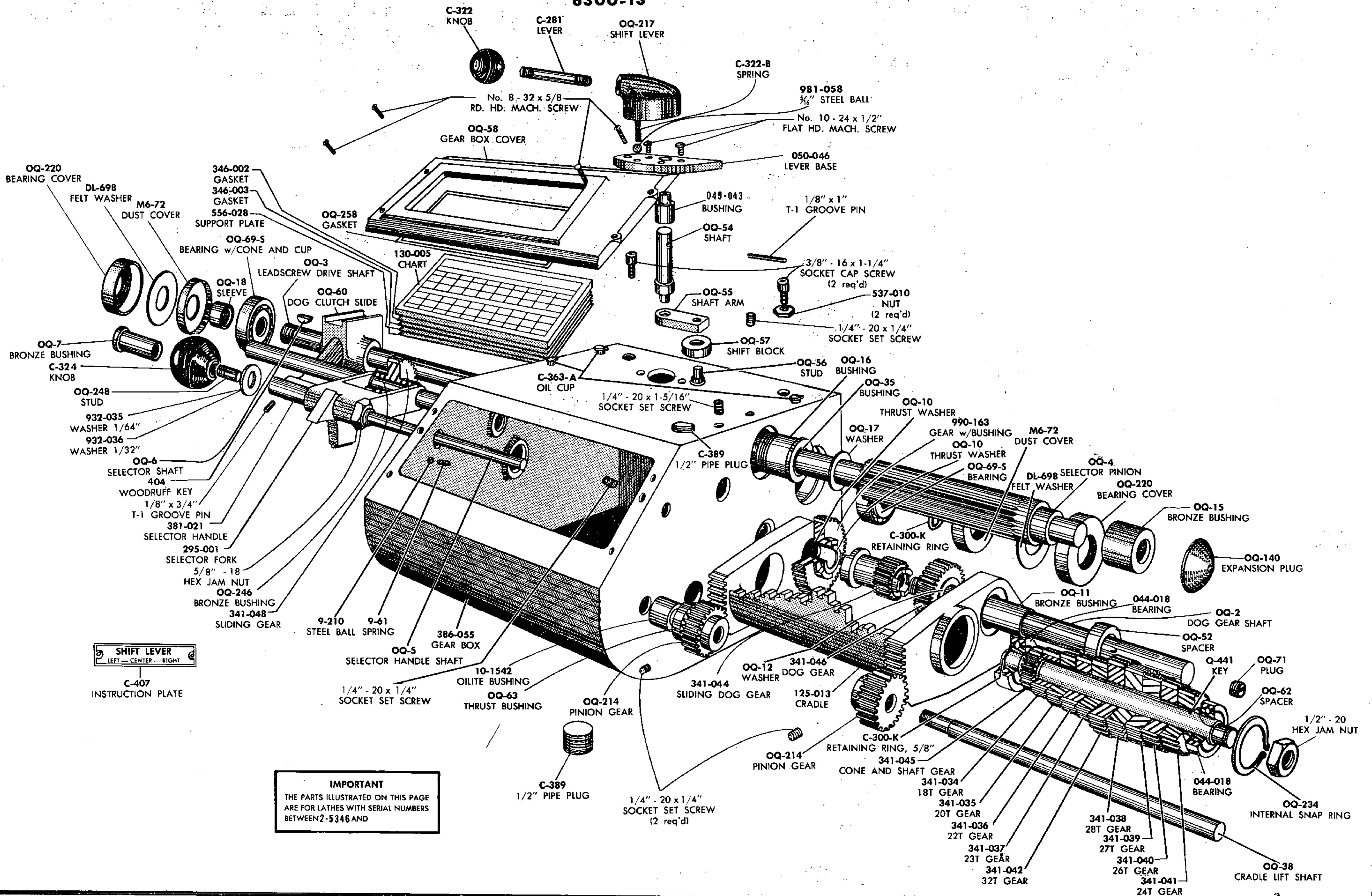
6300-13



IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE
 ARE FOR LATHES WITH SERIAL NUMBERS
 BETWEEN 2-3695 AND 2-5346



GEAR BOX ASSEMBLY 6300-13

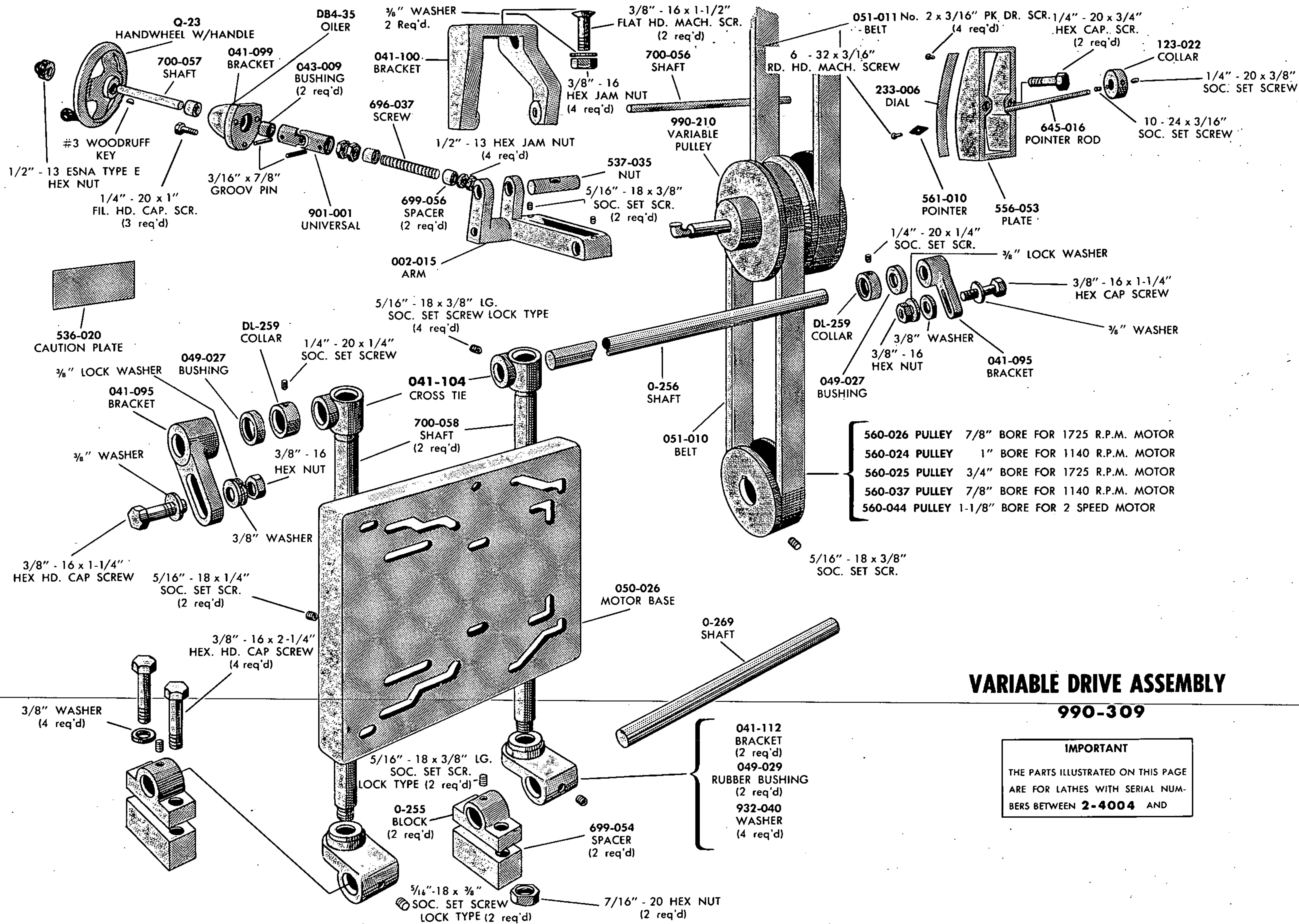


15 A



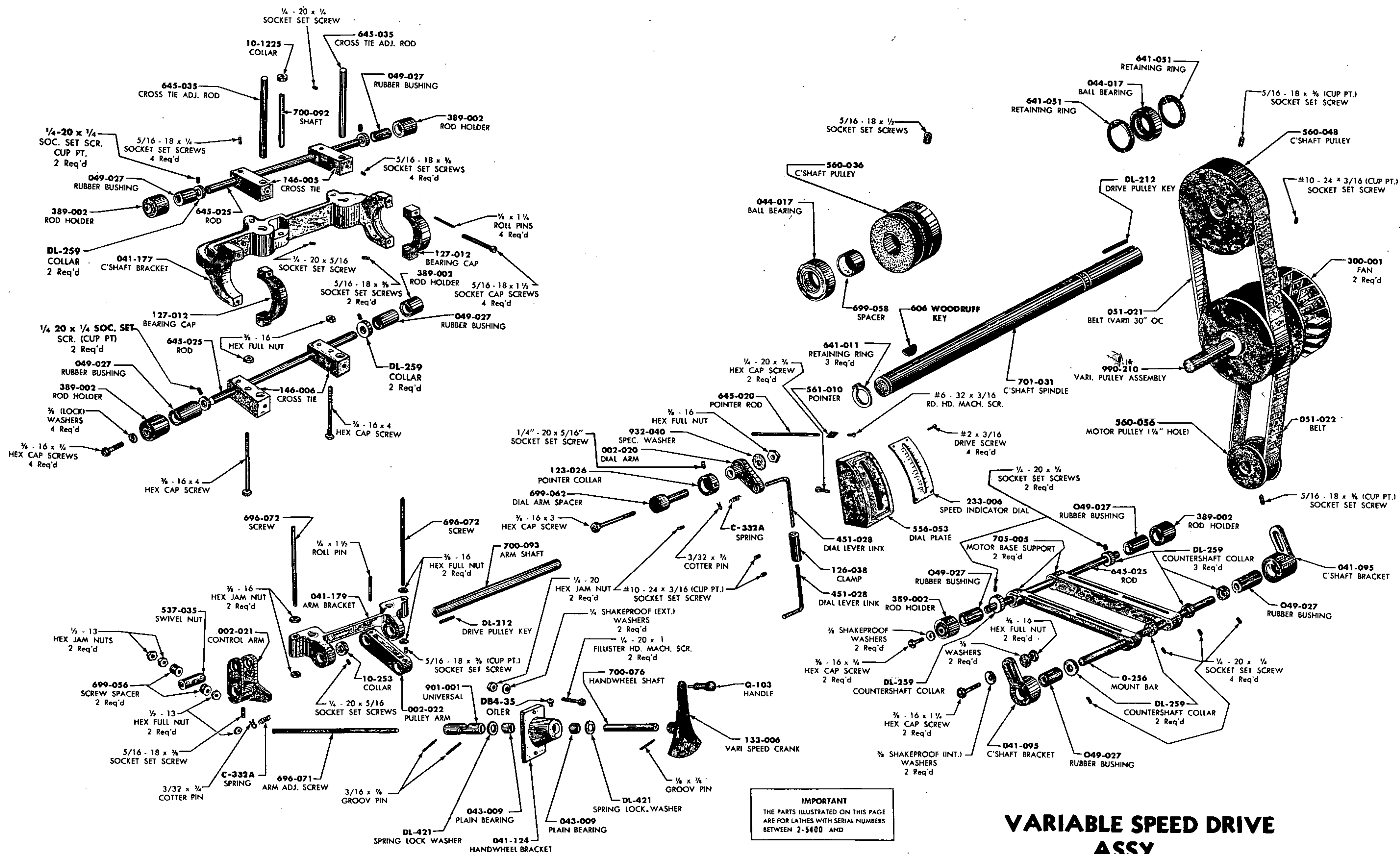
C-407
INSTRUCTION PLATE

IMPORTANT
THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-5346 AND



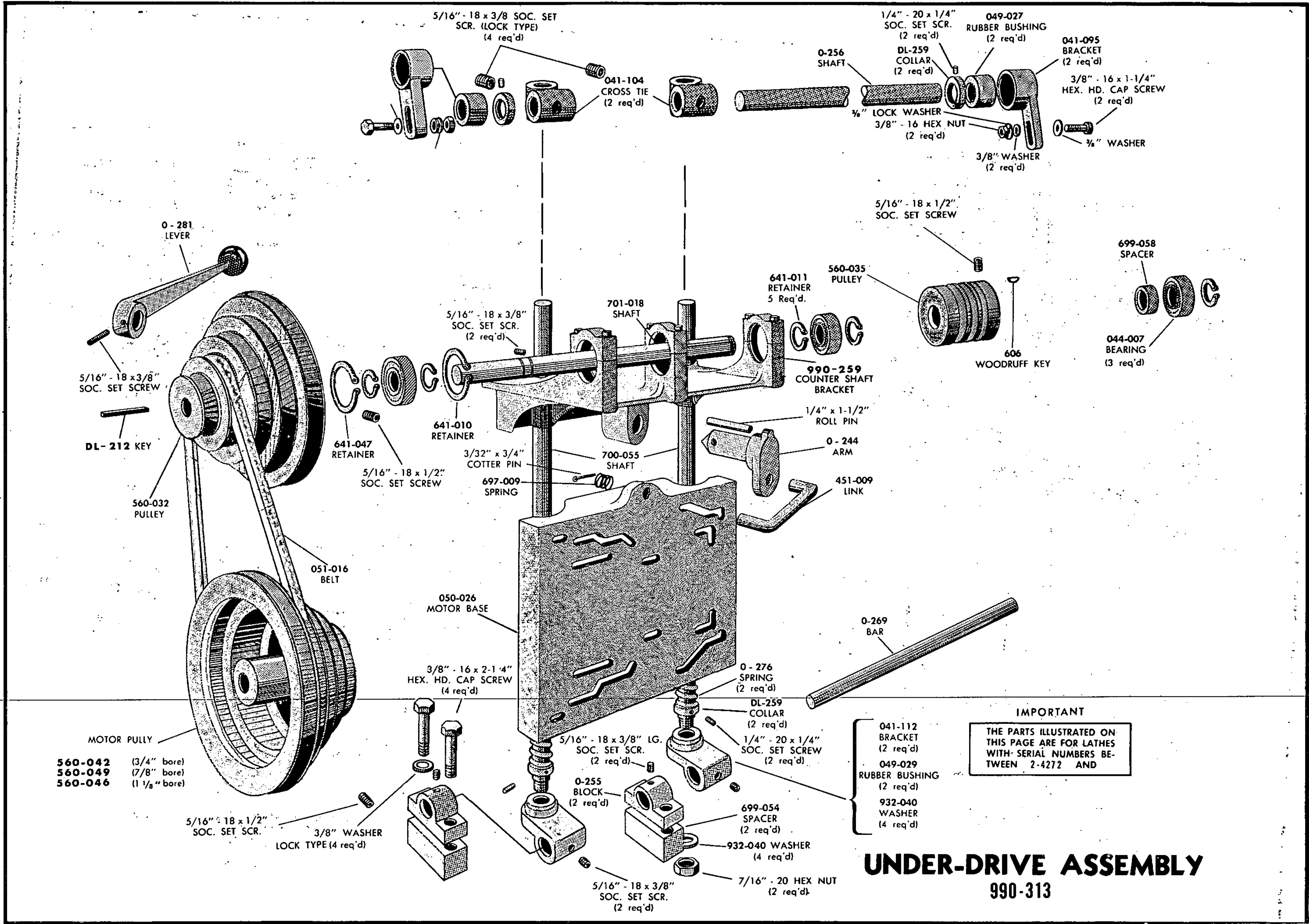
VARIABLE DRIVE ASSEMBLY
990-309

IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE
 ARE FOR LATHES WITH SERIAL NUM-
 BERS BETWEEN **2-4004** AND



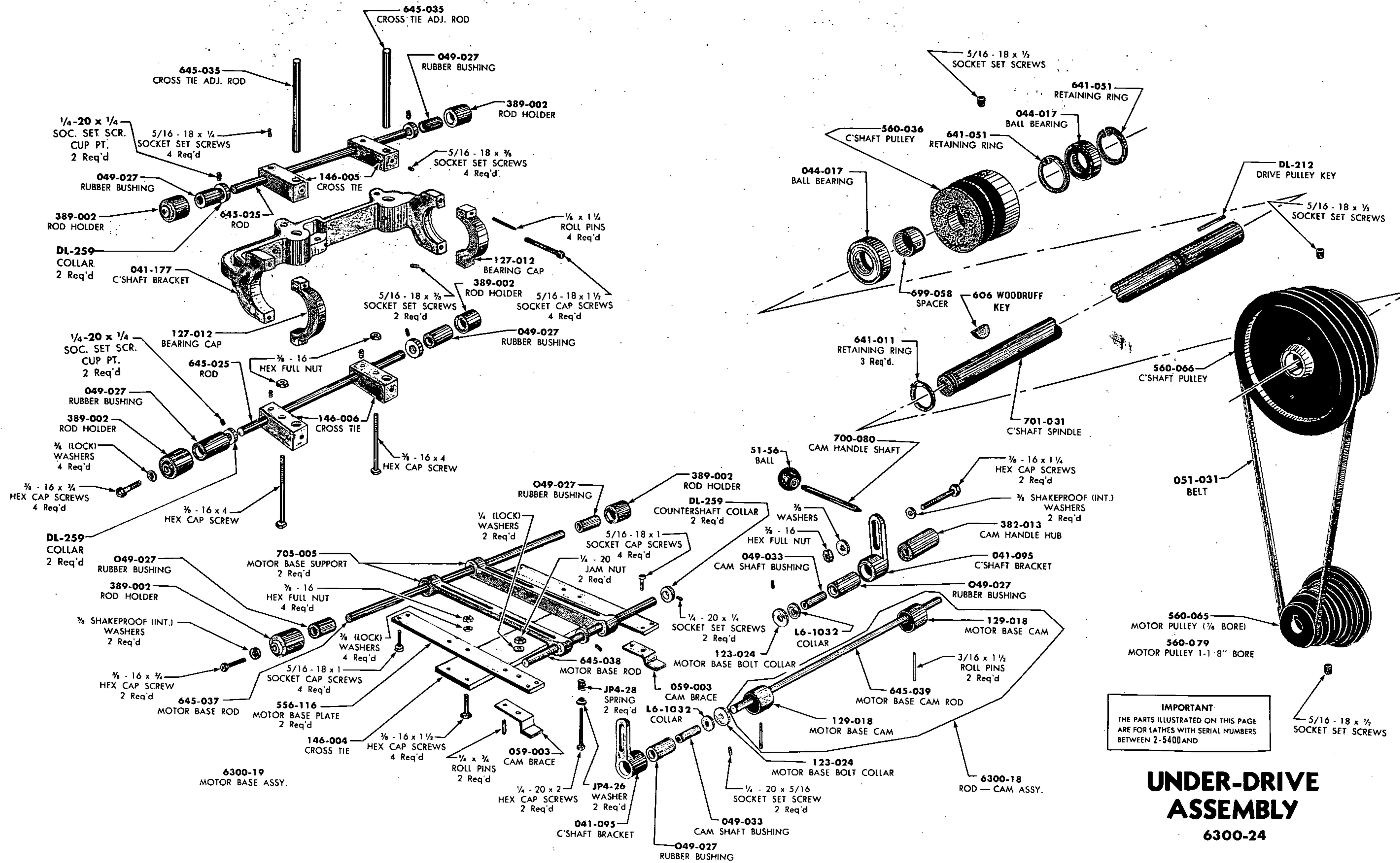
IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE
 ARE FOR LATHES WITH SERIAL NUMBERS
 BETWEEN 2-5400 AND

**VARIABLE SPEED DRIVE
 ASSY.
 6300-25**



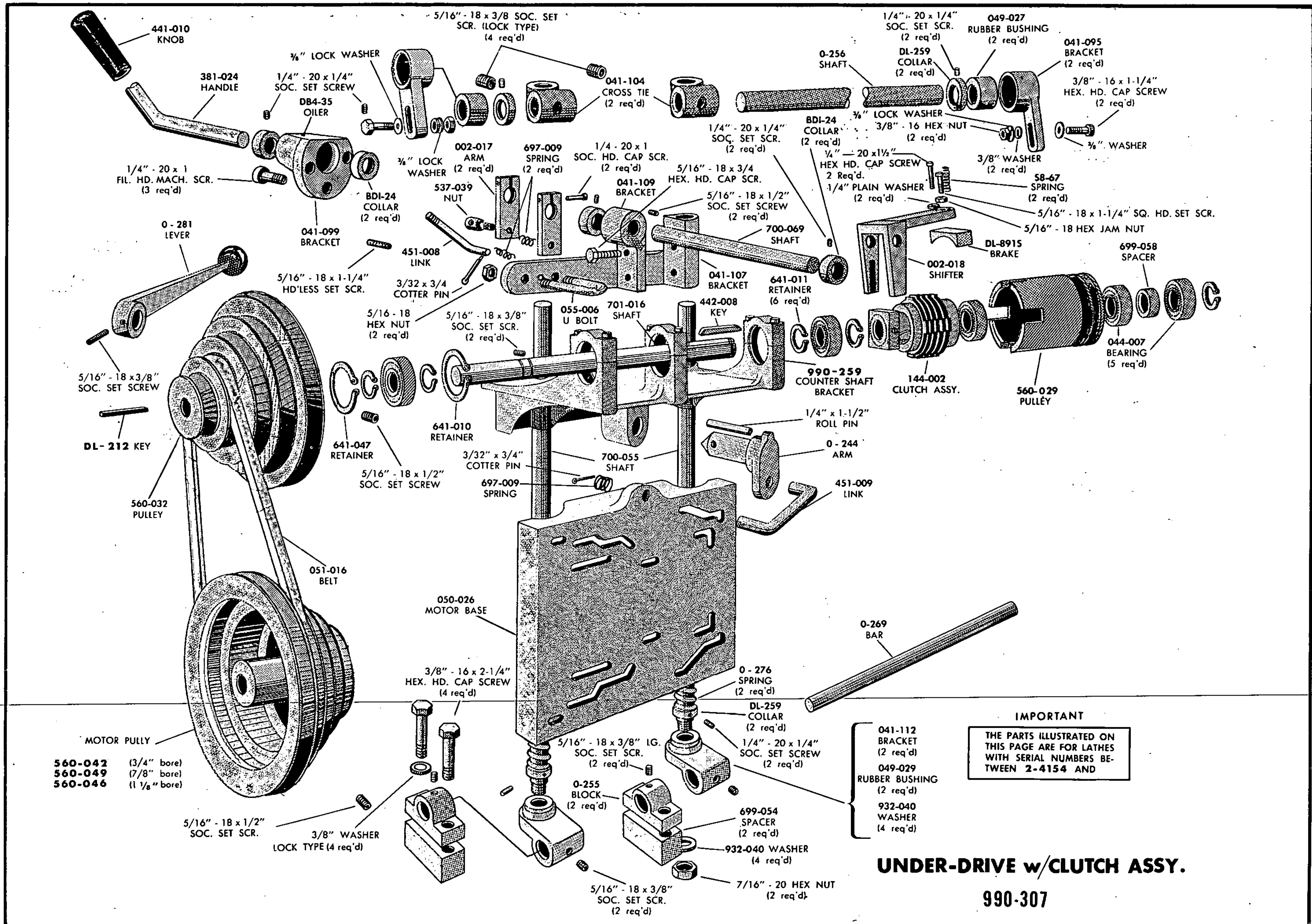
IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE ARE FOR LATHES WITH SERIAL NUMBERS BETWEEN 2-4272 AND

UNDER-DRIVE ASSEMBLY
 990-313



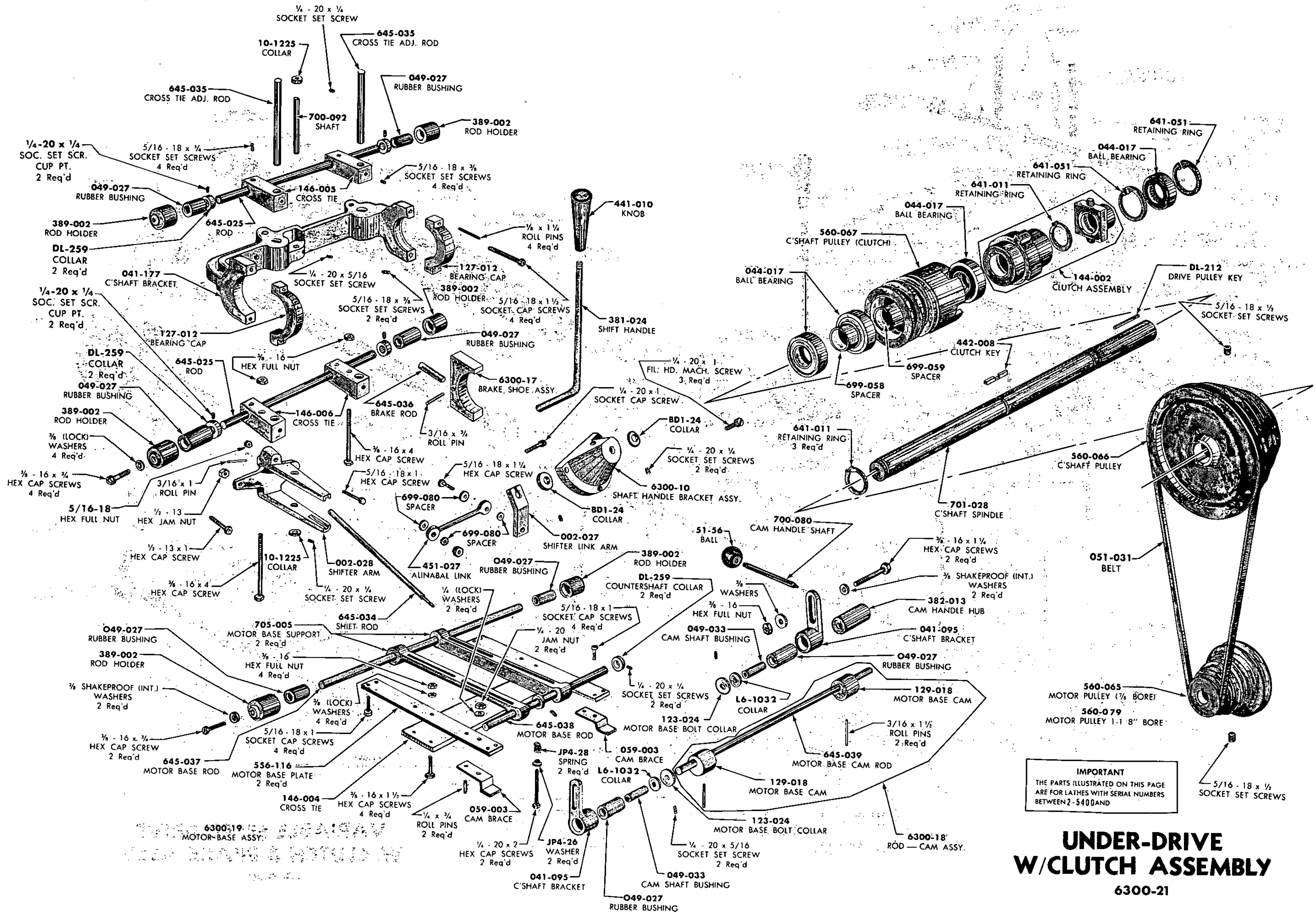
IMPORTANT
THE PARTS ILLUSTRATED ON THIS PAGE ARE FOR LATHES WITH SERIAL NUMBERS BETWEEN 2-5400 AND

UNDER-DRIVE ASSEMBLY
6300-24



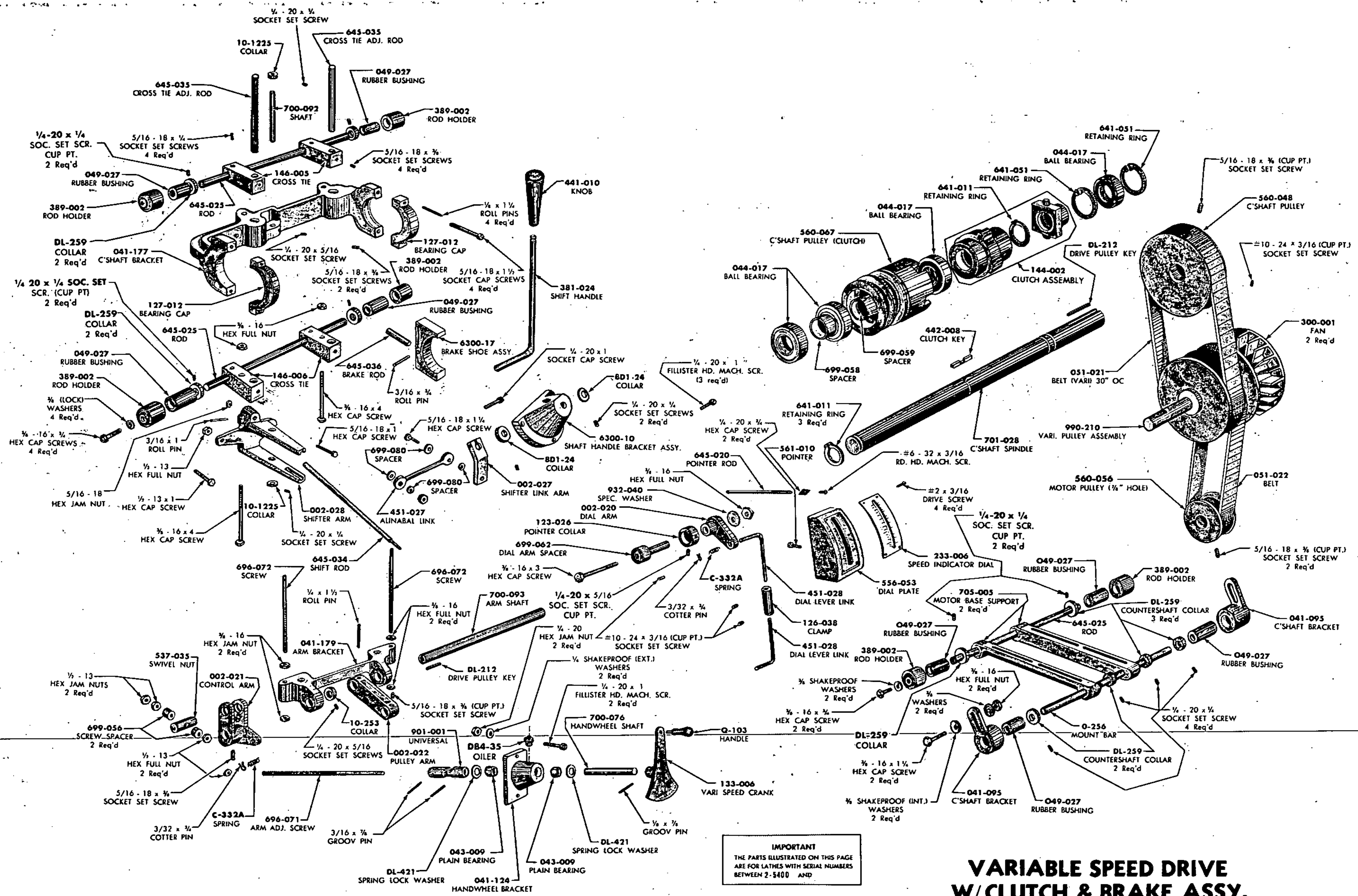
IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE ARE FOR LATHES WITH SERIAL NUMBERS BETWEEN 2-4154 AND

UNDER-DRIVE w/CLUTCH ASSY.
990-307



IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE ARE FOR LATHES WITH SERIAL NUMBERS BETWEEN 2-5400 AND

UNDER-DRIVE W/CLUTCH ASSEMBLY
6300-21



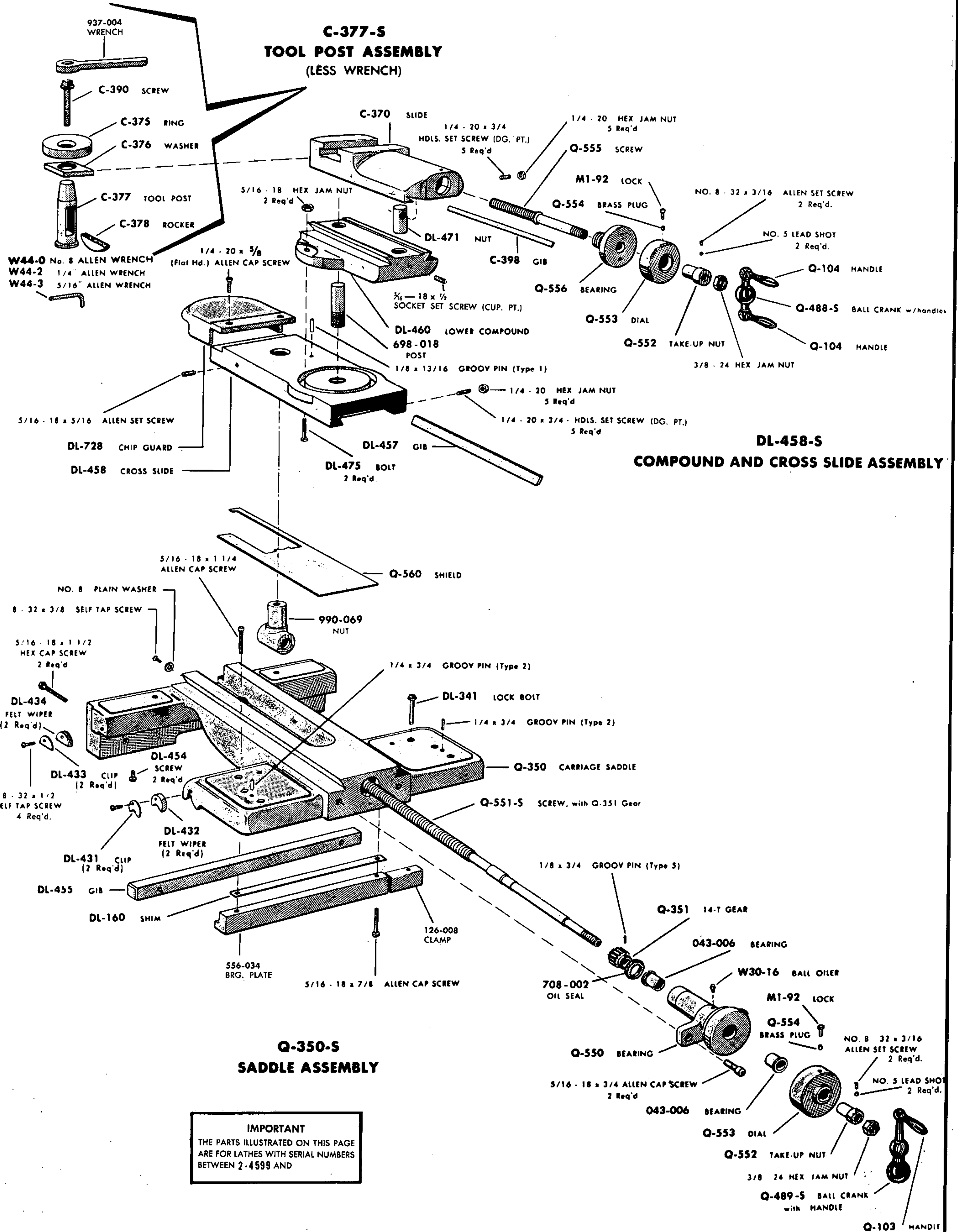
IMPORTANT
 THE PARTS ILLUSTRATED ON THIS PAGE
 ARE FOR LATHES WITH SERIAL NUMBERS
 BETWEEN 2-5400 AND

VARIABLE SPEED DRIVE W/CLUTCH & BRAKE ASSY.

6300-20

CARRIAGE SADDLE AND COMPOUND ASSEMBLY

6300-15



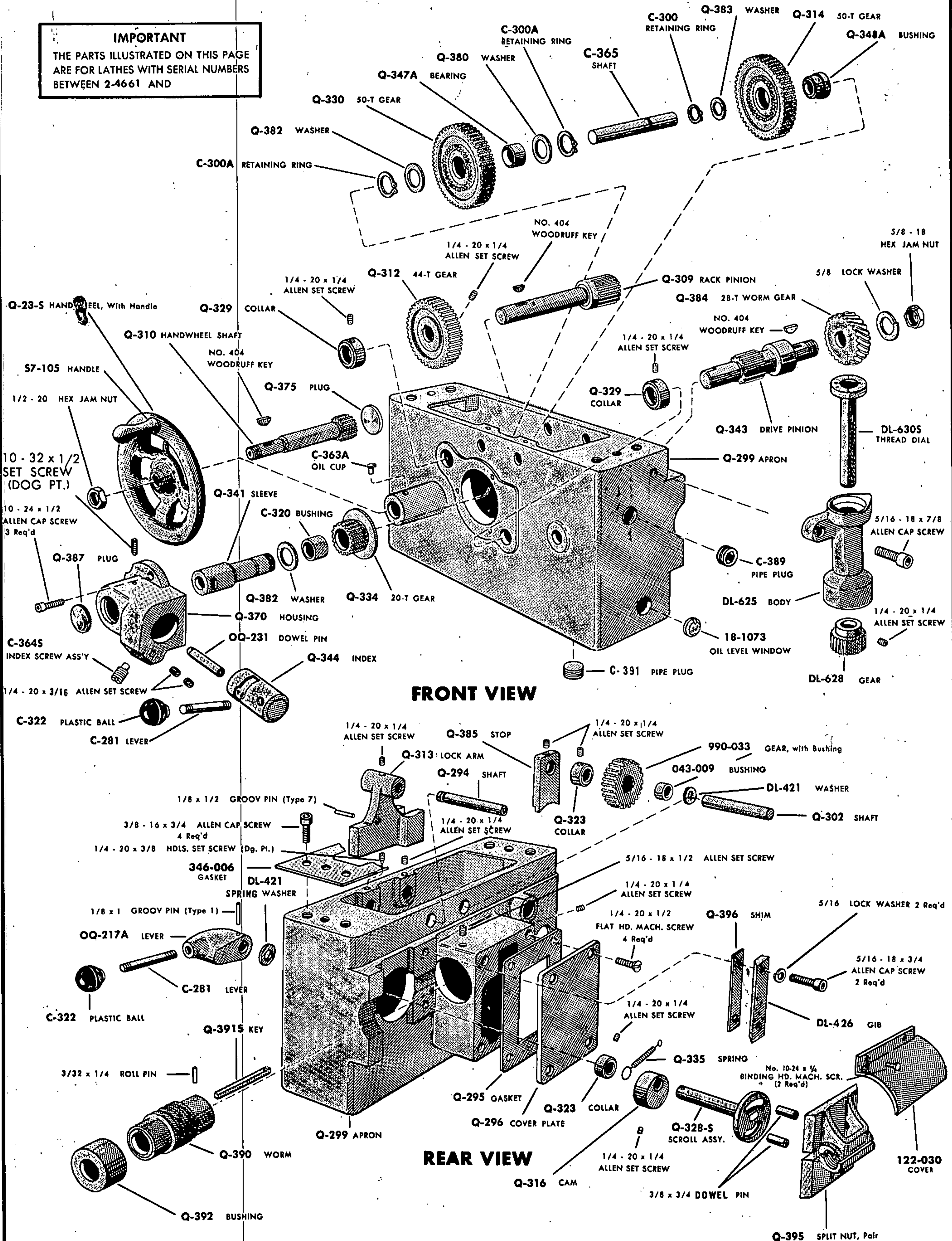
IMPORTANT
THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-4599 AND

GARRIAGE APRON ASSEMBLY Q-299-S

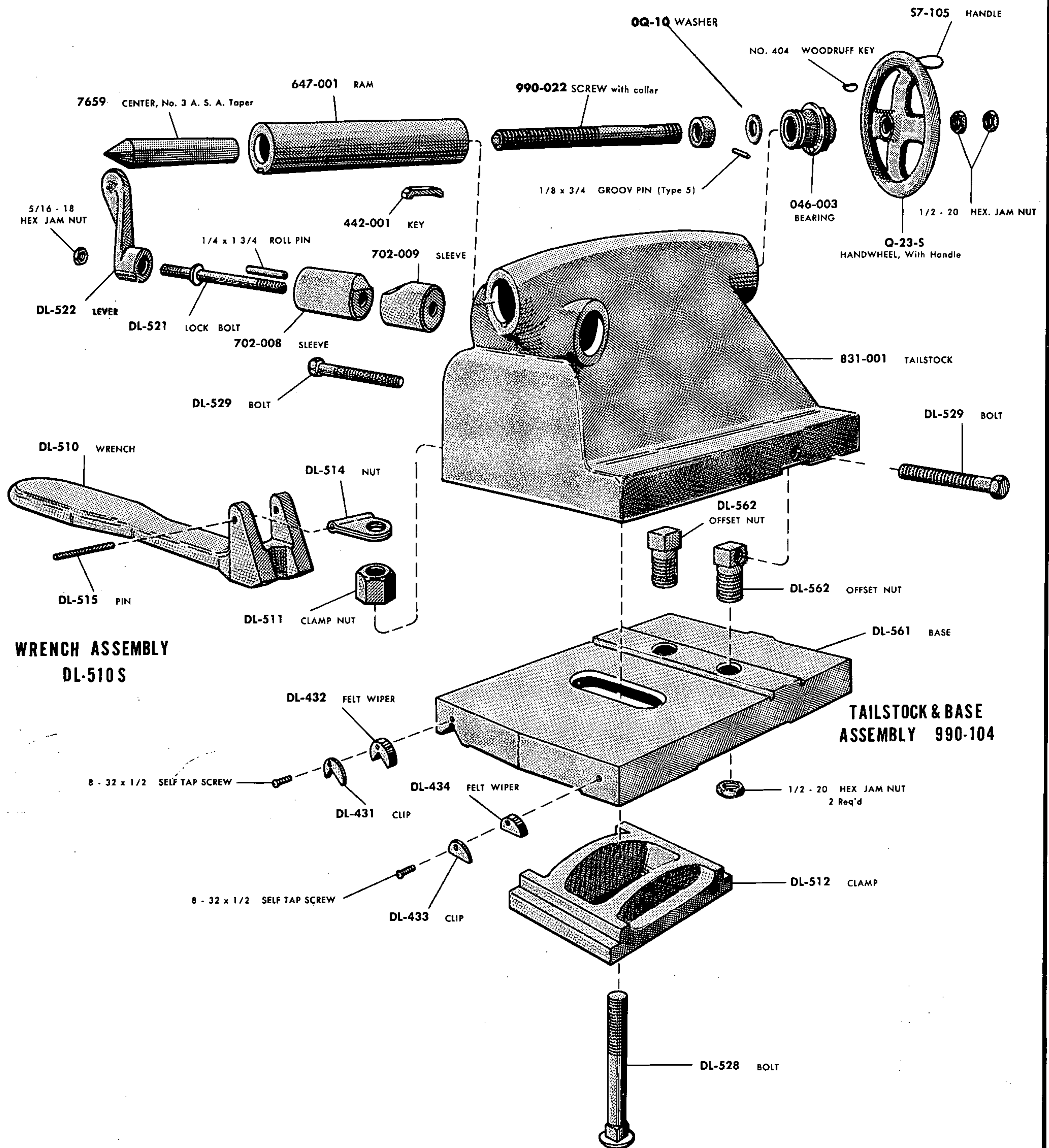
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IMPORTANT

THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-4661 AND



TAILSTOCK ASSEMBLY 990-039



IMPORTANT
THE PARTS ILLUSTRATED ON THIS PAGE
ARE FOR LATHES WITH SERIAL NUMBERS
BETWEEN 2-3030 AND