

Wade

INSTRUCTION BOOK

LATHE *#7 Screw Machine*.....

SERIAL NO. *7-492*.....



WADE TOOL CO.
WALTHAM, MASS.

Covel Acquires Wade Tool

Covel Mfg. Co., Benton Harbor, Mich. has acquired from the Wade Tool Co., Waltham, Mass., its line of hand turret lathes, finishing lathes, and toolmakers' lathes. Manufacturing, sales, and service of these lathes will be moved to Benton Harbor. The Wade lathe line has been manufactured since 1872. Covel has made precision grinders since 1874.

Wade

Wade

Complete mach - \$2,010.00

less motor -

a 220-60-3 motor costs \$110.00

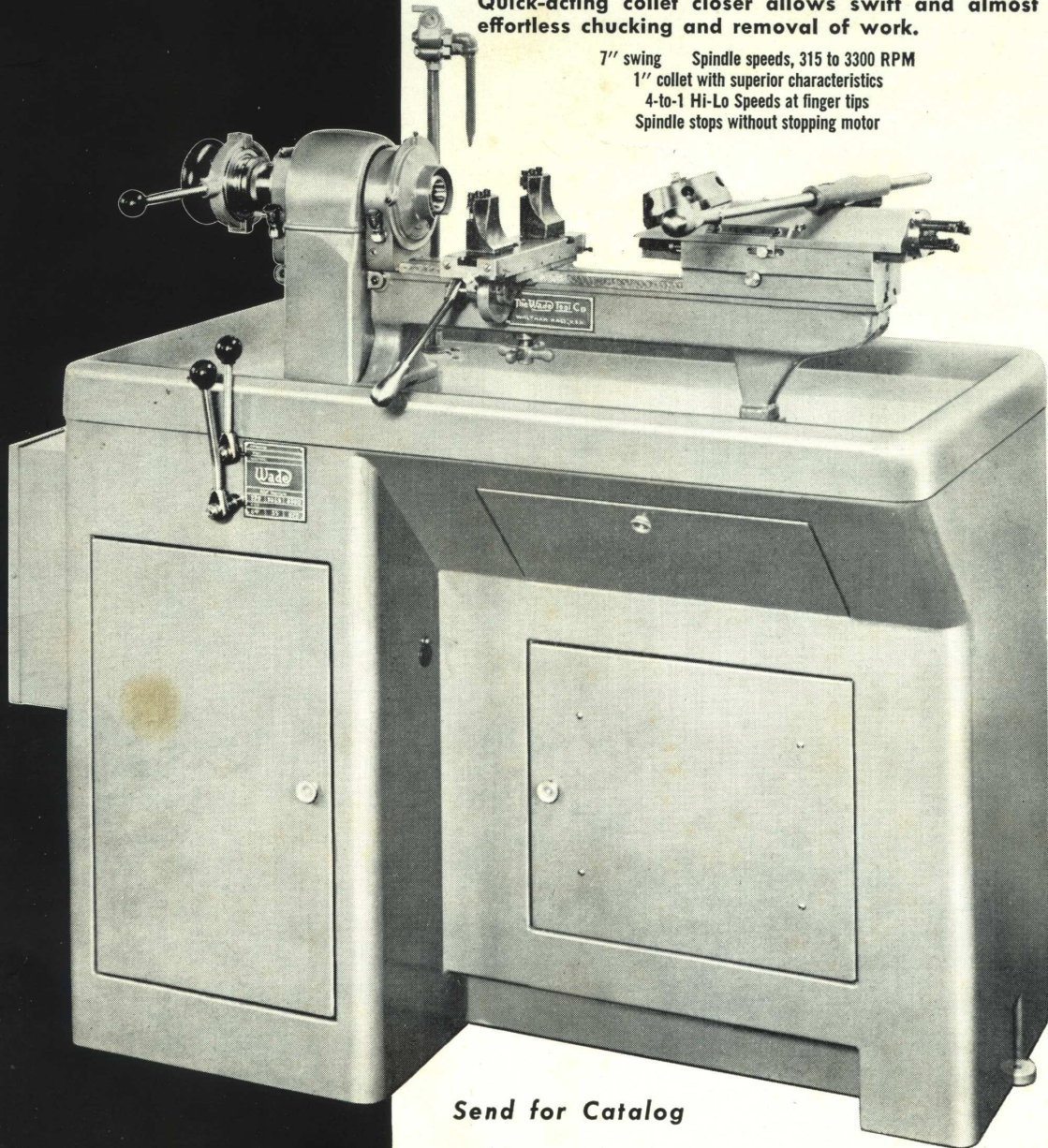
a 220 single phase motor would
be a little more than \$110.00

No. 7 less cabinet and stand - \$100.00^{app.}

® HAND SCREW MACHINE

... for modern, fast, economical production of second-operation work. All rotating parts are "Dynerically" balanced for vibrationless operation at all speeds. Quick-acting collet closer allows swift and almost effortless chucking and removal of work.

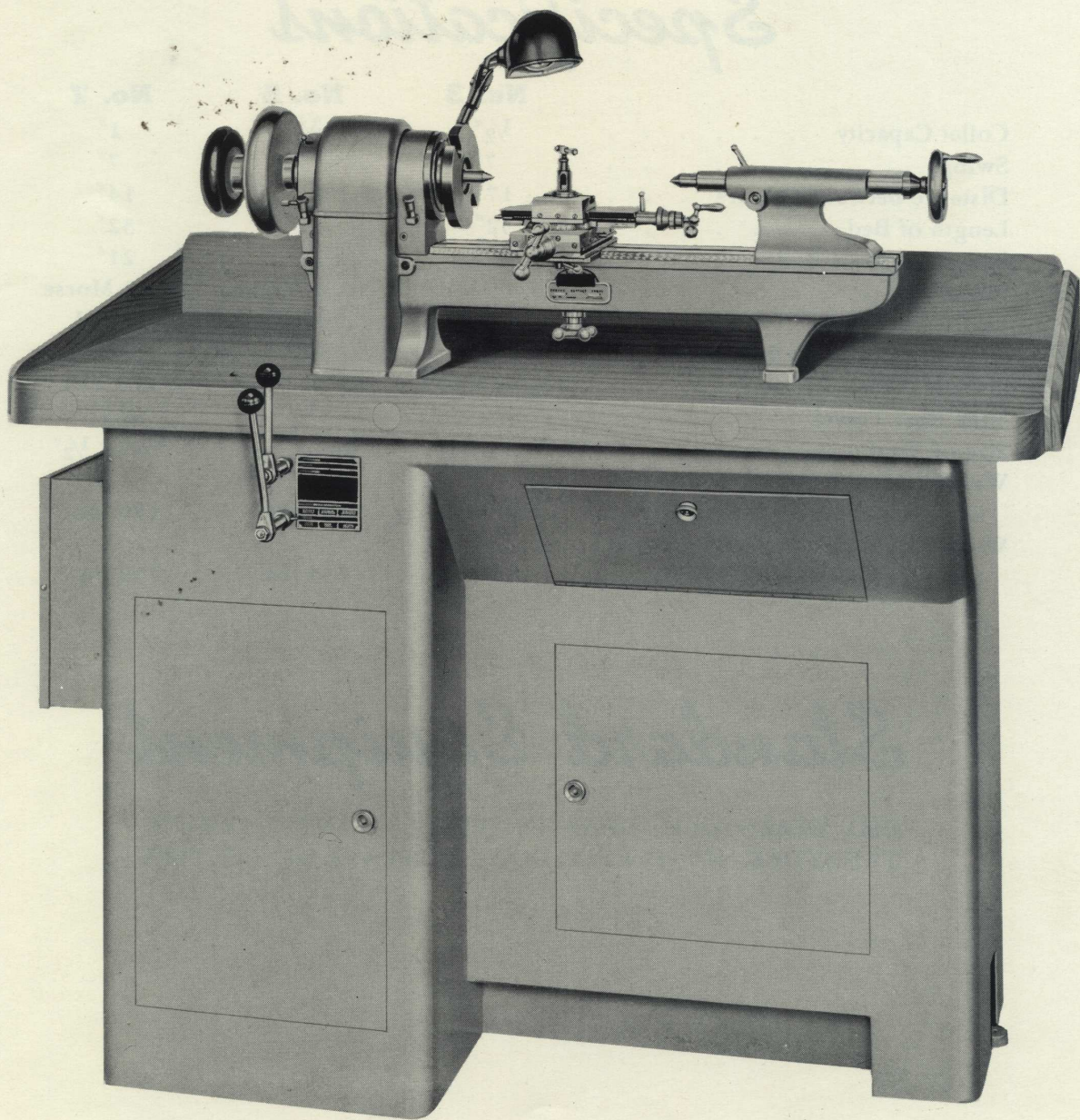
7" swing Spindle speeds, 315 to 3300 RPM
1" collet with superior characteristics
4-to-1 Hi-Lo Speeds at finger tips
Spindle stops without stopping motor



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THE WADE TOOL CO., 56 River St., Waltham, Mass.

DOALL CLEVELAND COMPANY
6517 Euclid Ave. — EXpress 1-1177
CLEVELAND, OHIO



GENERAL VIEW OF STANDARD LATHE ON CABINET

Specifications

	No. 3	No. 5	No. 7
Collet Capacity	1/2"	3/4"	1"
Swing	7"	7"	7"
Distance between Centers	17"	15"	14"
Length of Bed	32"	32"	32"
Length of Short Bed	21"	21"	21"
Taper	No. 1 Morse	No. 2 Morse	No. 2 Morse
Lead Screw	10 TPI	10 TPI	10 TPI
Travel of Tailstock Spindle . . .	3 1/4"	3 1/4"	3 1/4"
Spindle Nose	1 1/2" x 12 TPI	1 3/4" x 12 TPI	2" x 10 TPI
Slide Rest Travel	4 1/4"	4 1/4"	4 1/4"
Size of Tool	5/16" x 1/2"	5/16" x 1/2"	5/16" x 1/2"
Weight with Standard Equipment and Compound Slide Rest . . .	130 lbs.	140 lbs.	150 lbs.
Weight same with Cabinet, Motor Drive and Motor		735 lbs.	750 lbs.

Standard Equipment

BED, HEADSTOCK, DRAW-IN SPINDLE, CENTER COLLET,
TAILSTOCK, HAND REST, DOG FACEPLATE, and CENTERS

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UNIT MOTOR DRIVE

The unit motor drive is used on the # 3, # 5 and # 7 Lathes when it is desired to drive from below. The object is to drive the spindle of the lathe at speeds ranging from 200 to 2000 in geometric progression.

The spindle speeds are as follows:

204	816
325	1300
520	2080

When a clutch is provided you get an instantaneous 4 : 1 ratio by simply throwing the lever. This feature is necessary for operations such as drilling at high speed and reaming at a much lower speed etc.

The simplified motor drive Fig. 2 gives the same speeds but does not give the instantaneous 4:1 ratio. This high-low range is obtained by shifting the belt by hand.

Treadle operation gives the clutch action in starting and stopping, and leaves the hands free for work.

The motor is mounted on an adjustable base. To tighten motor belt turn the screw clockwise. An eccentric is used to tighten the countershaft belts. See (160) Fig. 1. The main driving belt is tightened by adjusting 3D- 171.

When it becomes necessary to replace the V belts be sure not only to get the correct number but also to give both the lathe number and the belt number. To replace the V belts it is necessary to loosen 2 bolts, (A) Fig. 1 and slide the two round bars toward the headstock, now remove the bolt at the right side of the Counter shaft bracket entirely and the old belt may be slipped off and the new ones put in place. It is now necessary to slide the base back into position and refasten the bolts.

The switch generally supplied is three position drum switch, the three positions being forward, stop and reverse. Proper overload relays are also supplied. If the overload relay trips, be sure to find the cause of the overload, and correct it before resetting.

The motor should be lubricated periodically according to the makers recommendations.

There are 6 grease fittings on this underdrive which should be greased at least every three months with a good grade of ball bearing grease. Be sure both the gun and the fitting are clean before injecting any grease.

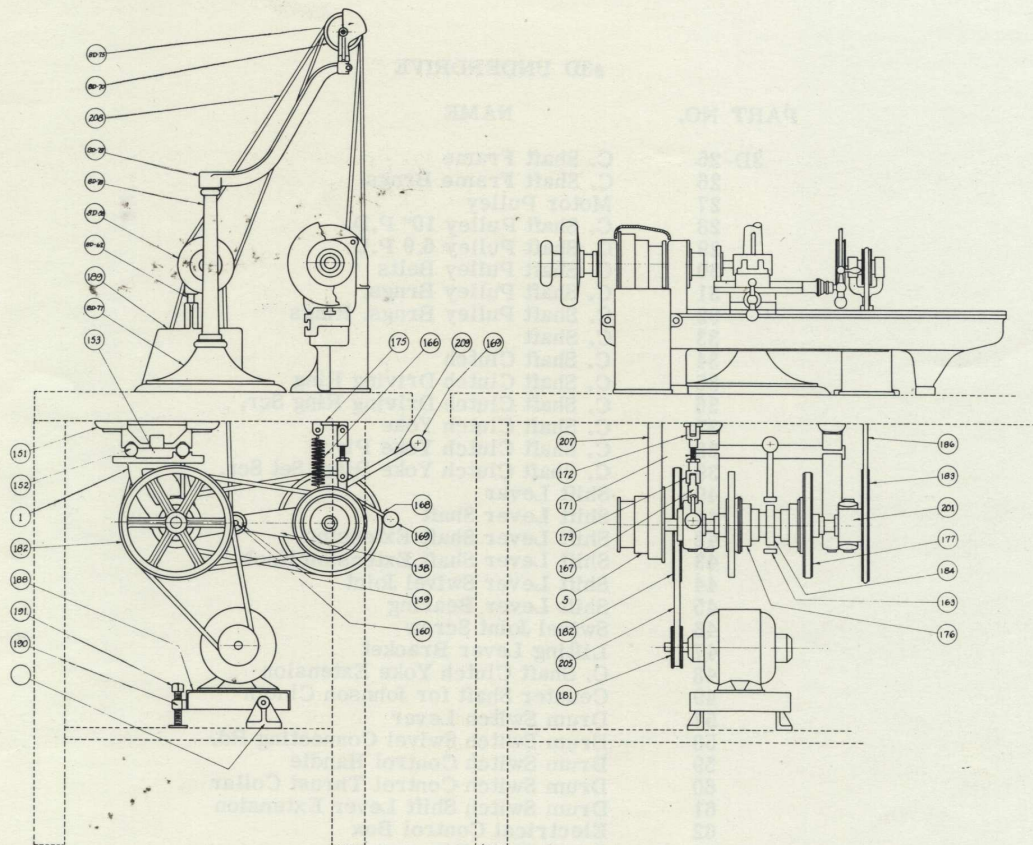


Fig. 1 Unit Motor Drive

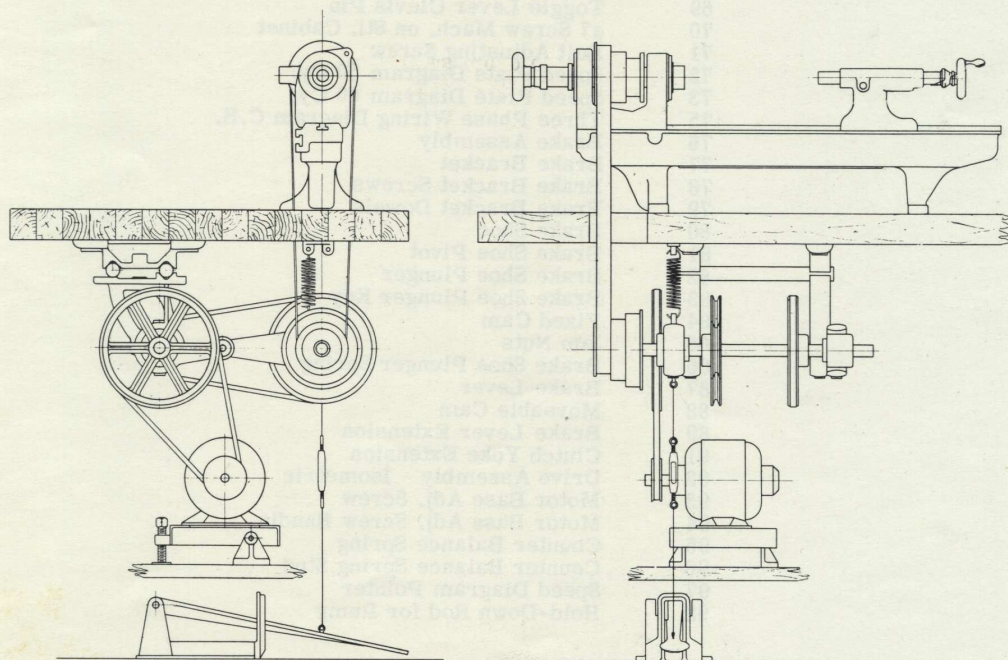
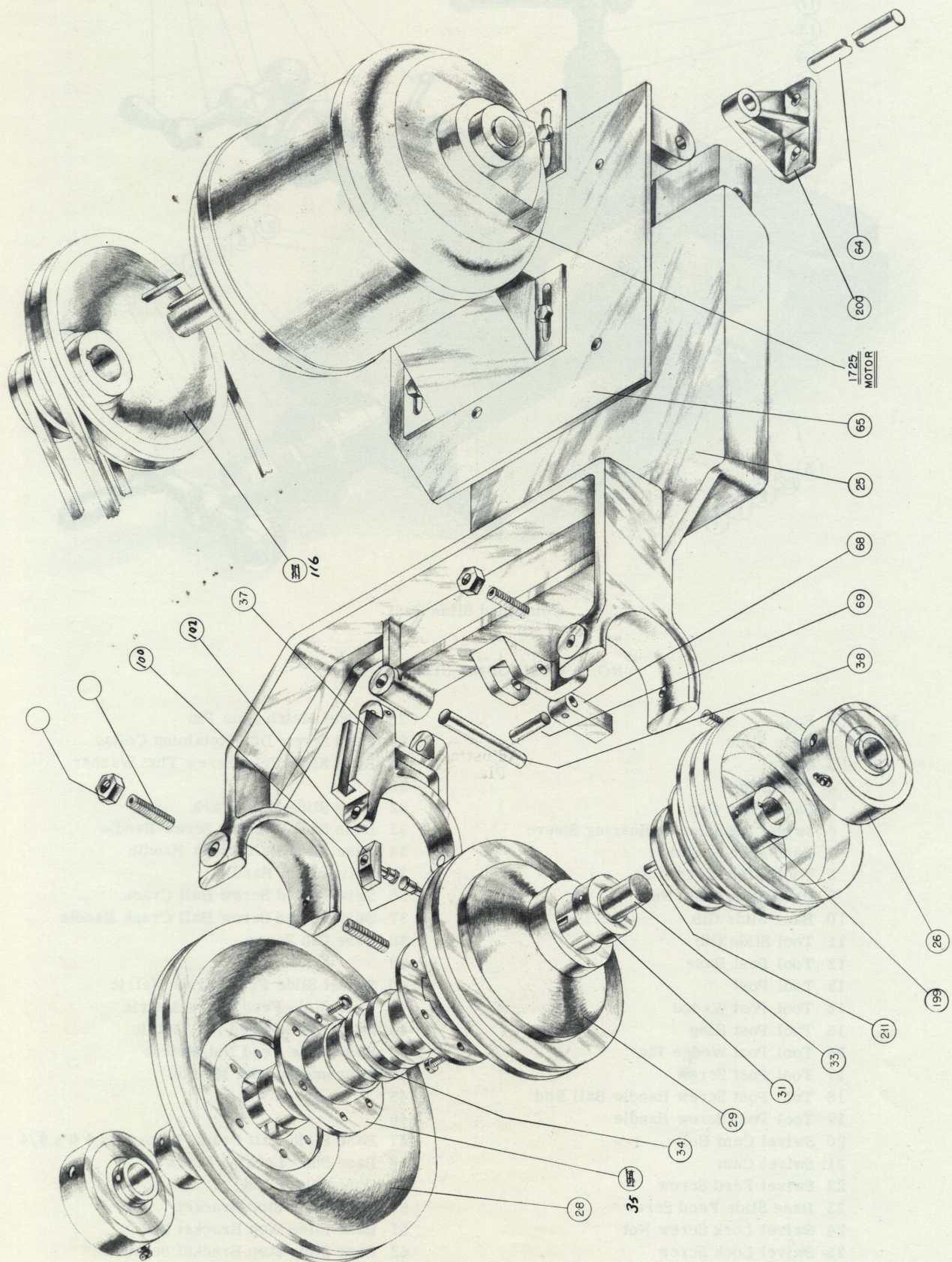


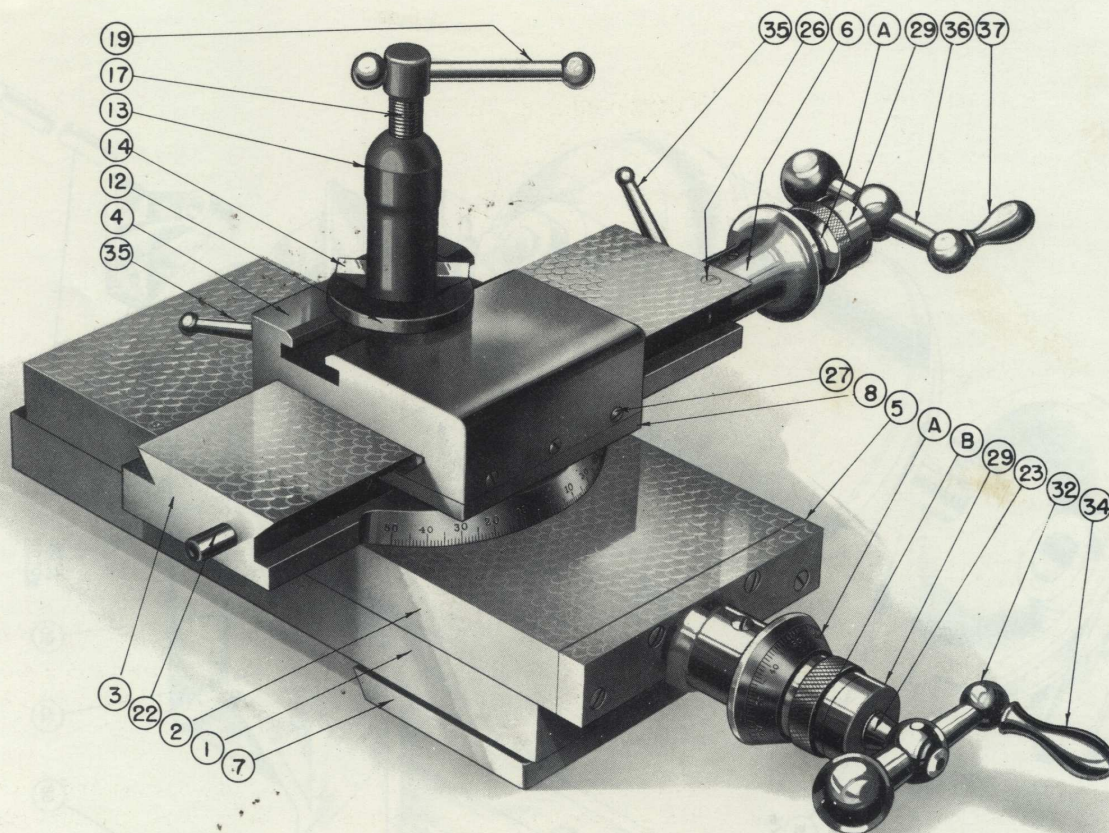
Fig. 2 Simplified Motor Drive

#3D UNDERDRIVE

PART NO.	NAME
3D-25	C. Shaft Frame
26	C. Shaft Frame Brngs.
27	Motor Pulley
28	C. Shaft Pulley 10" P.D.
29	C. Shaft Pulley 6.9 P.D.
30	C. Shaft Pulley Belts
31	C. Shaft Pulley Brngs.
32	C. Shaft Pulley Brngs. Rings
33	C. Shaft
34	C. Shaft Clutch
35	C. Shaft Clutch Driving Ring
36	C. Shaft Clutch Driving Ring Scr.
37	C. Shaft Clutch Yoke
38	C. Shaft Clutch Yoke Pivot
39	C. Shaft Clutch Yoke Pivot Set Scr.
40	Shift Lever
41	Shift Lever Shaft
42	Shift Lever Shaft Extension
43	Shift Lever Shaft Extension Knob
44	Shift Lever Swivel Joint
45	Shift Lever Bearing
46	Swivel Joint Screw
47	Lifting Lever Bracket
48	C. Shaft Clutch Yoke Extension
49	Counter Shaft for Johnson Clutch
57	Drum Switch Lever
58	Drum Switch Swivel Connecting Rd.
59	Drum Switch Control Handle
60	Drum Switch Control Thrust Collar
61	Drum Switch Shift Lever Extension
62	Electrical Control Box
63	Speed Plate Diagram
64	Motor Base Pivot
65	Motor Base
66	Toggle Lever
67	Toggle Lever Clevis - R.H.
68	Toggle Lever Clevis - L.H.
69	Toggle Lever Clevis Pin
70	#7 Screw Mach. on Stl. Cabinet
71	Belt Adjusting Screw
72	Speed Plate Diagram 50 Cy.
73	Speed Plate Diagram 60 Cy.
75	Three Phase Wiring Diagram C.H.
76	Brake Assembly
77	Brake Bracket
78	Brake Bracket Screws
79	Brake Bracket Dowels
80	Brake Shoe
81	Brake Shoe Pivot
82	Brake Shoe Plunger
83	Brake Shoe Plunger Key
84	Fixed Cam
85	Jam Nuts
86	Brake Shoe Plunger Spring
87	Brake Lever
88	Moveable Cam
89	Brake Lever Extension
91	Clutch Yoke Extension
92	Drive Assembly - Isometric
93	Motor Base Adj. Screw
94	Motor Base Adj. Screw Handle
95	Counter Balance Spring
96	Counter Balance Spring Stud
97	Speed Diagram Pointer
98	Hold-Down Rod for Pump



#3D UNDERDRIVE



Compound Slide Rest

NO. 3 COMPOUND SLIDE REST

- | | |
|---|--|
| 3S - 1 Base | 28 Swivel Match Line Pin |
| 2 Base Slide | 29 Feed Screw Dial Retaining Collar |
| 3 Swivel | 30 Base Slide Feed Screw Thr. Washer |
| 4 Tool Slide | 31 |
| 5 Base Slide Cap | 32 Base Slide Ball Crank |
| 6 Swivel Feed Screw Bearing Sleeve | 33 Base Shoe Locking Screw Handle |
| 7 Base Shoe or Guide | 34 Base Slide Ball Crank Handle |
| 8 Tool, Slide Feed Nut | 35 Swivel Cam Handle |
| 9 Base Slide Feed Nut | 36 Swivel Feed Screw Ball Crank |
| 10 Base Slide Gib | 37 Swivel Feed Screw Ball Crank Handle |
| 11 Tool Slide Gib | 38 Base Gib Screw |
| 12 Tool Post Base | 39 |
| 13 Tool Post | 40 Swivel Slide Feed Screw Metric |
| 14 Tool Post Wedge | 41 Base Slide Feed Screw Metric |
| 15 Tool Post Ring | 42 Swivel Slide Feed Nut Metric |
| 16 Tool Post Wedge Pin | 43 Base Slide Feed Nut Metric |
| 17 Tool Post Screw | 44 Micrometer Dial Metric |
| 18 Tool Post Screw Handle Ball End | 45 |
| 19 Tool Post Screw Handle | 46 |
| 20 Swivel Cam Bolt | 47 Base Slide Ball Crank Taper Pin # 0 x 3/4 |
| 21 Swivel Cam | 48 Base Shoe Locking Screw |
| 22 Swivel Feed Screw | 49 Guide Block Nut |
| 23 Base Slide Feed Screw | 50 Base Slide Stop Bracket |
| 24 Swivel Lock Screw Nut | 51 Base Slide Stop Bracket Nut |
| 25 Swivel Lock Screw | 52 Base Slide Stop Bracket Screw |
| 26 Swivel Feed Screw Bearing Sleeve Lk. Screw | 53 Base Slide Stop Pin |
| 27 Tool Slide Gib Screw | |

COMPOUND SLIDE REST

	Specifications
Top Slide Travel	4 1/4"
Base Slide Travel	4 1/2"
Tool Size Maximum	5/16" x 5/8"
Swivel Slide may be swung 50 degrees either side of the center line of the Lathe	

The Compound Slide is perhaps the most important and versatile of all the various attachments that can be applied to these Lathes. It must be used for practically all turning and boring operations.

The bottom of the slide rest is provided with an aligning shoe or guide which conforms to the slide rest toward or out from the center of the Lathe. Before mounting the slide rest on the bed be sure both the bed and the aligning shoe are clean.

Steel gibbs on both the top and base slides are adjusted with self binding gib screws.

The top slide is mounted on a swivel, graduated in degrees, which permit the cutting tool to be fed at any desired angle. When clamping the swivel be sure to tighten the center clamp first (this is clamp 35) at the right hand end of the slide rest. This clamp pulls the slide down on a tapered stud and insures accurate resetting of angles. Now tighten the main clamp which is at the rear of the swivel.

The large micrometer dials, which are graduated in thousands of an inch, may be revolved to any desired starting point by holding the handle with one hand and turning the dial to the desired point with the other hand.

The base is provided with an adjustable stop for controlling the depth of cut. This stop should be used in connection with the micrometer dial for accurate work.

The maximum size tool bits this slide rest will accommodate is 5/16 x 5/8, but for general turning etc. a tool bit 5/16 square is adequate.

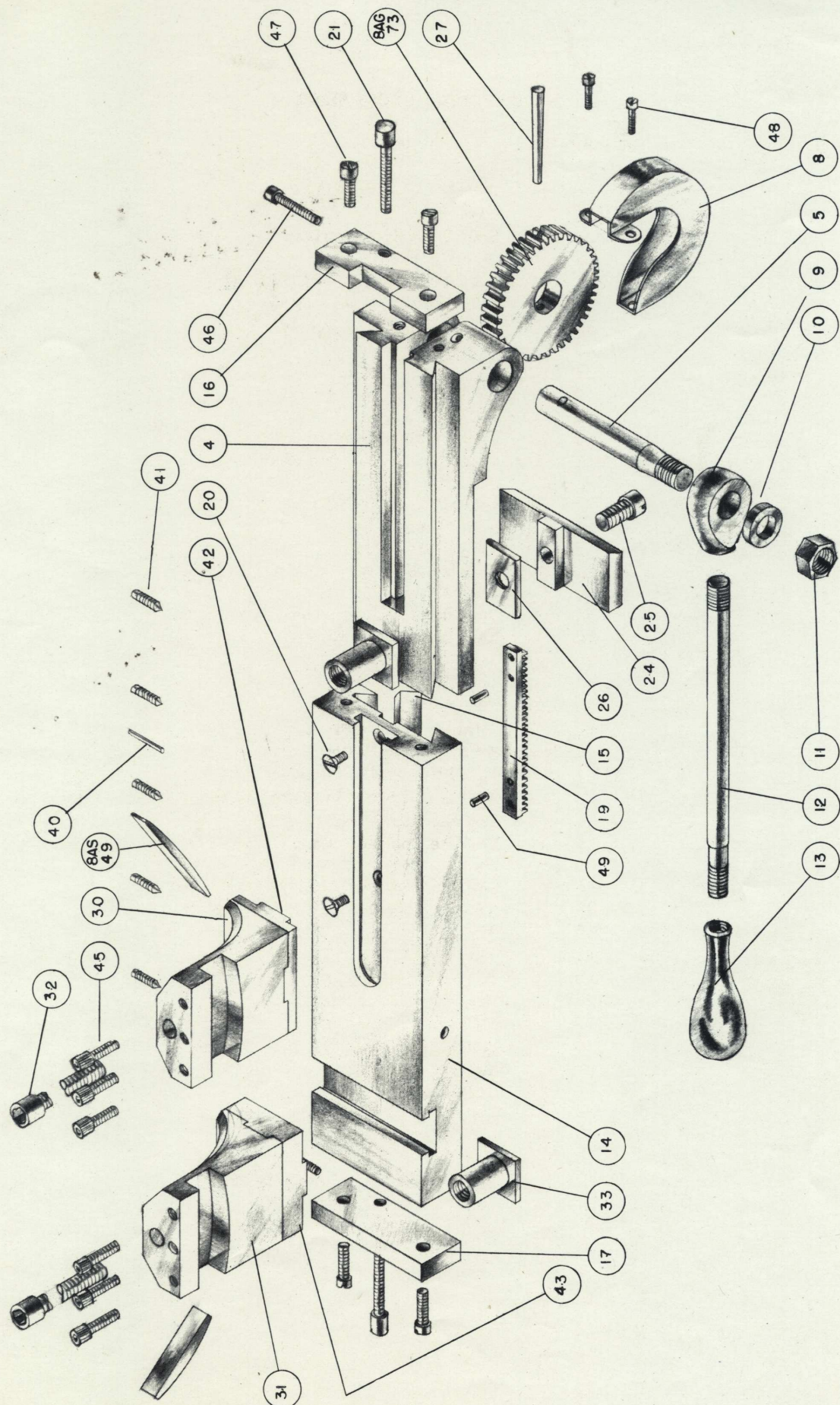
Both top and bottom slides should be oiled often enough to maintain a thin film of oil on the dovetail. The only other places that require oil are clearly indicated by ball valve oilers. These oilers should be filled at least once a week.

A convenient method of filling these small valve oilers is to depress the ball cover with a scriber or small wire and pour the oil on this. The oil in turn runs down the scriber and into the hole with a minimum of leakage.

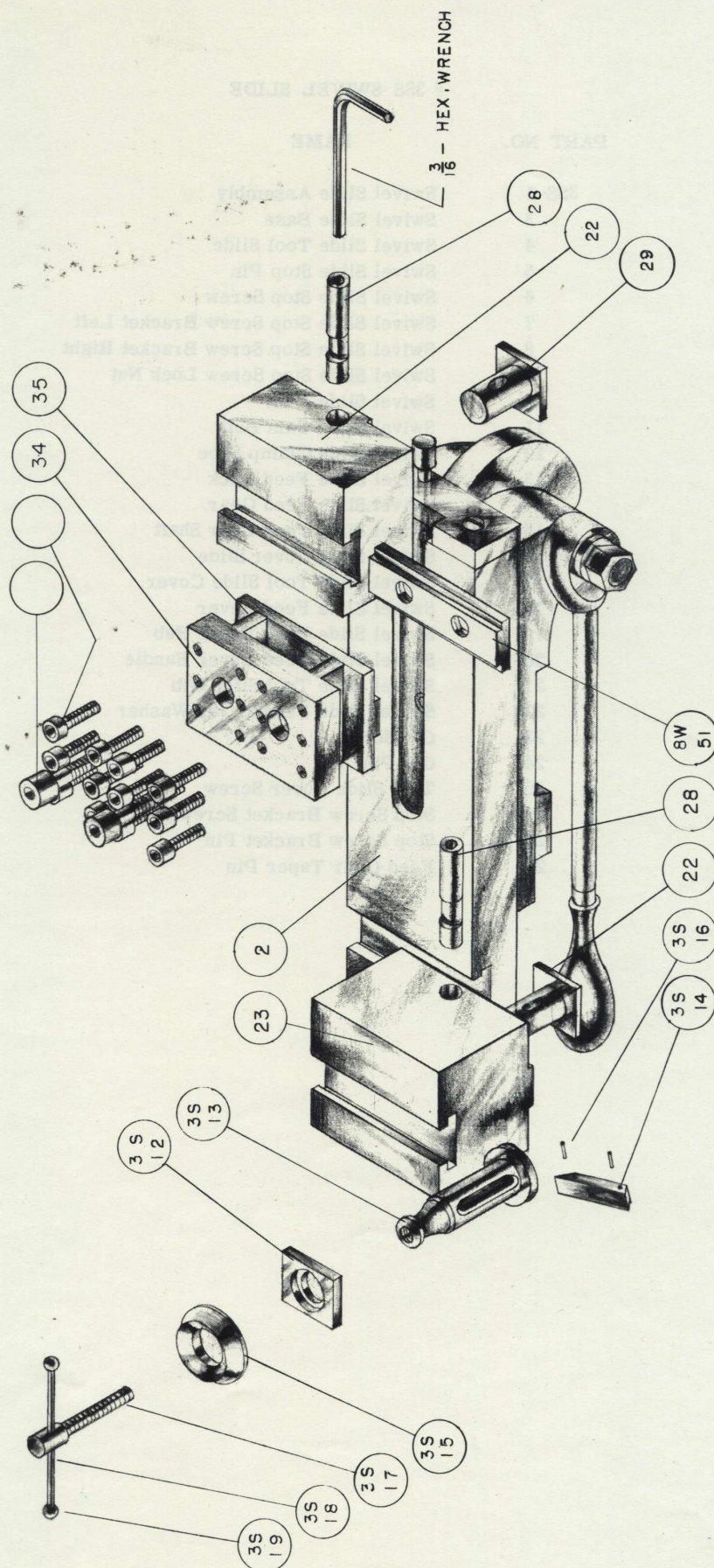
The picture and part list on the following page should enable anyone ordering repair parts to find the name and number of the necessary parts.

3SD DOUBLE CROSS SLIDE

PART NO.	NAME
3SD-4	Base
5	Feed Shaft
6	Feed Shaft Retaining Scr.
8	Gear Guard
9	Feed Lever Hub
10	Feed Lever Washer
11	Feed Lever Nut
12	Feed Lever Rod
13	Feed Lever Handle
14	Cross Slide
15	Cross Slide Gib
16	Cross Slide Stop Plate Front
17	Cross Slide Stop Plate Rear
19	Cross Slide Rack
20	Cross Slide Rack Screws
21	Cross Slide Stop Cap
22	Tool Block Front
23	Tool Block Rear
24	Base Shoe
25	Base Shoe Locking Screw
26	Base Shoe Clamp Screw
27	Feed Shaft Pin
28	Tool Block Cam
29	Tool Block Cam Bolt
30	Solid Tool Block Front
31	Solid Tool Block Rear
32	Solid Tool Block Clamp Bolt
33	Solid Tool Block Clamp Bolt Head
34	Multiple Tool Post
35	Multiple Tool Post Base Front
36	Multiple Tool Post Base Rear
37	Multiple Tool Post Base Screws
38	Multiple Tool Post Base Clamp Scr.
40	Gib Dowel
41	Gib Screw
42	Front Tool Block Adapter
43	Rear Tool Block Adapter
45	Tool Post Screw
46	Stop Screw Clamp Screw
47	Stop Plate Screw
48	Gear Guard Screw
49	Rack Dowel Pin



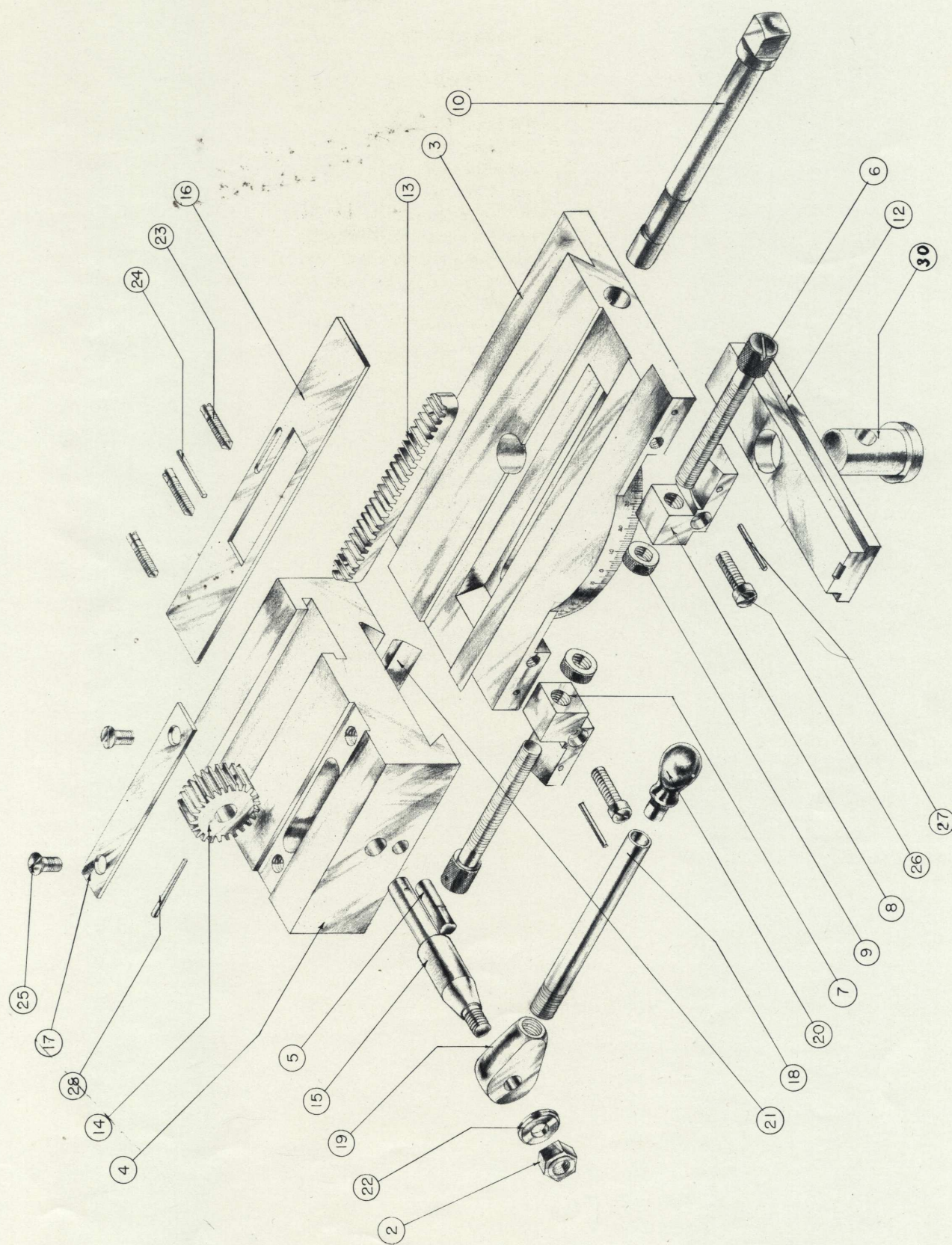
#3SD DOUBLE CROSS SLIDE



MULTIPLE TOOL BLOCK, ASSEMBLY

3SS SWIVEL SLIDE

PART NO.	NAME
3SS-1	Swivel Slide Assembly
3	Swivel Slide Base
4	Swivel Slide Tool Slide
5	Swivel Slide Stop Pin
6	Swivel Slide Stop Screw
7	Swivel Slide Stop Screw Bracket Left
8	Swivel Slide Stop Screw Bracket Right
9	Swivel Slide Stop Screw Lock Nut
10	Swivel Slide Cam
11	Swivel Slide Cam Bolt
12	Swivel Slide Clamp Shoe
13	Swivel Slide Feed Rack
14	Swivel Slide Feed Gear
15	Swivel Slide Feed Gear Shaft
16	Swivel Slide Cover Slide
17	Swivel Slide Tool Slide Cover
18	Swivel Slide Feed Lever
19	Swivel Slide Feed Lever Hub
20	Swivel Slide Feed Lever Handle
21	Swivel Slide Tool Slide Gib
22	Swivel Slide Feed Lever Washer
23	Gib Screw
24	Gib Pin
25	Tool Slide Cover Screw
26	Stop Screw Bracket Screw
27	Stop Screw Bracket Pin
28	Feed Gear Taper Pin



#3SS SWIVEL SLIDE

TAILSTOCK

The standard Tailstock (Fig. 1) is scraped to exact alignment with the headstock.

The spindle is hardened and ground and has a bearing the full length of the tailstock, regardless of how far extended. The spindle is graduated in sixteenths of an inch and the screw feed is provided with adjustable micrometer dial graduated in thousands of an inch.

The knockout plug automatically ejects tools in the # 1 Morse taper, when the spindle is drawn back to the limit.

This tailstock is furnished as standard equipment, and for general work is the most useful type.



Fig. 1 Standard Tailstock

The lever tailstock (Fig. 2) will be found most useful on various production jobs of drilling etc. A small hand turret can be fitted to the spindle to provide for a number of operations with the tailstock.

The only difference between this tailstock and the standard is that the feed screw and nut are replaced with the lever attachment. This is a simple conversion and can be effected in a few minutes.

To make this change simply remove the taper pins from the nut and push the whole spindle assembly out of the tailstock casting. Now unscrew the feed screw bearing (3T-6) and remove the feed screw and nut. Screw (3TL-30) into the end of the tailstock spindle. The slot in this piece should be 90° from the slot in the spindle, if not it will have to be faced off until it comes in the correct position.

The feed lever fulcrum (3TL-28) is slipped into the spindle and pushed into the position the nut formerly occupied. The taper pins are now replaced, the linkage assembled and the lever tailstock is ready to operate. If the above assembly has been done by our factory, everything will fit properly but if the customer has to do the fitting, it will be necessary for him to drill and ream for the two taper pins which hold the lever fulcrum.

The center or chuck is ejected by tapping on a 3/16 rod put through the center of the stop screw. The stop screw is provided with a check nut.

The Half Open tailstock (Fig. 3) is made to receive rapidly one or more tool spindles with tool all set for certain operations. Resting in hardened steel, ground and lapped bearings makes a simple method of obtaining absolute accuracy in light manufacturing.

The tool spindle hardened, ground and lapped to size and smoothness can be pushed by hand where cut is light and sensitive touch is wanted, or a lever can be provided to operate against the hardened end which protrudes slightly through the handle. The spindle is held from turning by a brass dog which also holds an adjustable stop for accurate depth of cut.



Fig. 2 Lever Tailstock

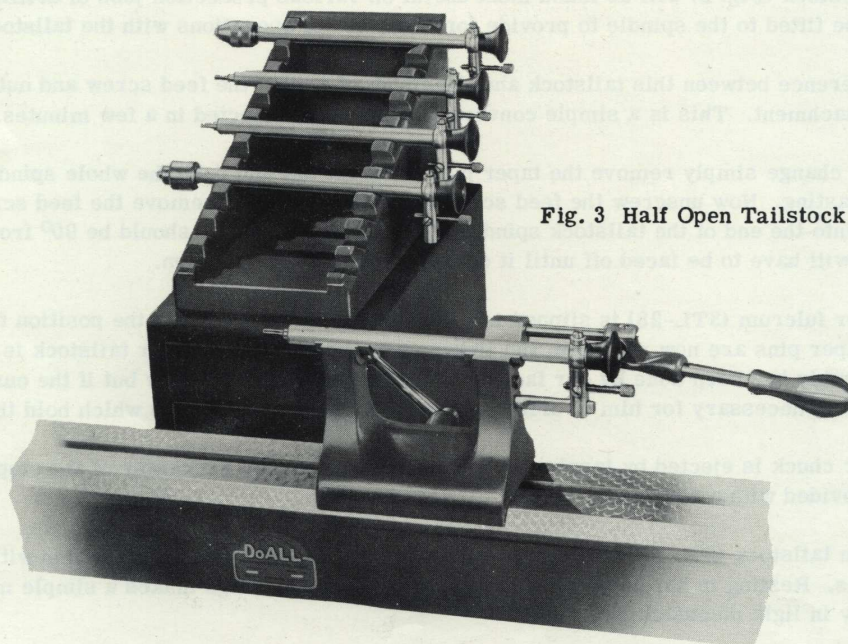


Fig. 3 Half Open Tailstock

TURRET ATTACHMENT

This turret has a tilted head in order to clear large box tools, self opening dies, etc. The six holes in the head are $3/4$ " in diameter to take tools with $3/4$ " shanks. When the ram is flush with the base at the front, the turret head may be turned by hand in either direction if it is desired to skip some of the stations or turn back. The turret head is automatically clamped after the indexing cycle has been completed. This indexing cycle consists of unclamping the head, removing the index pin, turning the head clockwise to the next station, and indexing the stop screw to the proper position. The working travel is $3\ 1/4$ ", indexing travel 1", making a total movement of $4\ 1/4$ ".

LUBRICATION

Fill both oil cups on the Ram once a week or often enough to maintain a thin film of oil on the dovetails.

Fill the oil cup in the center of the head at least once a week with a good grade of machine oil.

The head lever linkage should be oiled occasionally with machine oil and the stop roll should receive a few drops of oil weekly.

ADJUSTMENTS

The gibs on the dovetail are tapered in opposite directions, so be sure that both screws are turned the same amount when adjusting the fit of the ram.

If at any time the head should be found to be out of center, mount an indicator on the spindle and put a $3/4$ " plug in a turret head hole. Adjust the gib screws until the indicator reads the same on both sides of the plug.

If through wear or abuse the turret head becomes too loose, remove the oil cup in the center of the head and insert a hexagon wrench $1/8$ " across the flats. This allows the center bolt to be held stationary while the hexagon nut ($7/8$ ") is tightened. Before adjusting this nut, loosen the set screw in the side.

The scale index may be placed in any convenient position for setting tools. The scale itself may be turned to any of four different graduations to suit the operator.

The stop screws, which index automatically, have set screws directly above each screw to bind it once the correct adjustment has been made. There is a brass plug under each screw to protect the threads and if this comes out, do not tighten the set screw until it has been replaced.

The hand lever length may be adjusted to suit operating conditions by loosening the set screw at the front of the lever casting, moving the lever to the desired position and retightening the screw.

Should it become necessary to order repair parts, give both the part number and name (3TT-40 - Clamping Lever Spring). The sectional drawing and part list should enable you to do this, but if necessary send a sketch of the desired part.

INSTRUCTIONS FOR BORING TURRET

If your lathe has been purchased with a turret, the head will, of course, be bored and reamed to a standard $3/4$ " hole, but if for any reason you have to bore the turret yourself, the following instructions may help you.

Before boring the turret head, run the headstock for at least fifteen minutes at high speed. This will bring the machine up to normal operating temperature. Be sure to remove the six binding plugs before machining.

The first step to take in boring this turret head is to fasten the base to the bed in such a position that the boring tool will not begin cutting until the ram projects at least $3/4$ " over the base. The turret as you receive it will have six drilled holes, $11/16$ " diameter in the head and these holes are the correct depth ($1\ 1/4$ "). After one stop screw has been set, using this hole as a guide, the others may be set just the same distance in.

Mount an adjustable boring bar in the headstock, preferably in a collet and bore each hole to .745" diameter. Take this in several chips, indexing to all six positions after each chip. As the boring tool will break through the clamping plug hole, be very careful about feeding the tool, use both hands on lever.

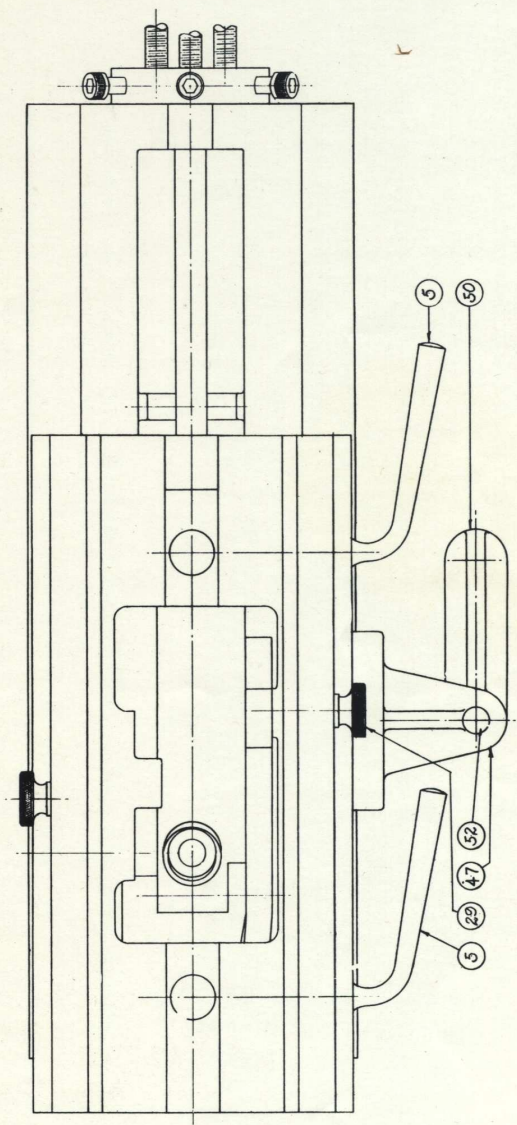
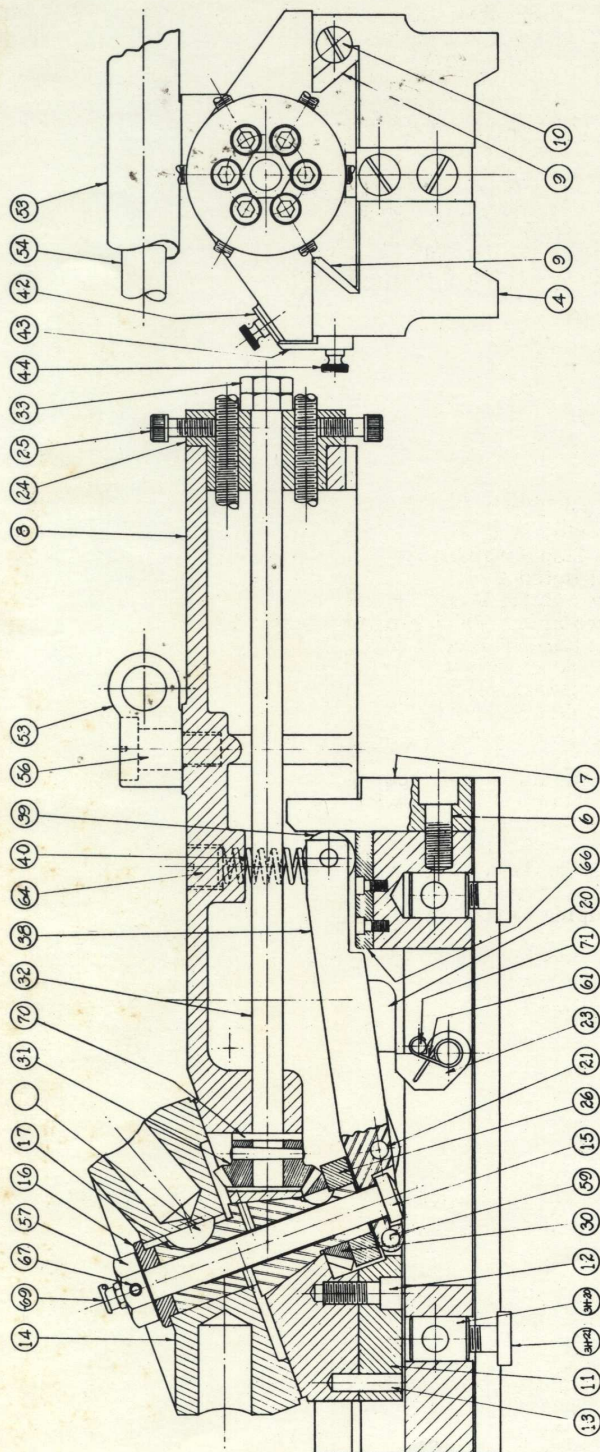
The final operation of reaming these bored holes should be done with either a standard machine reamer or a machine expansion reamer. A $3/4$ " plug should be a light push fit in each of the six holes.

If the above work has been done carefully, each turret position will index well within .0005" of each other on a bar extended 5" from the center line of the turret head and within plus or minus .0002" of the center line of the headstock spindle.

TILTED TURRET

PART NO.	NAME
3TT-1	Turret Assembly
2	
3	
4	Base
5	Cam
6	Base Stop Block Screw
7	Base Stop Block
8	Top Slide
9	Top Slide Gib
10	Top Slide Gib Screws
11	Top Slide Bottom Plate
12	Top Slide Bottom Plate Scr.
13	Top Slide Bottom Plate Dowels
14	Head
15	Head Bolt
16	Head Washer
17	Head Stud
18	Locking Bolt
19	Locking Bolt Sleeve
20	Locking Bolt Lever
21	Locking Bolt Lever Pivot
22	Locking Bolt Bushing
23	Locking Bolt Pawl
24	Slide Stop Ring
25	Slide Stop Ring Clamp
26	Index Ratchet
27	Index Ratchet Pawl
28	Index Ratchet Pawl Pivot
29	Index Ratchet Pawl Knob
30	Bevel Gear, Front
31	Bevel Gear, Rear
32	Bevel Gear, Rear Shaft
33	Bevel Gear, Rear Shaft Nut
34	Bevel Gear, Rear Shaft Taper Pin #1
35	Tool Clamp Plug- Upper
36	Tool Clamp Plug- Lower
37	Tool Clamp Screw
38	Clamping Lever
39	Clamping Lever Roll
40	Clamping Lever Spring
41	Clamping Lever Spring Screw
42	Scale
43	Scale Index
44	Scale Index Screw
45	Tool Clamp Key
46	
47	Hand Lever Bracket
48	Hand Lever Bracket Screws
49	Hand Lever Bracket Dowels
50	Hand Lever Link
51	Hand Lever Link Screws
52	Hand Lever Link Pivot
53	Hand Lever
54	Hand Lever Extension
55	Hand Lever Handle
56	Hand Lever Pivot
57	Head Bolt Nut
58	Locking Bolt Pawl Pivot
59	Clamping Lever Pivot
60	Clamping Lever Roll Pivot
61	Locking Bolt Pawl Spring
62	Locking Bolt Pawl Spring Cap
63	Locking Bolt Pawl Plunger
64	Clamping Lever Spring Cap
65	Clamping Lever Roll PLATE
66	Locking Bolt Spring
67	Hd. Bolt Nut Set Screw
68	Hd. Bolt Nut Set Screw Plug
69	Head Oil Cup
70	Bevel Gear Thrust Washer
71	Locking Bolt Pawl Stop Pin
72	

TW 41050



TILTED HEAD TURRET

#5 and #7 Headstock

The principle difference between the #5 and #7 is the collet capacity. The #5 is 3/4" and the #7 is 1".

The heart of the lathe is the spindle and bearings, and the system used on Wade Lathes has been developed with careful experimentation and in accordance with true principles of precision bearing design. Today, the last word in precision bearings is the double row, roller bearings used in Wade Lathes.

At any time after the purchase of the lathe any of the standard attachments can be applied without trouble by the person owning the lathe.

LUBRICATION

The two oilcups at the front of the headstock should be kept filled with an oil equal to Spinesso #38. As the oil in these cups will surge into the bearings when the lathe is running, the oil cups should be checked when the lathe is at rest. Once every year the oil cups should be removed and the housings thoroughly flushed out with a non-corrosive cleaning solvent.

The bearing surface between the spindle and the draw bar must be kept clean and a thin film of oil applied regularly. See Assembly drawing.

If a lever closer is supplied with the lathe, all moving parts should be oiled daily.

Both the throat and the outside of the spindle nose must be kept absolutely clean. Clean the throat and the threads in the chuck plate before mounting a chuck or face plate.

If the lathe is to be used with a grinding attachment, keep the head guarded, run the headstock in reverse and see that all bearing surfaces are protected from dust. Never use compressed air for cleaning this machine as it will lodge chips in between slides and possibly blow grit into the bearings.

ADJUSTMENTS

The spindle bearings if given the proper care will not require any adjustment for many years and when adjustments are necessary only a man familiar with this bearing setup should be entrusted with the job.

The lever closer is as simple to adjust as tightening a collet with the draw bar. First put the lever closer in the "on" position (to the left) now tighten the draw bar until the stock is gripped securely by the collet. Use the stop pin at the front of the headstock for holding the spindle while adjusting the draw-bar. Never use the index pin at the rear of the headstock for this purpose as it will soon elongate the holes and spoil the indexing accuracy of the headstock. Next tighten the socket head screw at (A) in the assembly drawing and the lever closer is ready to use. When the collet is opened (by moving the lever to the right) it is pushed forward just enough to allow the spring of the collet to open it and allow free passage of the stock through.

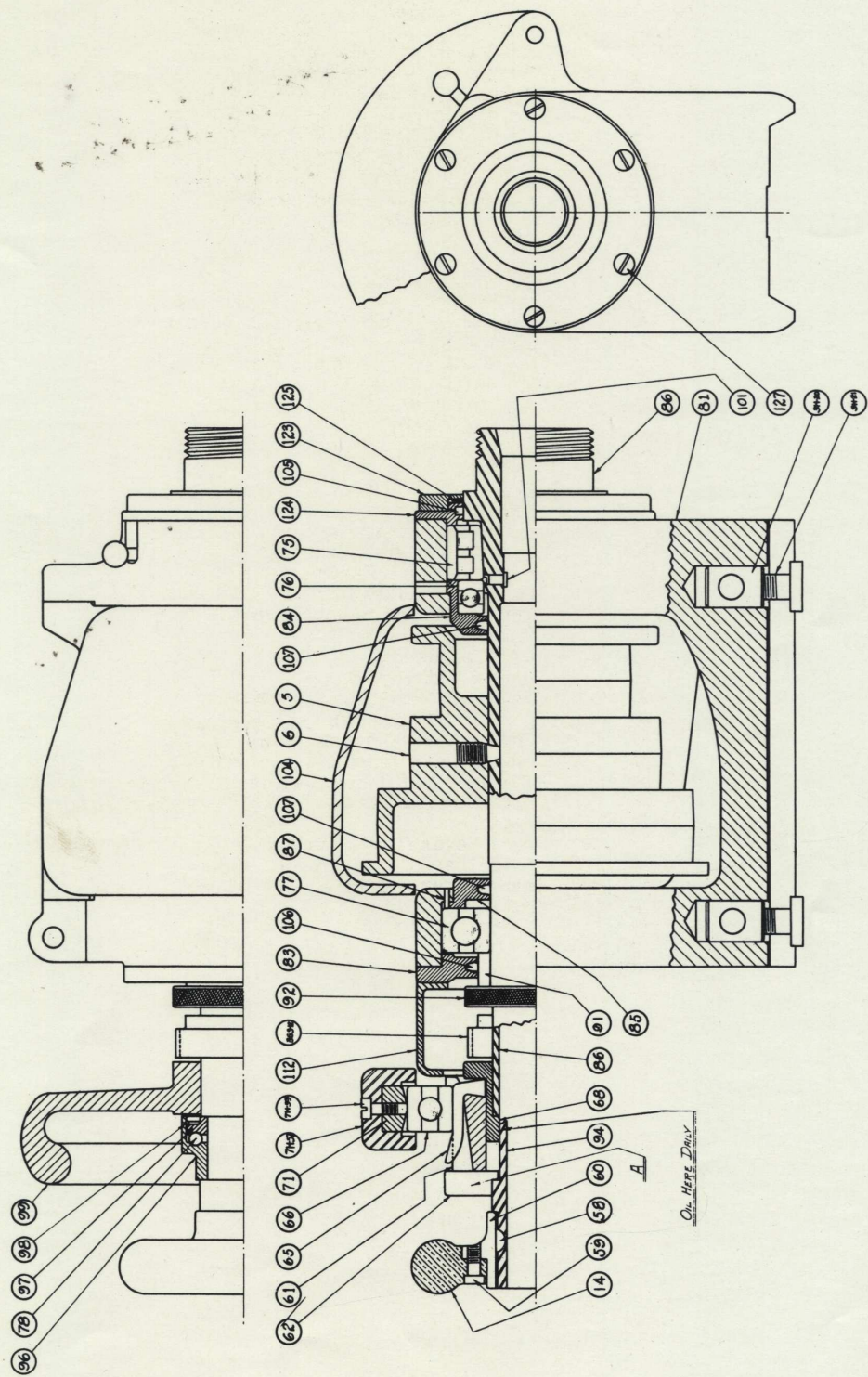
If the lathe is to be used for tool work or work requiring frequent changing of the collets there is no need of tightening the clamping screw at (A) each time the collet is changed. Use the draw bar just the same as if the lever closer were not there.

#5 HEADSTOCK

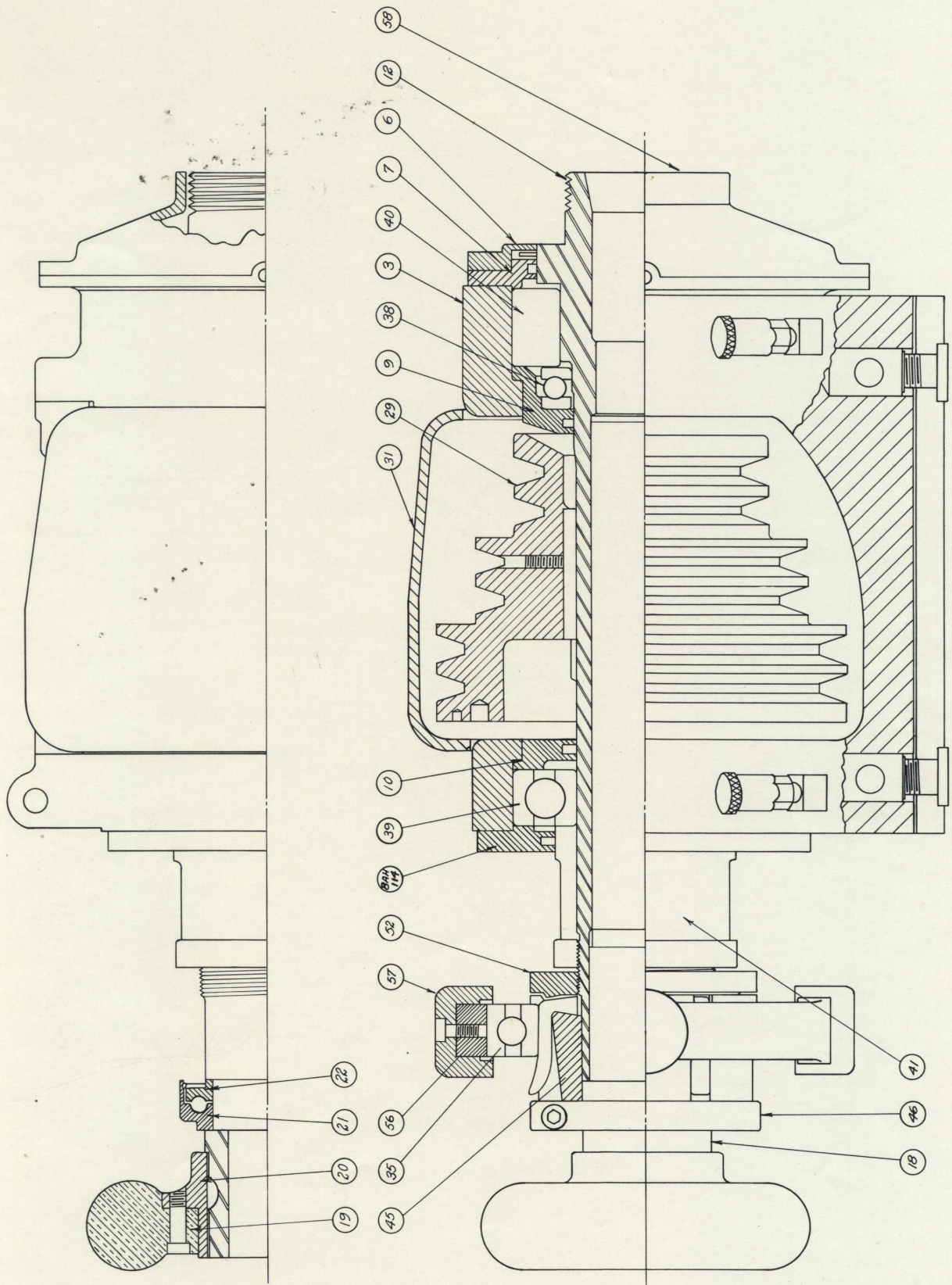
PART NO.	NAME
5H- 5	Cone Pulley
6	Cone Pulley Drive Screw
14	Draw Bar Handle
58	Draw Bar Key
59	Draw Bar Screws
60	Draw Bar Hub
61	Fulcrum Sleeve
62	Fulcrum Sleeve Ring
63	
64	
65	Finger Lever
66	Finger Lever Brng.
67	Finger Lever Brng. Shield
68	Finger Lever Thrust Bushing
69	
70	
71	Hand Lever
72	Hand Lever Handle
73	Hand Lever Link
74	Hand Lever Link Pins
75	Headstock Roller Bearing
76	Headstock Thrust Bearing
77	Headstock Ball Bearing
78	Draw Bar Thrust Brng. Balls
79	
80	Bearing Assembly
81	Frame
82	
83	Rear Dust Cap
84	Thrust Brng. Housing
85	Rear Inside Dust Cap
86	Spindle
87	Rear Inside Dust Cap Pin
88	
89	
90	
91	Ball Bearing Collar
92	Ball Bearing Adj. Ring Nut
93	
94	Draw Bar
95	Thrust Bearing Spacer
96	Thrust Bearing - Outer Race
97	Thrust Bearing - Inner Race
98	Thrust Bearing Retainer Ring
99	Spindle Hand Wheel
100	Roller Bearing Spacer
101	Collet Key
102	
103	Gear Guard Ring
104	Belt Cover
105	Front Dust Felt
106	Rear Dust Felt
107	Inside Dust Felts
108	Belt Guard
109	Belt Guard Rear
110	Spindle Stop Pin
111	Spindle Stop Pin Handle
112	Gear Guard
113	
114	
115	
116	
117	
118	Headstock Assembly
119	Headstock Assembly
120	Nose Cap
121	Nose Guard
122	
123	Headstock Front Dust Cap - Outer Ring
124	Headstock Front Dust Cap - Inner Ring
125	Headstock Front Oil Flinger
126	Headstock Cone Pulley for V Belts
127	Headstock Dust Cap Screws

#7H HEADSTOCK

PART NO.	NAME
7H-1	Headstock Assembly
2	Headstock Bearing Asm.
3	Headstock Frame
4	Headstock Cone Pulley
6	Front Dust Cap Outer Ring
7	Front Dust Cap Inner Ring
8	Front Oil Flinger
9	Thrust Bearing Housing
10	Rear Inside Dust Cap
12	Spindle
18	Draw Bar
19	Draw Bar Handle
20	Draw Bar Hub
21	Draw Bar Thrust Brng. Out. Race
22	Draw Bar Thrust Brng. Inner Race
23	Draw Bar Thrust Brng. Retainer
24	Rear Inside Dust Felt
25	Front Inside Dust Felt
26	Front Outside Dust Felt
29	V Belt Pulley
31	Belt Cover
33	Hand Lever Link
35	Finger Lever Brng.
37	#7 General Assembly
38	Headstock Thrust Bearing
39	Headstock Ball Bearing
40	Headstock Roller Bearing
41	Rear Bearing Outside Spacer
42	Roller Brng. Spacer
45	Fulcrum Sleeve
46	Fulcrum Sleeve Ring
47	Fulcrum Sleeve Ring Screws
48	Fulcrum Sleeve Ring Adj. Scr.
52	Finger Lever Thrust Collar
53	Finger Lever Thrust Collar Screws
54	Finger Lever Thrust Collar Set Screws
55	Finger Lever Thrust Collar Set Screws Plug
56	Hand Lever
57	Hand Lever Closer Stirrup
58	Nose Guard
59	Hand Lever Closer Stirrup Screw
60	Spindle Stop Pin
61	Spindle Hand Wheel



#5 HEADSTOCK ASSEMBLY



#7 HEADSTOCK ASSEMBLY

The Wade Tool Co.

WALTHAM, MASS., U.S.A.