EDGWICK 6½" GAP-BED LATHE

OPERATOR'S HANDBOOK.

(2nd Edition).

We respectfully request that this book be given to the operator of the machine and not retained in the office.

The best results can be obtained only by enabling the operator to make himself familiar with its contents.

Further copies will be supplied on request.

As improvements are made to these machines from time to time, the description and illustrations in this book are subject to alteration without notice.

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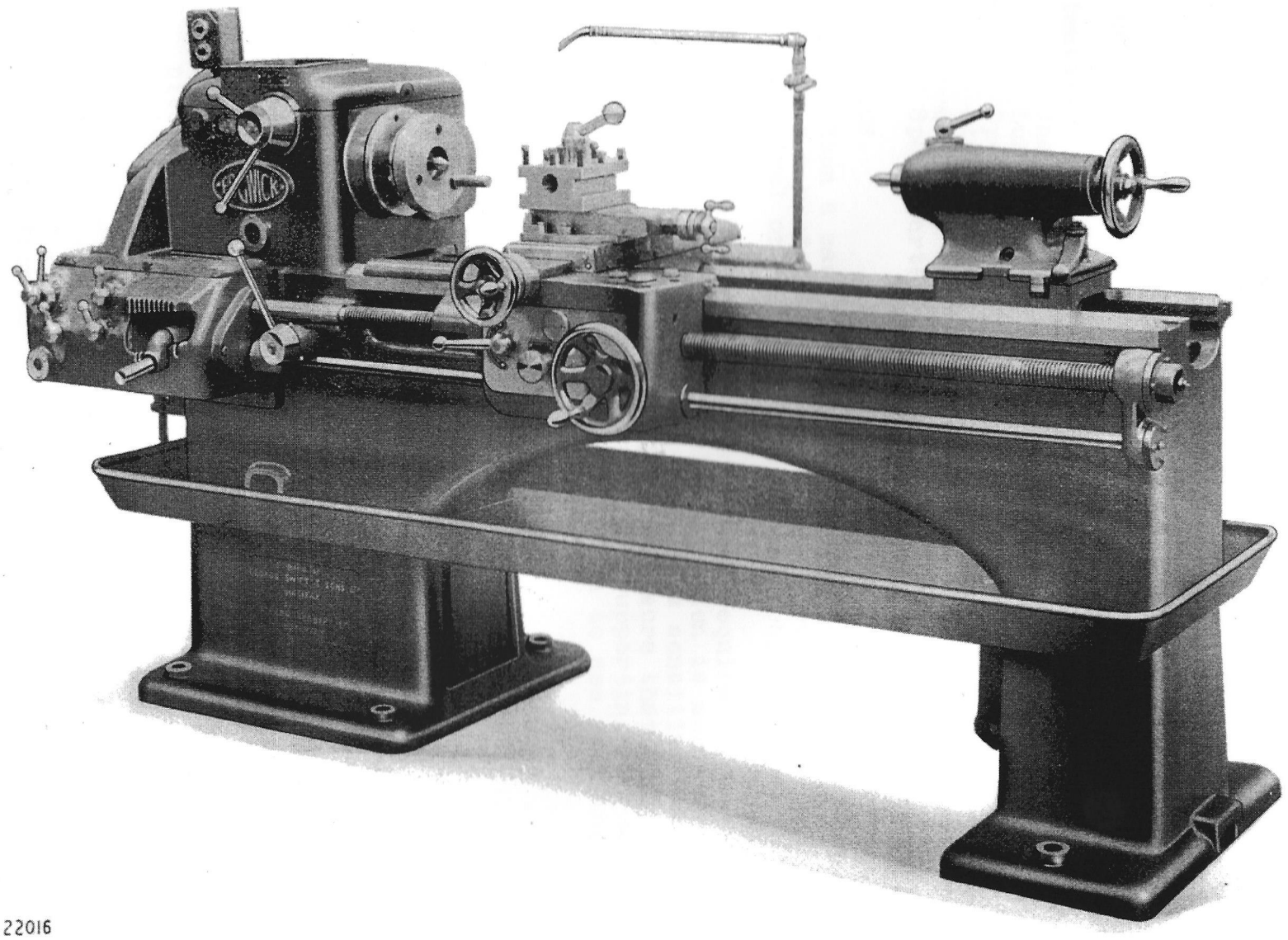

Fig. 1 Edgwick 6½" Gap-bed Lathe
Sliding, Surfacing and Screwcutting.

EDGWICK 6½" GAP-BED LATHE

The information in this handbook is intended as a guide to the use and maintenance of this machine.

Contents:-

INSTALLATION.

Cleaning. When a machine leaves the works all the bright parts are covered with a rust preventive and this should be removed with wipers soaked in petrol or paraffin before the machine is run.

Foundation. Fig.2 shows the floor space required and the positions of the foundation bolts. No special foundation is necessary if the machine stands on a concrete or wood floor. Use a sensitive level and three levelling wedges as shown in Fig.2 and ensure that there is no cross wind in the bed. When level, four more supporting wedges can be used but in driving these care should be taken to see that they do not disturb the previous levelling.

DRIVING ARRANGEMENTS.

1. Belt drive. 3" belt. No countershaft required.
2. Belt drive with reversing countershaft.
3. 3 h.p. 955 r.p.m. non-reversing motor drive with two push buttons - start and stop.
4. 3 h.p. 955 r.p.m. reversing motor drive with three push buttons, start, reverse, stop.
5. 5 h.p. 1440 r.p.m. non-reversing motor drive with two push buttons - start and stop.
6. 5 h.p. 1440 r.p.m. reversing motor drive with three push buttons - start, reverse, stop.

NOTE - When cutting Metric pitches with English leadscrew or English pitches with Metric leadscrew, reversing control is desirable as leadscrew nut must not be disengaged.

Check electrical supply characteristics with plate on starter and connect isolator switch to mains, as shown on wiring diagrams (Figs. 3 to 5). Check direction of rotation - headstock spindle should run counterclockwise when viewed from tailstock.

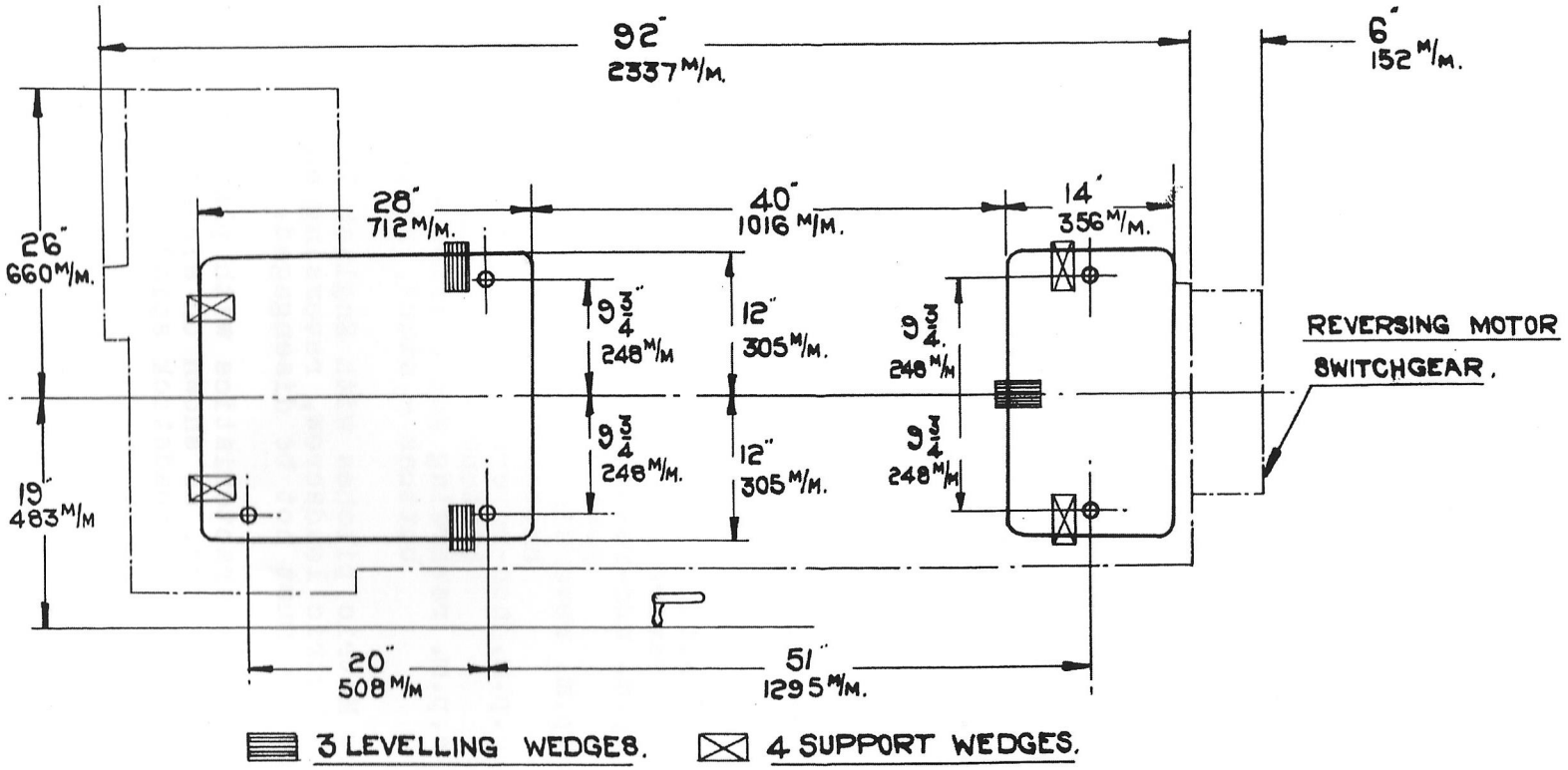

Fig.2 Edgwick 6.1/2" Gap Bed Lathe - Foundation Plan.

WIRING DIAGRAMS.

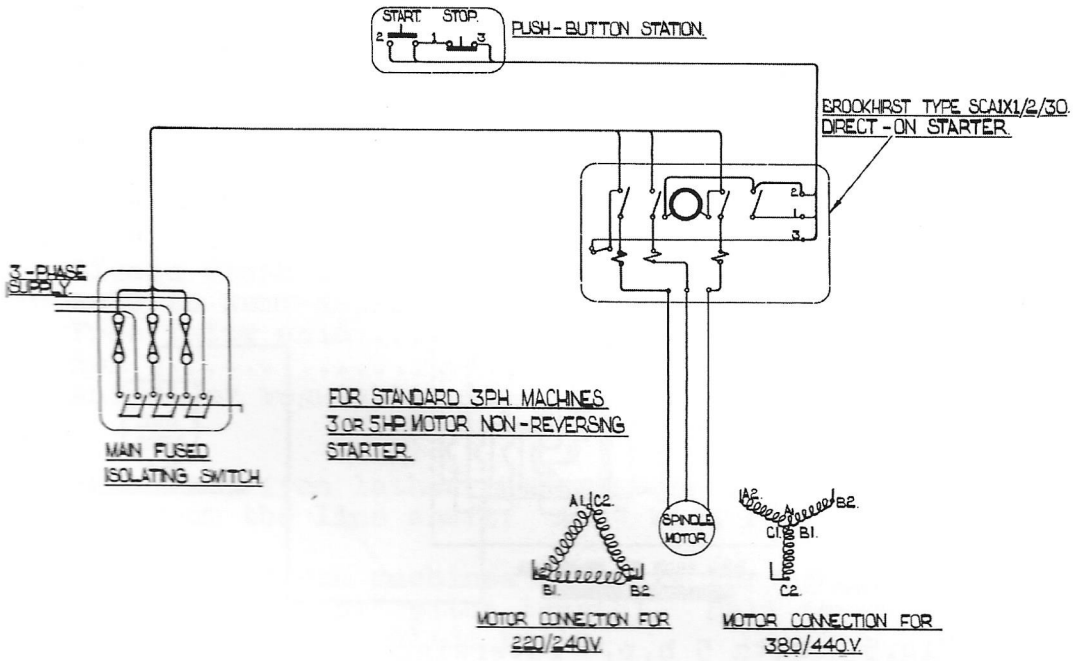

Fig.3 With 3 h.p. non-reversing motor 955 r.p.m.
With 5 h.p. non-reversing motor 1440 r.p.m.

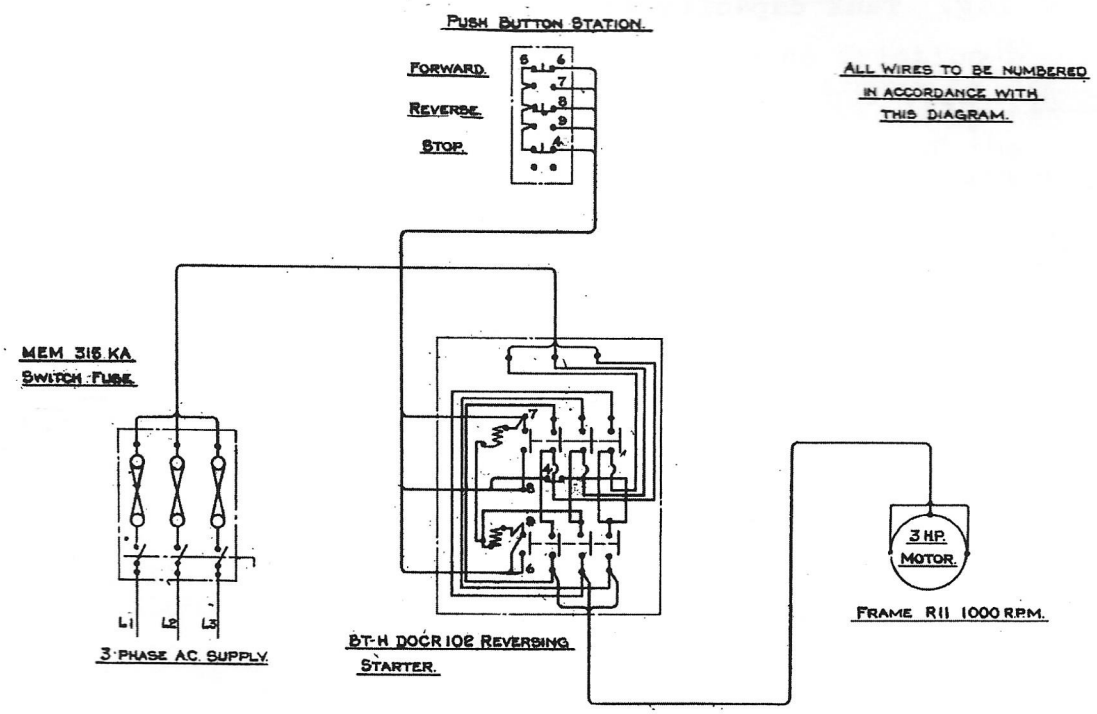

Fig.4 With 3 h.p. reversing motor 955 r.p.m.

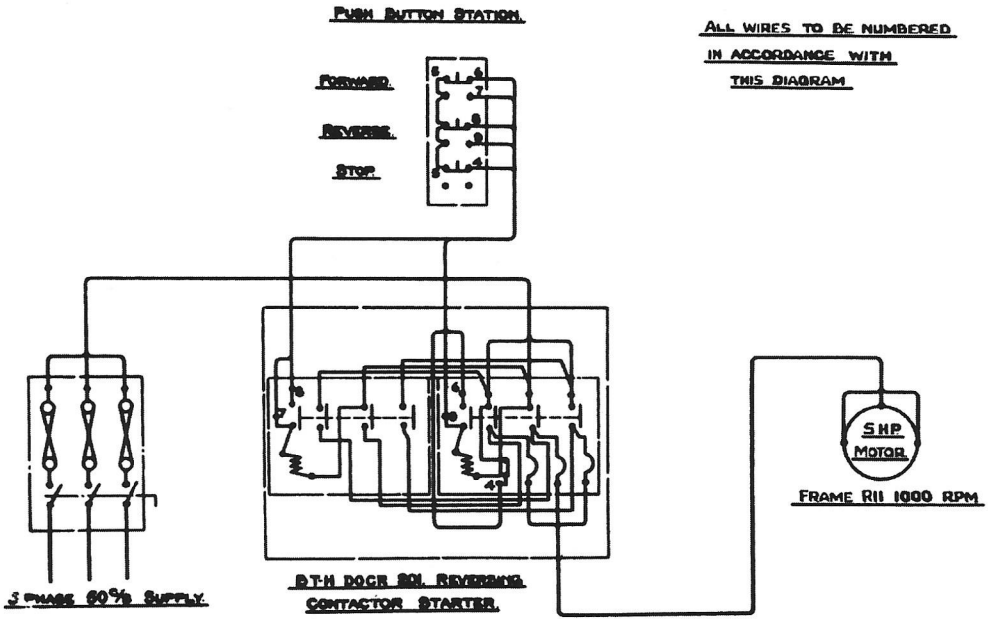

Fig.5 With 5 h.p. reversing motor 1440 r.p.m.

COOLANT.

When fitted with coolant pump the tank is situated inside headstock leg. Tank capacity is 5 galls.

LUBRICATION.

Headstock - Lift top cover and fill to level marked on window with 5 pints of oil.

Feedbox - Remove filler cap and fill to level marked on window with 1.1/4 pints of oil and 1/2 pint in tumbler box.

Saddle Apron - Remove filler cap and oil daily.

Motor Bearings - Two oilers. Use machine oil once weekly or as required.

16 Grease Nipples - Use machine oil in grease gun daily.

Situations:- 2 - Clutch operating shaft, front and rear.
3 - R.H. side of saddle.
1 - Front of saddle apron.
2 - End of cross slide.
2 - End of top slide.
1 - Square turret locking handle.
1 - End of lead screw.
1 - End of feed shaft.
1 - Tailstock.
1 - Back of saddle.
1 - Under swing guard over headstock pulley.

Oil recommended is "Circol" Headstock Oil obtainable from our Small Tool Dept. Its specification is :-

Specific gravity at 60°F	.900
Redwood viscosity at 70°F	750 secs.
" " " 140°F	100 "
" " " 200°F	45 "
Closed flash point	380°F
Sets to semi-solid mass	10°F
Free fatty acid	Nil
Ash	.002%
Animal or vegetable oil	Nil

OPERATION.

On belt-driven lathes the belt guard is adjustable to suit angle of belt from the line shaft. A 3" wide flat belt is required.

On motor-driven machines drive is through four size A80 vee belts (1/2" x 5/16" and 81" pitch length). Belt tension can be adjusted by moving the motor on its slide rails.

Spindle is started by moving the clutch lever (Fig.6) to the right. Movement to the left applies a friction brake and stops the spindle quickly.

Drive to spindle is through a multi-disc friction clutch on main pulley shaft. Access to this clutch for adjustment is obtained by removing headstock cover. Clutch adjustment is provided by two serrated rings, one of which has cam faces that engage the ends of the clutch operating levers. To adjust the cam ring should be moved one or two serrations in relation to the outer ring. Lines inscribed on the two rings indicate amount of adjustment given. An instruction plate showing method of adjusting the clutch is fastened inside headstock cover.

SPINDLE SPEEDS.

Twelve speeds are obtained by sliding gears controlled by two levers on the front of the headstock (Fig.6). The lever bosses are marked to show speed required. First turn front lever till chosen speed is in the uppermost quadrant with arrow on front of boss vertical; then set the arrow on the rear lever boss opposite speed desired.

IMPORTANT. IT IS ESSENTIAL THAT THE FRICTION CLUTCH IS DISENGAGED AND SPINDLE STATIONARY BEFORE ANY ATTEMPT IS MADE TO ENGAGE A DIFFERENT SET OF GEARS. FAILURE TO DO THIS MAY RESULT IN DAMAGE TO GEAR TEETH.

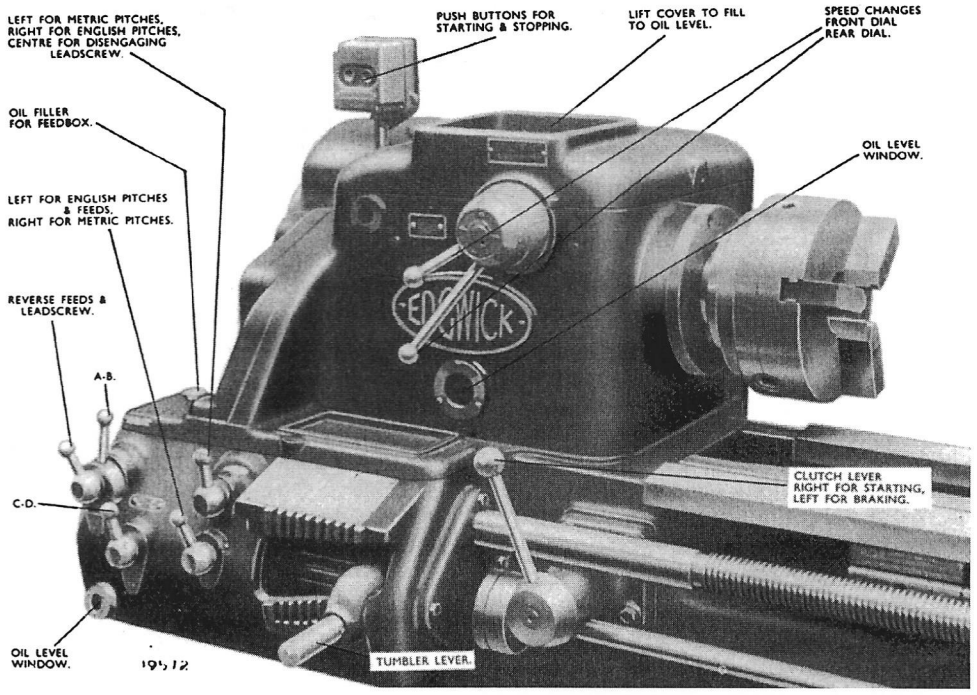

Fig.6 Headstock and Feedbox.

When these lathes are supplied with a 3 h.p. motor or pulley speed is 350 r.p.m. the spindle speed range is :- 17, 26, 38, 59, 112, 172, 190, 225, 290, 390, 430, 670 r.p.m.

When supplied with a 5 h.p. motor or a pulley speed of 500 r.p.m. the range is:-
25, 39, 57, 88, 170, 255, 280, 380, 430, 580, 650, 1000 r.p.m.

FEEDS.

Thirty-six feed changes, thirty-six standard English pitches and thirty-four Metric pitches are obtained through a quick-change feed box and a 1/4" pitch lead screw. The changes are obtained by a nine-position tumbler gear and five levers on front of feed box.

Surfacing feeds are half the sliding feeds in inches per revolution of spindle or double the number of cuts per inch.

NOTE:- The leadscrew should be disengaged when turning or facing using the feed shaft. This is done by moving to its central position the upper right-hand small lever on feed box.

EDGWICK 6½" GAP-BED LATHE

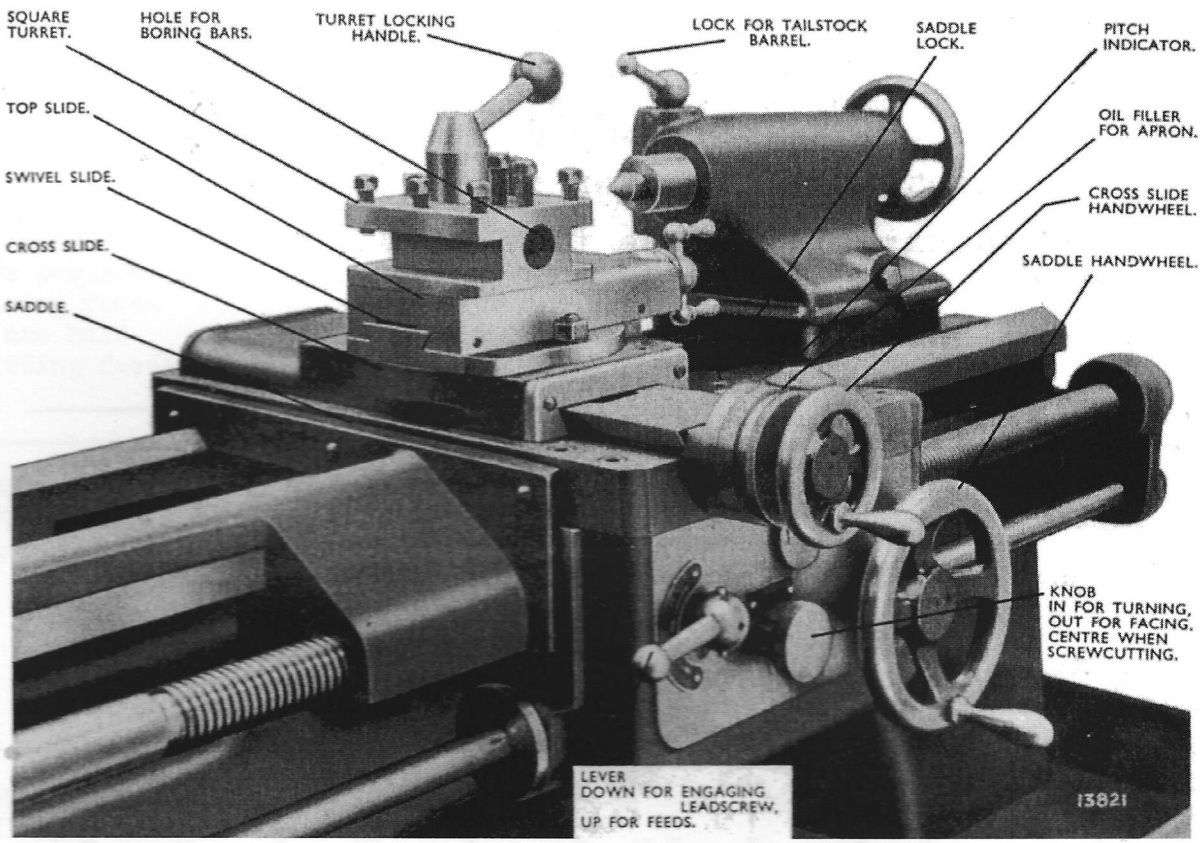

Fig.7 Saddle and Tailstock.

TOOL CARRIAGE.

Hand and automatic feeds are provided to saddle and cross slide, hand motion only to top slide. Top face of cross slide is graduated in degrees for setting swivel slide for angular work.

Standard tool post is a square turret, machined on three sides for mounting 3/4" x 1/2" rectangular shank cutting tools; the fourth side is bored 1.1/4" diameter for holding boring bars, drill and reamer holders. Turret rises automatically when locking handle is loosened and can then be rotated freely. On relocking, location is by a hardened plunger fitting in hardened bushes.

If desired a special top slide carrying a single American-type tool post can be ordered in place of the square turret.

Top slide can be set parallel to bed ways by a hardened dowel passing through the swivel slide base into the cross slide. A swinging distance piece prevents the dowel from entering the saddle but when using boring bars they can be centralised with headstock spindle by swinging the distance piece out. For angular settings of top slide the dowel can be withdrawn.

Saddle can be clamped to bed by the hexagon-headed lock screw on right-hand front wing of saddle.

Feed knob in apron has a three-position setting:-
Fully-in for turning (saddle traverse)
Fully-out for facing (cross slide traverse)
Midway neutral position for screwcutting.

It is very desirable to use this midway setting when screw-cutting as it effectually prevents feed motion being accidently engaged.

THREADS CUT WITH ENGLISH LEADSCREW 1/4" PITCH.

		Levers			Leadscrew $\frac{1}{4}$" pitch					
SLIDING FEEDS cuts per inch. Facing feeds are half sliding feeds	CB	14	16	17	18	20	21	22	23	25
	DB	28	32	34	36	40	42	44	46	50
	CA	56	64	68	72	80	84	88	92	100
	DA	112	128	136	144	160	168	176	184	200
ENGLISH PITCHES Threads per inch.	CB	2*	$2\frac{1}{4}$*	$2\frac{3}{8}$	$2\frac{1}{2}$*	$2\frac{3}{4}$*	$2\frac{7}{8}$	3*	$3\frac{1}{4}$*	$3\frac{1}{2}$*
	DB	4*	$4\frac{1}{2}$*	$4\frac{3}{4}$*	5*	$5\frac{1}{2}$*	$5\frac{3}{4}$*	6*	$6\frac{1}{2}$*	7*
	CA	8*	9*	$9\frac{1}{2}$*	10*	11*	$11\frac{1}{2}$*	12*	13*	14*
	DA	16*	18*	19*	20*	22*	23*	24*	26*	28*
PITCH IN M/M	CB	8	9	$9\frac{1}{2}$	10	11	$11\frac{1}{2}$	12	13	14
	DB	4	$4\frac{1}{2}$	$4\frac{3}{4}$	5	$5\frac{1}{2}$	$5\frac{3}{4}$	6	$6\frac{1}{2}$	7
	CA	2	$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{7}{8}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$
	DA	1	$1\frac{1}{8}$		$1\frac{1}{4}$	$1\frac{3}{8}$		$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$

Fig.8 Feeds and thread cut with 1/4" pitch leadscrew.
* (Saddle can be returned by hand when cutting pitches shown)
First cut should be taken when indicator registers 4.

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THREADS CUT WITH METRIC LEADSCREW 8 m/m PITCH.

	Levers	Leadscrew 8 m/m pitch.								
SLIDING FEEDS m/m per rev. Facing feeds are half sliding feeds	CB	1.8	1.6	1.5	1.4	1.3	1.2	1.15	1.1	1.0
	DB	.9	.8	.75	.7	.65	.6	.58	.55	.5
	CA	.45	.4	.38	.35	.33	.3	.29	.27	.25
	DA	.23	.2	.19	.18	.16	.15	.14	.13	.12
ENGLISH PITCHES Threads per inch	CB	2	2¼	2⅜	2½	2¾	2⅞	3	3¼	3½
	DB	4	4½	4¾	5	5½	5¾	6	6½	7
	CA	8	9	9½	10	11	11½	12	13	14
	DA	16	18	19	20	22	23	24	26	28
PITCH IN M/M	CB	8*	9*	9½	10*	11*	11½	12*	13	14
	DB	4*	4½	4¾	5*	5½	5¾	6*	6½	7*
	CA	2*	2¼	2⅜	2½	2¾	2⅞	3*	3¼	3½
	DA	1*	1⅛		1¼	1⅜		1½	1⅝	1¾

Fig.9 Feeds and threads cut with 8 m/m pitch leadscrew.
* (Saddle can be returned by hand when cutting pitches shown)
First cut should be taken when pitch indicator registers 15.

SCREWCUTTING.

These lathes can be supplied with leadscrew of either English or Metric pitch. (See Figs.8 and 9). A plate on top of feedbox shows all threads that can be cut and positions of change levers. Each change lever has its function indicated on an adjacent plate and it is important that both right-hand levers should be set for the same kind of thread. If one lever is set for Metric and the other for English pitch no damage to machine will result but work will be incorrect.

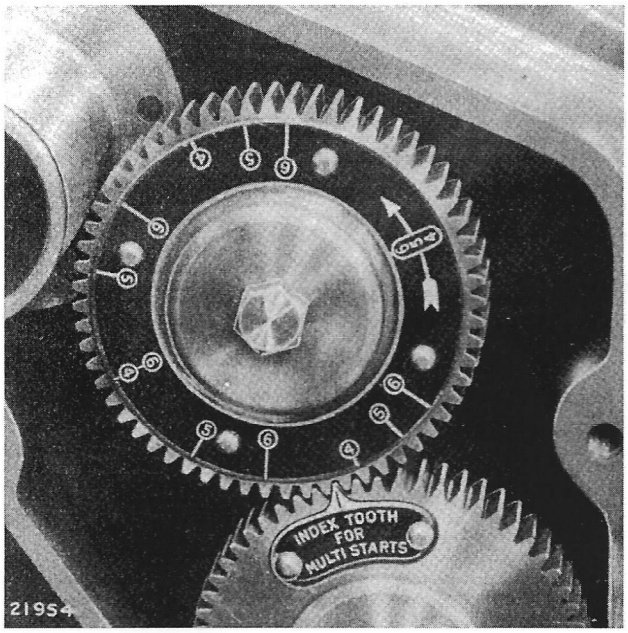


Fig.10 Arrangement for cutting multi-start threads.

The pitch indicator is situated on the right-hand front wing of saddle. With English pitch leadscrew there are eight divisions, alternate ones being numbered 1, 2, 3, 4. With Metric pitch leadscrew the same divisions are numbered 0, 5, 10, 15.

For whole even numbers (2,4,6,8 etc.) re-engage at any mark.

For whole odd numbers (1,3,5,7 etc.) re-engage at any numbered mark.

For fractional threads per inch ending in 1/2 (2.1/2, 3.1/2 etc.) re-engage at either 2 or 4.

For fractional threads per inch ending in 1/4 (2.1/4, 3.1/4 etc.) re-engage at 4 only.

For 2.3/8 and 2.7/8 threads per inch and for all metric threads keep leadscrew nut engaged and return saddle by reversing main motor or by reverse lever on feedbox.

For 1, 2, 4 and 8 m/m pitches, re-engage leadscrew nut at any division.

For 3, 6 and 12 m/m pitches, re-engage at any numbered division.

For 5 and 10 m/m pitches, re-engage at 5, 10 or 15.

For 7, 9, 11, 13 and 14 m/m pitches, fractional metric and all English pitches, keep leadscrew nut engaged and return saddle by reversing main motor or by reverse lever on feedbox.

MULTI-START THREADS.

Provision for cutting threads with 2, 3, 4, 5 or 6 starts is made in the gear train from spindle to gearbox. If the cover over these gears is removed, a tooth on the second intermediate gear will be seen to be marked as an index tooth. A plate on the first intermediate gear is graduated to indicate 4, 5, or 6 starts with the tooth space to be used for the first thread marked for all threee starts. For two starts, second thread should be cut with index tooth opposite first start position. For three starts alternate divisions marked 6 should be used.

Cut the first thread with index tooth meshing with space marked 4, 5, 6.

For second and subsequent starts, withdraw gear marked "index tooth", turn spindle till graduation for next start comes opposite index tooth and re-engage.

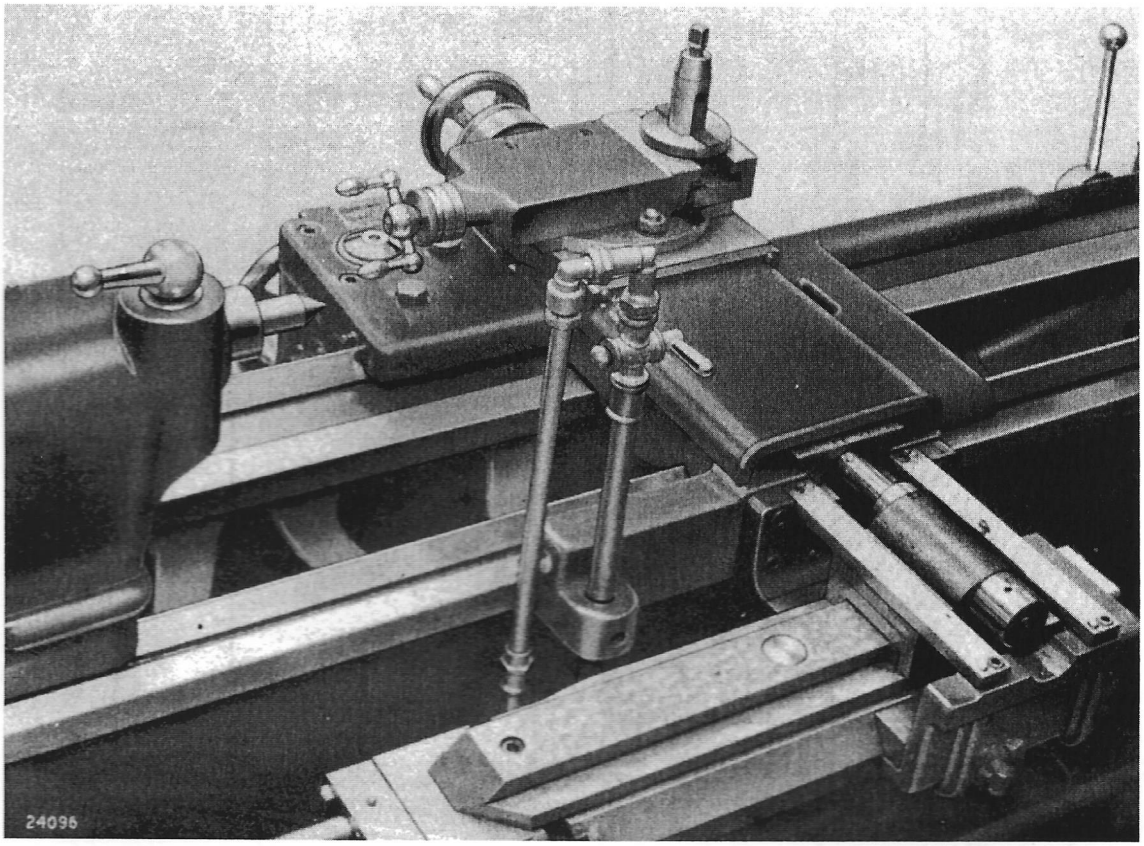


Fig.11 Bed with Cross Ribbing and Taper Turning Attachment.

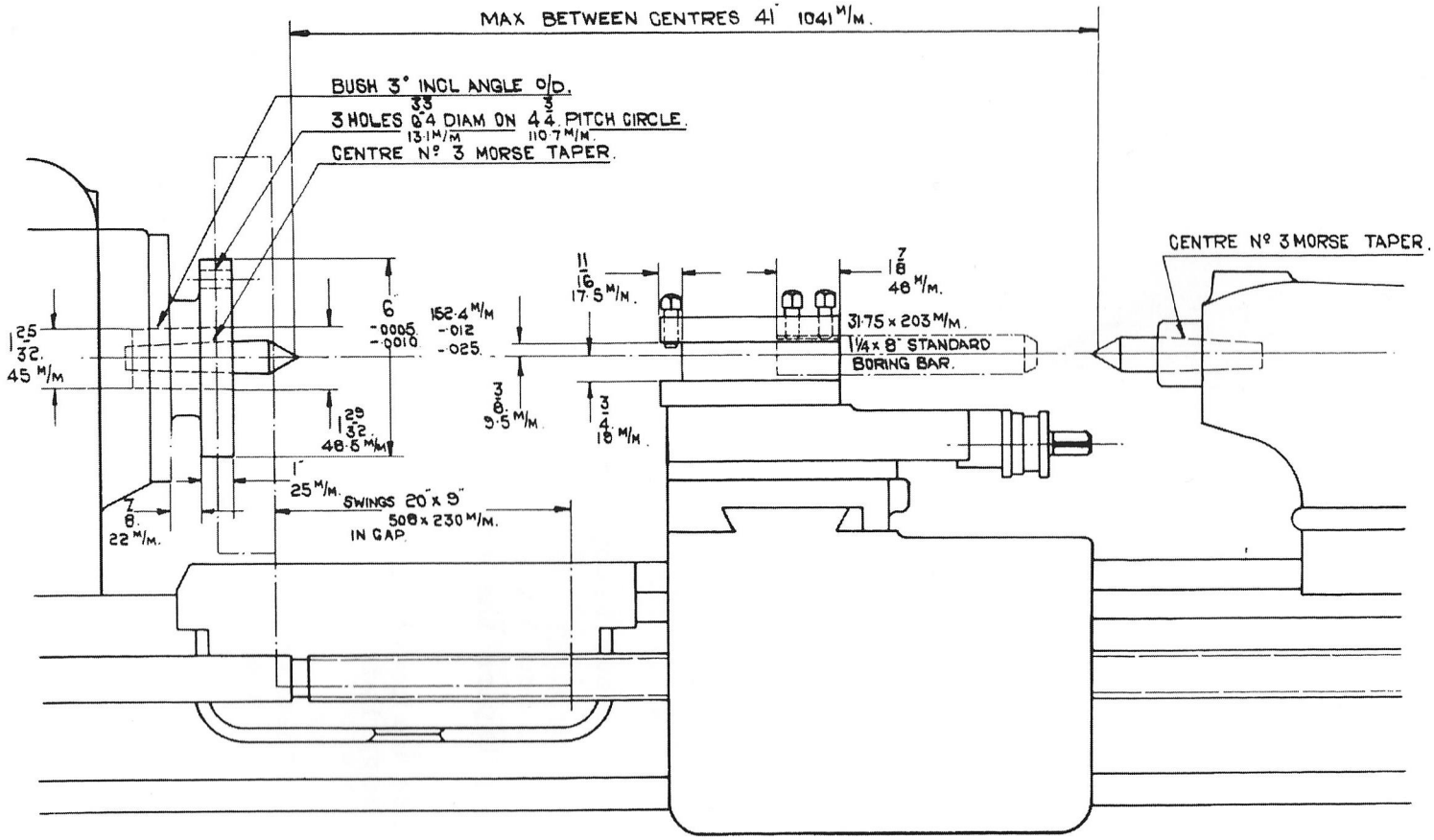
TAPER TURNING.

For short steep tapers the top slide can be set to required angle and hand traversed.

For long tapers up to 18° included angle 14" long a taper-turning attachment can be supplied.

COOLANT.

On machines supplied with coolant pump, drive can be cut out by withdrawing and turning a spring plunger under the swing guard on side of headstock pulley guard.



EDGWICK 6½" GAP-BED LATHE

CAPACITY CHART.

FAC.P. 3329.

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Fig. 12 Capacity Chart.

Fig.13 Type 1L Edgwick Equipment cabinet.

STANDARD EQUIPMENT.
Square turret.
7" Driver plate.
12" Face plate.
Two No.3 Morse taper centres.
Travelling stay.
Grease gun and spanners.

EXTRA EQUIPMENT.
Coolant pump and fittings.
Compound slide with single tool post.
Taper turning attachment.
Chucks and backplates.
Stationary stay with plain or roller paws.
21" Face plate.
12" Driver plate with two pegs.
Tee rest for hand turning.
Low voltage lighting equipment.
Type 1L Edgwick equipment cabinet.
5" Trugrip collet chuck with one set, of eleven collets, sizes 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4" and 7/8" diameters (or Metric if required).

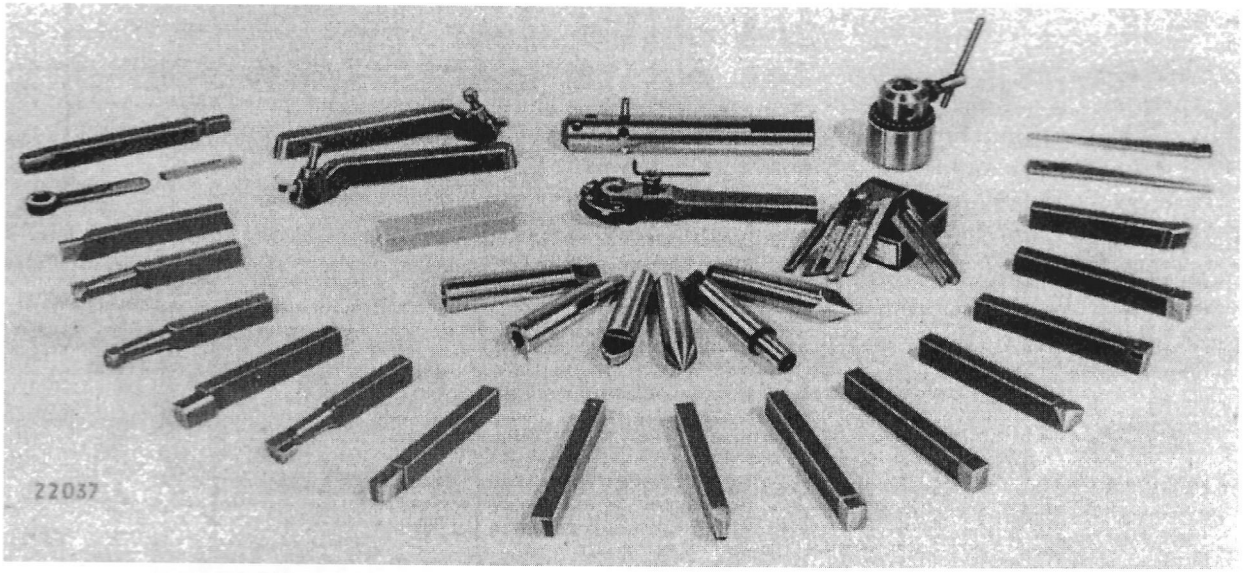


Fig.14 Standard Outfit of Tools.

Standard outfit of tools, comprising:-

Set of 14 slide rest cutting tools.
1 - Bar-Mor No.0 Universal Toolholder 5/8" sq. x 6.5/8" with 12 tool bits 1/4" sq.
1 - Right-hand Toolholder No.1042-12 with 12 tool bits 1/4" sq.
1 - Left-hand Toolholder No.1042-12 with 12 tool bits 1/4" sq.
1 - Multi-Knurling Tool No.1027.
1 - 1/2" Drill Chuck with No.3 Morse taper shank.
1 - No.3 Norton Oilstone 4" x 1" x 1/2".
1 - 8" Flat file with handle.
1 - Square centre.
1 - Light centre.
1 - Half centre.
1 - Drill sleeve 3-1 Morse taper.
1 - Drill sleeve 3-2 Morse taper.
1 - Boring bar 1.1/4" diam. x 8" long with two tools.

SPARE PARTS LIST.

BED	7HB87	Rack
HEADSTOCK	7HH22	12" Faceplate
	7HH23	7" Catchplate
	7HH81A	Spindle
	7HH82	Spindle Gear
	7HH83A	3rd motion gear
	7HH84	2nd motion gear
	7HH85A	1st motion gear
	7HH87	Clutch disc
	7HH88	1st motion shaft
	7HH89	2nd " "
	7HH90	3rd " "
	7HH94	Spindle feed gear
	7HH118	60T multi-start gear
	7HH119	36T " " "
	7HH120	27T " " "
	7HH165	Gear shift rack
	7HH166	Gear shift rack pinion
	7HL91	Headstock centre
	659 - 652	3" bore Timken Roller Bearing
	3982-3920	2.1/2" bore Timken Roller Bearing
	LJ1	1" bore R. &. M. Ball Bearing
	LJ1.1/8	1.1/8" bore R.&.M. Ball Bearing
	LJ1.1/4	1.1/4" " " " "
	LJ1.3/8	1.3/8" " " " "
	LJ2.1/2	2.1/2" " " " "

SPARE PARTS LIST. Cont'd.

TAILSTOCK	7HL81A	Barrel
	7HL82	Barrel screw
	7HL91	Tailstock centre
SADDLE and APRON	7HA25	Travelling Steady
	7HA32	Apron
	7HA33	Worm Box
	7HA61	Sq. turret clamp nut
	7HA63B	Cross slide screw nut
	7HA65	Leadscrew half nuts
	7HA67	Apron bush
	7HA68	" "
	7HA70	Worm wheel
	7HA71	Clutch gear bush
	7HA74	Pitch indicator worm wheel
	EM148/1	Cross slide screw
	7HA98	Square turret
	7HA99	Square turret clamp screw
	WO28-1	" " tool clamping screw
	7HA102	" " plunger
	7HA103	" " plunger bush
	7HA105	" " lock bush
	7HA109	Top slide screw
	7HA116	Square turret plunger spring
	7HA120	Pinion worm wheel
	7HA121	Rack pinion shaft
	7HA123	Pinion and gear rack
	7HA126	Pinion and clutch
	7HA127	Pinion and clutch shaft
	7HA128	Screwcutting cam
	7HA130	Clutch gear
	7HA131	Worm and pinion
	7HA135	Worm box pinion
	7HA137	Hand traverse pinion
	LT7/8	7/8" bore R.&.M. ball bearing
	XLJ1.3/4	1.3/4" " " " "
FEED BOX	7HF81	Leadscrew gear 25 and 28T
	7HF82	Driving shaft
	7HF83	" "
	7HF84	Reverse clutch
	7HF85	Reverse gear 30T
	7HF86	Double reverse gear 20 and 30T
	7HF87	Driving gear 27T
	7HF88	Shaft and pinion 20T
	7HF89	Double sliding gear 30 and 40T
	7HF91	Internal gear 40 and 20T

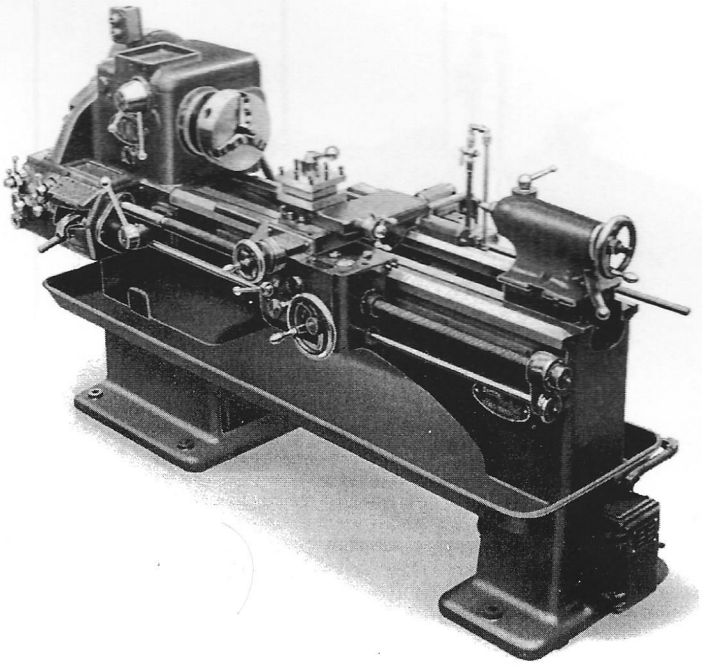
SPARE PARTS LIST. Cont'd.

FEED BOX	7HF92	Pinion 20T
	7HF93	3rd shaft
	7HF94	Sliding clutch gear 21T
	7HF95	Fixed clutch gear 21T
	7HF96	Gear on nest-gear shaft 28T
	7HF97	Tumbler gear 16T
	7HF98	Tumbler intermediate gear 23T
	7HF100	Nest-gear shaft
	7HF101	Nest-gear 16T
	7HF102	" " 18T
	7HF103	" " 19T
	7HF104	" " 20T
	7HF105	" " 22T
	7HF106	" " 23T
	7HF107	" " 24T
	7HF108	" " 26T
	7HF109	" " 28T
	7HF111	Tumbler shaft
	7HF122	Intermediate gear 63T
	7HF134A	Lead screw (English pitch)
	7HF135A	Feed shaft
	LJ.1/2	1/2" bore R.&.M. ball bearing
	LJ.5/8	5/8" " " " "
	LJ.7/8	7/8" " " " "
	LJ1	1" " " " "
	LJ1.1/8	1.1/8" " " " "
	LJ1.1/4	1.1/4" " " " "
EQUIPMENT	7HH32	Chuck adapter for 9" Coventry Chuck
	7HH33	" " " 10" - 4-jaw Pratt Chuck
	7HH35	" " " 9" - 3-jaw Pratt Chuck
	7HH36	" " " 12" - 4-jaw Pratt Chuck
	7HH134	" " bolts and nuts
	7HH20	21" Faceplate
	7HH101	Special driver plate
	1574-19	Stationary 3-point steady
		Vee Belts 1/2" x 5/16" - 81" long (4 per set)
		Suds Pump
		Compound Slide complete

EDGWICK

6½" GAP-BED CENTRE LATHE

SPARE PARTS LIST
(Ist Edition)



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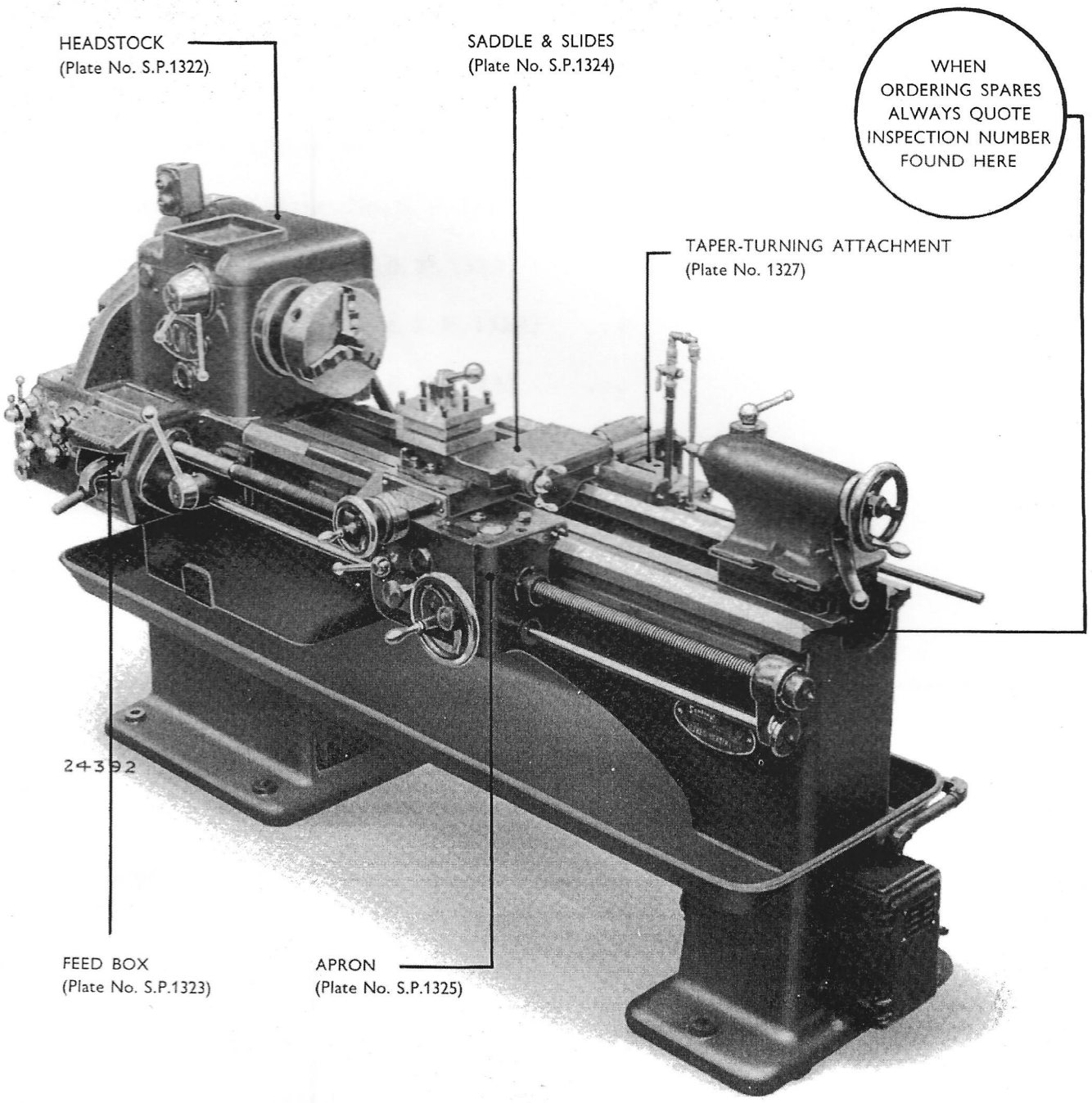


The Edgwick 6½" Gap-bed Centre Lathe.

INDEX

IMPORTANT

WHEN ORDERING SPARE PARTS IT IS ESSENTIAL TO QUOTE :—

1. **INSPECTION No. of the machine** for which the part is required. This is stamped on the top surface at the right-hand end of the bed of the machine. (See illustration on Page 2).
2. PHOTOGRAPH No. of the part as indicated in this list. The photograph number is useless for identification unless the INSPECTION NUMBER is also quoted.
3. THE TYPE AND SIZE OF THE MACHINE on older types where the Inspection number may have been removed during reconditioning. This information should be accompanied by a dimensioned sketch of the part required, or the damaged part itself sent to us.
4. HOW MANY SIMILAR PARTS ARE REQUIRED.

THE ILLUSTRATIONS IN THIS LIST ARE NOT NECESSARILY CORRECT IN DETAIL OWING TO ALTERATIONS IN DESIGN, BUT IF THE ABOVE INFORMATION IS GIVEN THE CORRECT PART WILL BE SUPPLIED.

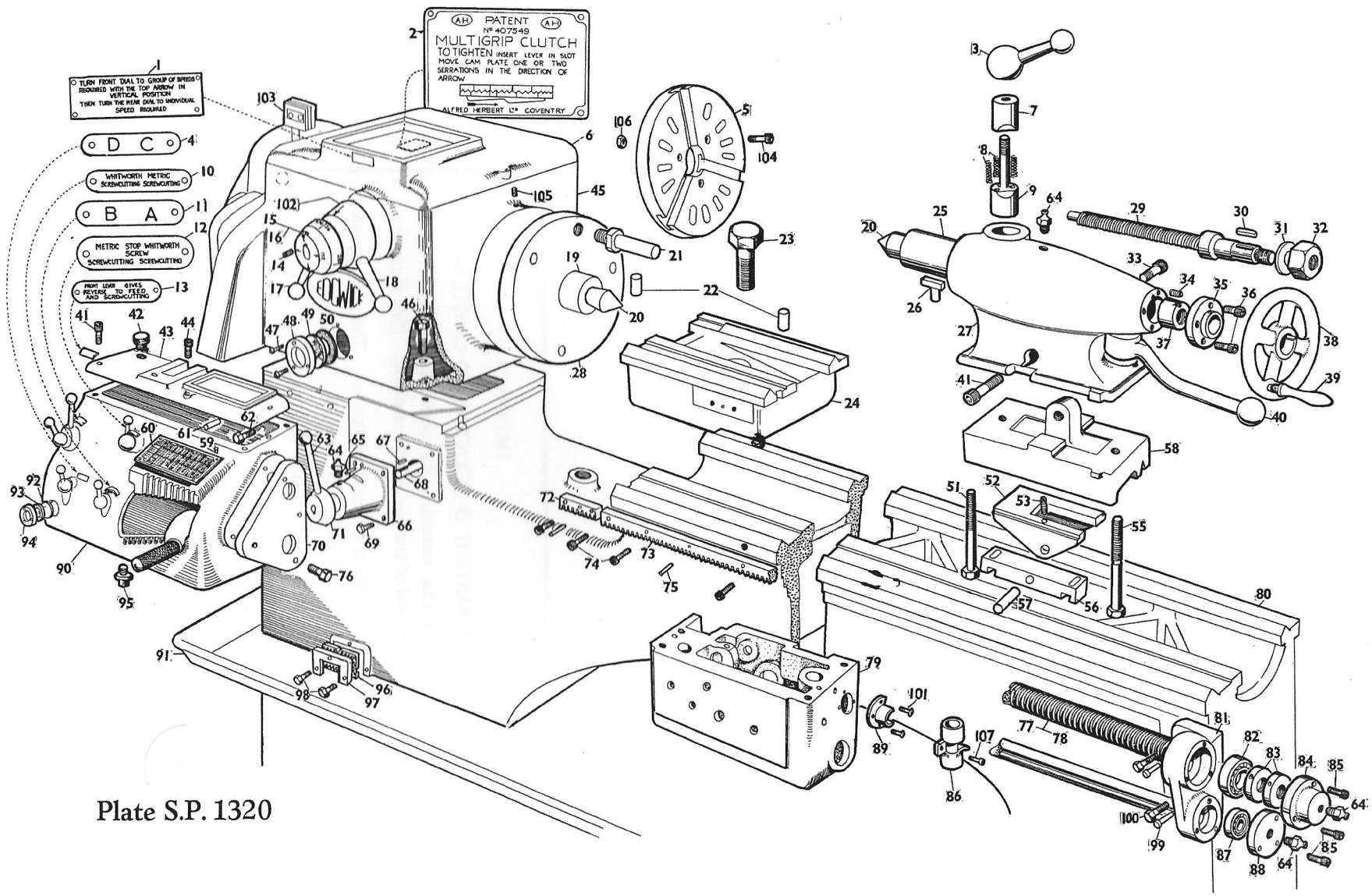


Plate S.P. 1320

FRONT DETAILS (Plate S. P. 1320).

Ref. No.	Part.
1.	Speeds Instruction Plate.
2.	Clutch Instruction Plate.
3.	Locking Lever.
4.	Instruction Plate.
5.	12" Face Plate.
6.	Top Cover.
7.	Clamping Pad.
8.	Springs.
9.	Clamping Bolt.
10.	Instruction Plate.
11.	Instruction Plate.
12.	Instruction Plate.
13.	Instruction Plate.
14.	3/8" Whit. x $\frac{1}{2}$" Screw.
15.	Lever Boss for Standard Speed Range.
16.	Lever Boss for Special Speed Range.
17.	Lever for 15 or 16.
18.	Lever for 102.
19.	Centre Bush.
20.	Morse Taper Centre.
21.	Standard Driver.
22.	Dowel Pins.
23.	Hex. Screw for 24.
24.	Gap Piece.
25.	Shoot.
26.	Tee Key for 25.
27.	Tailstock.
28.	Catch Plate.
29.	Shoot Screw.
30.	$\frac{1}{4}$" x $\frac{1}{4}$" x 1" Key.
31.	$\frac{1}{2}$" Washer.
32.	$\frac{1}{2}$" Whit. Hex. Nut.
33.	$\frac{1}{2}$" Whit. x $2\frac{1}{4}$" Cap Screw.
34.	5/16" Whit. x $\frac{1}{2}$" Grub Screw.
35.	Cap.
36.	4 - 5/16" Whit. x $\frac{1}{2}$" Cap Screws.
37.	Nut.
38.	Handwheel.
39.	Handle.
40.	Locking Lever.
41.	$\frac{1}{2}$" Whit. x $1\frac{3}{4}$" Cap Screws.
42.	Oil Filler Cap.
43.	Top Cover.
44.	4 - 5/16" x 7/8" Cap Screws.
45.	Headstock.
46.	2 - $\frac{1}{2}$" Whit. x $2\frac{1}{4}$" Hex. Screws.
46.	2 - $\frac{1}{2}$" Whit. x $3\frac{1}{2}$" Hex. Screws.
47.	3/16" Whit. x $\frac{1}{2}$" Screws.
48.	Oil Level Cover.
49.	Oil Level Glass.
50.	Oil Level Joint.
51.	Holding Bolt.
52.	Clamp Plate.
53.	5/16" Whit. x 5/8" Grub Screw.
55.	Bolt.
56.	Clamp bar.
57.	Hinge pin.
58.	Base.
59.	Screws for 60.
60.	Instruction Plate.
61.	3/8" dia. x 2" Dowels.
62.	$\frac{1}{2}$" x $1\frac{1}{2}$" Hex. Screw.
63.	Clutch Lever.
64.	2 - 1/8" B. S. P. Oil Nipples.
65.	Dowel.
66.	Front Bracket.
67.	Key.
68.	Clutch Shaft.
69.	3/8" Whit. x $1\frac{1}{2}$" Hex. Screws.
70.	End Cover.
71.	Clutch Lever Boss.
72.	Rack (Short Piece).
73.	Rack (Long Piece).
74.	3/8" Whit. x 1" Cap Screws.
75.	3/8" dia. x $1\frac{1}{4}$" Dowel.
76.	4 - 5/16" x 7/8" Hex. Screws.
77.	Guide Screw - English.
78.	Guide Screw - Metric.
79.	Apron.
80.	Bed.
81.	Shaft Bracket.
82.	A. C. Ball Bearing.
83.	Locknuts.
84.	End Cap.
85.	$\frac{1}{4}$" Whit. x 7/8" Cap Screws.
86.	Housing.
87.	Ball Journal Bearing.
88.	Cap.
89.	Guide Screw Guards.
90.	Feed Box.
91.	Tray.
92.	Oil Sight Glass.
93.	Oil Sight Seal.
94.	Oil Sight Cover.
95.	$\frac{1}{4}$" Gas Taper Plug.
96.	Strainer.
97.	Clamp.
98.	$\frac{1}{4}$" Whit. x 5/8" Hex. Screws.
99.	Dowels.
100.	3/8" Whit. x 1. 1/8" Hex. Screws.
101.	3 - $\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screws.
102.	Boss for Large Lever.
103.	Push Button Unit.
104.	3 - $\frac{1}{2}$" Whit. x $2\frac{1}{4}$" Cap Screws.
105.	1/8" B. S. F. Grub Screw.
106.	$\frac{1}{2}$" Whit. Hex. Nut.
107.	2 - 3/8" Whit. x 1" Cap Screws.

IMPORTANT.—WHEN ORDERING SPARES ALWAYS QUOTE INSPECTION NUMBER OF MACHINE.

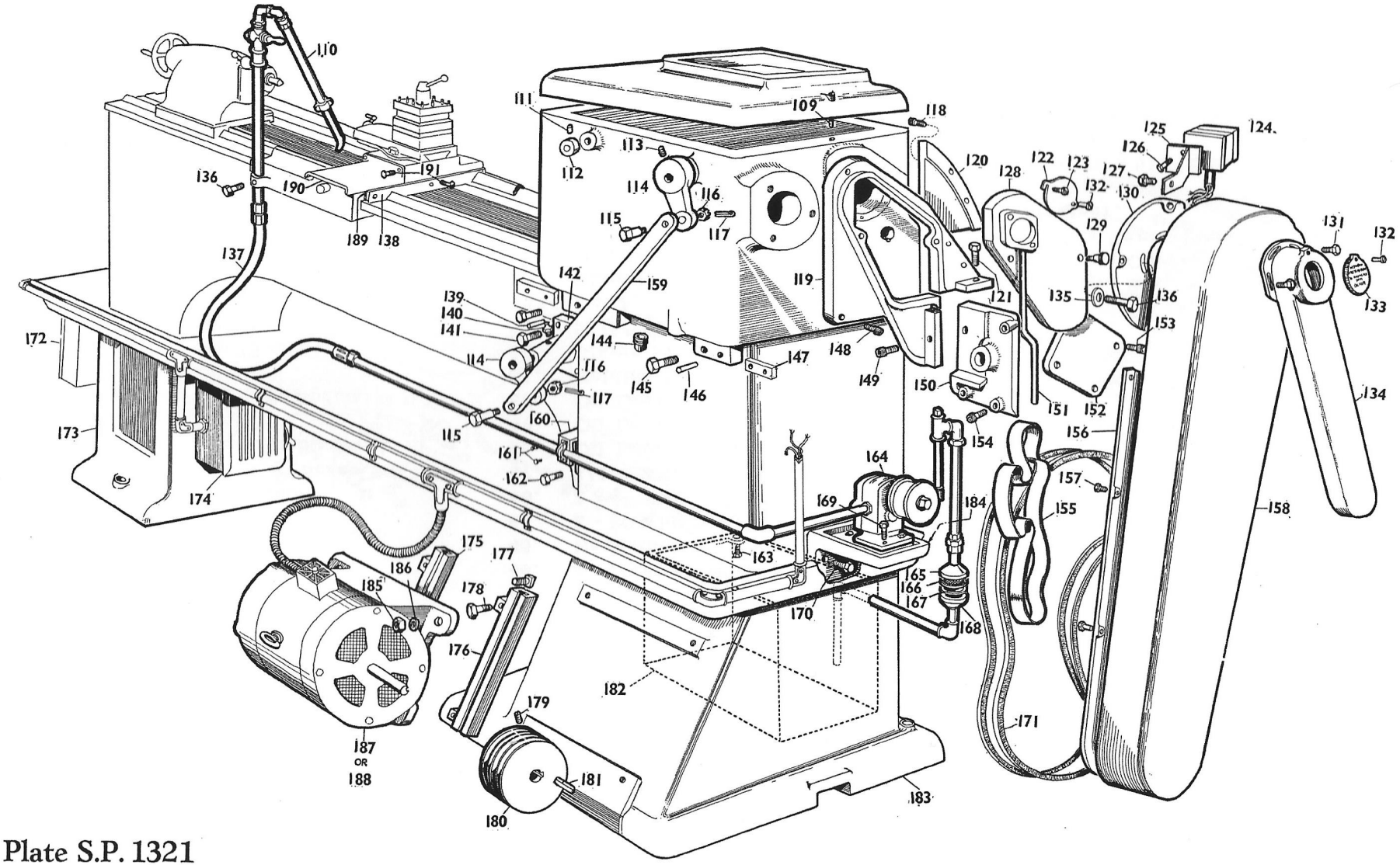


Plate S.P. 1321

REAR DETAILS (Plate S. P. 1321).

Ref. No.	Part.
109.	2-$\frac{1}{4}$" dia. x $1\frac{3}{4}$" Pins
110.	Coolant Unit.
111.	3/8" Whit. x 3/8" Grub Screw.
112.	Collar.
113.	3/8" Whit. x $\frac{1}{2}$" Grub Screw.
114.	Brake Lever.
115.	Pin.
116.	$\frac{1}{2}$" Whit. Hex. Nut.
117.	2-1/8" x $1\frac{1}{4}$" Split Pins.
118.	$\frac{1}{4}$" Whit. x 1" Cap Screws.
119.	End Cover.
120.	Side Cover.
121.	5/16" Whit. x 7/8" Hex Screw.
122.	Cover.
123.	2-$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screws.
124.	Push Button switch unit.
125.	Bracket.
126.	Screws.
127.	Screws.
128.	Front Cover 119.
129.	2-Knurled Hd. Screws.
130.	Belt Cover.
131.	$\frac{1}{4}$" Whit. x $\frac{3}{4}$" Hex Screw.
132.	$\frac{1}{4}$" Whit. x $\frac{3}{4}$" Hex Screw.
133.	Swing Cover.
134.	Pump Drive Belt Guard.
135.	3-3/8" Washers.
136.	3-3/8" Whit.x 1" Screws.
137.	3/8" Bore x 3'6" long Hose.
138.	Saddle Wiper.
139.	Dowel.
140.	1/8" BSP Oil Nipple.
141.	8-3/8" Whit.x $1\frac{1}{2}$" Hex Screws.
142.	Bracket.
144.	$\frac{1}{2}$" BSP Draining Plug.
145.	2-$\frac{1}{2}$" Whit.x$2\frac{1}{2}$" Hex Screws.
146.	3/8" dia. x 2" Dowel.
147.	Distance Plate.
148.	5/16" Whit. x 7/8" Cap Screw.
149.	$\frac{1}{4}$" Whit. x 7/8" Cap Screw.
150.	Back Cover.
151.	3/8" O/D Copper Pipe.
152.	End Cover.
153.	5/16" Whit. x 7/8" Cap Screw.
154.	5/16" Whit. x $1\frac{1}{4}$" Cap Screw.
155.	Belt 3/16" x 7/8" x 3'10"
156.	Back Cover.
157.	Hex Head Screws.
158.	Belt Guard.
159.	Link Lever.
160.	Bracket.
161.	2-Screws.
162.	2-5/16" x 7/8" Hex Screws.
163.	5/16" Whit. x 7/8" Hex Screws.
164.	Suds Pump.
165.	Filter Body - Top.
166.	Strainer.
167.	Joint.
168.	Filter Body - Bottom.
169.	3/8" Whit. x $\frac{3}{4}$" Hex Screws.
170.	3/8" Whit. x 1. 1/8" Hex Screw.
171.	$\frac{1}{2}$" x 81" Vee-rope belts.
172.	Standard Starter.
173.	Leg.
174.	Isolator Switch.
175.	Motor Slide Rail L. H.
176.	Motor Slide Rail R. H.
177.	7/16" Whit. x 2" Bolts.
178.	$\frac{1}{2}$" Whit. x $1\frac{3}{4}$" Hex Bolts.
179.	$\frac{1}{2}$" Whit. x $1\frac{3}{4}$" Screw.
180.	Pulley.
181.	Key.
182.	Sump.
183.	Leg.
184.	Bracket.
185.	7/16" Whit. Hex Nut.
186.	4-7/16" Spring Washers.
187.	3 H. P. Motor.
188.	5 H. P. Motor.
189.	Wiper.
190.	Saddle Guard.
191.	$\frac{1}{4}$" Whit. x $\frac{3}{4}$" Domed Screws.

IMPORTANT.—WHEN ORDERING SPARES ALWAYS QUOTE INSPECTION NUMBER OF MACHINE.

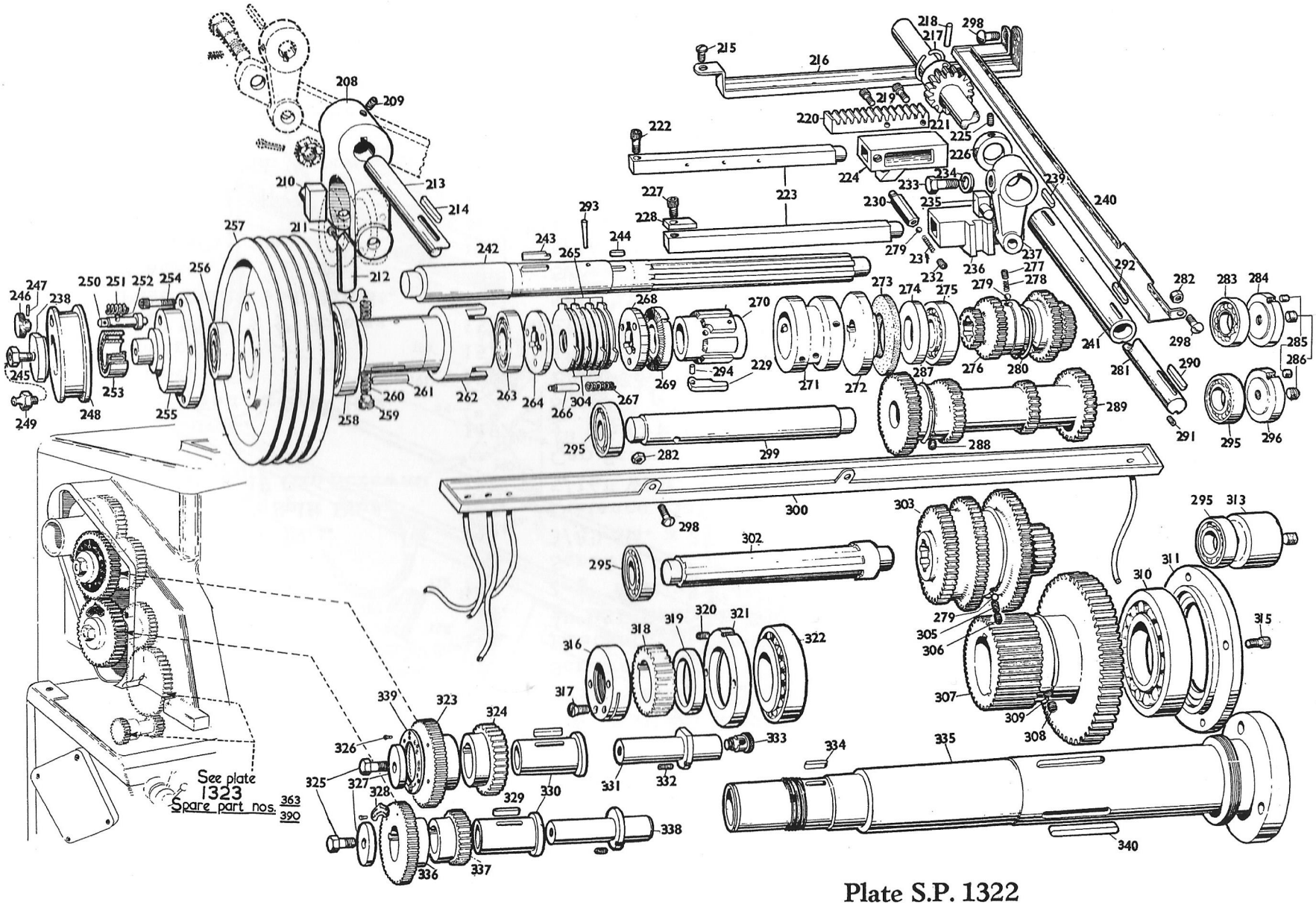


Plate S.P. 1322

HEADSTOCK (Plate S. P. 1322).

Ref. No.	Part.
208.	Lever.
209.	3/8" Whit. x ½" Grub Screw.
210.	2-Friction Dies.
211.	Locating Screw.
212.	Plunger.
213.	Shaft.
214.	Key.
215.	Dome Head Screw.
216.	Back Oil Tray.
217.	1.5/16" Bore Split Ring.
218.	No.3 Taper Pin.
219.	¼" Whit. x 1" Cap Screws.
220.	Rack.
221.	Rack Pinion.
222.	5/16" Whit. x 1" Cap Screw.
223.	2-Slider Rods.
224.	Gear Slider.
225.	3/8" Whit. x 3/8" Grub Screw.
226.	Stop Collar.
227.	5/16" Whit. x 1¼" Cap Screw.
228.	Stop Plate.
229.	3-Fingers.
230.	Spring Box.
231.	¼" O/D x 1.1/8" Spring.
232.	5/16" Whit. Grub Screw.
233.	3/8" Whit. Hex Screw.
234.	3/8" dia. Spring Washer.
235.	P.B. Glut.
236.	Gear Slider.
237.	Lever.
238.	Bearing Clamp Plate.
239.	Key.
240.	Top Oil Tray.
241.	Sleeve.
242.	Shaft.
243.	3/16" x 3/8" x 1.3/8" Key.
244.	¼" x ¼" x ½" Key.
245.	Bearing Clamp Bolt.
246.	Knurled Knob.
247.	3/32" x 5/8" Taper Pin.
248.	Driving Pulley.
249.	Grease Nipple.
250.	Plunger.
251.	Spring.
252.	Peg.
253.	Needle Roller Bearing.
254.	4-¼" Whit. x 7/8" Screws.
255.	Hub.
256.	Ball Journal Bearing.
257.	Vee-Rope Pulley.
258.	Ball Journal Bearing.
259.	Screw.
260.	15/32" O/D x 3½" Spring.
261.	3/8" x 3/8" x 1¾" Key.
262.	Clutch Sleeve.
263.	Ball Journal Bearing.
264.	Washer.
265.	Outer Plates.
266.	Guide Pins.
267.	Springs.
268.	Serrated Washer.
269.	Cam.
270.	No.3 Herbert Clutch Body.
271.	Bobbin.
272.	Brake Plate.
273.	Brake Lining 4" O/D.
274.	Washer.
275.	Ball Journal Bearing.
276.	Cluster Gear.
277.	5/16" Whit. x 5/16" Grub Screw.
278.	¼" O/D x ½" long Spring.
279.	3-¼" dia. Steel Balls.
280.	2.3/8" Bore Ring.
281.	Change Gear Shaft.
282.	¼" Whit. Hex Nut.
283.	Ball Journal Bearing.
284.	Retaining Plate.
285.	3-5/16" Whit. x 3/8" Grub Screws.
286.	3-½" Whit. Grub Screws.
287.	2.3/8" Bore Ring.
288.	½" BSF Grub Screw.
289.	Cluster Gear.

(Continued Overleaf).

IMPORTANT.—WHEN ORDERING SPARES ALWAYS QUOTE INSPECTION NUMBER OF MACHINE.

HEADSTOCK (Plate S. P. 1322). (Cont'd).

Ref. No.	Part.
290.	3/16" x 3/16" x 1¼" Key.
291.	¼" Whit. x 3/8" Grub Screw.
292.	3/16" x 3/16" x 7/8" Key.
293.	Fixing Pin.
294.	Pegs.
295.	Ball Journal Bearing.
296.	Retainer.
298.	¼" Whit. x 1" Screws.
299.	Shaft.
300.	Front Oil Tray.
302.	Shaft.
303.	Cluster Gear.
305.	¼" O/D x 1. 1/8" Spring.
306.	3/8" Whit. x 3/8" Grub Screw.
307.	Double Gear.
308.	½" BSF Grub Screw.
309.	3¾" Bore Split Ring.
310.	3" Bore Taper Roller Bearing.
311.	Front Cap.
313.	Retainer.
315.	4-3/8" Whit. x 1" Screws.
316.	Nut for Spindle.
317.	2-5/16" Screws.
318.	Gear.
319.	Distance Piece.
320.	¼" Whit. x ¼" Grub Screw.
321.	Oil Retaining Cap.
322.	2½" Bore Taper Roller Bearing.
323.	60T Gear.
324.	36T Gear.
325.	2-3/8" Whit. x 7/8" Hex. Screws.
326.	Rivets.
327.	2-Washers.
328.	Pointer Plate.
329.	2-¼" x ¼" x 2" long Keys.
330.	2-Running Bushes.
331.	Stud.
332.	2-5/16" Whit. x 3/8" Screws.
333.	Lubricator.
334.	Key.
335.	Spindle.
336.	60T End Gear.
337.	27T End Gear.
338.	Stud.
339.	Index Plates.
340.	Key.

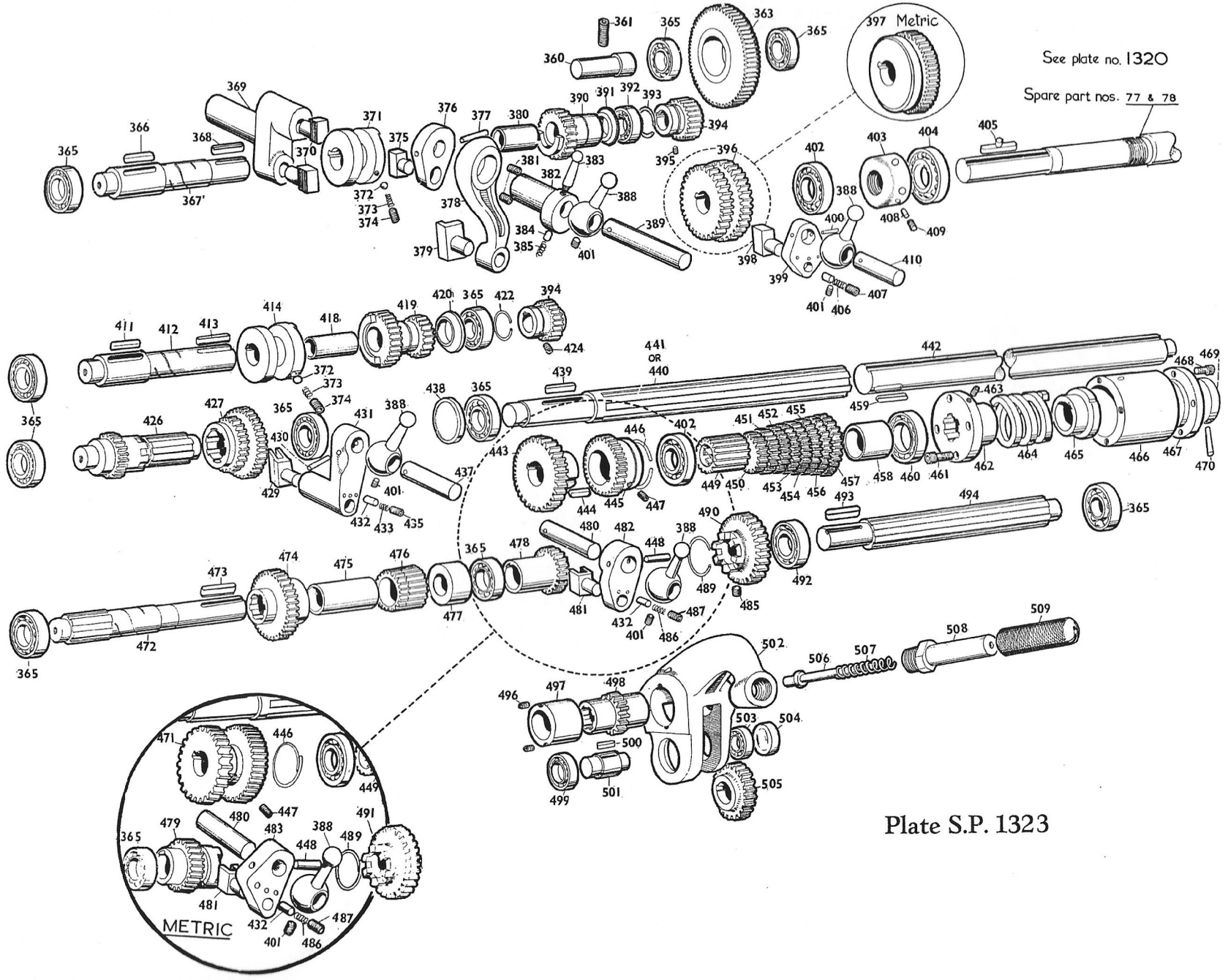


Plate S.P. 1323

NORTON TYPE FEED BOX (Plate S. P. 1323).

Ref. No.	Part.
360.	Stud.
361.	3/8" Whit. x 1" Grub Screw.
363.	Intermediate Gear.
365.	12-Ball Journal Bearings.
366.	Key.
367.	Driving Shaft.
368.	Key.
369.	Reverse Lever & Shaft.
370.	2-P. B. Gluts.
371.	Reversing Clutch.
372.	$\frac{1}{4}$" dia. Steel Ball.
373.	Spring.
374.	5/16" x $\frac{1}{4}$" Grub Screw.
375.	P. B. Glut.
376.	Small Lever.
377.	7/32" x 2" long Taper Pin.
378.	Lever.

Ref. No.	Part.
379.	P. B. Glut.
380.	Bush.
381.	2-$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screw.
382.	Socket Sleeve.
383.	Handle.
384.	Plunger.
385.	Spring.
388.	4-Handles.
389.	Stud.
390.	Reversing Gear.
391.	Oil Retaining Ring.
393.	$1\frac{1}{2}$" Bore Split Ring.
394.	Driving Gear.
396.	Screw Gear (English).
397.	Screw Gear (Metric).
398.	P. B. Glut.
399.	Level.
400.	Taper Pin.
401.	Grub Screw.
402.	Ball Bearing.

Ref. No.	Part.
403.	Nut.
404.	A. C. Ball Bearing.
405.	Tee Key.
406.	3-Springs.
407.	3-3/8" Whit. x 3/8" Screws.
408.	9/32" dia. x $\frac{1}{4}$" Brass Pad.
409.	3/8" Whit. x 3/8" Grub Screw.
410.	Shaft.
411.	Key.
412.	Driving Shaft.
413.	Dovetail Key.
414.	Reverse Clutch.
418.	P. B. Bush.
419.	Double Gear.
420.	Oil Retaining Ring.
422.	$1\frac{1}{2}$" Bore Split Ring.
424.	$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screw.
426.	Pinion Shaft.

(Continued overleaf).

IMPORTANT.— WHEN ORDERING SPARES ALWAYS QUOTE INSPECTION NUMBER OF MACHINE

NORTON-TYPE FEED BOX (Plate S. P. 1323) (Cont'd).

Ref. No.	Part.
427.	Double Gear.
429.	Glut.
430.	7/32" x 2" Taper Pin.
431.	Gear Shaft Lever.
432.	2-Plungers.
433.	Spring.
435.	3/8" Whit. x 3/8" Screw.
437.	Stud.
438.	Spacer.
439.	Key.
440.	Shaft.
441.	Gear (Metric).
442.	Feed Shaft.
443.	Gear.
444.	Key.
445.	Gear (English).
446.	$2\frac{1}{4}$" Bore Split Ring.
447.	5/16" Whit. x 7/8" Grub Screw.
448.	7/32" dia. x 2" Taper Pin.
449.	16T Nest Gear.
450.	18T Nest Gear.
451.	19T Nest Gear.
452.	20T Nest Gear.
453.	22T Nest Gear.
454.	23T Nest Gear.
455.	24T Nest Gear.
456.	26T Nest Gear.
457.	28T Nest Gear.
458.	Spacing Bush.
459.	Key.
460.	Ball Journal Bearing.
461.	$\frac{1}{4}$" Whit. x 5/8" Cap Screw.
462.	Cover.
463.	$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Grub Screw.
464.	Clutch Spring.
465.	Friction Plate.
466.	Clutch Body.
467.	Cover.
468.	$\frac{1}{4}$" Whit. x 5/8" Cap Screw.
469.	Collar.
470.	Taper Pin.
471.	Double Gear (Metric M/cs).
472.	Shaft.
473.	$\frac{1}{4}$" x 2" Dovetail Key.
474.	Internal Gear.
475.	P. B. Bush.
476.	Pinion.
477.	Oil Retaining Ring.
478.	Clutch Pinion (English).
479.	Clutch Pinion (Metric).
480.	Stud.
481.	P. B. Glut.
482.	Gear Lever (English).
483.	Gear Lever (Metric).
485.	$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screw.
486.	Spring.
487.	3/8" Whit. x 3/8" Screw.
488.	7/32" dia. x 2" Pin.
489.	1.5/8" bore x 1/16" Split Ring.
490.	Clutch Gear (English).
491.	Clutch Gear (Metric).
492.	Ball Journal Bearing.
493.	Key.
494.	Tumbler Shaft.
496.	$\frac{1}{4}$" x $\frac{1}{2}$" Allen Screw.
497.	Spacer.
498.	Tumbler Gear.
499.	Ball Bearing.
500.	Key.
501.	Stud.
502.	Tumbler Bracket.
503.	Ball Journal Bearing.
504.	Plug.
505.	Tumbler Gear.
506.	Plunger.
507.	Spring.
508.	Socket.
509.	Knurled Handle.

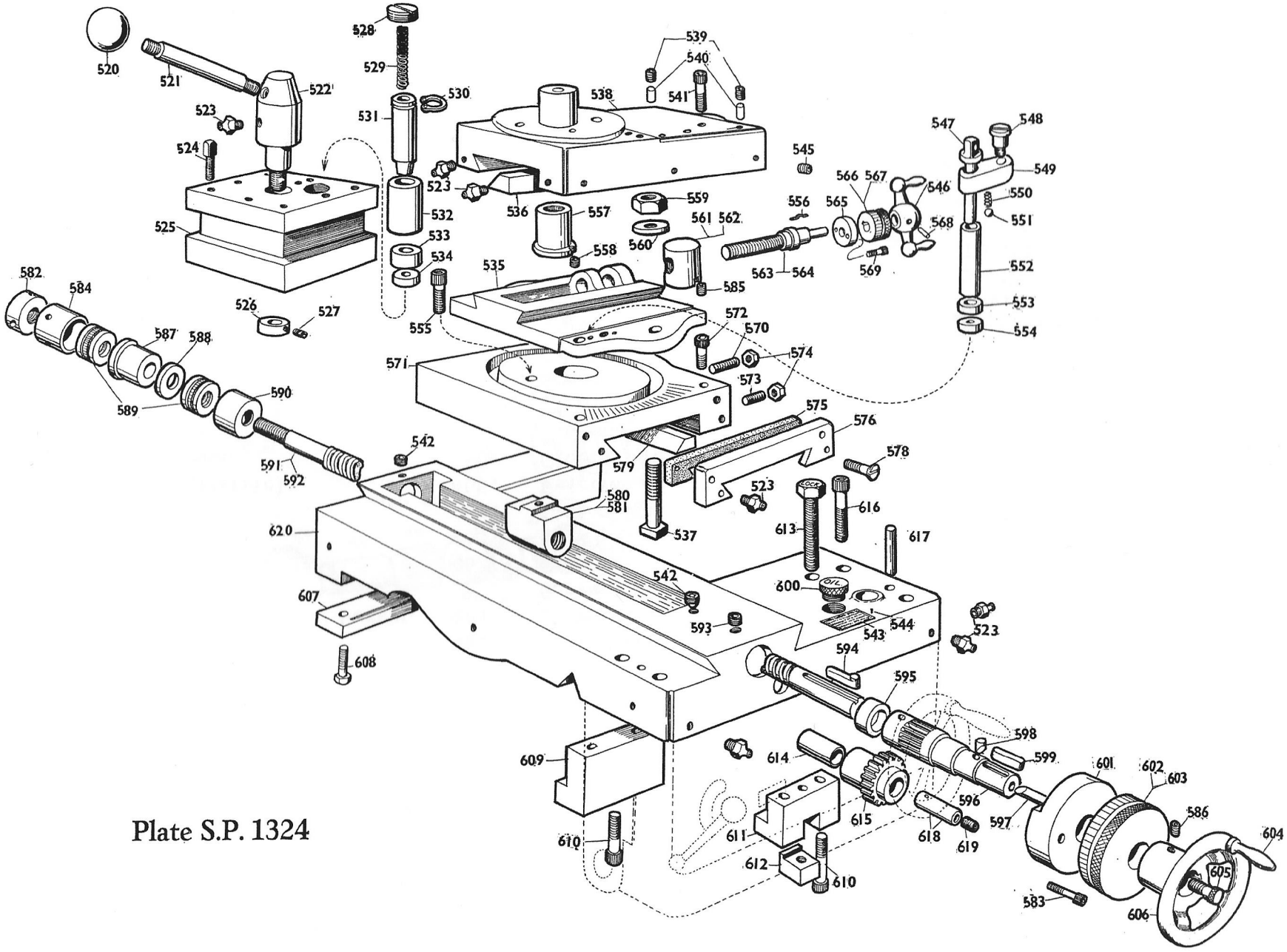


Plate S.P. 1324

SADDLE AND SLIDES (Plate S. P. 1324).

Ref. No.	Part.
520.	Black Knob.
521.	Handle.
522.	Screw.
523.	Oil Nipple.
524.	9-7/16" Whit. Sq. Hd. Screws.
526.	Collar.
527.	5/16" Whit. x $\frac{1}{2}$" Screw.
528.	Screwed Plug.
529.	Spring 3/8" O/D x 2$\frac{1}{2}$"
530.	5/8" ext. dia. Circlip.
531.	Turret Locating Plunger.
532.	Bush.
533.	Turret Locating Bush.
534.	Pad.
535.	Swivel Slide.
536.	Vee Strip.
537.	2-Tee Slot Bolts.
538.	Top Slide.
539.	3-$\frac{1}{4}$" BSF x $\frac{1}{4}$" Screw.
540.	3-Locking Pads.
541.	3-5/16" Whit. x $\frac{3}{4}$" Cap Screws.
542.	5/16" Whit. x $\frac{1}{4}$" Screw.
543.	Instruction Plate.
544.	Rivets.
545.	3-5/16" Whit. x $\frac{3}{4}$" Screw.
546.	Handle.
547.	Locating Pin.
548.	Cheese Head Pin.
549.	Swing Lever.
550.	$\frac{1}{4}$" dia. Spring.
551.	$\frac{1}{4}$" dia. Steel Ball.
552.	Bush.
553.	Locating Pin Bush.
554.	Extracting Pad.
555.	5/16" Whit. x $\frac{3}{4}$" Cap Screws.
556.	Leaf Spring.
557.	Clamping Nut.
558.	$\frac{1}{4}$" Whit. x 3/8" Screw.
559.	2-$\frac{1}{2}$" Whit. Hex Nuts.
560.	2-$\frac{1}{2}$" Std. Washers.
561.	Nut (English).
562.	Nut (Metric).
563.	Screw (English).
564.	Screw (Metric).
565.	Plate.
566.	Graduated Dial (English).
567.	Graduated Dial (Metric).
568.	3/16" dia. x 1$\frac{1}{4}$" Taper Pin.
569.	2- $\frac{1}{4}$" Whit. x $\frac{1}{2}$" Cap Screws.
570.	5/16" x 1.5/8" Screw.
571.	Cross Slide.
572.	2-5/16" Whit. x 1" Cap Screws.
573.	5/16" Whit. x 7/8" Screws.
574.	3-5/16" Whit. Hex Nuts.
575.	Felt Wiper.
576.	Cross Slide Wiper.
578.	2-$\frac{1}{4}$" Whit. x $\frac{3}{4}$" Screws.
579.	Vee Strip.
580.	Surfacing Nut (English).
581.	Surfacing Nut (Metric).

(Continued overleaf).

SADDLE AND SLIDES (Plate S. P. 1324) (Cont'd).

Ref. No.	Part.
582.	Check Nut.
584.	Ball Thrust Cover.
585.	$\frac{1}{4}$" Whit. x 3/8" Screw.
586.	5/16" Whit. x 3/8" Screw.
587.	Bush.
588.	Thrust Washer.
589.	2-5/8" Thrust Bearings.
590.	Cover.
591.	Surfacing Screw (English).
592.	Surfacing Screw (Metric).
593.	5/16" Whit. x $\frac{1}{4}$" Screw.
594.	Key.
595.	P. B. Bush.
596.	Pinion Shaft.
597.	Dial Locking Pin.
598.	Dial Locking Plunger.
599.	Key.
600.	Oil Filler Cap.
601.	Marker.
602.	Graduated Dial (English).
603.	Graduated Dial (Metric).
604.	Handle.
605.	Knurled Locking Screw.
606.	Handwheel.
607.	4-Back Gib Strips.
608.	3/8" Whit. x 7/8" Hex Screw.
609.	L.H. Front Gib Strip.
610.	4-3/8" Whit. x $1\frac{3}{4}$" Cap Screws.
611.	R.H. Front Gib Strip.
612.	Locking Piece.
613.	Locking Screw.
614.	Bush.
615.	Intermediate Pinion.
616.	4-$\frac{1}{2}$" Whit. x $2\frac{1}{2}$" Cap Screws.
617.	3/8" dia. x $2\frac{1}{4}$" Dowel.
618.	Intermediate Pinion Stud.
619.	$\frac{1}{4}$" Whit. x 3/8" Grub Screw.
620.	Saddle.

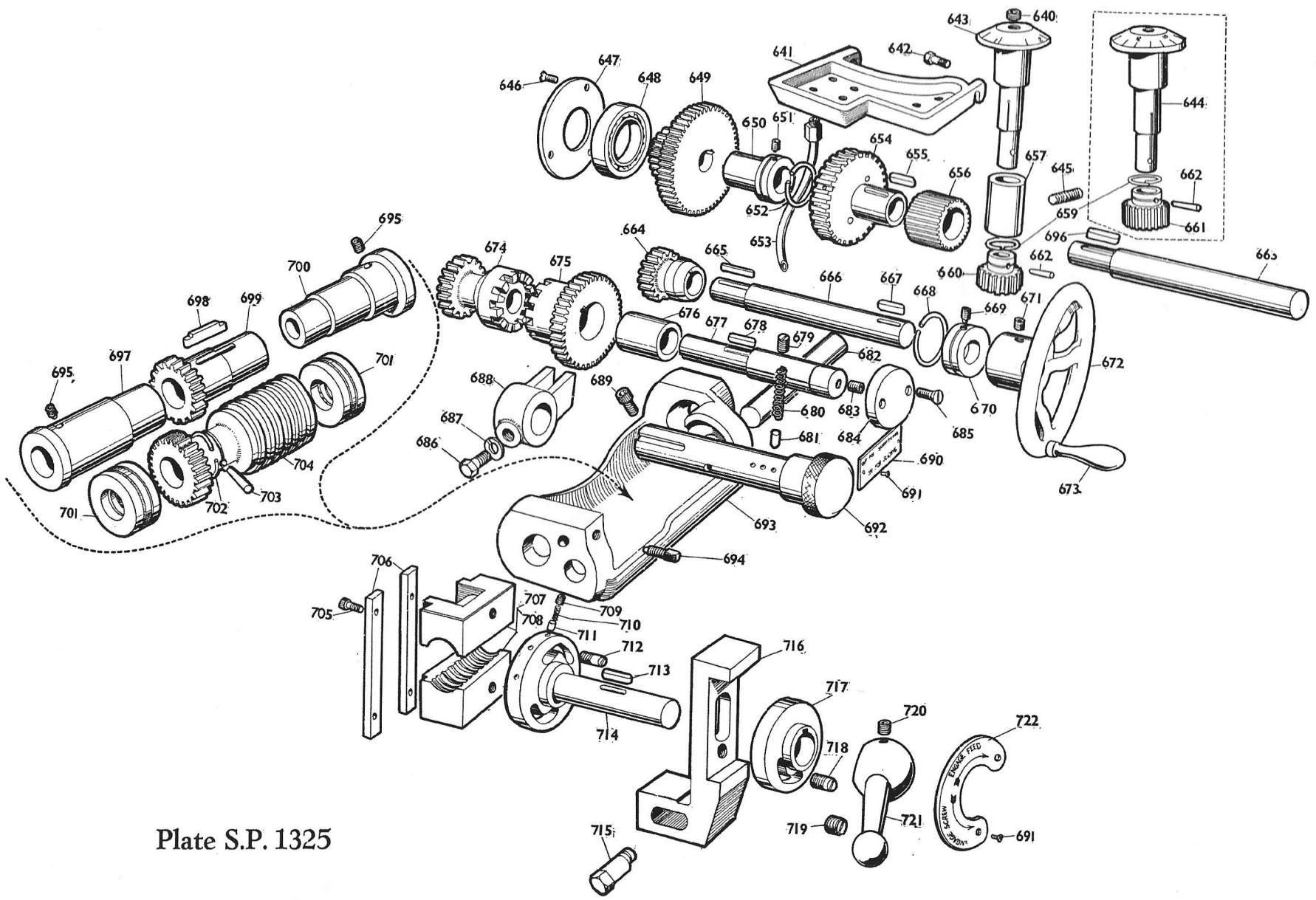


Plate S.P. 1325

APRON (Plate S. P. 1325).

Ref. No.	Part.
640.	3/8" Whit. x 3/8" Grub Screw.
641.	Oil Reservoir.
642.	2-$\frac{1}{4}$" Whit. x 9/16" Hex Screws.
643.	Screw-cutting dial (English).
644.	Screw-cutting dial (Metric).
645.	$\frac{1}{2}$" Whit. x $1\frac{3}{4}$" Grub Screw.
646.	3-$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screw.
647.	Cover Plate.
648.	Ball Journal Bearing.
649.	Rack Pinion & Gear.
650.	Spacer.
651.	3/8" Whit. x 5/8" Grub Screw.
652.	1.5/8" I/D Split Ring.
653.	Wick Holder & Oil Pipe Unit.
654.	Worm Wheel.
655.	$\frac{1}{4}$" x $\frac{1}{4}$" x 1" Key.
656.	Gear.
657.	Bush.
659.	15/16" I/D Split Ring.
660.	Worm Wheel (English).
661.	Worm Wheel (Metric).
662.	3/16" x $1\frac{1}{2}$" Taper Pin.
663.	Rack Pinion Shaft.
664.	Hand Traverse Pinion.
665.	Key.
666.	Hand Traverse Shaft.
667.	$\frac{1}{4}$" x $\frac{1}{4}$" x 1" Key.
668.	$1\frac{1}{2}$" I/D Split Ring.
669.	5/16" Whit. x 9/16" Grub Screw.
670.	Collar.
671.	5/16" Whit. x $\frac{1}{2}$" Grub Screw.
672.	Handwheel.
673.	Handle.
674.	Pinion & Clutch.
675.	Clutch Gear.
676.	P. B. Bush.
677.	Pinion & Clutch Shaft.
678.	$\frac{1}{4}$" x $\frac{1}{4}$" x 1" Key.
679.	3/8" Whit. x 3/8" Grub Screw.
680.	Spring.
681.	Plunger.
682.	Worm Shaft.
683.	5/16" Whit. x $\frac{1}{4}$" Grub Screw.
684.	Retaining Plate.
685.	2-$\frac{1}{4}$" Whit. x $\frac{1}{2}$" Screws.
686.	Screw.
687.	3/8" Spring Washer.
688.	Sliding Gear Glut.
689.	$\frac{1}{4}$" Whit. x $\frac{3}{4}$" Cap Screw.
690.	Surfacing Instruction Plate.
691.	Rivets.

(Continued overleaf).

APRON (Plate S. P. 1325) (Cont'd).

Ref. No.	Part.
692.	Glut Shaft.
693.	Worm Box.
694.	Square Headed Screw.
695.	2-$\frac{1}{2}$" BSF Grub Screws.
696.	$\frac{1}{4}$" x $\frac{1}{4}$" x 1$\frac{1}{2}$" Key.
697.	L.H. P.B. Bush.
698.	Key.
699.	Pinion.
700.	R.H. Bush.
701.	2-7/8" Thrust Bearings.
702.	1, 1/8" I/D Split Ring.
703.	7/32" x 1$\frac{1}{2}$" Taper Pin.
704.	Worm & Pinion.
705.	4-$\frac{1}{4}$" Whit. x 1" Cap Screws.
706.	2-Nut Plates.
707.	One Pair of Half Nuts (English).
708.	One Pair of Half Nuts (Metric).
709.	3/8" Whit. x 3/8" Grub Screw.
710.	Spring.
711.	Plunger.
712.	2-Pins.
713.	$\frac{1}{4}$" x $\frac{1}{4}$" x 5/8" Key.
714.	Screwcutting Nut.
715.	Eccentric Stud.
716.	Lever.
717.	Feed Cam.
718.	Cam Pin.
719.	5/8" Whit. x $\frac{1}{2}$" Grub Screw.
720.	3/8" Whit. x 3/8" Grub Screw.
721.	Handle.
722.	Instruction Plate.

IMPORTANT.—WHEN ORDERING SPARES ALWAYS QUOTE INSPECTION NUMBER OF MACHINE

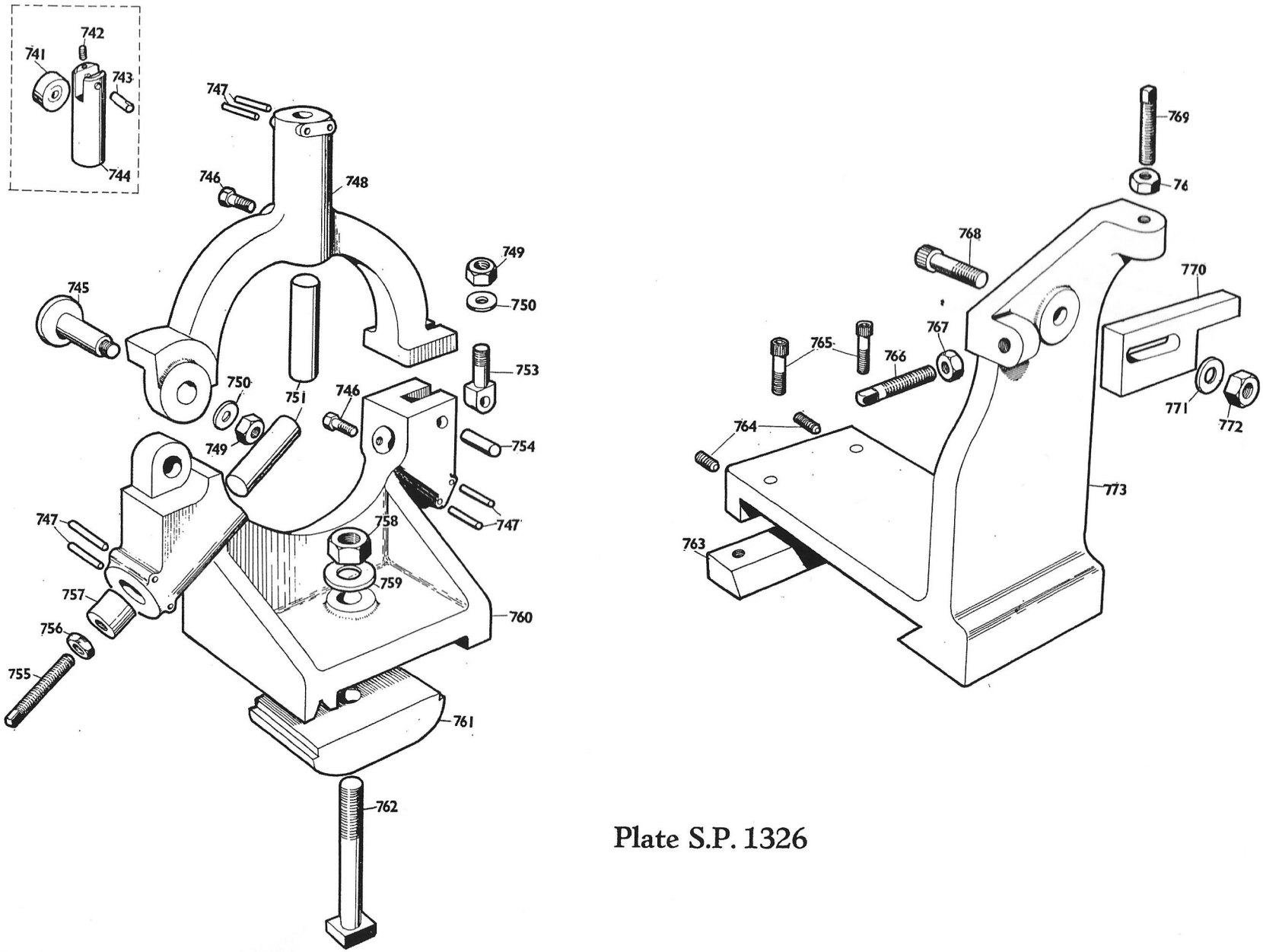


Plate S.P. 1326

STATIONARY STEADY (Plate S.P. 1326).

Ref. No.	Part.
741.	3-Rollers.
742.	3-4.B.A. x 3/16" Grub Screws.
743.	3-Roller Pins.
744.	3-Roller Holders.
745.	Hinge Pin.
746.	3-3/8" Whit. x 1" Set Screws.
747.	6-Pins 3/16" dia. x 2¼".
748.	Top Half of Steady.
749.	2-½"Whit. Hex Nuts.
750.	2-½" Std. Washers.
751.	3-Pads.
753.	Eye Bolt.
754.	Pin.
755.	Adjusting Screws.
756.	½" Whit. Hex Locknuts.
757.	3-Adjusting Nuts.
758.	¾" Whit. Hex Nut.
759.	¾" Std. Washer.
760.	Bottom Half of Steady.
761.	Clamp Plate.
762.	Clamp Bolt.
763.	Vee Strip.
764.	2-5/16" Whit. x ¾" Grub Screws.
765.	2-5/16" Whit. x 7/8" Cap Screws.
766.	3/8" Whit. x 1½" Set Screws.
767.	3/8" Whit. Hex Nut.
768.	½" Whit. x 1¾" Cap Screw.
769.	3/8" Whit. x 2" Set Screw.
770.	Steady Block.
771.	½" Std. Washer.
772.	½" Whit. Hex. Nut.
773.	Traverse Steady Body.

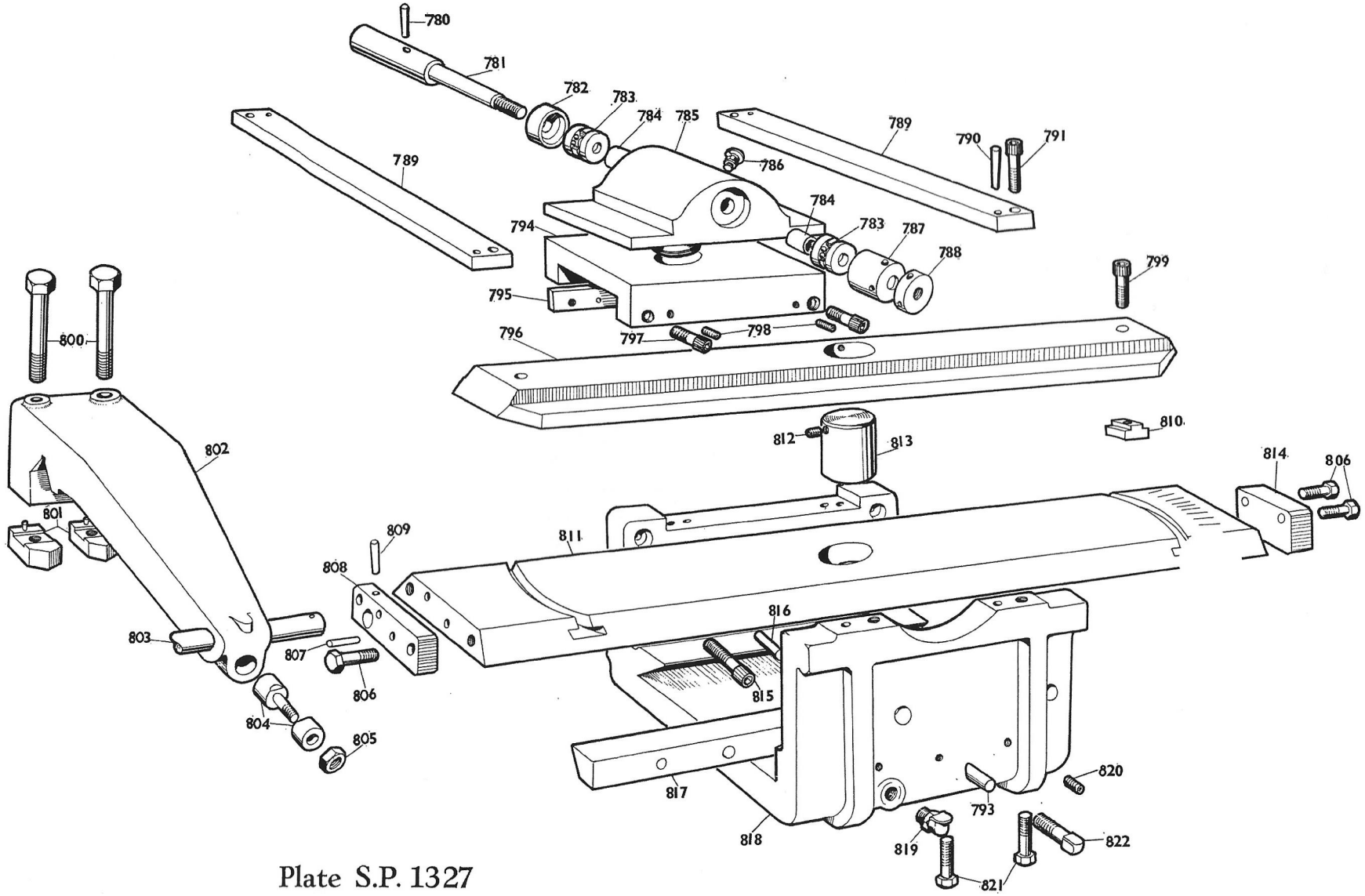


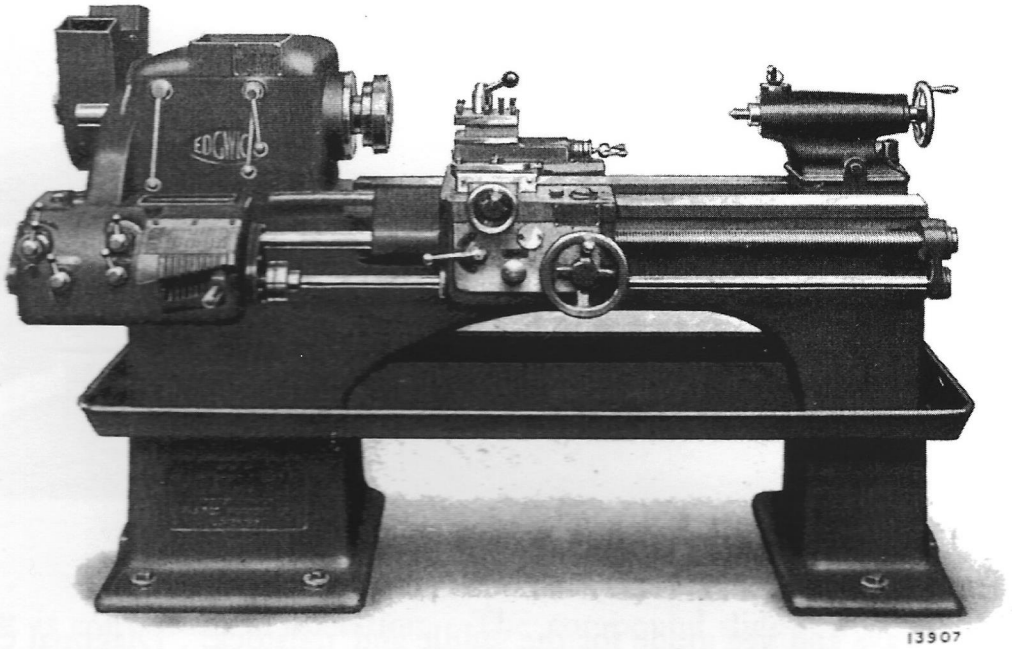
Plate S.P. 1327

TAPER-TURNING ATTACHMENT (Plate S. P. 1327).

Ref. No.	Part.
780.	No. 1 Taper Pin.
781.	Feed Screw Extension.
782.	Cover.
783.	Ball Thrust Bearing.
784.	2-Oilite Bushes.
785.	Sliding Block.
786.	Oiler.
787.	Cover.
788.	Check Nut.
789.	2-Guide Strips.
790.	No. 4 Taper Pin.
791.	5/16" Whit x 7/8" Cap Screw.
793.	Brass Locking Pad.
794.	Thrust Block.
795.	Gib.
796.	Swivelling Slide.
797.	$\frac{1}{4}$" BSF. x 5/8" Cap Screw.
798.	$\frac{1}{4}$" BSF. x $\frac{1}{2}$" Grub Screw.
799.	7/16" Whit. x 1" Allen Screw.
800.	$\frac{1}{2}$" Whit. x $3\frac{1}{4}$" Hex Screw.
801.	2-Clamps.
802.	Draw Bar Bracket.
803.	Draw Bar.
804.	Pad Bolt & Pad.
805.	$\frac{1}{2}$" Whit. Hex Nut.
806.	4-3/8" Whit. x 1.7/8" Hex Screws.
807.	No. 4 Taper Pin.
808.	Anchor Block.
809.	No. 4 Taper Pin.
810.	Tee-Slot Nuts.
811.	Intermediate Slide.
812.	5/16" Whit. x 3/8" Grub Screw.
813.	Spigot.
814.	End Stop.
815.	7/16" Whit. x $1\frac{1}{4}$" Cap Screw.
816.	2-No. 6 Taper Pins.
817.	Gib.
818.	Bottom Slide.
819.	1/8" Gas Oiler.
820.	5/16" Whit. $\frac{3}{4}$" Grub Screw.
821.	3/8" Whit. x 1.3/8" Hex Screw.
822.	3/8" Whit. x 1" Square Head Screw.

HERBERT

In the present state of emergency it may become necessary to make deviations from the specifications given in this catalogue matter which therefore must not be considered binding in detail.



Edgwick 6½" Screw-cutting Lathe. Belt-driven model.

EDGWICK 6½" GAP-BED LATHES

Built in two styles—With or without screw-cutting

Swings over Bed 13" Swings in Gap 20" × 5" Length of Bed 6' 6"

The Edgwick Lathe is made exclusively for us, under our supervision, by a well-known British firm. It combines many of the best features of British and American practice.

Modern design using ball- and roller-bearings and short splined shafts enables this machine to make full use of tungsten-carbide tools such as Ardoloy. Simple and convenient controls enable it to deal rapidly with general and toolroom work.

5th Edition

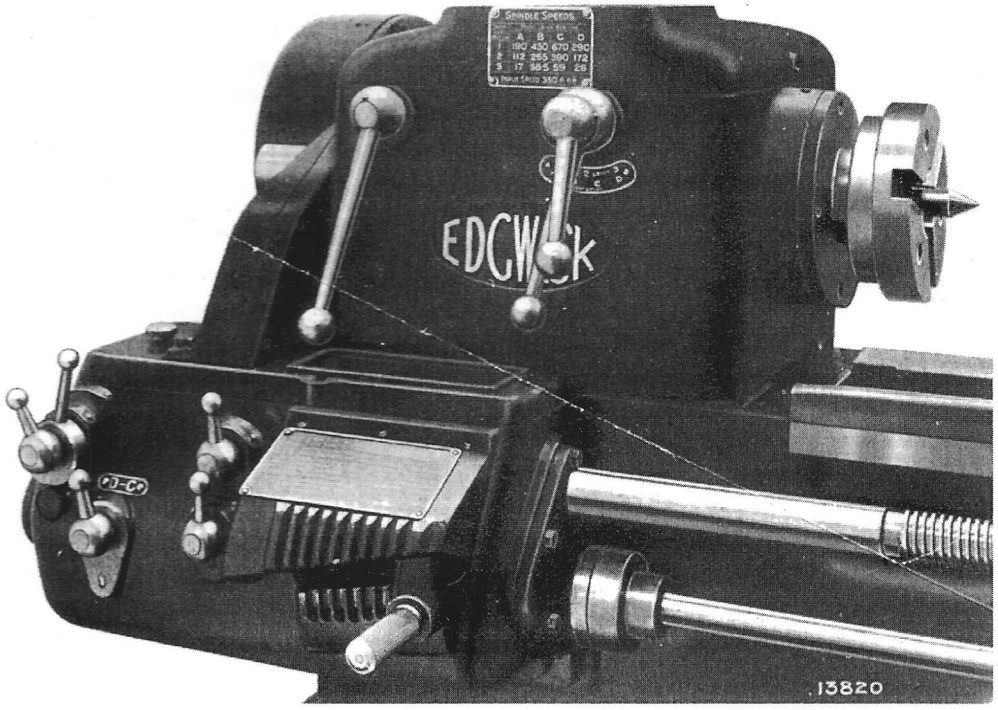
Catalogue Sheet No. E865

ALFRED HERBERT LTD. COVENTRY

FACTORED DEPARTMENT

ALFRED HERBERT LTD., COVENTRY, ENGLAND

FACTORED DEPARTMENT



Feedbox and headstock of the Edgwick Screw-cutting Lathe.

BED has flat ways and vee guide for the saddle and tailstock. Diagonal cross ribs give rigidity without affecting chip clearance. A full gap piece is fitted.

HEADSTOCK carries flanged spindle mounted on preloaded taper-roller bearings. All gear shafts are short and mounted on plain roller bearings. Gears are made from heat-treated nickel-chrome steel.

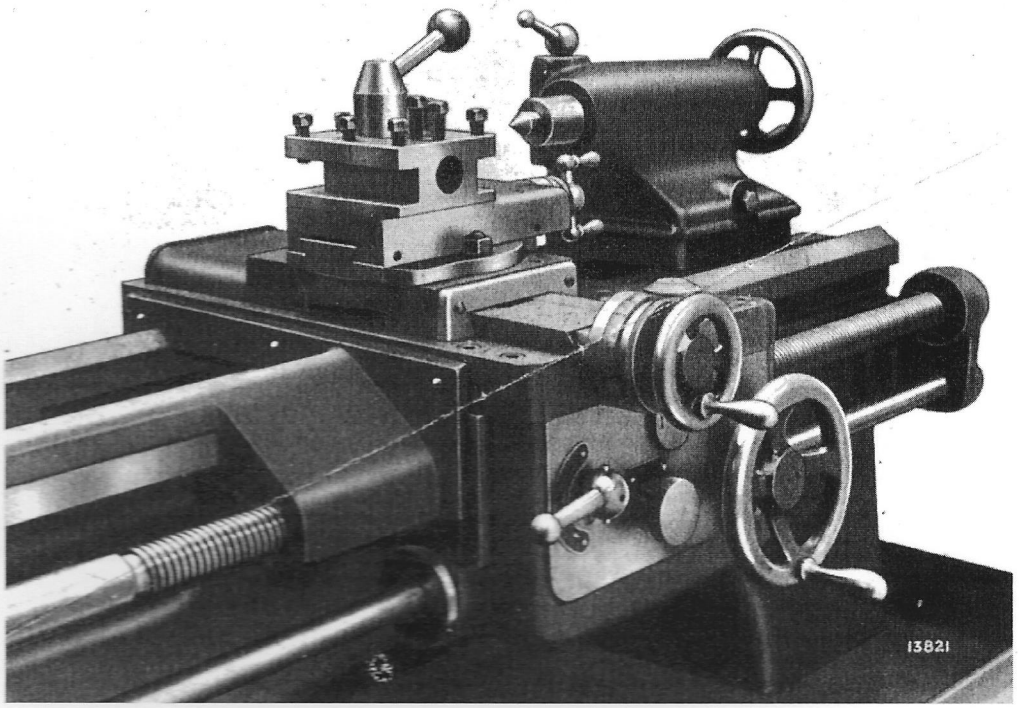
Three levers, conveniently mounted, control all motions of the twelve-speed headstock. Left-hand lever operates multi-disc clutch and friction brake, right-hand levers select speeds.

FEED BOX of the screw-cutting lathe is of the quick-change type. Thirty-six sliding and surfacing feeds and thirty-six Whitworth threads and thirty-four metric threads are obtainable without the use of change wheels.

A lever is provided on the feed box to give reverse to leadscrew when cutting metric threads. Single-tooth clutch ensures correct re-engagement.

Gears are mounted on solid six-spline shafts running on roller bearings.

The feed on the lathe without screw-cutting, is by tensioned vee belt driving from the spindle to a reverse box on the bed. Four rates of feed provided giving 58, 83, 157 and 178 cuts per inch.



Saddle and Tail-stock of the Edgwick Screw-cutting Lathe.

SADDLE is convenient in operation. The compound slide-rest carries a four-way tool post. A guard attached to the saddle effectively protects the bed ways and leadscrew from chips and dirt.

APRON is a heavy double-walled casting.

One interlocking lever controls the sliding, surfacing and screw-cutting motions. A pitch indicator is provided for the latter and the feed mechanism is protected by a slipping clutch.

DRIVE. Single-pulley belt drive from lineshaft or by motor mounted at the rear. Guarding complies with Section 17 of the Factories Act, 1937.

TAILSTOCK has instant locking for the centre barrel and slide. Set-over is provided for taper turning.

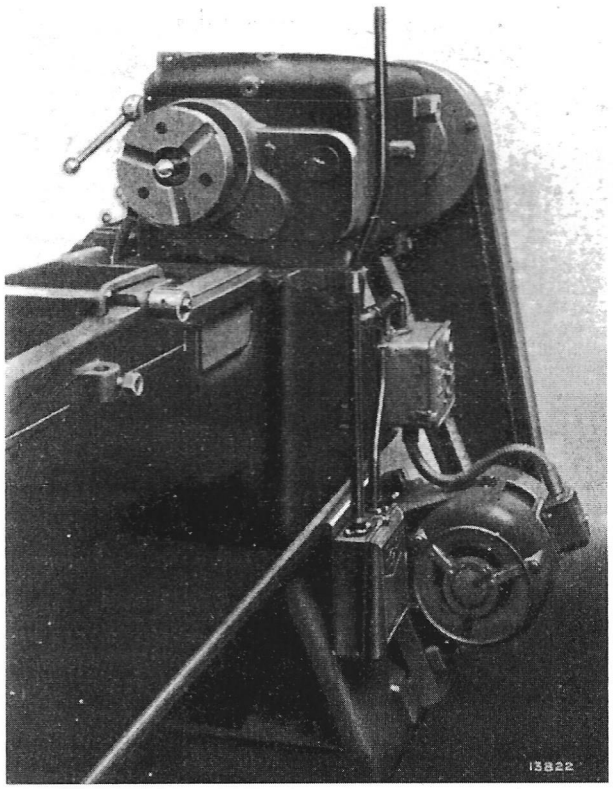
LUBRICATION. Headstock mechanism is flood lubricated. Apron forms self-contained oil bath.

EQUIPMENT. Four-way tool post, catchplate, 12″ faceplate, travelling steady, sheet-steel chip tray, grease gun and spanners. Electrical equipment can be supplied at extra cost for all standard alternating and direct currents. A list of the extras will be found under Dimensions on page 4.

EDGWICK 6½" GAP-BED LATHES.

ALFRED HERBERT LTD., COVENTRY, ENGLAND

FACTORED DEPARTMENT



Rear view of Edgwick Lathe showing motor drive arrangement. (Electrical equipment is extra.)

	Lever Position	LEADSCREW ¼" PITCH								
SLIDING FEEDS SURFACING FEEDS = SLIDING FEED × 2	CB	14	16	17	18	20	21	22	23	25
	DB	28	32	34	36	40	42	44	46	50
	CA	56	64	68	72	80	84	88	92	100
	DA	112	128	136	144	160	168	176	184	200
WHITWORTH THDS. PER IN.	CB	2	2¼	2⅜	2½	2¾	2⅞	3	3¼	3½
	DB	4	4½	4¾	5	5½	5¾	6	6½	7
	CA	8	9	9½	10	11	11½	12	13	14
	DA	16	18	19	20	22	23	24	26	28
PITCH OF SCREW IN M/M	CB	8	9	9½	10	11	11½	12	13	14
	DB	4	4½	4¾	5	5½	5¾	6	6½	7
	CA	2	2¼	2⅜	2½	2¾	2⅞	3	3¼	3½
	DA	1	1⅛		1¼	1⅜		1½	1⅝	1¾

DIMENSIONS

Length of bed	6′ 6″
Swings over bed	13″
Swings over saddle	8″
Swings over saddle guard	7″
Swings in gap	20″ × 5″
Admits between centres	3′ 5″
Travel of turret on compound slide rest	3″
Hole through spindle	1¾″
Taper of headstock centre, morse	No. 2
Taper of tailstock centre, morse	No. 3
Section of tools	¾″ × ½″
Number of spindle speeds	12
Range of spindle speeds, 3 or 5 h.p. motor running at 960 r.p.m.	17, 26, 38, 59, 112, 172, 190, 225, 290, 390 430, 670
Range of spindle speeds, 3 or 5 h.p. motor running at 1450 r.p.m.	25, 39, 57, 88, 170, 255, 280 380, 430, 650, 580, 1000
Range of feeds	See chart above
Range of feeds (without screw-cutting), c.p.i.	58, 83, 157, 178
Driving pulley speed, r.p.m.	350
Driving pulley size	10″ × 3″
Floor space occupied	8′ × 3′ 6″
Approx. net weight, cwts.	21½
Approx. gross weight, cwts.	25½
Approx shipping dimensions, cu. ft.	100
Codeword, belt drive	*Xkduy*
Codeword, motor drive, exclusive of electrical equipment	add *mo*
Codeword if without screw-cutting	add *sc*

EXTRAS

	Codeword
Suds pump and fittings	add *py*
Chuck plate	add *ab*
3-point stationary stay, plain paws	add *ec*
3-point roller stationary stay	add *id*
21″ diameter faceplate for gap	add *of*
Driver plates 12″ diameter with 2 pegs	add *ug*
Slide rest tools (14 in all)	add *yh*
Making machine dust-proof	add *ja*
Tee-rest for hand turning	add *ke*
Cone centres 4″ dia. with MT Shank and ball thrust washers for pipe work	add *li*
Cone centres 6″ dia. with MT Shank and ball thrust washers for pipe work	add *nu*
Square centre	add *hj*
Light centre	add *ck*
One-sided centre	add *dl*
Foundation bolts and plates	add *fm*
Fitting low voltage lighting equipment	add *gn*
Electrical equipment consisting of 3 H.P. motor suitable for 400/440 volts, 3 phase, 50 cycles, with direct contactor starter with thermal over-load releases and start and stop push button control and triple pole isolator and fuses	add *hp*
Ditto 200 volts, 2 phase, 50 cycles	add *qs*
Ditto 200/500 volts D.C. with hand-operated control panel arranged for wall mounting	add *rq*
Floor fixing stand for starter (D.C. only)	add *tu*

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