

SADDLE

The Saddle is shown in detail on drawing. The operation of the two traverses is by means of a single worm mounted in a drop box and the positioning of the curved lever on front of the apron selects either the longitudinal or the cross traverse. A further small lever with a red knob releases the drop box. This lever is also released mechanically when the Knock-off rod at the left hand side of the apron is in contact with the Stop fitted to the lathe bed.

All shafts in the apron have double bearings.

The Bronze half nuts for screwcutting are engaged with the leadscrew when the lever is in the upward position.

The cross Feedscrew is mounted in a housing so designed that the housing, screw and gear are easily removed without dismantling the apron. This is a useful feature when replacement is necessary or removal of the cross slide is desired. The cross feedscrew is cut 10 threads/inch.

The Swivel Slide is mounted on a sturdy pillar on the Cross Slide, released or tightened by 2 socket screws.. These screws impinge on tapered circular segments which clamp the unit effectively and force it down tightly on its base. The Swivel Slide is graduated up to 90 degrees either side of zero.

A large size micrometer dial having adequate width between graduations is provided both for the Cross Slide and Top Slide. This is mounted on a sleeve on which it can quickly be turned against spring pressure to bring the graduations to the desired position. Small clamping screws which easily become lost or damaged are thus dispensed with.

TAILSTOCK

The tailstock has quick action clamping to the bed and no spanners are required for its operation. A malleable clamp under the bed guides is pivoted at the right-hand end, the clamp bolt passing at a slight angle, right through the tailstock to the top where it is easy of access. Adjustment for taper turning is provided but if taper turning to any serious degree is required it is recommended that the Taper Turning attachment supplied as an extra should be used. The steel Barrel is fitted with an inserted bronze nut, easily replaceable when worn.

INSPECTION

Every component of the "Raglan" lathe undergoes a

rigid inspection both during and after machining and those not conforming to the specified limits are rejected. Sub-assemblies are again inspected and the lathe, when finally assembled is fully tested for alignment.

LATHES ARE ALWAYS TESTED IN OUR WORKS IN THE FREE STANDING POSITION. i.e. not bolted down to any foundation.

The lathe is run under its own power for several hours and every motion examined, during which period the Catch Plate supplied with it is turned up in position and examined for finish and accuracy.

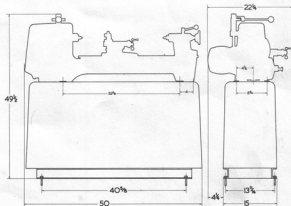
A SIGNED INSPECTION SHEET IS ISSUED WITH EVERY MACHINE.

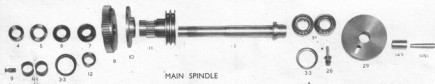
MAINTAINANCE

The life of a Lathe, its freedom from trouble and the accuracy of its work is very much dependent on careful maintenance. An appreciative Operator will therefore give a little time to keeping it clean, periodic oiling and adjustment and the early replacement of worn or damaged parts.

The Variable speed Drive will not give its full range of speeds unless in correct adjustment and the remarks on page 4 should be carefully studied.

Saddle and Top Rest Slides should be periodically attended to. At the risk of appearing obvious, we would emphasise that any lathe should be kept as clean as possible as the entrance of chippings and swarf into inaccessible places soon causes wear and probably damage.

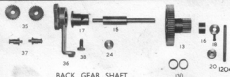




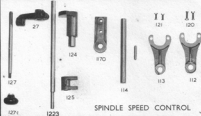
MAIN SPINDLE



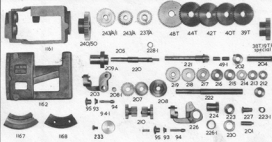
LAY-SHAFT



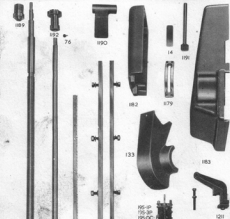
BACK GEAR SHAFT



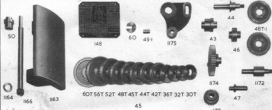
SPINDLE SPEED CONTROL



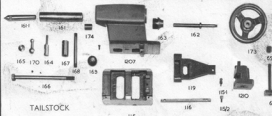
QUICK CHANGE GEARBOX



PARTS FOR LATHE WITHOUT GEARBOX

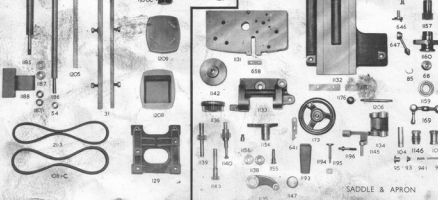


TAILSTOCK



PARTS LIST

For description see next page

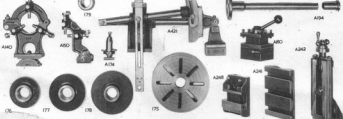


SADDLE & APRON

SPARE PARTS LIST

FOR ILLUSTRATIONS
REFER PREVIOUS PAGE

1 Spinile	5.18. 6	108 Sliding Flange	1.14. 0.	221 Change Gear Shaft with	1.17. 5.	1176 Saddle Front Strips	6. 6.
1-1 Drive Roller Bearings(2) ea.	1.17. 6	109-1/2 V-Belt, Main Drive.	1.17. 6	222 Collar Shaft. (collar.)	1.17. 5.	1177 Saddle Rear Strips	6. 6.
1-2 Dust Cover, internal (2) ea.	5. 6.	109 Inclined Flange	2.16. 3.	223 Idler Gear, Sector	9. 6.	1178 Saddle Adjusting Strip	2. 3.
3 Dust Cover, outer (2) ea.	5. 6.	109-1/2 Ball Bearing	6. 6.	223-1 Oil Retaining Bush	2. 0.	1179 Index Plate (Back Gear)	7. 6.
4 Nut	9. 7. 0.	109-1/2 Oil Seal	2. 9.	224 Oil Seal	17. 0.	1180 Strap for 1141	1. 9. 6.
5 Thrust Collar	9. 7. 0.	110 Sliding Flange	2. 2. 5.	226 Sector Bracket	1. 7. 3.	1181 Bed	29. 0. 6.
6 Spacing Bush	9. 7. 0.	111 Thrust Washer Housings	9. 0.	226-1 Oil Retaining Bush	3. 0.	1182 Cap	1.15. 3.
7 Drive Gear 58 T	14. 6.	111-1 Thrust Bearing	11. 0.	227 Pin, Idler Gear	6. 4.	1183 And Guard	4.11. 6.
8 Gear 57 T	3. 9. 0.	112 Operating Fork, Layshaft.	11. 9.	228-1 Oil Retaining Bush	2. 0.	1184 Cross V/Gear Nut	5.15. 6.
9 Lock Pin	4. 7. 1.	113 Operating Fork, Motor.	11. 9.	230 Collar, Sliding Gear	3. 3.	1185 Lead screw	1. 7. 9.
10 Catch Plate	18.11. 1.	114 Operating Shaft	7. 2.	233 Washer, Stud D	5. 5.	1186 Thrust Bearing Caps	1.15. 0.
11-1 Oil Retaining Bush (2)	5.1. 6.	115 Tailstock Base	1.15. 0.	240 5/8" Gear	1. 1. 6.	1187 H.H. Bracket	1.15. 0.
12 Cross sleeve	9. 0.	116 Adj. Strip	ea. 4. 8.	243A Gear	12.10. 1.	1188 Clutch	19. 1.
13 Back Gear	2.12. 6.	119 Clamp Plate	ea. 10. 4.	243B Gear	1.19. 7.	1189 Back Guard Hinge Bracket	11.10. 1.
14-1 Oilite Bushes	ea. 4. 5.	120 Retaining Studs(2)	ea. 1. 7.	241 Latch	10.10. 1.	1190 Back Guard Hinge Pin	7. 6.
14 Index Plate, Tumbler	5. 3.	121 Retaining Studs(2)	ea. 1. 7.	246 Knock-out Shaft	10.10. 1.	1192 Feedshaft Gear 28T	1. 4. 9.
15 Back Gear Shaft	2. 6. 3.	122 Control Rod Bracket	12. 8.	247 Knock-out Handle	15. 6.	1193 Roly	19.10. 1.
16-1 Bearing Bush	5. 3.	123 Operating Claw	6. 5.	248 Stop Bar	5. 19. 3.	1194 Dial Shaft	6. 3.
17 L.H. Bearing Bush	10. 6.	127 Control Rod	6. 0.	1108 Saddle Lock	9. 4.	1195 Swivel Pin	6. 3.
18 Stop Collar	2. 9.	127-1 Knob	2. 6.	1131 Agreen	5.11. 6.	1196 Swivel Pin	6. 3.
20 Knurled Nut	3. 2.	128 1 h.p. Motor Footplate.	15. 7.	1132 Saddle	7.14.10. 1.	1197 Cross Slide	1.10. 0.
21 Double groove pulley	1.14. 7.	133 Motor Pulley Guard	1. 2.	1133 Worm Bracket	9. 5. 0.	1198 Swivel Slide	2.10. 0.
22-1 Ball Bearing	6. 0.	137 Clamp Segments (2) pair.	8. 3.	1134 Worm Bush	1. 1. 7.	1199 Stop Pin	7. 9.
22-2 Circlop	1. 0.	148 Rewinding Chart, Plain.	5. 8.	1135 Feed Change Lever	10. 4.	1200 Top Slide screw Housing	10. 5.
23-1 V Belts (2)	ea. 12. 8.	149 Spindle Reducing Bush	7. 3.	1136 Varn Wheel	1.15. 9.	1201 Top Slide Feed screw	1.19. 0.
24 Washer	2. 1.	150-1 Spindle Centre	7. 6.	1137 Stop Pin for 1135	1. 7.	1202 Top Slide Adj. Strip	7. 9.
26 Driver Plate Pins (2)	ea. 5. 9.	161 Tailstock Barrel	1.10. 0.	1138 Gear 18T 16 IF.	9. 4.	1203 Cross Slide Adj. Strip	7. 9.
27 Control Rod Connector	10. 7.	162-1 Tailstock Centre	1.15. 7.	1139 Gear 18T 16 IF.	1. 20. 4.	1204 Gear Tube	8. 6.
28 Catch Plate	1.10. 6.	166 Screw	ea. 1. 0.	1140 Gear 18T (Hand Feed)	1.11. 6.	1205 Rack	1. 2. 1.
31 Bed Strips (2)	pair, 5. 6. 0.	163 Bearing	13. 4.	1141 Gear 42T (Hand Feed)	18. 0.	1246 Worm Box Handle	6. 6.
35 Tumbler Gears (2)	ea. 11. 6.	164 Barrel Clamp Bolt	9. 0.	1142 Gear 56T	1. 9. 0.	1207 Tailstock	1.18. 5.
36 Tumbler Bracket	1. 1.	165 Washer	10. 3.	1143 Gear 16 IF	10. 6.	1208 Switch Box	15. 9.
37 Studs(2)	ea. 6. 0.	166 Clamp Bolt	6. 8.	1144 Interlocking	6. 9.	1209 Switch Box Cover	9. 0.
38 Tumbler Screw	3. 6.	167 Clamp Nut Handle	10. 3.	1145 Pin (Interlocking)	2. 5.	1210 Tool Post	15. 6.
43 Gear Sleeve	11. 3.	168 Rod	1. 9.	1146 Pin	1.12. 6.	1211 Bracket	16.10. 1.
44 Stud 8	14. 8.	169 Ballsize Knob	1. 3.	1147 Cover	4. 9.	1212 Stop Bracket & Way	2.12. 6.
45 Change Wheels:- see end of last column.		170 Lever Ball Handle	5. 6.	1148 Release Rod	3. 5.	1213 Layshaft	1. 4. 9.
		172 T-Blocking Piece	2. 6.	1149 Half Nut	1. 8. 5.	1214 Locking Collar	2. 4.
		173 Handwheel	1. 9.	1150 Half Nut, Bottom	1. 18. 5.	1215 Washer for Layshaft	2. 4.
		174 Tailstock Barrel Nut	7. 6.	1151 Cam	30. 1.	1216 Bush	2. 4.
46 Gear Sleeve	7.10.	195-1P	1.10. 0.	1152 Guide	1. 7. 0.	1220 Latch Swivel Pin	9. 3.
47 Stud C	8. 2.	195-2P	1.15. 7.	1153 Guide Pin	9. 3.	1221 Latch Stop Rod	4. 7.
48 Gear, 45T, 2 T.	ea. 12. 8.	195-3P	1.10. 0.	1154 Rucker	1. 2. 1.	1222 Guard for Cross Slide	5. 6.
49-1 Bush	1.11. 2.	195-4C	1.10. 0.	1155 Pin (for Gear 1130)	6. 3.	1223 Control Shaft	4.11. 1.
50 Sleeve	9. 0.	201 Pin, Tumbler Gears	1.10. 0.	1156 Pin	5. 12. 7.	1224 Tool Tray	5. 0.
54 Washer	5. 1.	202 Collar	5. 4.	1157 Gear on Cross Feed Screw, 20T.	15. 6.	1228 Tool Tray Support	6. 3.
55 Wash	3. 6.	203 Tumbler Bracket	10. 0.	1158 Cross Feed Screw	1.11. 7.	1229 Bush	6. 3.
56 7 Bolt for Toolpost	3. 4.	204 Tumbler Shaft	3. 6.	1159 Micrometer dial 2"	12. 0.	1230 Bush	4. 9.
65-1 Nut for above	7. 8.	205 Selector Chart	4. 6.	1160 Micrometer dial 2"	12. 0.		
66 Micrometer Dial Sleeve	7. 2.	206 Micrometer Chart	15. 7.	1161 Norton Gear Box	3. 2. 0.		
75 Micrometer Dial	12. 7.	207 Tumbler Gear 27 T.(2) pair.	9. 4.	1162 Norton Gear Box Cover	2. 4. 6.		
76 Shearing Pin	10. 0.	208 Tumbler Gear 36T	9. 6.	1163 Cover Plate, Plain Lathe	2. 1. 0.		
77 Ball Handle	7. 0.	208-1 Oil Retaining Bush	2. 3.	1164 Washer	3. 3.		
81 Swivel Slide Nut	8. 6.	209A Stud 12" Sleeve	1. 0.	1165 Washer	3. 3.		
85 Clip Spring	4. 4.	210 Twin Gear (2)	18. 3.	1166 Gear and Shaft	2. 4. 0.		
86 Ball Handle	5. 8.	212 Gear 16T. Inside Gearbox	7. 0.	1167 Segment with 7 slot	12. 5.		
87 Nut Flanger	21.3	214 30T. "	7. 0.	1168 Segment for Idler Gear	10. 9.		
88 Flanger	5. 8.	216 22T. "	7. 0.	1170 Fork Rod Bracket	6.10. 1.		
94-1 Spring	5. 2.	216 22T. "	7. 0.	1171 Layshaft Housing	8. 1.		
95 Knob	4. 0.	216 22T. "	7. 0.	1172 Layshaft Housing	8. 1.		
102 Feedshaft Gear	21.7	217 21T. "	7.10. 1.	1173 Stud 4	1. 1. 0.		
103 Worm and Spur	14. 6.	218 20T. "	9. 6.	1175 26T Gear 14 IF	11. 3.		
105 Worm Shaft	3. 4.	219 30T. "	11. 1.	1176 52 Gear 14 IF	1.11. 1.		
107 Inclined Flange	1.19. 0.	220 Shaft, Stud D	18. 7.	1175 Quadrant	1. 3.11.		



ACCESSORIES E.

A-140 Fixed Steady	- 5. 2. 6.	179 Wire Protection Cap, 3-p.t.	- 16. 0.	A-241 Boring Table	5" x 7" - 7.15. 6.
A-150 Travelling		A-160 Four-way Tripod	15.9. 6.	A-242 Vertical Slide	
Steady Rest	- 3.12. 6.	A-174 Draw-in Spindle	- 6. 0. 0.	with V-Groove	19. 20. 0.
A-176 Ring and Rocker		Toolpost	- 2.18. 0.	A-243 Taper Turning	
Toolpost	- 2.18. 0.	A-175 Packplate 8" dia	- 3.12. 6.	stock 1/8" to 1"	Attachment - 18.12. 6.
A-175 Packplate 8" dia	- 3.12. 6.	176 Packplate 8" dia	- 2. 5. 6.	by 1/8", also A1	Extra for
177 Packplate 5" dia	- 2. 5. 6.	178 Packplate 5" dia	- 2. 5. 6.	Hexagon and Square sizes	- 1.17. 6.
179 Packplate 6" dia	- 2. 5. 6.				

CHANGE WHEELS. For Plain Lathe.
42T, 44T, 45T, 48T, 52T, 56T, etc. 12. 8.
For Gearbox Lathe.
No. 37, 39T, 40T, etc. 12. 8.
No. 42T, 44T, 45T, 48T, 52T, 56T, etc. 12. 8.
No. 40T, 42T, 44T, 45T, 48T, 52T, 56T, etc. 12. 8.
Change wheels available for special pitches. Price on application.

