SOUTH BEND LATHE

CE3458 PARTS MANUAL

10", 13", 14 1/2", 16" AND 16/24" LATHES

INSTALLATION, OPERATION

MAINTENANCE & PARTS MANUAL

SBL.

South Bend Lathe Corp.

SOUTH BEND LATHE CORP.
400 West Sample St.
South Bend, IN. 46601
Phone: (219)289-7771 FAX: (219)236-1210
URL: www.southbendlathecorp.com
southbendlathe@worldnet.att.net

12/1995

COST - $75.-

WARNING

IMPORTANT SAFETY INFORMATION

A) IT SHALL BE THE RESPONSIBILITY OF THE END USER TO PROVIDE, AND ENSURE THE USE OF, A GUARD, GUARDING DEVICE, AWARENESS BARRIER, AWARENESS DEVICE, OR SHIELD...

B) DO NOT OPERATE LATHE AT A HIGHER SPEED THAN WHAT THE CHUCK MANUFACTURER RECOMMENDS.

C) NEVER PLACE ANY PART OF YOUR BODY NEAR MOVING PARTS OF THIS MACHINE.

D) NEVER WEAR LOOSE CLOTHING THAT COULD BECOME CAUGHT OR TANGLED IN THE MOVING PARTS OF THE MACHINE.

E) NEVER OPERATE OR MAINTAIN THIS MACHINE WITHOUT PROPER INSTRUCTIONS OR SUPERVISION, WEAR SAFETY GLASSES & SAFETY SHOES.

F) STOP SPINDLE COMPLETELY BEFORE CHANGING OR ADJUSTING THE WORKPIECE FIXTURES OR TOOL.

ELECTRICAL CONNECTION: MACHINE MUST BE INSTALLED BY PROFESSIONAL ELECTRICIAN TO VERIFY THE PROPER VOLTAGE.

SPECIAL INFORMATION

FORM 1038
ALL MODELS

CARE OF MACHINE TOOLS THAT ARE NOT IN USE

When a machine is taken out of service, such as in a school where they would not be used during the summer months or at some other vacation or off period, it should be properly taken care of as follows:

1. Thoroughly clean the machine, being sure that all surfaces are cleaned. It is as important to clean the painted surfaces as well as the machined surfaces. The machine should be cleaned with some type of solvent if the machine has accumulated hard to remove deposits. If all deposits are not removed and a protective coating is applied, it will make the machine doubly hard to clean when the machine is put back into service. A neutralizing agent should be used where finger printing is common or where the climate is very damp.

2. After the machine has been thoroughly cleaned all of the machined surfaces should be covered with either a good grade of medium weight MACHINE OIL (NOT AUTO ENGINE OIL) or if the machine is going to be out of service for a long period of time a light weight grease (commercial petroleum jelly that has been thinned with naptha or mineral spirits is very good) should be used. When covering the machine surfaces care should be taken so that the machined surfaces are completely covered. Also you should try and keep the oil and grease off the painted surfaces.

3. If the machine has belts of any type, they should be loosened, so that they will not stretch while the machine is not in use.

4. All power to the machine should be disconnected. Some machines could be very easily damaged if run after being out of service for a long period of time.

5. The machine should be covered witha cover that will keep dust and dirt from accumulating on it. Also the cover should be liquid repellent to keep any liquid from coming into contact with the working parts of the machine. Such a cover is listed in our General Catalog. These covers are available for all sizes and types of machines that we manufacture.

BACK GEAR AND ECCENTRIC SHAFT

10" and 14½" lathes only

Fig. 1

Fig. 2

I. TO DISASSEMBLE:

1. Remove items "A" and "B" (Fig. 1).
2. Loosen screw "C" (Fig. 2).
3. Remove items "D" thru "I" (Fig. 2) in alphabetical order.

II. TO REASSEMBLE:

1. Replace items "H" and "I". (Be sure gears are free of dirt, chips, and nicks.)
2. Replace item "G" and pin with item "F".
3. Replace item "E", locating the point of the screw in slot of eccentric shaft bushing "J" and replace nut "D".

III. ADJUSTING BACK GEARS:

1. Engage back gears using eccentric shaft lever "K" and allow mating gears to bottom. Then back off back gears until you feel a slight rock between mating gears and tighten set screw "E". Tighten screw "C" so tension on bushing "G" is enough to hold gears in mesh on heavy cuts, but not so tight that the eccentric shaft lever "K" is hard to operate. Make final adjustment by allowing lathe to run for a few minutes. If there is an abnormal amount of noise such as a gear rattling noise the gear clearance is too great, adjust by slightly unscrewing set screw "E". If it seems to be a howling noise, the gear clearance is insufficient. Adjust by screwing in slightly set screw "E". When proper gear clearance is obtained, lock set screw "E" with nut "D".

IV. OILING

1. Remove plug "L" and fill teflon grease. Use our CE1625 or equal.

BACK GEAR AND ECCENTRIC SHAFT
13", 16" AND 16/24" LATHES ONLY

Fig. 1

Fig. 2

I. TO DISASSEMBLE:

1. Remove items "A" and "B" (Fig. 1)

2. Remove items "C" thru "G" (Fig. 2) in alphabetical order.

II. TO REASSEMBLE:

1. Replace items "E" and "F". (Be sure gears are free of dirt, chips, and nicks.)

2. Slip in item "G" with countersunk spot in line with hole for set screw "D".

3. Replace screws "C" and "D" and finger tighten until points of screws are located in bushing countersunk spots.

4. Tighten set screw "C" firmly.

5. Tighten set screw "D" so tension on bushing is tight enough to hold gears in mesh on heavy cuts, but not so tight that the eccentric shaft lever "J" is hard to operate.

III. OILING:

1. Remove oil plug "H" (Fig. 2) and fill with teflon grease, our CE1625 or equal.

IV. INSTALLING NEW ECCENTRIC SHAFT ASSEMBLY:

1. Disassemble per instructions under sub-heading I.

2. Reassemble according to instructions under sub-heading II, but do not tighten set screw "C".

3. Engage back gears using eccentric shaft lever "J" and allow mating gears to bottom. Then back off back gears until you feel a slight rock between mating gears. IMPORTANT - Turn eccentric shaft bushing in direction as shown above (↶) until pin is against stop. Tighten set screw "C" enough to make an impression on bushing "K".

4. Disassemble back gear again and drill countersunk spot 1/8" deep in bushing "K".

5. Reassemble according to instructions under sub-heading II.

V. INSTALLING NEW ECCENTRIC SHAFT BUSHING "K":

1. Remove eccentric shaft assembly "E".

2. Knock out taper pin from eccentric lever "J", replace with new bushing and repin. If bushing is slightly long, face the end without the pin.

3. Reassemble according to instructions under sub-heading IV.

GENERAL INFORMATION:

If there is an abnormal amount of noise in back gears, check the following:

1. Clean teeth with stiff brush and mineral spirits to remove all chips and dirt in gear teeth.

2. Remove all burrs and nicks on gear teeth with knife file.

3. Adjust gear clearance between back gears and gears on spindle assembly.
   3A. If it seems to be a gear rattling noise, the gear clearance is too great - Try adjusting this by elongating countersunk spot on bushing "K" (Fig. 2) with scraper. Scrape on the high side as shown in Fig. 3, then reassemble again according to instructions under sub-heading II.
   3B. If it seems to be a howling noise, the gear clearance is insufficient - Try adjusting this by elongating countersunk spot on bushing "K" (Fig. 2) with scraper. Scrape on the low side as shown in Fig. 3, then reassemble again according to instructions under sub-heading II.
   3C. If necessary to replace eccentric shaft bushing "K" see sub-heading V.

Fig.3 Enlarged View of Eccentric Bushing "K"

Position of New Split Eccentric Shaft Bushing Installed On Lathe

MAINTENANCE

FORM 2002
ALL MODELS

HEADSTOCK SPINDLE SLEEVE BEARINGS
10", 13", 14/12", 16" & 16/24" LATHE MODELS

Fig. 1. Disassembling of Headstock
Perform Operations in numerical sequence.

Fig. 2. Loosening bearing cap by jarring piece of round stock placed in screw hole.

Fig. 3. Removing and disassembling spindle. See Fig. 4 if end assembly of spindle differs from above

Fig. 4. End assembly of spindle on some models of 13"and 14-1/2" lathes

Fig. 5. Marking sleeve bearing for grooves

File grooves at both ends approx. same size as on originals. Use round file

Fig. 6. Filed grooves in sleeve bearing

Fig. 7. Run pipe cleaner through oil breather holes at A and B also oil return hole at C and groove D to clean out any obstruction

TO ASSEMBLE HEADSTOCK

1. Wipe all parts free of dirt and chips. Be sure all oil return and breather holes are clear. See Fig. 7.
2. Reverse the procedure indicated in Fig. 3 and Fig. 4 to assemble the spindle, but do not tighten the take-up nut. Also, if assembly of spindle is like that shown in Fig. 3 do not as yet press on the spindle gear

Fig. 8 Bearing Expander

3. Place spindle assembly in headstock, moving the bearings back and forth until the hole in bottom of sleeve bearing fits over the brass oiler tube in headstock.
4. Place bearing shims in proper position.
5. Fasten both bearing caps.
6. Install washers and expander screws and adjust moderately tight. Fasten pipe plugs into bearing caps.
7. Remove the wires used to hold down the felt oilers, put wires back in to check that oilers popped up in to position. Install the pipe plugs and return oil cups to upright position.

Fig. 9. Take-up nut adjustment

8. Adjust take-up nut. If end assembly of spindle is of the type shown above, (Take-up nut against face of headstock) Hand tighten the take-up nut, then back off approx. 3/8" (circular measurement) and lock in place with screw. Check to see that cone pulley runs free.
9. Press on Spindle Gear

Fig. 10. Take-up nut adjustment on same 13" and 14-1/2" lathes.

10. If end assembly of spindle is of the type shown above, hand tighten the take-up nut and lock in place with take-up nut screw.

CHECKING THE HEADSTOCK

Fig. 11. Lift test at large bearing end

With the indicator set on the spindle as near to the shoulder as possible, force spindle down then exert about a 75 lb. lift. If the reading indicates a movement of over .001" the bearing cap at the front end will have to be removed and a .0015" lamination peeled off the laminated shim on one side. If necessary repeat on opposite side.

If the reading indicates a movement of less than .0007", a .0015" thick lamination will have to be added to the existing shims.

Follow same procedure for test at small bearing end. See Fig. 12.

Fig. 12. Lift test at small bearing end

LUBRICATION

Before running the headstock under power fill the the spindle bearing oilers with proper machine oil (S.B.L.W. Catalog No. CE1600 or equal) and fill the spindle cone with oil (S.B.L.W. Catalog No. CE1603 or equal.)

TROUBLE SHOOTER

Overheated Bearing:

1. Remove pipe plugs in bearing cap and tighten bearing expander screws.
2. Remove bearing cap and place additional shim lamination (approx. .0015" thick.)
3. Flush bearing reservoir with kerosene and fill with proper machine oil (S.B.L.W. Catalog No. CE1600 or equal.)
4. If small bearing overheats, loosen the take-up nut slightly.

Bearing Throwing Oil:

1. Usually a clogged oil return or breather hole. Remove bearing caps and proceed as in Fig. 7.
2. Remove the bearing expander and file the "V" of expander as shown in Fig. 13. Also trim the expander wick about 1/8".

Fig. 13. Bearing expander with the "V" filed flat.

ADJUSTING TOGGLE CAM APRON CLUTCH

Fig. 1

Fig. 2

TO ADJUST CLUTCH

1. With Allen wrench, loosen set screw "U" and turn clutch lever clockwise until clutch engages in proper position. (See figs. 1 & 2) Clutch lever should not go beyond the perpendicular to the thrust collar "R".

2. Tighten set screw "U" as much as possible.

3. Clutch lever should be just tight enough to stay engaged in a heavy cut. If clutch is too loose, repeat the steps outlined above. If too tight, turn clutch lever counter-clockwise in steps outlined above.

If all adjustments have been utilized replace clutch discs. See form 992C and back side of this page.

Fig. 3

TO ADJUST DIRECTION OF CLUTCH LEVER SWING

The clutch lever can be adjusted to swing in any plane convenient to the operator. (As in "A" or "B" fig. 3)

1. Loosen lock nut "P" and set screw "O" (Fig. 2)
2. By the clutch lever, rotate entire assembly to the desired angle.
3. Pull slightly on clutch lever allowing the clutch mechanism to come forward as far as possible while tightening set screw "O".
4. Lock with nut "P".

TO REMEDY A STICKY CLUTCH

The cause of a sticky clutch can usually be traced to dirty oil, improper oil, or edge of clutch discs are burred. To remedy, follow the steps outlined below:

1. Drain apron oil from reservoir and fill with kerosene.
2. Operate lathe for a day or two and drain kerosene.
3. Flush with kerosene until clean.
4. Refill reservoir with South Bend CE1600 oil or equal.
5. If clutch remains sticky it is necessary to remove clutch assembly to examine the discs.

TO REMOVE CLUTCH DISCS

Fig. 4.

1. Remove drain plug and drain apron reservoir.
2. Turn lead screw so keyway is down.
3. Block to support apron.
4. Remove saddle lock and bolt.
5. Remove lead screw bracket.
6. Remove screws holding apron to saddle.
7. Loosen saddle gib screws on back underside of saddle 1/4". (Not visible in picture)
8. Lift up saddle to clear cross feed screw and slide apron off right end of lead screw. Be careful not to bend lead screw.
9. Remove oil trough from back of apron. See fig. 5
10. With Allen wrench through hole "U" (fig. 2) loosen set screw and remove clutch handle and swivel nut together by turning counterclockwise. See item 1, fig. 6.
11. Remove thrust washer. Item 2, fig. 6.
12. Unlock nut and remove set screw. Items 6 and 7, fig. 6.
13. Remove retainer bushing and bearing. Items 3 and 4, fig. 6.
14. Remove pin from draw bar. Item 5, fig. 6. (Some models have a key instead of pin)
15. Remove clutch draw bar, bearing, clutch disc plate, spring, and clutch discs together on draw bar. Items 8, 9, 10, 11, 12, and 13, fig. 6.
16. Remove clutch discs and examine for burrs, dirt, pieces of metal or scored discs. Discs not deeply burred can be smoothed by stroking burred surfaces on abrasive paper held firm against a level surface. Discs deeply burred should be replaced. See Form 992C.

Fig. 5.

Fig. 6.

17. When assembling apply pressure on back of draw bar to hold discs in place until swivel nut and handle are fastened. See "F", fig. 5.
18. When installing apron, lift up on front of saddle to clear cross feed gear to allow correct positioning. Secure apron and rear lead screw bracket.
19. Tighten saddle gibs previously loosened.
20. **Fill reservoir and adjust clutch according to instructions on other**

PARTS LIST

A

B

C

BELTS AND LUBRICATION

A. EXTREMUNTUS FLAT BELTS. A combination of plastic and leather form a strong flexible belt recommended for use with South Bend Lathes. Able to withstand continual flexing without significant stretch and loss of efficiency. Belts are skived on both ends and cement for joining skived ends is included with each belt. Shipping weight each approx. 1/2 lb.

Type of Drive	Cat. No.		Type of Drive	Cat. No.	
9" HMD	CE3750N		13" UMD 3-Step	CE3753T	
10-K HMD	CE3750K		14½" UMD 4-Step	CE3752F	
9" UMD	CE3752N		14½" UMD 3-Step	CE3753F	
10-K UMD	CE3752K		16" UMD 4-Step	CE3752H	
10" UMD Bench	CE3753R		16" UMD 3-Step	CE3753H	
10" UMD Floor	CE3752R		16-24" UMD 4-Step	CE3752V	
13" UMD 4-Step	CE3752T		16-24" UMD 3-Step	CE3753V	
			16" Turret	CE3753H	

B. BELT SPLICING CLAMPS. For gluing skived ends of cone pulley belts or other flat leather belts. Made of heavy steel plate with guide for aligning edges on belt ends.

Catalog Number	Maximum Size of Belt			Ship. Wt.	
	Width	Thickness	Skive Length		
CE1898	1¾"	½"	6⅜"	4 lbs.	
CE1899	3"	½"	6⅜"	5 lbs.	

C. LUBRICATING OIL. Nothing is more important to the satisfactory operation and life of fine machinery than correct lubrication. The lubricating oils listed below have been thoroughly tested in our research laboratory and are highly recommended. It is essential that the correct type of oil by used for the lathe spindle, lathe apron, and shaper oil reservoirs and general lubrication. a supply of each kind of oil should be kept on hand and used as needed. The Saybolt viscosity of the various oils is indicated in seconds of 100 F.

Cat. No.	Viscosity	Quantity	Ship. Wt.	
General Lubricating Oil (See Oil Chart for Individual Machine)				
CE1603	240-500	1 quart	3 lbs.	
CE1906	240-500	12 quarts	31 lbs.	
CE2019	240-500	Gal. can	11 lbs.	
Oil for Spindle Bearings of South Bend Lathes (For other components see Oil Chart for Individual Machine)				
CE1600	100	1 quart	3 lbs.	
CE1905	100	12 quarts	31 lbs.	
CE2017	100	Gal. can	11 lbs.	
Oil for Lathes and Shapers (See Oil Chart for Individual Machine)				
CE1602	150-240	1 quart	3 lbs.	
CE1904	150-240	12 quarts	31 lbs.	
CE2018	150-240	Gal. can	11 lbs.	

LEATHER V-BELTS FOR CONE PULLEYS

Lathe cone pulley V-belts can be placed without disassembling the lathe headstock or drive unit by using these cord reinforced leather V-belts. Belts you skived for gluing you will need to supply your contact cement.

Cat. No.	Size Lathe	Drive	Ship. Wt.	
CE5L61L	9"	U.M.D.	1 lb.	
CE5L62L	10-K	U.M.D.	1 lb.	
CE5L54L	9"	H.M.D.	1 lb.	
CE5L51L	10-K	H.M.D.	1 lb.	

Rubber V-Belts

Rubber V-Belts for use with South Bend Lathes and other power driven machinery. Specify catalog number, maximum width, and outside circumference when ordering. Ship. wt. each, approximately ½ lb.

Catalog Number	Outside Length		Catalog Number	Outside Length	
V-Belts with ⅜" Top Width					
CE3L210	21"		CE3L240	24"	
CE3L220	22"		CE3L260	26"	
CE3L230	23"		CE3L270	27"	
V-Belts with ½" Top Width					
CE4L280	28"		CE4L480	48"	
CE4L290	29"		CE4L490	49"	
CE4L300	30"		CE4L530	53"	
CE4L310	31"		CE4L540	54"	
CE4L320	32"		CE4L580	58"	
CE4L440	44"		CE4L600	60"	
CE4L450	45"		CE4L640	64"	
CE4L460	46"		CE4L700	70"	
CE4L470	47"		CE4L800	80"	
V-Belts with ⅝" Top Width					
CE5L380	38"		CE5L460	46"	
CE5L400	40"		CE5L470	47"	
CE5L410	41"		CE5L490	49"	
CE5L420	42"		CE5L500	50"	
CE5L430	43"		CE5L510	51"	
CE5L440	44"		CE5L520	52"	
CE5L450	45"		CE5L550	55"	

CHUCK WRENCHES

CATALOG NUMBER	SIZE SQUARE	SHIPPING WEIGHT
PA3677-3	.277"	2 lbs.
PA3671-2	.297"	1 lb.
PA3686-1	.375"	2 lbs.
PA3678-2	.400"	2 lbs.
PA3674-2	.400"	2 lbs.

PARTS LIST

MOTOR PULLEYS

STYLE 1

STYLE 2A

STYLE 2

STYLE 3

STYLE 4

PART NO.	A	B	BB	C
STYLE 1				
PT2106NR1	.635	2-15/32		5/8

STYLE 2A				
PT2181NR1	.635	3.570		5/8
PT2183NR1	.635	3.570		7/8
PT213K2	.635	3.956		5/8
PT2129R1	.635	4-19/32		7/8
PT2158R1	.635	5-5/16		7/8

PART NO.	A	B	C
STYLE 2			
PT2102T1	.490	2-17/32	7/8
PT2103T1	.490	2-17/32	1-1/8
PT2106T1	.490	2-63/64	7/8
PT2108T1	.490	2-63/64	1-1/8
PT2127T1	.490	4-21/64	7/8
PT2129T1	.490	4-21/64	1-1/8

STYLE 3			
PT2101F1	.490	2-17/32	7/8

STYLE 4			
PT2101FH2	.490	2-17/32	7/8
PT2103FH1	.490	2-17/32	1-1/8
PT2161H1	.490	3-9/64	7/8
PT2168FH1	.490	3-49/64	1-1/8
PT2127H1	.490	4-5/64	7/8
PT2129H1	.490	4-5/64	1-1/8

PARTS LIST

FORM 908-C
ALL MODELS

HEADSTOCK

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1A	DRIVE SCREW	130x103	130x103	130x103	130x103
1	LUBRI. CHART (1A)	*AS441-4	*AS441-4	*AS441-4	*AS441-4
2	CONE COVER	PT2576R1	PT2576T1	NLA	PT2576H1
3	KNOB SCREW	****	****	103x1012	103x1012
4	JAM NUTS	139x23	139x27	139x25	139x27
5	SET SCREW	PT700R1	PT702TH1	NLA	PT702TH1
6	GUARD SCREW (REAR)	101x614	101x614	PT1154FH1	PT1154FH1
7	GUARD SCREW (FRONT)	101x616	114x16	101x716	PT388T1
8	QUILL GUARD	PT2580R1	PT2580T1	PT2580F1	PT2580H1
9	CAP SCREW	114x224	114x424	114x432	114x432
10	PIPE PLUG	152x73	152x73	152x73	152x73
11	EXPANDER SCREW	PT1165RH1	PT1165RH1	PT1165RH1	PT1165RH1
12	LOCK WASHER	180x103	180x103	183x103	180x103
13	SMALL BRG. CAP	PT12R2	PT12T3	PT12F3	PT12H3
	(NOT A SERVICE ITEM)				
14	DOWEL	153x1	153x2	153x4	153x4
15	BRG. EXPANDER	PT523R1	PT523T1	NLA	PT523H2
16	EXPANDER WICK	256x13	256x13	256x13	256x13
17	SLEEVE BEARING, SMALL	*AS512R2	*AS512T3	*AS512F3	*AS512H3
	(11-12-15-16-18-20-21)				
18	CAPILLARY OILER	AS373KH2	AS373KH2	AS373KH2	AS373KH2
19	OILER TUBE	PT522R1	PT522TH2	PT522TH2	PT522TH2
20	BRASS SHIM	PT366R1	PT366T2	PT366F2	PT366H1
21	LAMINATED SHIM	PT365R2	PT365T3	PT365F3	PT375H2
22	PIN	160x105	160x105	160x142	160x142
23	OILER	PT2678RH1	PT2678RH1	PT2678RH1	155x42
24	OILER FLANGE	PT386R1	PT386TH1	PT386TH1	PT386TH1
25	CLAMPING STUD	PT385R1	PT385TF1	PT385TF1	PT385H2
26	WASHER	161x30	161x36	161x37	161x44
27	NUT	138x31	138x35	138x35	138x39
28	SET SCREWS	****	PT246T1	****	PT246H1
29	JAM NUT	139x26	****	139x26	****
30	SET SCREW	PT4499K1	****	NLA	****
31	COVER KNOB	****	****	PT2579FH1	PT2579FH1
32	BEARING PLATE (1A)	*AS532RH2	*AS532RH2	*AS532RH2	*AS532RH2
33	PLUNGER GUARD (34-36)	*AS362R2	*AS362T2	*AS362F2	*AS362H2
34	SCREW	101x612	101x614	101x714	101x716
35	BULL GEAR GUARD (33)	*AS2581R1	*AS2581T1	NLA	*AS2581H1
36	JAM NUT	139x23	139x23	139x25	139x25
37	CAP SCREW	114x228	114x424	114x432	114x436
38	LARGE BRG. CAP	PT11R2	PT11T2	NLA	PT11H4
	(NOT SERVICE ITEM)				
39	BRG. EXPANDER	PT524R1	PT524T1	PT524F1	PT524H2
40	SLEEVE BEARING, LARGE	*AS511R2	*AS511T2	*AS511F2	*AS511H3
	(11-12-16-18-39-41-42)				
41	BRASS SHIM	PT364R1	PT364T1	PT364F1	PT364H1
42	LAMINATED SHIM	PT363R2	PT363T2	NLA	PT363H2
43	SCREW	****	****	****	104x206
44	PROTECTING RING (43-45)	****	****	****	AS451H2
45	GASKET	****	****	****	PT450H2
46	BINDER SHOE	PT1075NR	****	NLA	****
47	SPRING	PT374NR1	****	PT374F1	****
48	SQ. HD. SCREW	120x156	****	PT376F1	****
49	HEADSTOCK		****	****	****
50	SCREW	132x1402	132x1402	132x1402	132x1402
51	OIL TROUGH	PT2505R4	PT2505T1	NLA	PT2505H1

PARTS LIST

FORM 909-E
ALL MODELS

HEADSTOCK

10", 13", 14-1/2", 16" & 16/24"

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PART INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

FORM 909E CON'T

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
53	SPINDLE GEAR	PT30R1	PT30T2	NLA	PT30H1
54	TAKE UP NUT SCREW	PT382RF1	PT382RF1	PT382RF1	PT382H1
55	TAKE UP NUT (54,56)	*AS25R1	*AS25RF2	*AS25RF2	*AS25H1
56	WASHER	AS26R1	****	****	****
57	THRUST BEARING	****	PA191T1	PT207FH1	****
58	THRUST BEARING	PT207R1	PA190T1	PT207FH1	PT207FH1
59	CONE PINION (60)	*AS17R2	*AS17T4	*AS17F4	*AS17H2
60	OILITE CONE BEARING	PT3669T1	PT3669T1	NLA	PT3669H1
61	OILITE CONE BEARING	****	****	NLA	PT3669H1
62	CONE FLANGE	PT29R1	PT29T1	NLA	PT29H1
63	SPINDLE CONE 4 STEP	****	*AS14T4	NLA	*AS14H3
64	SPINDLE CONE 3 STEP	****	NLA	NLA	NLA
65	PIN	169x242	169x236	169x236	169x237
66	OIL SCREW	PT381NH1	PT381NH1	PT381NH1	PT381NH1
67	SPINDLE CONE 3 STEP	AS14R3	****	****	****
68	PIN	169x242	****	****	****
69	OIL SCREW	PT381NH1	****	****	****
70	SPRING	PT367NR1	****	****	****
71	PLUNGER	PT214NR2	****	****	****
72	COTTER PIN	****	170x206	170x206	170x206
73	WASHER	****	161x16	161x16	161x16
74	COIL SPRING	****	162x18	162x18	101x206
75	SCREW	****	101x304	101x304	101x206
76	CLAMP GIB	****	PT213TF1	PT213TF1	PT213H2
77	CLAMP	****	PT16TF1	PT16TF1	PT16H1
78	OILITE BUSHING	PT3669T1	PT3669T1	NLA	PT3669H1
79	OILITE CONE BUSHING	****	****	NLA	PT3669H1
80	BULL GEAR	*AS15R1 (70-71)	*AS15T6 (72-73-74-75-76-77-81)	*AS15F5 (72-73-74-75-76-77-81)	*AS15H5 (72-73-74-75-76-77-81)
81	PLUNGER	****	PT214T1	PT214F1	PT214H1
82	H.S. SPINDLE				
82A	11/16" COL. CAP.	PT200R1	****	NLA	PT200H1
82B	1-1/16" COL. CAP.	PT200L1	PT200T2	NLA	NLA
83A	PROTECTING RING (1 7/8-8)	PT370RT1	****	NLA	NLA
83B	PROTECTING RING (2 1/4-8)	PT369LT1	PT369LT1	NLA	NLA
84	KEY	106x404	106x606	106x606	106x1008
85	KEY	106x606	106x606	106x606	106x606
86	SPINDLE SLEEVE				
	#2 MT 11/16" COL. CAP.	NLA	NLA	****	****
	#3 MT 11/16" COL. CAP.	NLA	NLA	NLA	NLA
	#2 MT 1-1/16" COL.	CL205L	CL205L	CL205L	CL205L
	#3 MT 1-1/16" COL.	CL205H	CL205H	CL205H	CL205H
87A	CENTER RG. #2 MT	CE2401	CE2401	CE2401	CE2401
87B	#3 MT	CE2402	CE2402	CE2402	CE2402
87C	CARBIDE #2 MT	CE1889	CE1889	CE1889	CE1889
87D	#3 MT	CE1890	CE1890	CE1890	CE1890
88	FACE PLATE				
	11/16" COL. CAP.	NLA	****	NLA	NLA
	1-1/16" COL. CAP.	CL2175L	CL2175Q	NLA	NLA
89	FACE PLATE				
	11/16" COL. CAP.	NLA	****	****	NLA
	1-1/16" COL. CAP.	CL2180L	CE2180Q	CL2180MH	CL2180MH
90	BACK GEAR LEVER	PT24R1	PT24T1	****	PT24H1
91	TAPER PIN	168x313	168x212	168x516	168x314
92	PIN	****	160x50	****	160x50
93	ECC. BUSHING	****	PA21T1	****	PA21H1
94	ECCENTRIC SHAFT	*AS202R1	****	NLA	****
	(90-91-102-103)				
	ECCENTRIC SHAFT	****	*AS202T1	****	*AS202H1
	(90-91-92-94)				
95	QUILL GEAR	PT18R1	PT18T1	NLA	PT18H1
96	KEY	106x404	106x605	106x606	106x806
97	QUILL SLEEVE	*AS19R1	*AS19T1	NLA	*AS19H1
	(96-98-99-100)				
98A	OIL PLUG	NLA PRIOR TO 6/65	NLA PRIOR TO 6/65	NLA PRIOR TO 6/65	NLA PRIOR TO 6/65
98B	OIL PLUG	101x604 AFTER 7/65	101x604 AFTER 7/65	101x604 AFTER 7/65	101x604 AFTER 7/65
99	FIBER WASHER	PT378RH1	PT378RH1	PT378RH1	PT378RH1
100	KEY	106x404	106x605	106x606	106x806
101	QUILL PINION	PT20R1	PT20T1	NLA	PT20H1
102	TAPER PIN	168x313	****	168x514	****
103	ECC. BUSHING	PT438R1	PT438T1	PT438F1	PT438H1
104	HEX NUT	137x31	PT1072-5	PT1072-7	PT1072-7
105	STUD GEAR	SEE GEAR SHEET	SEE GEAR SHEET	SEE GEAR SHEET	SEE GEAR SHEET
106	REVERSE GEAR	PT28R1	PT28T2	PT28F2	PT28H1
107	STUD (123-109-108)	*AS229R1	*AS229T2	NLA	*AS229H2
108	FELT WICK-ROUND	256x7	****	****	256x8
109	FELT WICK-FLAT	****	256x3	256x3	****
110	OILITE BUSHING	****	PT687FH1	****	****
111	PIN	****	160x45	160x45	****
112	FELT WICK	****	256x7	256x7	****
113	OILER	155x48	155x48	155x48	155x48
114	PIN	160x26	160x28	160x30	160x30
115	REVERSE LATCH	PT638RT1	PT638RT1	PT683FH1	PT638FH1
116	REVERSE BRACKET	*AS635R2	*AS635T2	NLA	*AS635H1
	(111-112-114-115-119-120-121-123)				
117	SCREW	103x210	101x612	101x612	162x15
118	REVERSE LOCK	PT642R1	PT642T1	PT642FH1	PT642FH1
119	SPRING	162x13	162x14	162x15	162x15
120	PLUNGER	PT640R1	PT640T1	NLA	PT640H1
121	PLUG	****	PT1502	PT1502	****
122	HEX NUT	139x25	139x27	139x31	139x31
123	FLET WICK	256x3	256x3	256x3	256x3
124	KEY	164x11	PT636T1	PT636FH3	PT636FH3
125	REVERSE SHAFT	*AS637R1	*AS637T1	NLA	*AS637H3
	(104-124)				
126	TWIN GEAR (110)	PA27R228	PA27T327	NLA	PT27H132
127	TWIN GEAR (110)	PA27R228	PA27T327	NLA	PT27H136
128	BUSHING	PT2660-1	****	****	****

PARTS LIST

FORM 961-A
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER. SEE HEADSTOCK SHEET FOR LOCATION OF UNIT CODE.

SEE HEADSTOCK SHEET. BASIC FORM NUMBER 909 FOR OTHER SPINDLE ASSEMBLY PARTS.

TYPE D1 CAM LOCK HEADSTOCK SPINDLE
SIZE-4D1
FOR 10", 13", 14-1/2", 16", 16/24" AND 2H, 1" COLLET LATHES

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16", 16/24", 2H PART NO.
1	SPINDLE 4" CAM LOCK (2,3,4,5,6,7)	*AS3600L1	*AS3600T1	NLA	*AS3600H1
2	KEY	106x404	106x606	106x606	106x606
3	KEY	106x606	106x606	106x606	106x1008
4	CAP SCREW	114x112	114x112	114x112	114x112
5	DETENT SPRING	PT3639LH1	PT3639LH1	PT3639LH1	PT3639LH1
6	DETENT PLUNGER	PT3638LH1	PT3638LH1	PT3638LH1	PT3638LH1
7	CAM	PT3629LH1	PT3629LH1	PT3629LH1	PT3629LH1
8	SPINDLE SLEEVE #2 M.T.	PT3604L1	*****	*****	*****
8A	SPINDLE SLEEVE #3 M.T.	NLA	PT3605T1	PT3605FH1	PT3605FH1
9	CENTER #2 TAPER	CE2401	*****	*****	*****
9A	CENTER #3 TAPER	CE2402	CE2402	CE2402	CE2402
10	SPINDLE NOSE PROTECTOR (16,17)	*AS3641LH3	*AS3641LH3	*AS3641LH3	*AS3641LH3
11	SCREW	114x8	114x8	114x8	114x8
12	CAM LOCK STUD	PT3626LH1	PT3626LH1	PT3626LH1	PT3626LH1
13	FACE PLATE SMALL (11-12)	CB2175LT	CB2175LT	CB2175FH	CB2175FH
14	FACE PLATE LARGE (11-12)	CB2180L	CB2180T	CB2180FH	CB2180FH
15	WRENCH	PA3638-1	PA3686-1	PA3686-1	PA3686-1
16	SCREW	103x206	103x206	103x206	103x206
17	STUD	PT3642LH1	PT3642LH1	PT3624LH1	PT3624LH1

PARTS LIST

FORM 961-A CON'T
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER. SEE HEADSTOCK SHEET FOR LOCATION AND UNIT CODE NUMBER.

SEE HEADSTOCK SHEET. BASIC FOR NUMBER 909 FOR OTHER SPINDLE ASSEMBLY PARTS.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

TYPE L TAPER KEY DRIVE HEADSTOCK SPINDLE
SIZE-00

FOR 10", 13", 14-1/2", 16", 16/24" AND 2H, 1" COLLET LATHES

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16", 16/24" & 2H PART NO.
1	WRENCH	PT3724LH1	PT3724LH1	PT3724LH1	PT3724LH1
2	PIN	PT1822	160x90	160x90	160x90
3	NUT	138x17	138x17	138x17	138x17
4	SCREW	120x914	120x914	120x914	120x19
5	SPACER	PT3722L1	PT3722TH1	PT3722TH1	PT3722TH1
6	HINGE WEDGE	PT3721LH2	AS3721TH1	AS3721TH2	AS3721TH2
7	SHOULDER SCREW	PT3723L1	PT3723TH1	PT3723TH1	PT3723TH1
8	DRAW NUT	PT3725LH1	PT3725LH1	PT3725LH1	PT3725LH1
9	KEY	106x404	106x606	106x606	160x606
10	SPINDLE TYPE LOO	PT3700L1	AS3700T1	NLA	AS3700H1
11	KEY	106x606	106x606	106x606	106x1008
12	SPACER	114x605	114x605	114x605	114x605
13	KEY	PT3720LH1	PT3720LH1	PT3720LH1	PT3720LH1
14	SPINDLE SLEEVE #2 M.T.	CL205L	*****	*****	*****
14A	SPINDLE SLEEVE #3 M.T.	CL205H	CL205H	CL205H	CL205H
15	CENTER #2 M.T.	CE2401	*****	*****	*****
15A	CENTER #3 M.T.	CE2402	CE2402	CE2402	CE2402
16	FACE PLATE-SMALL	CA2175L	CA2175T	CA2175FH	CA2175FH
17	FACE PLATE-LARGE	CA2180L	NLA	CA2180FH	CA2180FH

PARTS LIST

FORM 910-D
ALL MODELS

APRON

10", 13", 14-1/2", 16" & 16/24"

Star knob operated clutch can be replaced by toggle cam. For toggle-cam operated clutch see form 992C

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16/24" PART NO.
1	CLUTCH SLEEVE ASSEMBLY (2-3-4-5-6-7-8-9-10-11-40-48-49)	*AXS4620R1	*AXS4620T1	NLA	AXS4620H1
2	CLUTCH SLEEVE	NLA	NLA	NLA	NLA
3	OIL WASHER	161x59	161x60	161x69	161x61
4	WORM GEAR	PT77R1	PT77T1	NLA	PT77H1
5	LOCK RING	PT408R1	PT408TF1	PT408TF1	PT408H1
6	ORDER ITEM 7 (PRICE PER SET)	PT411R1	PT411TF1	PT411TF1	PT411H1
7	INNER PLATE (6) (PRICE PER SET)	*AS410R1	*AS410T1	*AS410F1	*AS410H1
8	SPRING	162x51	162x15	162x15	162x37
9	CLUTCH DISC	NLA	NLA	NLA	NLA
10	PIN	160x21	160x23	160x23	160x27

ITEM NO.	PART NAME	10" PART NO.	13 PART NO.	14-1/2" PART NO.	16" & 16/24" PART NO.
11	CLUTCH SCREW (10-40)	NLA	NLA	NLA	NLA
12	PIN	160x19	160x19	160x21	160x21
13	WORM COLLAR	PT208R1	PT208T1	PT208FH1	PT208FH1
14	WORM BUSHING	PT79R1	PT79T1	PT79FH1	PT79FH1
15	PIN	160x21	160x21	160x21	160x21
16	WORM (12-13-17)	&AS203R2	*AS203T2	*AS203F2	*AS203H2
17	KEY	PT239R1	PT239T1	PT239F1	PT239H1
18	APRON	PT70R2	PT70T2	PA70F1	PT70H2
19	TAPER PIN	168x310	168x514	168x514	168x616
20	RACK PINION GEAR (19-32)	*AS76R1	*AS76T1	NLA	*AS76H1
21	PIN	160x23	160x25	160x27	160x55
22	C.F. COMP. PINION (21-23-24)	*AS87R1	*AS87T1	*AS87F1	*AS87H1
23	ORDER ITEM 22	PT85R1	PT85T1	NLA	PT85H1
24	PIN	160x18	160x21	160x21	160x48
25	HANDLE	PT1492	PT1494	PT1494	PT1495
26	HANDWHEEL (25-27-*33-70)	*AS1263R1	*AS1263T1	NLA	*AS1263H1
27	TAPER PIN	168x210	168x412	168x412	168x514
28	OIL WICK	256x1	256x1	256x1	****
	1/16" x 1/8"				
29	OIL WICK	256x3	256x3	256x3	256x3
	3/32" x 3/16"				
30	OILER	PT298RH1	PT298RH1	PT298RH1	PT298RH1
31	SCREW	122x204	120x6	120x8	120x106
32	ORDER ITEM 20	PT204R1	PT204T1	NLA	PT204H1
33	HANDWHEEL PINION (34)	*AS225R1	*AS225T1	NLA	*AS225H1
34	SPRING	PT409R1	PT409T1	PT409F1	PT409H1
35	IDLER GEAR SHIFTER	PT83R1	PT83T1	NLA	PT83H1
36	IDLER GEAR	PT86R1	PT86T1	NLA	PT86H1
37	SHIFTER LEVER	*AS84R1	*AS84T1	NLA	*AS84H1
	(35-38-43-44-45-47)				
38	TAPER PIN	168x210	168x414	168x414	168x518
39	OILER	PT414R1	PT414TF1	PT414TF1	PT414H1
40	KNOB SCREW	PT355NF1	PT355NF1	PT355NF1	PT355H1
41	PIN	160x74	PT1811	PT1811	PT1811
42	GEAR SHAFT	PT231R1	PT231T1	NLA	PT231H1
43	PLUNGER KNOB (44-45-47)	*AS88R2	*AS88TF2	*AS88TF2	*AS88H2
44	PIN	160x27	160x29	160x29	160x31
45	SPRING	162x29	162x28	162x28	162x28
46	OILER	PT2675RH1	PT2675RH1	PT2675RH1	PT2675RH1
47	ORDER ITEM 43	PT89R1	PT89TF1	PT89TF1	PT89H1
48	KNOB	NLA	NLA	NLA	PT82H1
49	HEX. NUT	NLA	NLA	NLA	NLA
50	LOCK PLUNGER ARM	PT98R1	PT98T1	NLA	PT98H1
51	SET SCREW	118x8	118x108	118x108	118x108
52	FRICTION WASHER	PT75R1	PT75TF1	PT75TF1	PT75H1
53	HALF NUT CAM	PT74R1	PT74T1	PT74F1	PT75H1
54	HALF NUT CAM	PT172RT1	PT172RT1	PT172FH1	PT172FH1
55	HALF NUT (54)	*AS72R1	*AS72T1	*AS72F1	*AS72H1
56	HALF NUT GIB	PT73R1	PT73T1	PT73F1	PT73H1
57	PIN	160x76	160x77	160x80	160x80
58	CAP SCREWS	112x112	112x114	112x216	112x216
59	HANDLE	PT1481	PT1481	PT1481	PT1482
60	TAPER PIN	168x312	168x516	168x516	168x518
61	CAM LEVER	*AS407R1	*AS407TF1	*AS407TF1	*AS407H1
	(59-60-52-53)				
62	PIPE PLUG	PT1511	PT1511	PT1511	PT1511
63	LOCK PLUNGER	PT97R1	PT97T1	NLA	PT97H1
64	GASKET	PT412R1	PT412T1	NLA	PT412H1
65	OIL TROUGH (64-66-67)	*AS227R1	*AS227T1	*AS227F1	*AS227H1
66	CAP SCREW	114x3	114x20	114x14	114x120
67	CAP SCREW	114x3	114x14	114x14	114x14
68	HANDWHEEL PINION (34)	*AS225R2	****	****	****
69	HANDWHEEL (25-27-*68-70)	*AS6775R1	****	****	****
70	STUD	PT1242	PT1244	PT1244	PT1245
71	HANDLE	PT1482	NLA	NLA	PT1485
72	HANDWHEEL (25-27-33-34)	AS6775R1	NLA	NLA	NLA

PARTS LIST

FORM 992-C
ALL MODELS

APRON TOGGLE-CAM OPERATED CLUTCH
FOR 10", 13", 14-1/2", 16" & 16/24" LATHES

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER. SEE ARPON SHEET FOR LOCATION OF CODE NUMBER.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16/24" PART NO.
1	FEED ROD KNOB	PT406KFH1	PT406KFH1	PT406KFH1	PT406KFH1
2	HANDLE	PT4624R1	PT4624TH1	PT4624TH1	PT4624TH1
3	BINDER CAM (19)	*AS4622RH1	*AS4622RH1	*AS4622RH1	*AS4622RH1
4	SWIVEL NUT (21)	*AS4623R1	*AS4623TH1	*AS4623TH1	*AS4623TH1
5	THRUST WASHER	PT4625R1	PT4625TF1	PT4625TF1	PT4625H1
6	RETAINER BUSHING	PT4626R2	PT4626T2	NLA	PT4626H2
7	BEARING	AS841R1	AS841T2	AS841T2	AS841H2
8	CLUTCH SLEEVE	PT4620R1	PT4620T1	NLA	PT4620H1
9	OIL DISTRI. WASHER	161x59	161x60	161x69	161x61
10	WORM GEAR	PT77R1	PT77T1	NLA	PT77TH1
11	LOCK RING	PT408R1	PT408TF1	PT408TF1	PT408H1
12	ORDER ITEM 13	PT411R1	PT411TF1	PT411TF1	PT411H1
13	CLUTCH PLATES (12)	*AS410R1	*AS410T1	*AS410F1	*AS410H1
	(PRICE PER SET)				
14	SPRING	162x15	162x15	162x15	162x37
15	CLUTCH PLATE DISC	PT4628R2	106x404	106x404	106x404
16	BEARING	ASA4629R1	****	****	****
17	KEY	NLA	****	****	****
18	CLUTCH DRAW BAR (27)	*AS4621R2	*AS4621T2	*AS4621F2	*AS4621H2
19	PIN	160x33	160x33	160x33	160x33
20	PIN	160x252	160x252	160x252	160x252
21	CAP SCREW	114x708	114x708	114x708	114x708
22	HEX. NUT	138x17	138x17	138x17	138x17
23	SET SCREW	120x908	120x908	120x908	120x908
24	CLUTCH SLEEVE ASSEMBLY	*AXS4620R1	*AXS4620T1	NLA	*AXS4620H1
	(1-2-*3-4-5-6-7-8-9				
	10-11-*13-14-*18-20-22				
	23-25-26)				
25	CLUTCH PLATE DISC	PT4628R2	PT4628TF1	PT4628TF1	PT4628H1
26	BEARING	ASA4629R1	ASA4629TH1	ASA4629TH1	ASA4629TH1
27	PIN	160x18	160x18	160x18	160x18

INSTALLING TOGGLE CAM OPERATED APRON CLUTCH

FIG. 1

Fig. 2

Fig. 3

FIG. 4

FIG. 5

TO REMOVE STAR KNOB CLUTCH:

1. Remove drain plug from bottom of apron and drain oil reservoir.
2. Remove saddle lock and bolt.
3. Place support under apron to prevent from dropping and bending lead screw.
4. Remove read lead screw bracket.
5. Remove screws holding apron to saddle
6. Loosen the saddle gib screws on the back underside of the saddle approxi mately 1/4".
7. Remove apron from lathe by lifting up on the front of the saddle so the cross feed gear "A" (Fig. 1) in the apron will clear the saddle. Then slide apron off the lead screw at the tailstock end of the lathe but be careful not to bend lead screw.
8. Remove oil trough "B" half nut gib "C", half nuts "D" and key "E" (Fig. 1).
9. Mark the two collars "F" (Fig. 1) so when reassembling they can be placed in their original position. Then drive out the two pins at "G" and unscrew both collars "F".
10. Remove bushing "H" (Fig. 1) carefully to avoid tearing felt wick. Note how felt wick is wrapped around worm gear. With bushing remove draw wick through hole bored for bushing.
11. Remove apron worm "J".
12. Remove screw "K" (has left hand thread), knob "L" and nut "M" (Fig. 2).
13. Remove clutch assembly "N" (Fig. 1) from back of apron. The oil distributing washer "V" (Fig. 3) on the clutch may have to be positioned to permit removing.

INSTALLING TOGGLE CAM CLUTCH.

14. Drill and tap hole in bottom of apron hub as shown in Fig. 3, then file bottom of hub flat so nut can be locked against this surface.
15. Install screw "O" and nut "P" (Fig. 4) but do not let screw "O" protrude into bored hole.
16. Position oil distributing washer "V" (Fig. 3) inside apron and insert new clutch assembly (Fig. 3). Apply slight pressure on clutch bar "W" (Fig. 3) and tighten set screw "O" and nut "P" (Fig. 4).
17. Apply pressure on clutch bar "W" (Fig. 3), remove nut "Q" and commercial washers (discard nut and washers). Maintain pressure on clutch bar, install collar "R" and swivel nut "S" (Fig. 4). Screw the swivel nut on tight enough so the handle will lock itself against the thrust collar in the "engaged" position (Fig. 5). It is important to maintain pressure on clutch bar until swivel nut "S" is fastened as allowing it to back up more than 3/32" may cause the outside clutch plate to drop over the clutch sleeve and become distorted when tightened later.
18. Swing handle into a down or "disengaged" position (Fig. 5) and tighten swivel nut "S" (draw up as tight as possible) with Allen head wrench through hole shown at "U" (Fig. 4).
19. Insert worm "J" and thread felt wicking around worm gear and through bored bole. Extra wick provided if original is torn.
20. Replace bushing "H" and insert wick in keyway of bushing.
21. Install collars "F" in their original position and insert pins "G".
22. Turn worm "J" so keyway will be in down position and insert key "E".
23. Replace half nuts "D" and fasten gib "C".
24. Replace gasket and oil trough "B".
25. Turn lead screw so keyway is in down position and mount apron on lathe, checking to see that cross feed gear "A" is in mesh with gear on cross feed screw, again be careful not to bend lead screw.
26. Replace saddle lock screw and saddle lock.
27. Fasten apron to saddle and tighten saddle gib screws.
28. Install read lead screw bracket.

POSITIONING CLUTCH LEVER:

29. The clutch lever can be positioned (Fig. 5) by loosening set screw "O" and rotating the complete clutch assembly, then tighten set screw "O" and lock with nut "P". BEFORE TIGHTENING THE SET SCREW, HOWEVER, PULL SLIGHTLY ON THE CLUTCH LEVER ALLOWING THE CLUTCH MECHANISM TO COME FORWARD AS FAR AS POSSIBLE.
30. Replace oil drain plug.

LUBRICATION:

Fill apron reservoir with proper lubricant (SBL Catalog No. 1602 or equal) and oil lead screw bracket.

PARTS LIST

FORM 948-D
ALL MODELS

STANDARD GRADUATED COLLARS - EACH GRADUATION REPRESENTS A MOVEMENT OF THE CROSS SLIDE OF .001" OR A REDUCTION IN THE DIAMETER OF THE WORK OF .002".

DIRECT READING GRADUATED COLLARS - EACH GRADUATION REPRESENTS A MOVEMENT OF THE CROSS SLIDE OF .0005" OR A REDUCTION IN THE DIAMETER OF THE WORK OF .001".

METRIC GRADUATED COLLARS - EACH GRADUATION REPRESENTS A MOVEMENT OF THE CROSS SLIDE OF 0.02 MM. OR A REDUCTION IN THE DIAMETER OF THE WORK OF 0.04 MM.

COMPOUND REST TOP
ENGLISH AND METRIC
FOR 10" 13", 14½", 16" & 16/24"

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	WRENCH	PT253R1	PT253T1	PT253FH1	PT253FH1
2	TOOL POST SCREW	PT233R1	PT233T1	NLA	PT233H2
3	TOOL POST RING	PT251R1	PT251T1	NLA	PT251H1
4	TOOL POST BLOCK	PT209R1	PT209T1	NLA	PT209H1
5	TOOL POST	PT250R2	PT250T2	NLA	PT250H2
6	TOOL POST COMPLETE	CE2450R	CE2450T	NLA	CE2450H
	(1-2-3-4-5-7)				
7	TOOL POST WEDGE	PT252R2	PT252T2	NLA	PT252H2
8	HANDLE	PT1480	PT1481	PT1481	PT1481
9	RETAINING NUT	PT295NR1	PT295T1	PT295T1	PT295T1
10	PIN	160x17	160x17	160x17	160x17
11	BALL CRANK (8)	*AS277NR1	*AS277TH1	*AS277TH1	*AS277TH1
12	SHOE	PT1080NK1	PT1080NK1	PT1080NK1	PT1080NK1
13	PIN	160x17	160x21	160x21	160x21
14	THUMB SCREW	PT1847	PT1847	PT1847	PT1847
15	GRADUATED COLLAR	NLA	NLA	NLA	NLA
	(12-13-14)				
16	GRADUATED COLLAR	*AS1269R2	*AS1269TH1	*AS1269TH1	*AS1269TH1
	(12-13-14)				
17	GRADUATED COLLAR	NLA	NLA	NLA	NLA
	(12-13-14)				
18	COMP. REST BUSHING	PT94NR2	PT94T2	PT94FH2	PT94FH2
19	OIL SCREW	122x102	122x102	122x103	122x103
20	COMP. REST NUT	PT95R1	PT95T1	PT95FH1	PT95FH1
21	COMP. REST NUT	PT2234R1	NLA	NLA	PT2234FH1
22	COMP. REST SCREW (9-10-*11	NLA	NLA	NLA	NLA
	15-18-20-37)				
23	COMP. REST SCREW (9-10-*11	*ASD230R3	*ASD230T3	*ASD230F3	*ASD230H3
	*16-18-20-37)				
24	COMP. REST SCREW (9-10-*11	NLA	*ASD230T3	NLA	NLA
	*17-18-21-37)				
25	COMP. REST SCREW (9-10-*11	NLA	NLA	NLA	NLA
	*15-18-20-37)				
26	COMP. REST SCREW (9-10-*11	*ASD6824L1	*ASD6824T1	NLA	*ASD6824H1
	*16-18-20-37)				
27	COMP. REST TOP (19-*22	NLA	NLA	NLA	NLA
	32-33-34-35-36)				
28	COMP. REST TOP (19-*23	*ASD90R1	*ASD90T1	NLA	*ASD90H1
	32-33-34-35-36)				
29	COMP. REST TOP (19-*24-32	NLA	NLA	NLA	NLA
	33-34-35-36)				
30	COMP. REST TOP (19-*25-32	NLA	NLA	NLA	NLA
	33-34-35-36)				
31	COMP. REST TOP (19-*26-32	NLA	NLA	NLA	NLA
	33-34-35-36)				
32	GIB SCREW	PT219R1	PT219TH1	PT219TH1	PT219TH1
33	SHOE	PT1082NT1	PT1077TH1	PT1077TH1	PT1077TH1
34	SCREW	122x203	122x505	122x505	122x508
35	COMP. REST GIB	PT257R1	PT257H1	PT257H1	PT257H1
36	COMP. REST SWIVEL	PT91R1	PT91T1	PT91F1	PT91H1
37	FILL HEAD SCREW	114x10	114x114	114x114	114x116

27 THREADS PER INCH

It is possible to cut 27 threads per inch on any South Bend Lathe by procuring an additional gear. Lathes with wide range gear box DTG 106R and above are already equipped to cut 27 threads. For other South Bend Lathes see list below:

SIZE AND TYPE OF LATHE	PART NO.
DOUBLE TUMBLER GEAR BOXES	
10" (11/16 OR 1" Col. Cap) Double Tumbler	PT32R142
13" Double Tumbler	PT612T132
14 1/2", 16" 16-24" & 2H Double Tumbler	
For Gear Box Code No. Q.C.G. 103	PT612FH232
For Gear Box Code No. D.T.G. 104	PT612FH332
SINGLE TUMBLER GEAR BOXES	
10" (11/16 OR 1" Col. Cap.) Single Tumbler	PT612R132 (NLA)
13" Single Tumbler	PT612T124
14 1/2", 16", 16-24" & 2H Single Tumbler	PT612FH124
SEE REVERSE SIDE FOR SET UP CHART	

IMPORTANT: When ordering you must specify "Gear is to be used to cut 27 threads per inch." Also state serial number of your lathe which is stamped on flat way of bed at tailstock end and gear box code number stamped on face of tumbler guide bar attached to bottom of gear box. this information enables us to double check and to determine if correct gear is being order.

PARTS LIST

FORM 968 CON'T
ALL MODELS

SET-UP CHART FOR CUTTING 27 THREADS PER INCH

DOUBLE TUMBLER GEAR

STUD GEAR

10" (1" COL.) REQUIRES 20 TOOTH GEAR. FURNISHED WITH LATHE
13" REQUIRES 32 TOOL SPECIAL GEAR, PT612T132
14 1/2", 16", 16-24" & 2H REQUIRES 32 TOOL SPECIAL GEAR. USE PT612FH232 ON LATHES WITH GEAR BOX CODE QCG103. FOR LATHES WITH GEAR BOX CODE DTG104 USE PT612FH332 GEAR.

STUD GEAR	LEFT HAND TUMBLER	THREADS PER INCH							
SEE NOTE ABOVE	A								
	A								
	B								
	C		27						
	D								
	E								

GEAR BOX GEAR

10" (1" COL.) REQURIES 42 TOOL SPECIAL GAR, PT32R142
13" REQUIRES 64 TOOL GEAR. FURNISHED WITH LATHE.
14 1/2", 16", 16-24" & 2H REQUIRES 64 TOOTH GEAR. FURNISHED ON LATHE

SINGLE TUMBLER GEAR

STUD GEAR

10" LATHE REQUIRES 32 TOOL SPECIAL GEAR, PT612R132
13" LATHE REQUIRES 24 TOOL SPECIAL GEAR, PT612T124
14 1/2", 16", 16-24" AND 2H LATHES REQUIRES 24 TOOTH SPECIAL GEAR, PT612FH124

SLIDING GEAR	TOP LEVER	THREADS PER INCH									
IN	LEFT										
	CENTER										
	RIGHT										
OUT	LEFT		27								
	CENTER										
	RIGHT										

PARTS LIST

FORM 947-C
10" MODEL ONLY

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

PARTS LIST

FORM 947-C CON'T
10" MODEL ONLY

ITEM NO.	PART NAME	PART NO.
1	NUT	PT1071-3
2	WASHER	161x30
3	MAIN DRIVE SHAFT	*AS6747R3
	(1-2-13-14-15)	
4	PIN	160x17
5	ORDER ITEM 6	PT6764R2
6	COMPOUND GEAR (4-5)	*AS625R1
7	BUSHING	PT6760R1
8	PIN	160x17
9	ORDER ITEM 10	PT6764R2
10	COMPOUND GEAR (7-8-9)	*AS6758R2
11	PIN	160x31
12	SET SCREW	120x1104
13	KEY	164x18
14	KEY	106x404
15	FELT WICK	256x1
15A	BUSHING (11)	*AS6765R2
15B	BUSHING (12)	*AS6754R1
16	PLUG	PT1500
17	OILER	155x38
18	GEAR BOX	AS6745R2
18A		
18B	OIL WICK	PT611NH1
19	NUT	PT1055NR1
21	LEAD SCREW GEAR	PT6753R2
22	INNER BEARING	PT3240R1
23	DRIVE SCREWS	130x103
24	INDEX PLATE (23)	*AS6752R2
25	FILL. HD. MCH. SCREW	114x6
26	PIN	160x48
27	TUMBLER GUIDE BAR	PT6749R1
28	PIN	PT1806
29	HEX. HD. CAP SCREW	112x28
30	BUSHING	PT3239R2
31		
32	BUSHING	PT601R3
33	BUSHING	PT6759R1
34	CONE SHAFT GEAR (33)	*AS6757R2
35	BUSHING	PT6760R1
35A	PIN	160x17
36	ORDER ITEM 37	PT6764R2
36A	ORDER ITEM 37A	PT6764R2
37	COMPOUND GEAR	*AS6758R2
	(35-35A-36)	
37A	COMPOUND GEAR	*AS6755R2
	(35A-35-36A)	
38	BEARING	PT4106DP1
39	TAPER PIN	168x310
40	CONE GEAR	PT6761R216
41	CONE GEAR	PT6761R218
42	CONE GEAR	PT6761R220
43	CONE GEAR	PT6761R222
44	CONE GEAR	PT6761R223
45	CONE GEAR	PT6761R224
46	CONE GEAR	PT6761R226
46A	CONE GEAR	PT6761R227
47	CONE GEAR	NLA
47A	CONE GEAR	NLA
48	PIN	160x43
49	CONE GEAR SHAFT (50-51)	*AS6746R3
50	FELT WICK	256x1
51	KEY	PT599R2
52	TUMBLER IDLER GEAR (53)	*AS6762R2
53	NEEDLE BEARING	PT384FH1
54	MAIN DRIVE GEAR	PT6763R2
55	SPRING	162x29
56	PLUNGER	PT608NR1
57	PIN	160x266
58	PIN	160x42
59	BUSHING	PT610NR1
60	PLUNGER KNOB (55-56-61)	*AS88R2GB
61	PIN	160x27
62	TUMBLER (*52-57-58-59-*60)	*AS6748R1
63	FELT WICK	256x1
64	TUMBLER PINION SHAFT	PT6750R1

ITEM NO.	PART NAME	PART NO.
65	SCREW	101x616
66	SCREW	101x640
67	LOCK SCREW	PT672RH1
68	UPPER GUARD	PT670R1
69	HINGE PIN	PT281R1
70	CERRO MATRIX	506x7
71	LOWER GUARD (69-70)	*AS671R1
72	GUARD BRACKET (73)	*AS147R1
73	SCREW	118x116
74	HEX. NUT	PT1052FH1
75	WASHER	161x26
76	IDLER GEAR (100)	*AS33R3
77	STUD GEAR	PT32R240
78	BUSHING	PT38R1
79	BOLT (74-75)	*AS247R1
80	COLLAR	PT35R1
81	SCREW GEAR (101)	*AS32R256
82	LOCK SCREW	PT212R1
83	BRACKET (82)	*AS630R2
84	THRUST BEARING	PT661R1
85	THRUST COLLAR	PT39R3
86	KEY	PT2070
87	BABBITT	506x6
88	LD. SC. BRACKET (87-89)	*AS5R1
89	OILER	155x38
90	LEAD SCREW (19-85-86)	*AS6751R103
91	LEAD SCREW (19-85-86)	*AS6751R135
92	LEAD SCREW (19-85-86)	*AS6751R104
93	LEAD SCREW (19-85-86)	*AS6751R145
94	LEAD SCREW (19-85-86)	NLA
95	LEAD SCREW (19-85-86)	NLA
96	LEAD SCREW (19-85-86)	NLA
97	MAIN D.S. BUSHING	PT3657R1
98	TUMB. SHAFT BUSHING	PT3659R1
99	CONE SHAFT BUSHING	PT3658R1
100	GROMMET	PT1110
101	GROMMET	PT3545R51

10" LEAD SCREW AND GEARING FOR 10" WIDE RANGE GEAR BOX

PARTS LIST

FORM 913-E
ALL MODELS

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	NUT	PT1071-3	PT1071-3	PT0172-7	PT0172-7
2	WASHER	161x30	161x30	••••	••••
3	MAIN DR. SHAFT (1-2-12-13-14-15)	*AS603R1	*AS603T3	*AS603FH2	*AS603FH2
4	PIN	160x17	160x19	160x21	160x21
5	ORDER ITEM 6	PT626R1	PT626T1	PT626FH1	PT626FH1
6	COMP. GEAR (4-5)	*AS625R1	*AS625T1	*AS625FH1	*AS625FH1
7	ORDER ITEM 8	PT626R1	PT626T1	PT626FH1	PT626FH1
8	COMP. GEAR (4-7-129)	*AS619R1	*AS619T2	*AS619FH2	*AS619FH2
9	BUSHING	PT606R1	PT606T3	PT606FH2	PT606FH2
10	PIN	160x31	160x33	160x39	160x39
11	COLLAR (12)	*AS604R2	*AS604T2	*AS604FH2	*AS604FH2
12	TAPER PIN	168x210	168x212	168x312	168x312
13	KEY	164x18	164x12	106x607	106x607
14	KEY	106x404	106x405	106x607	106x607
15	FELT WICK	256x1	256x1	256x3	256x3
16	PLUG	PT1500	PT1500	PT1500	PT1500
17	OILER	155x38	155x38	155x38	155x38
18	GEAR BOX	WRITE FOR INFORMATION		WRITE FOR INFORMATION	
19	JAM NUT	PT1053NR1	PT1055T1	PT1055FH2	PT1055FH2
20	WASHER	161x26	••••	PT1677FH1	PT1677FH1
21	LEAD SC. GEAR	PT6753R2	PT3235T1	PT3235FH1	PT3235FH1
22	INNER BEARING	PT3240R1	PT3240TH1	PT3240TH1	PT3240TH1
23	SCREW	132x1	132x1	132x1	132x1
24	INDEX PLATE (23)	*AS1541R5	*AS1541T5	*AS1541FH5	*AS1541FH5
25	SCREW	114x6	114x6	114x110	114x110
26	PIN	160x19	160x46	160x50	160x50
27	GUID BAR	PT607R2	PT607T2	PT607FH2	PT607FH2
28	PIN	PT1806	PT1808	PT1808	PT1808
29	CAP SCREW	112x24	112x132	112x236	112x236
30	BUSHING	PT3239R1	PT3239T2	PT3239FH2	PT3239FH2
31	FELT WICK	256x3	••••	••••	••••
32	BUSHING	PT601R2	PT601T3	PT3658FH1	PT3658FH1
33	SHAFT (48-49-50)	*AS614R2	*AS614T3	*AS614FH2	*AS614FH2
34	CONE SHAFT GEAR (130)	PT624R1	*AS624T2	*AS624FH2	*AS624FH2
35	ORDER ITEM 36	PT626R1	PT626T1	PT626FH1	PT626FH1
36	COMP. GEAR (4-35-131)	*AS6758R2	*AS619T2	*AS623FH2	*AS623FH2
37	ORDER ITEM 38	PT626R1	PT626T1	PT626FH1	PT626FH1
38	COMP. GEAR (4-37-132)	*AS6758R2	*AS619T2	*AS622FH2	*AS622FH2
39	TAPER PIN	168x310	168x312	168x614	168x614
40	CONE GEAR. 16T	PT615R216	PT615T216	PT615FH216	PT615FH216
41	CONE GEAR. 18T	PT6761R218	PT615T218	PT615FH218	PT615FH218
42	CONE GEAR. 20T	PT6761R220	PT615T220	PT615FH220	PT615FH220
43	CONE GEAR. 22T	PT6761R222	PT615T222	PT615FH222	PT615FH222
44	CONE GEAR. 23T	PT6761R223	PT615T223	PT615FH223	PT615FH223
45	CONE GEAR. 24T	PT6761R224	PT615T224	PT615FH224	PT615FH224
46	CONE GEAR. 26T	PT6761R226	PT615T226	PT615FH226	PT615FH226
47	CONE GEAR. 28T	PT6761R228	PT615T228	PT615FH228	PT615FH228
48	FELT WICK	256x1	256x1	256x13	256x13
49	KEY	164x26	PT599T1	163x65	163x65
50	FELT WICK	256x1	••••	256x13	256x13
51	PIN	160x251	160x257	••••	
52	TUMB. IDLER GEAR (53)	*AS6762R2	*AS605T3	*AS605FH3	*AS605FH3
53	NEEDLE BEARING	PT884FH1	PT384FH1	PT384NK1	PT384NK1
54	MAIN DR. GEAR	PT621R1	PT621T1	PT621FH1	PT621FH1
55	COIL SPRING	162x29	162x26	162x21	162x21
56	PLUNGER (55-60-61)	*AS608NK1	*AS608T3	*AS608FH2	*AS608FH2
57	PIN	160x210	160x253	160x254	160x254
58	PIN	160x42	160x42	160x42	160x42
59	BUSHING	PT610NK1	PT610TH2	PT610TH2	PT610TH2
60	ORDER ITEM 56	PT88R2	PT88TF2	PT88TF2	PT88TF2
61	PIN	160x27	160x29	160x29	160x29
62	TUMBLER (*52-*56-57-58-59)	*AS400R1	*AS400T1	*AS400FH2	*AS400FH2
63	FELT WICK	256x1	256x3	256x3	256x3
64	TUMBLER SHAFT	PT620R1	PT620T1	PT620FH1	PT620FH1
129	BUSHING	••••	PT686T1	PT686FH1	PT686FH1
130	BUSHING	••••	PT686T1	PT687FH1	PT687FH1
131	BUSHING	••••	PT686T1	PT688FH1	PT688FH1
132	BUSHING	••••	PT686T1	PT689FH1	PT689FH1
133	PIN	160x19	160x19	160x21	160x21
		••••	••••	••••	••••
135	MAIN D.S. BUSHING	••••	PT3657T1	PT3657FH1	PT3657FH1
136	TUMB. SHAFT BUSHING	••••	PT3659T1	PT3659FH1	PT3659FH1
137	CONE SHAFT BUSHING	••••	PT3658T1	PT3658FH1	PT3658FH1

THESE PARTS ARE NO LONGER AVAILABLE.

PARTS LIST

FORM 914-C
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ANY ORDER

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
65	SCREW	101x616	101x620	101x620	101x624
66	SCREW	101x640	PT1160T1	101x616	101x660
67	SCREW	••••	••••	••••	101x612
68	LOCK SCREW	PT672RH1	PT672RH1	PT672RH1	PT672RH1
69	UPPER GUARD	PT670R1	PT670T1	NLA	PT670H1
70	UPPER GUARD	••••	••••	••••	PT2005V1
71	HINGE PIN	PT281R1	PT281T1	PT281FH1	PT281FH1
72	GUARD STUD	••••	••••	NLA	••••
73	CERRO MATRIX - 1 LB.	506x7	506x7	506x7	506x7
74	LOWER GUARD (71-73)	*AS671R1	*AS671T2	NLA	*AS671H2
75	GUARD BRACKET (76)	*AS147R1	*AS147T1	NLA	*AS647H3
76	SCREW	118x116	118x224	118x424	118x424
77	JAM NUT	PT1072-5	PT1072-5	PT1072-5	PT1072-5
78	SPACER COLLAR	••••	••••	••••	PT2017H1
79	STUD GEAR	PT32R120	PT612T124	PT612FH324	PT612FH324
80	SCREW	••••	••••	112x432	112x432
81	WASHER	••••	••••	161x30	161x30
82	HEX. NUT	PT1052FH1	PT1071-3	PT519FH1	PT519FH1
83	WASHER	161x26	161x26	PT518FH1	PT518FH1
84A	IDLER GEAR (84B)	*AS33R3	PT33T2	PT33FH2	PT33FH2
84B	RUBBER GROMMET	PT1110	••••	••••	••••
85	BUSHING	PT38R1	PT3238T1	PT3238FH2	PT3238FH2
86	BOLT (82-83)	*AS247R1	*AS247T1	*AS247FH1	*AS247FH1
87	STUD GEAR	PT32R140	PT612T148	PT612FH448	PT612FH448
88	SCREW GEAR	PT32R25L	PT3237T1	PT3237FH1	PT3237FH1
89	BRACKET (90-91)	*AS630R2	*AS630T2	*AS630FH2	*AS630FH2
90	SHOE	••••	••••	PT1079FH1	PT1079FH1
91	LOCK SCREW	PT212R1	114x324	119x110	119x110
92	OUTER BEARING	PT661R1	PT661T1	PT661FH1	PT661FH1
93	THRUST COLLAR (94)	*AS39R3	*AS39T2	*AS39FH2	*AS39FH2
94	TAPER PIN	168x310	168x514	168x516	168x516
94A	KEY	106x104	106x405	PT2090	PT2090
95	LD. SC. BRACKET (96-97)	*AS5R1	*AS5T1	NLA	*AS5H1
96	OILER	155x38	115x38	155x38	155x38
97	BABBITT	506x6	506x6	506x6	506x6
	THE FOLLOWING LEAD				
	SCREWS INCLUDE ITEMS				
	NO. 19-20 (FORM 913)				
	93 & 94A				
98	LEAD SCREW	*AS629R303	••••	••••	••••
99	LEAD SCREW	*AS629R335	••••	••••	••••
100	LEAD SCREW	*AS629R304	*AS629T204	••••	••••
101	LEAD SCREW	*AS629R545	••••	••••	••••
102	LEAD SCREW	••••	*AS629T205	NLA	••••
103	LEAD SCREW	••••	*AS629T206	*AS629FH206	*AS629FH206
104	LEAD SCREW	••••	*AS629T107	*AS629FH207	NLA
105	LEAD SCREW	••••	••••	*AS629FH208	*AS629FH208
106	LEAD SCREW	••••	••••	••••	*AS629FH210
107	LEAD SCREW	••••	••••	••••	*AS629FH212
108	LEAD SCREW	NLA	••••	••••	••••
109	LEAD SCREW	NLA	••••	••••	••••
110	LEAD SCREW	NLA	••••	••••	••••
111	LEAD SCREW	••••	NLA	NLA	••••
112	LEAD SCREW	••••	NLA	*AS629FH206	*AS629FH206
113	LEAD SCREW	••••	NLA	NLA	NLA
114	LEAD SCREW	••••	••••	*AS629FH206	*AS629FH208
115	GEAR STUD (116-120)	••••	••••	••••	*AS229H2
116	FELT WICK	••••	••••	••••	256x8
117	INTER REV. GEAR	••••	••••	••••	PT2015H1
118	OILER	••••	••••	••••	155x48
119	INTER. REV. BRACKET	••••	••••	••••	*AS2016H1
	(118-126-127)				
120	JAM NUT	••••	••••	••••	*AS637H3
121	STUD GEAR	••••	••••	••••	PT612FH324
122	STUD GEAR	••••	••••	••••	PT612FH448
123	REVERSE GEAR	••••	••••	••••	PT28H1
124	SCREW	••••	••••	••••	114x124
125	PIN	••••	••••	••••	160x19
126	FELT WICK	••••	••••	••••	256x3
127	KEY	••••	••••	••••	••••
128	LEAD SCREW	••••	••••	••••	PT636FH3
129	LEAD SCREW	••••	••••	••••	*AS629H214
	(INCLUDES ITEMS 19-20				
	FORM 913 AND 93-94A				
	THIS SHEET)				

PARTS LIST

FORM 915-B
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST ACCOMPANY ORDER.

GEAR BOX (SINGLE TUMBLER)

10"...11/16" & 1" COL.
13".....1" COL.
14 1/2".....1" COL.
16" & 16/24"...1" COL.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	HANDLE	PT1482	PT1483	PT1483	PT1483
2	SHIFTING PLUG	PT430R1	PT430TH1	PT430TH1	PT430TH1
3	SCREW	103x212	103x212	103x212	103x212
4	TRAY	PT634R1	PT634T1	PT634FH1	PT634FH1
5	OILER	155x38	155x38	155x38	155x38
6	BUSHING	PT429R1	PT106T1	PT601FH1	PT601FH1
7	LOCK SCREW	PT632RH1	PT632RH1	PT632RH1	PT632RH1
8	FELT WICK	256x3	256x3	256x3	256x3
9	BUSHING	PT601R1	PT601T1	PT601FH1	PT601FH1
10	SHOULDER SCREW	PT618R1	PT618T1	PT618FH1	PT618FH1
11	CLUTCH LEVER (1)	*AS617R1	*AS617T1	*AS617FH1	*AS617FH1
12	NUT	PT1053NR1	PT1054T1	PT1055FH1	PT1055FH1
13	LEAD SCREW GEAR	PT628R1	PT628T1	PT628FH1	PT628FH1
14	GEAR BOX	WRITE FOR INFORMATION		WRITE FOR IMFORMATION	
15	OIL TUBE	PT2853R1	PT2853TH1	PT2853TH1	PT2853TH1
16	OILER	155x46	155x46	155x46	155x46
17	INDEX PLATE (18)	*AS1541R2	*AS1541T2	*AS1541FH2	*AS1541FH2
18	DRIVE SCREW	130x103	130x103	130x103	130x103
19	FELT WICK	256x3	256x3	256x3	256x3
20	BUSHING	••••	••••	PT613FH1	PT613FH1
21	TAPER PIN	168x210	168x412	168x514	168x514
22	MAIN DR. COLLAR	PT604R1	PT604T1	PT604FH1	PT604FH1
23	SET SCREW	••••	122x716	122x816	1122x816
24	CAP SCREW	••••	112x220	112x428	112x424
25	PIN	160x44	160x46	160x48	160x48
26	CL. GEAR (25-27-36)	*AS424R1	*AS424T1	*AS424FH1	*AS424FH1
27	GEAR CLUTCH	PT423R1	PT423T1	PT423FH1	PT423FH1
28	SET SCREW	PT631RT1	PT631RT1	122x604	122x604
29	COIL SPRING	162x1	162x1	162x2	162x2
30	STEEL BALL	172x12	172x12	172x16	172x16
31	CL. GEAR (28-29-30)	*AS427R1	*AS427T1	*AS427FH1	*AS427FH1
32	CL. PINION (37-38)	*AS426R1	*AS426T1	*AS426FH1	*AS426FH1
33	CL. SHAFT GEAR	PT428R1	PT428T1	PT428FH1	PT428FH1
34	SET SCREW	122x504	122x504	122x504	122x504
35	CL. GEAR SHAFT (34-39-40)	*AS422R1	*AS422T1	*AS422FH1	*AS422FH1
36	FELT WICK	256x3	256x2	256x2	256x2
37	PIN	PT1807	PT1808	PT1807	PT1807
38	FELT WICK	256x2	256x2	256x2	256x2
39	KEY	163x12	163x14	163x16	163x16
40	PIN OR KEY	160x44	163x2	163x2	163x2
41	GUIDE BAR	PT607R1	PT607T1	PT607FH1	PT607FH1
42	SCREW	111x108	111x108	111x108	111x108
43	PIN	160x46	160x48	160x48	160x48
44	JAM NUT	PT659R1	PT659T1	PT659FH1	PT659FH1
45	CONE GEAR 16T	PT615K16R1	PT615K16T1	PT615K16FH1	PT615K16FH1
46	CONE GEAR 18T	PT615K18R1	PT615K18T1	PT615K18FH1	PT615K18FH1
47	CONE GEAR 20T	PT615K20R1	PT615K20T1	PT615K20FH1	PT615K20FH1
48	CONE GEAR 22T	PT615K22R1	PT615K22T1	PT615K22FH1	PT615K22FH1
49	CONE GEAR 23T	PT615K23R1	PT615K23T1	PT615K23FH1	PT615K23FH1
50	SPACE COLLAR	PT616R1	PT616T1	PT616FH1	PT616FH1
51	CONE GEAR 24T	PT615K24R1	PT615K24T1	PT615K24FH1	PT615K24FH1
52	CONE GEAR 26T	PT615K26R1	PT615K26T1	PT615K26FH1	PT615K26FH1
53	CONE GEAR 28T	PT615K28R1	PT615K28T1	PT615K28FH1	PT615K28FH1
54	CONE GEAR 32T	PT615K32R1	PT615K32T1	PT615K32FH1	PT615K32FH1
55	TAPER PIN	168x108	168x110	168x110	168x110
56	KEY	163x17	164x27	164x33	164x33
57	CONE GEAR SHAFT (44-55-56)	*AS614R1	*AS614T1	AS614FH1	AS614FH1
58	NUT	139x35	139x35	PT215H1	PT215H1
59	KEY	164x4	164x4	164x9	164x9
60	MAIN DR. PINION	*AS420R1	*AS420T1	*AS420FH1	*AS420FH1
	(21-22-58-59)				
61	TUMBLER STUD	PT643R1	153x8	153x12	153x12
62	NEEDLE BEARING	PT384NK1	PT384NK1	PT384FH1	PT384FH1
63	BUSHING	PT644R1	••••	••••	••••
64	IDLER GEAR (62)	*AS605R2	*AS605T2	*AS605FH2	*AS605FH2
65	TUMBLER (61-62-63-64-66	*AS602R3	*AS602T3	*AS602FH4	*AS602FH4
	67-68-69-70)				
66	TUMB. PLUNGER	PT608R1	PT608T2	PT608FH1	PT608FH1
67	KNOB	PT609R1	PT609TH1	PT609TH1	PT609TH1
68	BUSHING	PT610R1	PT610TH1	PT610TH1	PT610TH1
69	COIL SPRING	162x24	162x22	162x22	162x22
70	PIN	160x29	160x39	160x33	160x33
71	IDLER GEAR	PT605R1	PT605T1	PT605FH1	PT605FH1

 THESE PARTS ARE NO LONGER AVAILABLE.

PARTS LIST

FORM 916-A
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER

GEAR BOX
(SINGLE TUMBLER)

10"...11/16" & 1" COL.
13".....1" COL.
14 1/2".....1" COL.
16" & 16/24"....1" COL.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
71	PRIMARY GUARD	PT650R1	PT650T1	PT650F1	PT650H1
72	PRIMARY GUARD (87-109)	••••	••••	••••	*AS2004H1
73	SCREW	PT1159R1	101x648	PT1160HV1	PT1153R1
74	SCREW	PT1158R1	101x648	PT1160HV1	PT1153R1
75	DRIVE SCREW	130x103	130x103	130x103	130x103
76	"SLIDE" PLATE (75)	*AS662RH1	*AS662RH1	*AS662RH1	*AS662RH1
77	"SIZE" PLATE (75)	*AS664RH1	*AS664RH1	*AS664RH1	*AS664RH1
78	SCREW	PT1156R1	PT1153R1	PT1157TF1	PT1153R1
79	GEAR STUD (92)	*AS653R1	*AS653T1	*AS653FH1	*AS653FH1
80	PRI. PINION	PT651R1	PT651T1	PT651FH1	PT651FH1
81	NUT	137x31	137x31	137x39	137x39
82	STUD GEAR	PT612K24R1	PT612K18T1	PT612K18FH1	PT612K18FH1
83	PR. CH. GEAR	PT652R2	PT652T2	PT652FH2	PT652FH2
84	PR. CH. GEAR (80-90)	*AS652R2	*AS652T2	*AS652FH2	*AS652FH2
85	CAP SCREW	112x220	112x324	112x428	112x428
86	WASHER	161x17	161x74	161x65	161x65
87	HINGE PIN	••••	PT281T1	PT281FH1	PT281FH1
88	SL. GR. SHAFT (92)	*AS656R2	*AS656T2	*AS656FH2	*AS656FH2
89	FELT WICK	256x3	256x3	256x3	256x3
90	PIN	160x44	160x46	160x48	160x48
91	PIN	160x16	160x16	160x16	160x16
92	NUT	139x31	139x35	PT215H1	PT215H1
93	BRACKET	PT647R1	PT647T1	PT647FH1	PT647FH1
94	BRACKET	••••	••••	••••	PT147H1
95	SCREW	118x116	118x224	118x424	118x424
96	THUMB SCREW	••••	••••	••••	131x33
97	PRI. DRIVE GEAR	PT657R1	PT657T1	PT657FH1	PT657FH1
98	SLIDING GEAR	PT654R1	PT654T1	PT654FH1	PT654FH1
99	SLIDING GEAR (91-101-102-103-104)	*AS654R1	*AS654T1	*AS654FH1	*AS654FH1
100	KNOB PINION (91-101-102-103-104)	*AS655R2	*AS655T2	*AS655FH1	*AS655FH1
101	STEEL BALL	172x16	172x20	172x20	172x20
102	SPRING	PT649R2	PT649T1	PT649FH1	PT649FH1
103	SCREW	101x303	101x303	101x303	101x303
104	KEY	164x1	164x2	164x4	164x4
105	PRI. BRACKET	PT630R1	PT630T1	PT630FH1	PT630FH1
106	SCREW	118x212	118x212	112x440	112x440
107	OILER	155x38	155x38	155x38	155x38
108	L.S. BRACKET (109)	*AS5R1	*AS5T1	*AS5F1	*AS5H1
109	BABBITT	506x6	506x6	506x6	506x6
110	COLLAR	PT38NR2	PT39T2	PT39FH2	PT39FH2
111	KEY	164x1	164x2	164x3	164x3
	THE FOLLOWING LEAD SCREWS INCLUDE ITEMS. NO. 12 (PAGE 15) 110 & 111				
112	LEAD SCREW	*AS629W3R2	••••	••••	••••
113	LEAD SCREW	*AS629W35R2	••••	••••	••••
114	LEAD SCREW	*AS629W4R2	*AS629W4T1	••••	••••
115	LEAD SCREW	*AS629W45R2	••••	••••	••••
116	LEAD SCREW	••••	*AS629W5T1	*AS629W5FH1	••••
117	LEAD SCREW	••••	*AS629W6T1	*AS629W6FH1	*AS629W6FH1
118	LEAD SCREW	••••	*AS629W7T1	*AS629W7FH1	*AS629W7FH1
199	LEAD SCREW	••••	••••	*AS629W8FH1	*AS629W8FH1
120	LEAD SCREW	••••	••••	••••	*AS629W10FH1
121	LEAD SCREW	••••	••••	••••	*AS629W12FH1
122	LEAD SCREW	*AP629W3R2	••••	••••	••••
123	LEAD SCREW	*AP629W35R2	••••	••••	••••
124	LEAD SCREW	*AP629W45R4	*AP629W4T1	••••	••••
125	LEAD SCREW	••••	*AP629W5T1	*AP629W5FH1	••••
126	LEAD SCREW	••••	*AP629W6T1	*AP629W6FH1	*AP629W6FH1
127	LEAD SCREW	••••	••••	*AP629W7FH1	*AP629W7FH1
128	LEAD SCREW	••••	••••	*AP629W8FH1	*AS629W8FH1
129	SCREW	••••	PT1160T1	PT1153R1	PT1160HV1
130	SCREW	••••	PT1157TF1	PT1157TF1	101x624
131	SCREW	••••	••••	••••	101x612
132	LOCK SCREW	••••	PT672RH1	PT6729RH1	PT6729RH1
133	LOWER GUARD (87-109)	••••	*AS673T1	*AS673F1	*AS673H1
134	UPPER GUARD	••••	PT670T1	PT670F1	PT670H1
135	UPPER GUARD	••••	••••	••••	PT2005H1
136	GUARD STUD 1/4" 20 THD.	••••	••••	PT674F1	••••
137	GUARD STUD 7/16" 14 THD.	••••	••••	PT674F2	••••
138	GUARD BRACKET	••••	PT147T1	PT647F2	PT647H2
139	SCREW	••••	118x224	118x428	118x424

THESE PARTS ARE NO LONGER AVAILABLE.

PARTS LIST

FORM 911-J
ALL MODELS

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

DIRECT READING GRADUATED COLLARS - EACH GRADUATION REPRESENTS A MOVEMENT OF THE CROSS SLIDE OF .0005" OR A REDUCTION IN THE DIAMETER OF THE WORK OF .001"

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	STUD	PT1241	PT1242	PT1243	PT1243
2	RETAINING NUT	PT295NR1	PT295T1	PT295FH1	PT295FH1
3	PIN	160x17	160x19	160x19	160x19
4	BALL CRANK (1-16)	*AS1264R1	*AS1264T1	*AS1264FH1	*AS1264FH1
5	SHOE	PT1080NK1	PT1080NK1	PT1080NK1	PT1080NK1
6	PIN	160x20	160x26	160x26	160x26
7	THUMB SCREW	PT1857	PT1857	PT1857	PT1857
8	GRAD COLLAR (5-6-7)	*AS1266R2	*AS1266TH2	*AS1266TH2	*AS1266TH2
9	FRONT T.A. SCREW	*ASD482R2	*ASD482T3	*ASD482H3	*ASD482H3
	(2-3-*4-*9-17-18-19				
	20-21-22)				
10	COLLAR	PT866R2	PT866TF2	PT866TF2	PT866H2
11	HEX. NUT	139x25	139x27	139x27	139x31
12	HANDLE	PT1491	PT1492	PT1493	PT1493
13	PIN	169x247	160x268	160x268	160x268
14	C.F. SLEEVE	PT69R1	PT69TH1	PT69TH1	PT69TH1
15	BEARING, FRONT	*AS841R1	*AS841H2	*AS841H2	*AS841H2
16	C.F. BUSHING	PT63R3	PT63T3	PT63FH3	PT63FH3
17	BEARING, REAR	AS841R1	*AS841T2	*AS841H2	*AS841H3
18	KEY	PT484R1	PT484T1	NLA	PT484H1
19	REAR T.A. SCREW	*AS483R3	*AS483T3	*AS483F3	*AS483H3
	(14-15-*45-58)				
20	CROSS FEED SCREW	*ASD224R3	*ASD224T4	*ASD224F5	*ASD224H5
	(2-3-*4-*9-17-18-19				
	20-21-30-*45-58)				
21	CROSS FEED SCREW	*ASD6825L1	*ASD6825T1	*ASD6825H1	*ASD6825H1
	(2-3-*4-*9-17-18-19				
	20-21-30-*45-58)				
22	CHIP COLLAR	PT419R1	PT419T1	PT419FH1	PT419FH1
23	OIL SCREW	122x103	122x103	122x103	122x103
24	SADDLE FELT	PT59R1	PT59T1	PT59F1	PT59H1
25	RIGHT RETAINER	PT58R1	PT58T1	NLA	PT58H1
26	SCREW	107x6	101x108	101x108	101x108
27	SCREW	122x104	122x105	122x104	122x104
28	SADDLE SCREW	PT244R1	PT244T1	PT244F1	PT244H1
29	COLLAR SCREW	PT210R1	PT210T1	PT210F1	PT210H1
30	LEFT RETAINER	PT57R1	PT57T1	NLA	PT57H1
31	WRENCH	173x8	173x9	173x9	173x9
32	GIB SCREW	PT219R1	PT219TH1	PT219TH1	PT219TH1
33	C.R. BASE	*AS92R2	*AS92T2	*AS92F2	*AS92H2
	(40-42-43-56-57-60)				
34	CLAMP SHOE	PT211R1	PT211T1	PT211F1	PT211H1
35	SCREW	121x312	121x412	121x616	121x620
36	OIL SCREW	122x103	122x504	122x504	122x504
37	C.F. NUT SCREW (44)	AS66R2	*AS66T2	*AS66FH2	*AS66FH2
38	CHIP GUARD	PT96R1	PT96T1	PT96F1	PT96H1
39	SCREW	114x12	114x116	114x216	PT1168FH1
40	STOP SCREW	PT245NR1	PT245TH1	PT245TH1	PT245TH1
41	CAP SCREW	PT2903R1	PT2904TF1	PT2904TF1	PT2905H1
42	THREAD STOCK (48-49)	CL2250R	CL2250T	NLA	CL2250H
43	SADDLE	PT60R1	PT60T1	NLA	PT60H1
44	SADDLE LOCK	PT62R2	PT62T3	PT62F2	PT62H2
45	SADDLE GIB SCREW	112x116	112x120	112x224	112x224
46	WASHER	182x301	182x301	180x302	180x302
47	SADDLE GIB	PT61R1	PT61T1	NLA	PT61H1
48	SHOE	PT1082NT1	T1077TH1	PT1077TH1	PT1077TH1
49	SCREW	122x203	122x504	122X503	122X508
50	C.F. NUT - ENGLISH	PT65R1	PT65T1	PT65FH1	PT65FH1
51	C.R. BASE GIB	PT221R1	PT221H1	PT221F1	PT221H1
52	WRENCH	173x9	173x10	173x10	173x10
53	BEARING	*AS841R1	*AS841R1	*AS841R1	*AS841T2
54	BEARING COVER	PT899R1	****	****	****
55	REAR T.A. SCREW	*AS6827L2	*AS6827T2	NLA	*AS6827TH2
	(14-15-*45-58)				
56	OILER	115x14	155x15	155x15	155x15

PARTS LIST

FORM 978-A
ALL MODELS

REAR TAPER ATTACHMENT CROSS FEED SCREW FOR 10" TO 16" LATHES WITH BALL THRUST BEARINGS, REGULAR OR HARDENED AND GROUND THREADS AS A REPLACEMENT FOR REAR TAPER ATTACHMENT CROSS FEED SCREWS WITHOUT BALL THRUST BEARINGS.

NOTE: REAR TAPER ATTACHMENT CROSS FEED SCREWS WITH HARDENED AND GROUND THREADS ARE ONLY AVAILABLE FOR LATHES WITH BALL THRUST BEARINGS; HOWEVER, A CROSS FEED SCREW WITH BALL THRUST BEARINGS. WITH REGULAR OR HARDENED AND GROUND THREADS CAN BE INSTALLED ON A LATHE ORIGINALLY EQUIPPED WITH CROSS FEED SCREW WITH OUT BALL THRUST BEARING BY PRODUCING A COMPLETE SCREW ASSEMBLY SHOWN BELOW AND LISTED UNDER ITEMS 1,2, AND 3 SINGLE ITEMS AND SUB-ASSEMBLIES ARE ALSO LISTED BELOW AS A REPLACED PARTS GUIDE FOR LATHES WHERE THE CONVERSION TO THE BALL THRUST BEARING TYPE CROSS FEED SCREW HAS BEEN MADE.

SADDLE
ENGLISH
FOR 10", 13", 14-1/2", 16" AND 16/24"

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAM.E

ITEM NO.	PART NAME	PART NO. 10"	PART NO. 13"	PART NO. 14-1/2"	PART NO. 16" & 16/24"
1	REAR T.A. CROSS FEED SCREW ASSEMBLY (5-7-8-9-10-11)	*ASX6827L2	*ASX6827T2	NLA	*ASX6827H2
2	REAR T.A. CROSS FEED SCREW ASSEMBLY (5-7-8-9-10-11)	*ASX483R3	*ASX483T3	*ASX483F3	*ASX483H3
3	REAR T.A. CROSS FEED SCREW ASSEMBLY (5-7-11-12)	*AS6827L2	*AS6827T2	NLA	*AS6827H2
4	REAR T.A. CROSS FEED SCREW ASSEMBLY (5-7-11-12)	*AS483R3	*AS483T3	*AS483F3	*AS483H3
5	C.F. NUT-ENGLISH	PT65R1	PT65T1	PT65FH1	PT65FH1
6	OIL SCREW	122x103	122x504	122x504	122x508
7	C.F. NUT SCREW (6)	*AS66R2	*AS66T2	*AS66FH2	*AS66FH2
8	BEARING	AS841R1	AS841R1	AS841R1	AS841T2
9	BEARING COVER	PT899R1	----------	----------	----------
10	C.F. SC. SLEEVE (13-14)	*AS858R2	*AS858TF2	*AS858TF2	*AS858H2
11	COLLAR	PT866R2	PT866TF2	PT866TF2	PT866H2
12	HEX. NUT	139x25	139x27	139x27	139x31
13	BINDER STUD	PT867R1	PT867TF1	PT867TF1	PT867H1
14	TAPER PIN	168x310	168x412	168x412	168x514
15	LOCKING PIN	AS487R1	AS487TF1	----------	AS487H1

PARTS LIST

FORM 978-A CON'T
ALL MODELS

INSTALLATION INSTRUCTIONS

1. Remove Binding Lever "A" and Collar.
2. Remove the two screws at "B" and take off connecting bar "C".
3. Knock taper pin "D" out of binder stud "E".
4. Take off nut and collar at "F".
5. Slip out sleeve "G".
6. Move cross slide "H" to extreme rear position. Thus disengaging the rear taper attachment screw from front screw. Note the screw is still engaged with the nut, and this can only be removed by unscrewing it out of the cross feed nut by hand.
7. Lift out binder stud "E".
8. Remove cross feed nut screw "J" from top of cross slide "H" and cross feed nut (item 7 or 8 on reverse side) will fall out.
9. Insert replacement binder stud "E" in place.
10. Replace taper attachment connecting bar, but before tightening screws "B" move cross slide to extreme rear position so binder stud "E" is in extreme front of slot in connecting bar "C". Replace collar and tighten binding lever "A" on to plug. then tighten screws at "B".
11. Loosen binding lever and move cross slide "H" back and forth, checking to see that connecting bar does not bind in any position.
12. If connecting bar is tight in any position. Remove binder stud and face off at "X" until cross slide with connecting bar in place if free on binder stud.
13. Replace and pin sleeve in position.
14. Install cross feed nut and re-assemble cross feed screw to lathe. Be sure that all the play is removed between the cross feed screw and sleeve. Do not tighten too tightly, for bearings can be damaged.

PARTS LIST

FORM 912-E
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBER APPEARING IN PARENTHEIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	BINDING LEVER (2.3-46)	*AS54KR3	*AS54T2	*AS54FH1	*AS54FH1
2	ORDER ITEM 1	PT293NK2	****	****	****
3	ORDER ITEM 1	PT206KR3	PT606T2	PT206FH2	PT206FH2
4	UPPER PLUG	PT248NK3	PT248T2	NLA	PT248H2
5	LOWER PLUG	PT249KR3	PT249T2	NLA	PT249H2
6	T.S. CENTER	CE2401	CE2402	CE2402	CE2402
7	T.S. SPINDLE (18)	*AS201KR3	PT201T1	NLA	PT201H1
8	T.S. TOP 1/2 BASE (28)	PA50R2	PA50T1	NLA	PA50H1
9	CLAMP NUT	PT283R1	PT283T1	PT283FH1	PT283FH1
10	WASHER	161x27	PT236T1	PT236FH1	PT236FH1
11	T.S. WRENCH	PT55R1	PT55T1	PT55FH1	PT55FH1
12	OILER	PT2677NR1	155x23	155x23	155x23
13	SET-OVER SCREW	126x628	PT278TH1	126x788	PT278H1
14	SHOE	PT1076TH1	****	****	****
15	SCREW	122x104	****	****	****
16	T.S. HANDWHEEL (17-45)	*AS1262R1	*AS1262TH1	*AS1262TH1	*AS1262TH1
17	HANDLE	PT1492	PT1493	PT1493	PT1493
18	KEY	AS285KR1	PT286T1	NLA	PT286H1
19	T.S. SCREW (47)	*AS226R3	*AS226T3	*AS226F2	*AS226H2
20	FELT WASHER	PT288NR1	****	****	****
21	T.S. NUT	PT52R2	PT52T1	NLA	PT52H1
22	GRAD. DIAL (14-15)	*AS287R1	****	****	****
23	PIN	160x19	160x21	160x21	160x21
24	NUT	PT1071-1	PT1071-2	PT1071-2	PT1071-2
25	SCREW	107x308	107x308	NLA	****
26	RETAINER (REAR)	PT580R2	PT580T2	NLA	****
27	FELT WIPER	PT582R1	PT582T1	NLA	****
28	T.S. BASE	*AS51R3	*AS51T3	NLA	****
	(31-32-33-34-35)				
29	SET SCREWS	PT580R2	PT580T2	PT580F2	****
30	PIN	160x18	160x18	160x18	****
31	SCREW	****	****	****	103x212
32	RETAINER (LEFT)	****	****	****	PT581H1
33	RETAINER (RIGHT)	****	****	****	PT580H1
34	FELT WIPER (LEFT)	****	****	****	PT583H1
35	FELT WIPER (RIGHT)	****	****	****	PT582H1
36	T.S. BASE	****	****	****	*AS51H2
	(31-32-33-34-35)				
37	T.S. CLAMP	PT56R1	PT56T1	NLA	PT56H1
38	CLAMP BOLT	143x317	143x422	143x524	143x526
39	CLAMP BOLT	****	****	****	143x548
40	PIN	160x50	160x48	160x50	160x48
41	SCREW	****	122x604	122x604	122x606
42	OILER	****	155x23	155x23	155x23
43	OIL WICK	****	256x7	256x7	256x7
44	T.S. SPINDLE (18)	CL3875R	CL3875T	NLA	CL3875H
45	STUD	PT1242	PT1243	PT1243	PT1243
46	ORDER ITEM 1	160x255	160x251	160x60	160x60
47	RUBBER WASHER	PT3554NR1	PT3554TH1	PT3554TH1	PT3554TH1
48	T.S. HANDWHEEL (49)	NLA	NLA	NLA	NLA
49	HANDLE	NLA	NLA	NLA	NLA

PARTS LIST

FORM 917-C
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

UNDERNEATH DRIVE (FLOOR TYPE)

10"
13"
14 1/2"
16"

UNDERNEATH DRIVE (FLOOR TYPE)

16/24"

*AVAILBLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	FLAT CORD BELT (51A)	CE3753R	CE3753T	PT2204F3	CE3753H
2	FLAT CORD BELT (51A)	****	CE3752T	PT2204F3	CE3752H
3	JAM NUT	139x27	139x31	139x31	139x31
4	SET SCREW	120x216	120x420	120x420	120x420
5	C.S. CONE (3-4)	****	NLA	NLA	NLA
6	C.S. CONE (3-4)	*AS103R1	*AS103T1	NLA	NLA
7	TAPER PIN	168x513	168x618	168x718	168x718
8	C.S. PULLEY & SHAFT (7-9-11-21-22)	*AS2547RL1	*AS2547T2	*AS2547FH2	*AS2547FH21
9	ORDER ITEM 8	****	****	****	****
10	SCREW	101x316	101x316	101x320	101x320
11	BEARING	PT442R1	PT442T1	PT442FH1	PT442FH1
12	RING	PT2553R1	PT2553T1	PT2553FH1	PT2553FH1
13	LOCK WASHER	182x104	182x104	182x104	182x104
14	JAM NUT	138x18	138x18	138x18	138x18
15	SET SCREW	120x208	120x208	120x208	120x208
16	COLLAR (17)	****	****	*AS735FH1	*AS735FH1
17	SET SCREW	****	****	148x208	148x208
18	CRADLE (8-10-12-13-14-15-20)	PA2540R1	NLA	NLA	NLA
19	CRADLE SHAFT	NLA	NLA	PT2548FH1	PT2548FH1
20	BEARING	PT442R1	PT442T1	PT442FH1	PT422FH1
21	WASHER	139x40	161x44	161x41	161x41
22	JAM NUT	****	139x40	139x40	139x40
23	MOTOR PLATE SHAFT	PT2549R1	NLA	PT2549FH1	PT2549FH1
24	JAM NUT	137x13	PT1072-5	PT1072-6	PT1072-6
25	ADJUSTING STUD	PT2545RT1	PT2545RT1	PT2545FH1	PT2545FH1
26	STUD WASHER	PT2546RT1	PT2546RT1	PT2546FH1	PT2546FH1
27	MOTOR PLATE	PT2541R2	PT2541T1	NLA	NLA
28	WASHER	167x2	161x16	161x16	161x16
29	SCREW	112x112	112x232	112x224	112x224
30	PIN	****	****	****	160x76
31	C.S. PULLEY (30-*32)	****	****	****	*AS2031H1
32	PINION (53)	****	****	****	*AS2036H2
33	SCREW	****	****	****	112x110
34	LOCK WASHER	****	****	****	PT3400
35	PIN	****	****	****	160x19
36	WASHER	****	****	****	PT2032H1
37	CONE SHAFT GEAR	****	****	****	PT2035H1
38	KEY	****	****	****	106x605
39	CONE SHAFT	****	****	****	PT2030H1
40	SCREW	****	****	****	103x220
41	TAPER PIN	****	****	****	168x312
42	COLLAR	****	****	****	PT2034H1
43	PULLEY SHAFT	****	****	****	PT2033H1
44	FELT WICK	****	****	****	256x3
45	OILER	****	****	****	155x55
46	OILER FLANGE	****	****	****	PT386R1
47	CAPILLARY OILER	****	****	****	*AS373KH2
48	TAPER PIN	****	****	****	168x512
49	CRADLE	****	****	****	PRICE ON REQUEST
50	C.S. CONE (3-4)	****	****	****	PA303H1
51	FLAT BELT	****	****	****	CE3752V
51A	BELT CEMENT	CE1789	CE1789	CE1789	CE1789
52	FLAT CORD BELT (51A)	****	****	****	CE3753V
53	OILITE BEARING	****	****	****	PT3657R1

PARTS LIST

FORM 918-B
13", 14 1/2", & 16" MODEL

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

MOTOR CABINET LEG
UNDERNEATH DRIVE
(FLOOR TYPE)

13"
14 1/2"
16"

*AVAILABLE ONLY AS SUB-ASSEMBLY. PART INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
52	RAISING PLATE	****	NLA	****
53	SCREW	****	112x540	****
54	SCREW	101x710	101x710	101x710
55	LEFT VENTILATOR (54)	PT2527T2	*AS2527FH2	*AS2527FH2
56	CABINET LEG	NLA	NLA	NLA
	(55-59-60-61-62-63			
	64-65-66-67-69-70)			
57	SCREW	112x432	112x528	112x544
58	SPRING STUD	****	PT2636FH2	PT2636FH2
59	RIVET	133x624	133x624	133x624
60	FRONT DOOR	PT2526T1	PT2526FH1	PT2526FH1
61	DOOR KNOB	PT2528RH1	PT2528RH1	PT2528RH1
62	DOOR LATCH	PT2529RH1	PP2529RH1	PT2529RH1
63	SCREW	120x5	120x5	120x5
64	JAM NUT	139x25	139x27	139x27
65	SCREW	122x628	122x736	122x736
66	SCREW	122x602	122x732	122x732
67	RIGHT VENTILATOR	*AS2530T2	PT2530FH2	PT2530FH2
	(68-75-76)		101x712	
68	SCREW	101x712	148x216	101x712
69	SCREW	120x212	506x6	148x216
70	BABBITT	506x6	PT1485	506x6
71	WASHER	161x18	****	****
72	COTTER PIN	170x206	****	****
73	SPRING PIN	PT2571RT1	****	****
74	JAM NUT	139x27	****	****
75	SCREW	101x306	****	****
76	OIL HOLE COVER	PT2531RT1	****	****
77	MACH. HANDLE	PT1485	PT1485	PT1485
78	CRANK (77-79)	*AS2560RH1	*AS2560RH1	*AS256RH1
79	TAPER PIN	168x516	168x516	168x516
80	SCREW	112x112	112x112	112x112
81	CRANK BUSHING	PT2563RT1	PT2563FH1	PT2563FH1
82	CRANK SHAFT (78-83)	*AS2562TH1	*AS2562TH1	*AS2562TH1
83	SCREW	120x8	120x8	120x8
84	CLEVIS	PT2566RT1	PT2566FH1	PT2566FH1
85	CRANK PIN	PT2565RH1	PT2565RH1	PT2565RH1
86	ORDER ITEM 89	PT2567RT2	****	PT2567FH2
87	SCREW	120x105	120x105	120x105
88	PIN	160x151	160x210	160x210
89	CONNECTING SLEEVE	PT2568RT2	*AS2568FH2	*AS2568FH2
	(86-87-90-92)			PT2569FH1
90	ADJUSTING SCREW	PT2569RT1	PT2569FH1	****
91	COTTER PIN	170x206	170x206	****
92	SPRING PIN	PT2639RH1	PT2639RH1	****
93	TENSION SPRING	PT2638NT2	PT2638FH1	****
94	WASHER	161x18	161x18	161x16
95	WRENCH	PT2456-1	PT2457-1	PT2457-1
96	TAPER PIN	168x307	168x308	168x308
97	ADJUSTING NUT	PT2570RT1	PT2570FH1	PT2570FH1
98	JAM NUT	137x31	157x35	137x35
99	SCREW	112x216	112x216	112x216
100	WASHER	161x64	161x64	161x64
101	WASHER	PT1666TH1	PT1666TH1	PT1666TH1
102	PAN BRACKET	PT467TH1	PT467TH1	PT467TH1
103	SCREW	112x216	112x216	112x216
104	NUT	138x27	138x27	138x27

PARTS LIST

FORM 919-E
10" MODEL

UNDERDRIVE BENCH TYPE
10" MODEL

NOTE - Used Only With Steel Cabinet Bench Shown on Reverse Side.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

PARTS LIST

FORM 919-E CON'T
10" MODEL

ITEM NO.	PART NAME	10" PART NO.
1	MACH. HANDLE	PT1485
2	CRANK (1-10)	*AS2560RH1-B
3	HEX. NUT	138x29
4	LOCK WASHER	180x303
5	WASHER	161x65
6	VELLUMOID WASHER	PT1669R1
7	CARRIAGE BOLT	542x510
8	SET SCREW	118x110
9	CRADLE SUPPORT	PT2640R1
10	TAPER PIN	168x516
11	JAM NUT	139x25
12	SET SCREW	122x620
13		
14	SET SCREW	120x5008
15	CLEVIS	PT2566RT1
16	CRANK SHAFT	PT504R3
17	SET SCREW	120x105
18	BALL SOCKET	PT2567RT2
19	PIN	160x151
20	CRANK SHAFT PIN	PT2565RH1
21	CONE CRADLE SHAFT	PT2642R1
22	WASHER	161x18
23	TENSION SPRING	PT2638NT2
24	CONNECTING SPRING (17-18-25-26)	*AS2568RT2
25	ADJUSTING SCREW	PT2569RT1
26	BOTTOM SPRING PIN	PT2639RT1
27	COTTER PIN	170x206
28	TAPER PIN	168x307
29	ADJUSTING NUT	PT2570RT1
30	JAM NUT	PT1072-5
31	WRENCH	PT2456-1
32	JAM NUT	139x27
33	SET SCREW	120x216
34	C.S. CONE (32-33)	*AS103R1
35		

ITEM NO.	PART NAME	10" PART NO.
36		
37	BEARING RETAINER	PT2553R1
38	LOCK WASHER	182x104
39	JAM NUT	138x18
40	DRIVE PULLEY & SHAFT (41-42-43-49)	*AS2547RL1
41	TAPER PIN	168x513
42	BEARING	PT442R1
43	ORDER ITEM 40	**********
44	SCREW	101x316
45	SET SCREW	120x208
46	SET SCREW	120x206
47	COLLAR (46)	*AS735NR1
48	BEARING	PT442R1
49	JAM NUT	139x40
50	MOTOR PLATE SHAFT	PT2549R1
51	JAM NUT	PT1072-5
52	CRADLE (37-38-39-40-44-45-48)	PA2540R1
53	ADJUSTING STUD	PT2545RT1
54	STUD WASHER	PT2546RT1
55	MOTOR PLATE	PT2541R3
56		
57	WASHER	167x2
58	CAP SCREW	112x10
59	SET SCREW	120x1104
60	CRANKSHAFT COLLAR (59)	NLA
61	CRANKSHAFT CAM (14)	NLA
62	PIN	160x91

10" UNDERNEATH DRIVE BENCH AND BENCH LEGS

ITEM NO.	PART NAME	PART NO.
1	BENCH	NLA
2	BENCH	PT3777R345
3	CAP SCREW	112x224
4	WASHER	161x17
5	UNDERDRIVE LEG	NLA
6	VELLUMOID GASKET	195x3
7	HEX. NUT	138x27
8	BELT RELEASE PLATE	*AS425-1
9	DRIVE SCREW	130x103

PARTS LIST

FORM 920-E
ALL MODELS

BED AND LEGS

10"
13"
14 1/2"
16"

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	FRONT COVER	PT2509R2	PT2509T1	NLA	PT2509H2
2	SCREW	103x104	103x106	103x106	103x106
3	REAR COVER	****	****	****	PT2510H1
		****	****	****	****
		****	****	****	****
6	DRUM CONTROL	CE790-2	CE790-2	CE790-2	CE790-2
7	SCREW	PT388NR1	PT388T1	114x324	114x324
8	PIN	160x105	160x127	160x168	160x168
		****	****	****	****
		****	****	****	****
		****	****	****	****
		****	****	****	****
		****	****	****	****
		****	****	****	****
14	RACK SCREW	103x628	116x620	116x620	PT444H1
15	BED	NLA	NLA	NLA	NLA
16	SCREW	101x312	101x616	101x608	****
17	BED COVER	****	PT2502T4	****	****
18	SCREW	112x220	112x428	112x524	112x524
19	OIL PAN SHORT LEG	NLA	NLA	NLA	NLA
20	SCREW	112x224	112x432	112x532	112x540
21	RACK (14)	AS275R103	****	****	****
22	RACK (14)	AS275R135	****	****	****
23	RACK (14)	AS275R104	****	****	****
24	RACK (14)	AS275145	****	****	****
25	RACK (14)	****	*AS275T105	PT385TF1	****
26	RACK (14)	****	*AS275T106	*AS275FH306	*AS275FH306
27	RACK (14)	****	*AS275T107	*AS275FH307	*AS275FH307
28	RACK (14)	****	****	*AS275FH308	*AS275FH308
29	RACK (14)	****	****	****	*AS275FH310
30	RACK (14)	****	****	****	*AS275FH312
31	CENTER LEG	****	****	****	NLA
	(33-34-35-36)				
32	CENTER LEG	****	****	****	NLA
	(33-34-35-37)				
33	SET SCREW	****	****	****	119x532
34	JAM NUT	****	****	****	139x35
35	WASHER	****	****	****	PT565TH2
36	SCREW	****	****	****	112x540
37	SCREW	****	****	****	112x524
38	CLAMP SCREW	****	****	****	PT299FH1
39	SUPPORT BRACKET	****	****	****	PA44FH1
40	SCREW	****	****	****	112x572
41	PIN	****	****	****	160x18
42	NUT	****	****	****	PT1071-4
43	WASHER	****	****	****	161x67
44	CLAMP	****	****	****	PT45F1
45	L.S. SUPPORT	****	****	****	PT43FH1
46	REGULAR LEG	****	NLA	NLA	NLA
47	O.P. LONG LEG	****	NLA	NLA	NLA
48	SCREW	112x224	112x432	NLA	112x540
49	RACK (14)	****	****	****	*AS275H114
50	SCREW	101x308	****	****	****
51	COVER	PT2504R2	****	****	****

PARTS LIST

FORM 922-D
ALL MODELS

TAPER ATTACHMENT

10"
13"
14 1/2"
16"
16/24"

*AVAILABLE ONLY AS SUB-ASSEMBLY.
PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER. SEE APRON SHEET FOR LOCATION OF CODE NUMBER.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14 1/2" PART NO.	16" & 16/24" PART NO.
1	BINDING LEVER	PT873R1	PT54FH1	PT54FH1	PT54FH1
2	WASHER	PT875NR2	PT857H2	PT857H2	PT857H2
3	SCREW	114x12	114x116	114x216	114x216
4	CONNECTING BAR	PT868R2	PT868T2	NLA	PT868H2
5	BINDER STUD	PT867R1	PT867TF1	PT867TF1	PT867H1
6	SLIDE BLOCK (8-9-10-11)	*AS861R1	*AS861TF1	*AS861TF1	*AS861H1
7	TAPER PIN	168x310	168x412	168x412	168x514
8	SHOW	PT1082NT1	PT1077TH1	PT1077TH1	PT1077TH1
9	SET SCREW	122x205	122x505	122x505	122x505
10	SLIDE BLOCK GIB	PT870R1	PT870TF1	PT870TF1	PT870H1
11	GIB SCREW	PT219R1	PT219TH1	PT219TH1	PT219TH1
12	COLLAR SCREW	PT872R1	PT872T1	NLA	PT872H1
13	SET SCREW	122x205	122x507	122x507	112x508
14	SWIVEL BAR	PT869R1	PT869TF1	PT869TF1	PT869H1
15	PIN	160x197	160x197	160x197	160x197
16	BED BRACKET GIB	PT859R1	PT859TF1	PT859TF1	PPT221H1
17	WASHER	PT857NR2	PT867TF2	PT857TF2	PT857H2
18	C.F. SCR. SLEEVE (5-7)	NLA	NLA	NLA	NLA
19	PIN	160x82	160x119	160x119	160x119
20	CAP SCREW	112x320	112x424	112x428	112x428
21	C.F. SCR. SLEEVE (5-7)	*AS858R2	*AS858TF2	*AS858TF2	*AS858H2
22	TAPER ATT. BED	PT860R1	PT860TF1	PT860TF1	PT860H1
23	TIE ROD	PT865R1	PT865T2	NLA	PT865H2
24	COLLAR SCREW	PT210R1	PT871T1	PT871F1	PT871H1
25	WASHER	PT875RT1	PT875RT1	PT875FH1	PT875FH1
26	TIE ROD BRKT.	*AS864R1	*AS864T1	NLA	*AS864H1
	(24-27-32-33-34)				
27	BABBITT	506x6	506x6	506x6	506x6
28	BED BRACKET	PT862R1	PT862RF1	PT862TF1	PT862H1
29	CAP SCREW	114x110	114x210	114x210	114x212
30	CAP SCREW	114x114	114x116	114x210	114x116
31	STOP	NLA	NLA	NLA	NLA
32	BRACKET CLAMP	PT863NR1	PT863TF1	PT863TF1	PT863H1
33	SET SCREW	126x624	126x624	126x624	126x628
34	JAM NUT	PT1072-2	PT1072-2	PT1072-2	PT1072-2
35	HEX NUT	PT1051NF1	PT1051NF1	PT1052FH1	PT1052FH1
36	CHIP GUARD	PT6730R2	PT6730T1	PT6730FH1	PT6730FH1
37	SCREW	103x8	103x8	103x8	103x8
38	PIN	160x19	160x19	160x19	160x19
39	METRIC GRAD. PLATE (37-38)	*AS2239R1	*AS2239TF1	*AS2239TF1	PT2339H1
40	LOCKING PIN	AS487R1	AS487TF1	****	AS478H1

PARTS LIST

FORM 923-E
ALL MODELS

HANDWHEEL COLLET ATTACHMENT

10".....11/16", 1" & 1-1/16" COL.
13".....11/16", 1" & 1-1/16 COL.
14 1/2", 3/4", 1" & 1-1/16" COL.
16" & 16/24",1" & 1-1/16" COL.

FOR 10" - 13" - 14 1/2" - 16" - 16/24" - 1" & 1-1/16" COLLET CAPACITY LATHES - FOR USE WITH #5 COLLET.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16/2 PART NO.
1	PHILLIPS SCREWS	104x8	104x8	104x8	104x224
2	HANDWHEEL	PT798RH2	PT798RH2	PT798RH2	PT798RH2
3	HANDWHEEL SLEEVE	PT797LH1	PT797LH1	PT797LH1	PT798LH1
4	PIN	160x49	160x49	160x49	160x49
5	THRUST BEARING	PT207NK1	PT207NK1	PT207NK1	PT207NK1
6	DRAW BAR SLEEVE	PT794LH1	PT794LH1	PT794LH1	PT794LH1
7	DRAW BAR	PT793L2	PT793T3	PT793F3	PT793H2
8	KNOCK OUT NUT	PT995LT1	PT995LT1	PT995FH1	PT995FH1
9	COLLET SLEEVE (12)	*AS795LH1	*AS795LH1	*AS795LH1	*AS795LH1
10	SPACER	**********	**********	**********	PT779H1
11	SPANNER WRENCH	PT3201-2	PT3201-2	PT3201-2	PT3201-2
12	COLLET SLEEVE KEY	PT493NH1	PT493NH1	PT493NH1	PT493NH1
13	DRAW BAR	PT3610L2	PT3610T2	NLA	PT793H2
14	DRAW BAR	PT3707L2	PT3707T2	NLA	PT3707H2
15	DRAW BAR ASSEMBLY (1-2 3-4-5-6-7-10)	*AS793L2	*AS793T3	NLA	*AS793H2
16	DRAW BAR ASSEMBLY (1-2-3-4-5-6-10-13)	*AS3610L2	*AS3610T2	NLA	*AS3610H2
17	DRAW BAR ASSEMBLY (1-2-3-4-5-6-10 -14)	*AS3707L3	*AS3707T2	NLA	*AS3707H2
18	COLLET SLEEVE (12)	*AS3632LH1	*AS3632LH1	*AS3632LH1	*AS3632LH1
19	KNOCK OUT NUT	PT3719LH1	PT3719LH1	PT3719LH1	PT3719LH1

FOR 10" & 13", 11/16" COLLET CAPACITY LATHES - FOR USE WITH #2 COLLET
FOR 14-1/2", 3/4" COLLET CAPACITY LATHES - FOR USE WITH #4 COLLET

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.
1	PHILLIPS SCREWS	104x8	104x8	104x8
2	HANDWHEEL	PT798RH2	PT798RH2	PT798RH2
3	HANDWHEEL SLEEVE	PT797RT1	PT797RT1	NLA
4	PIN	160x53	160x53	160x51
5	THRUST BEARING	PT207NK1	PT207NK1	PT207NK1
6	DRAW BAR SLEEVE	NLA	NLA	NLA
7	DRAW BAR	PT793R1	NLA	NLA
8	KNOCK OUT NUT	NLA	PT995T1	NLA
9	COLLET SLEEVE (12)	*AS795RT1	*AS795RT1	NLA
11	SPANNER WRENCH	PT3201-2	PT3201-2	PT3201-2
12	COLLET SLEEVE KEY	PT493NH1	PT493NH1	PT493NH1
13	DRAW BAR ASSEMBLY	NLA	NLA	NLA

PARTS LIST

FORM 923-E CON'T
ALL MODELS

COLLET RACK

10".....11/16", 1" & 1-1/16" COLLET
13"....11/16", 1" & 1-1/16" COLLET
14 1/2", 3/4", 1" & 1-1/16" COLLET
16" * 16/24", 1" & 1-1/16" COLLET

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

FOR 10", 13", 14 1/2", 16", 16/24", 1" AND 1-1/16" COLLET CAPACITY LATHES. FOR USE WITH #5 COLLET.

ITEM NO.	PART NAME	PART NO. 10"	PART NO. 13"	PART NO. 14-1/2"	PART NO. 16" & 16/24"
1	COLLET RACK	PT780L2	PT780TH2	PT780TH2	PT780TH2
2	RACK PIPE	PT497R1	PT497T1	PT497F1	PT497H1
3	DRAW BAR HOOK	PT781LH2	PT781LH2	PT781LH2	PT781LH2
4	CLAMP SCREW	PT210R1	PT871T1	PT871F1	PT871H1
5	BRACKET	PT782L2	PT782T3	PT782F2	PT782H2
6	BRACKET CLAMP	PT863NR1	PT863TF1	PT863TF1	PT863H1
7	SET SCREW	122x624	122x624	122x624	122x628
8	JAM NUT	PT1072-2	PT1072-2	PT1072-2	PT1072-2
9	SET SCREW	122x505	122x505	122x505	122x505
10	SQ. HD. SET SCREW	118x108	118x110	118x210	118x212

PARTS LIST

FORM 924-D
ALL MODELS

NEW STYLE

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

HANDLEVER COLLET ATTACHMENT

10"..... 11/16" & 1" COL.
13"..... 11/16" & 1" COL.
14-1/2"....3/4" & 1" COL.
16" & 16-24".....1" COL.

FOR 10" - 13" - 14-1/2" - 16" & 16/24", 1" COLLET CAPACITY LATHES. FOR USE WITH #5 COLLET

SEE PARTS LIST ON REVERSE SIDE

NEW STYLE

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16/24' PART NO.
1	YOKE LEVER	PT990LT2	PT990LT2	PT990FH1	PT990FH1
2	LEVER SCR. UPPER	PT492LH1	PT492LH1	PT492LH1	PT492LH1
3	NUT	PT494LH1	PT494LH1	PT494LH1	PT494LH1
4	OILER	155x5	155x5	155x5	155x5
5	YOKE BOLT	PT991RT1	PT991RT1	NLA	NLA
6	CL. STOP NUT	PT978LH1	PT978LH1	PT978LH1	PT978LH1
7	LEVER BRACKET	PT993R1	PT993T2	NLA	PT993H1
8	BRACKET STUD	PT997R1	PT997T1	NLA	PT997H1
9	DRAW BAR	PT975L3	PT975T2	PT975F2	PT975H3
10	COLLAR	PT981LH2	PT981LH2	PT981LH2	PT981LH2
11	SET SCREWS	PT489NH1	PT489NH1	PT489NH1	PT489NH1
12	SPRING	162x52	162x52	162x52	162x52
13	SHOE	PT984NH1	PT984NH1	PT984NH1	PT984NH1
14	CLUTCH SLEEVE	NLA	NLA	NLA	NLA
15	DRAW BAR SPRING	PT976LH1	PT976LH1	PT976LH1	PT976LH1
16	SPINDLE REV. GEAR	PT980L1	****	****	PT980H1
17	WOODRUFF KEY	106x404	****	****	106x605
18	KEY	106x404	****	****	106x606
18A	JAM NUT	PT1062-1	PT1062-1	NLA	NLA
18B	KEY	****	106x404	106x404	****
19	YOKE SEGMENT (29-30)	*AS988LH1	*AS988LH1	*AS988LH1	*AS988LH1
20	PIN	160x47	160x47	160x47	160x43
21	YOKE SPRING	PT983LH1	PT983LH1	PT983LH1	PT983LH1
22	BALL RETAINER	PT488LH2	PT488LH2	PT488LH2	PT488LH2
23	STEEL BALL	172x20	172x20	172x20	172x20
24	KNOCK OUT NUT	PT995LT1	PT995LT1	NLA	NLA
25	COLLET SLEVE (33)	*AS795LH1	*AS795LH1	*AS795LH1	*AS795LH1
26	LEVER SCR. LOWER	NLA	NLA	NLA	NLA
27	JAM NUT	PT1062-1	PT1062-1	PT1062-1	PT1062-1
28	STOP NUT SCREW	PT490NH1	PT490NH1	PT490NH1	PT490NH1
29	PIN	160x18	160x18	160x18	160x18
30	FELT WICK	256x11	256x11	256x11	256x11
31	YOKE CONE	PT986LH3	PT986LH3	NLA	PT986LH3
32	SPANNER WRENCH	PT3201-2	PT3201-2	PT3201-2	PT3201-2
33	SLEEVE KEY	PT493NH1	PT493NH1	PT493NH1	PT493NH1

OLD STYLE

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16/24" PART NO.
1	YOKE LEVER	NLA	NLA	PT990FH1	PT990FH1
2	LEVER SCR. UPPER	PT492NRT1	PT492NRT1	NLA	PT492LH1
3	NUT	PT494NRT1	PT494NRT1	NLA	PT494LH1
4	OILER	155x5	155x5	155x5	155x5
5	YOKE BOLT	PT991RT1	PT991RT1	NLA	NLA
6	CL. STOP NUT	NLA	NLA	NLA	PT978LH1
7	LEVER BRACKET	PT993R1	NLA	NLA	PT993H1
8	BRACKET STUD	PT997R1	PT997T1	NLA	PT997H1
9	DRAW BAR	NLA	NLA	NLA	NLA
10	COLLAR	NLA	NLA	NLA	PT981LH2
11	SET SCREWS	PT489NH1	PT489NH1	PT489NH1	PT489NH1
12	SPRING	162x52	162x52	162x52	162x52
13	SHOE	PT984NH1	PT984NH1	PT984NH1	PT984NH1
14	CLUTCH SLEEVE	NLA	NLA	NLA	NLA
15	DRAW BAR SPRING	NLA	NLA	NLA	PT976LH1
16	SPINDLE REV. GEAR	NLA	NLA	NLA	PT980H1
17	WOODRUFF KEY	106x605	NLA	106x605	106x605
18	KEY	106x404	106x605	106x404	106x606
18A	JAM NUT	NLA	139x28	139x32	NLA
19	YOKE SEGMENT (29-30)	NLA	NLA	*AS988LH1	*AS988LH1
20	PIN	160x47	160x47	160x4	160x43
21	YOKE SPRING	NLA	NLA	NLA	PT983LH1
22	BALL RETAINER	NLA	NLA	NLA	PT488LH2
23	STEEL BALL	172x20	172x20	172x20	172x20
24	KNOCK OUT NUT	NLA	PT995T1	NLA	NLA
25	COLLET SLEVE (33)	*AS795RT1	*AS795RT1	NLA	*AS795LH1
26	LEVER SCR. LOWER	NLA	NLA	NLA	NLA
27	JAM NUT	PT1058NR1	PT1058NR1	NLA	PT1062-1
28	STOP NUT SCREW	PT490NH1	PT490NH1	PT490NH1	PT490NH1
29	PIN	160x18	160x18	160x18	160x18
30	FELT WICK	256x11	256x11	256x11	256x11
31	YOKE CONE	NLA	NLA	NLA	NLA
32	SPANNER WRENCH	PT3201-2	PT3201-2	PT3201-2	PT3201-2
33	SLEEVE KEY	PT493NH1	PT493NH1	PT493NH1	PT493NH1

PARTS LIST

FORM 924-E
ALL MODELS

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

HANDLEVER COLLET ATTACHMENT

FOR 10", 13", 14½", 16" AND 16-24" LATHES WITH 1-1/16" COLLET CAPACITY

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16/24" PART NO.
1	YOKE LEVER	PT990LT2	PT990LT2	PT990FH1	PT990FH1
2	LEVER SCR. UPPER	PT492LH1	PT492LH1	PT492LH1	PT492LH1
3	NUT	PT494LH1	PT494LH1	PT494LH1	PT494LH1
4	OILER	155x5	155x5	155x5	155x5
5	YOKE BOLT	PT991RT1	PT991RT1	NLA	174x8
6	BRACKET STUD	PT997R1	PT997T1	174x8	PT997H1
7	BRACKET	PT993R1	PT993T2	NLA	PT993H1
8	SHOE	PT4809RH1	PT4809RH1	PT4809RH1	PT4809RH1
9	SET SCREW	120x903	120x903	120x903	120x903
10	WRENCH	173x6	173x6	173x6	173x6
11	SET SCREWS	126x503	126x503	126x503	126x503
12	SHOE	PT1078RH1	PT1078RH1	PT1078RH1	PT1078RH1
13	YOKE SEGMENT (33-34)	*AS988LH1	*AS988LH1	*AS988LH1	*AS988LH1
14	PIN	160x47	160x47	160x47	160x47
15	SNAP RING	PT983LH1	PT983LH1	PT983LH1	PT983LH1
16	DRAW BAR	PT975L3	PT975T4	NLA	PT975H3
17	DRAW BAR	PT3609L3	PT3609T3	NLA	PT975H3
18	DRAW BAR	NLA	PT3706T3	NLA	PT3706H3
19	COLLAR	PT981LH2	PT981LH2	PT981LH2	PT981LH2
20	BALL RETAINER	PT488LH2	PT488LH2	PT488LH2	PT488LH2
21	STEEL BALL	172x20	172x20	172x20	172x20
22	CLUTCH SLEEVE	PT979L3	PT979TF4	PT979TF4	PT979H3
23	KEY	106x404	106x404	106x404	106x605
24	SNAP RING	PT976LH1	PT976LH1	PT976LH1	PT976LH1
25	SPINDLE REVERSE GEAR	PT980L1	****	****	PT980H1
26	KEY	106x404	****	****	106x606
27	YOKE LEVER SCREW - LOWER	PT994LT1	PT994LT1	PT994FH1	PT994FH1
28	NUT	PT1062-1	PT1062-1	PT1062-1	PT1062-1
29	NUT	PT1062-1	PT1062-1	170x306	170x306
30	CLUTCH STOP NUT (8-9)	*AS978LH3	*AS978LH3	*AS978LH3	*AS978LH3
31	LOCK COLLAR (11-12)	*AS998LH1	*AS998LH1	*AS998LH1	*AS998LH1
32	PIN	PT1837-1	PT1837-1	PT1837-1	PT1837-1
33	FELT WICK	256x11	256x11	256x11	256x11
34	PIN	160x18	160x18	160x18	160x18
35	CLUTCH YOKE CONE	PT986LH3	PT986LH3	PT986LH3	PT986LH3
36	KNOCK OUT NUT	PT3719LH1	PT3719LH1	PT3719LH1	PT3719LH1
37	KNOCK OUT NUT	PT995LT1	PT995LT1	PT995FH2	PT995FH2
38	SPANNER WRENCH	PT3201-2	PT3201-2	PT3201-2	PT3201-2
39	KEY	PT493NH1	PT493NH1	PT493NH1	PT493NH1
40	COLLET SLEEVE (39)	*AS795LH1	*AS795LH1	*AS795LH1	*AS795LH1
41	COLLET SLEEVE (39)	*AS3632LH1	*AS3632LH1	*AS3632LH1	*AS3632LH1

PARTS LIST

FORM 924-E CON'T
10" MODEL

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

THREAD DIAL

10"....11/16" & 1" COLLET

ITEM NO.	PART NAME	10" (11/16" & 1" COLLET) PART NO.
1	INDICATOR DIAL	PT888R1
2	SHOE	PT1078RH1
3	SET SCREW	122x505
4	OILER	155x16
5	INDICATOR SHAFT	PT891R2
6	INDICATOR FRAME	PT886R1
7	WASHER	161x11
8	CAP SCREW	112x112
9	PIN	160x52
10	IND. WORM WHEEL	PT887NR2
11	SET SCREW	120x6

INSTRUCTIONS FOR INSTALLING THREAD DIAL ON 13", 14½" & 16" LATHES

1. Loosen set screw "B" enough to allow the shaft to turn.

2. Install the thread dial on the side of the apron with screw "A" just snug. Be sure the spacer is between apron and dial frame as illustrated. Position worm gear so that you may reach screw "B" with a wrench in step 4.

3. Mesh the worm gear with the lead screw and tighten screw "A". Close the lead screw half nut.

4. The witness mark and dial must coincide. Move the dial from the top by hand or, if necessary, lightly rap with a small tool in one of the engraved lines. Tighten screw "B" securely.

HOW TO USE THREAD DIAL

For all even threads close lead screw half nut on any line on the dial. For all odd threads close the lead screw half nut on any numbered line.

For all threads involving ½ thread, such as 11½, close lead screw half nut on any ½ revolution of the dial.

For more detailed instructions on thread cutting see instruction book HOW TO RUN A LATHE, chapter 10.

PARTS LIST

FORM 1938 CON'T
13", 14 1/2", 16" MODELS

ITEM NO.	13", 14 1/2" & 16" PART NO.	PART NAME
1	155x15	OILER
2	PT6618GJ3	DIAL
3	PT6617GJ3	SHAFT
4	PT886TH2	FRAME
5	114x236	SOC. HD. CAP SCREW 3/8-16 x 2-1/4
6	PT890TH1	SPACER
7	AS7458M1	COLLAR (8)
8	120x4	SET SCREW 1/4-20 x 1/4
9	AS887TH1	WORM GEAR (10)
10	120x6	SET SCREW 1/4-20 x 3/8

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PAR-ENTHESIS AFTER PART NAME.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER 'MUST' ACCOMPANY ORDER.

PARTS LIST

FORM 939-C
ALL MODELS

MILLING ATTACHMENT
ENGLISH AND METRIC
FOR 10", 13", 14 1/2", 16", & 16/24"

ITEM NO.	PART NAME	10" PART NO.
1	HANDLE	PT1482
2	CRANK (1)	*AS830NH1
3	GRAD COLLAR - ENGLISH (5-6)	*AS829NT1
4	GRAD. COLLAR - METRIC (5-6)	NLA
5	SET SCREW	122x103
6	BRASS PUNCHING	PT1078NK1
7	PIN	160x46
8	FEED SCREW - ENGLISH (7-14-15-17)	NLA
9	FEED SCREW - METRIC (7-14-15-17)	NLA
10	CLAMPING SCREW	PT836NR1
11	VISE (20-21)	*AS827R1
12	CAP SCREW	111x14
13	"V" BLOCK	PT831R1
14	COLLAR	PT833NT1
15	TAPER PIN	168x206
16	FEED NUT - ENGLISH	PT828NR1
17	FEED NUT - METRIC	NLA
18	SWIVEL BOLT	PT834R1
19	PIN	160x19
20	SET SCREW	122x512
21	VISE GIB	PT835R1
22	WRENCH	PT2455
23	CAP SCREW	112x120
24	WASHER	161x12
25	HEX. NUT	PT1071-3
26	WASHER	161x27
27	BASE	PT825R1
28	SADDLE (18-19)	NLA
29	FEED SC. ENGLISH (7-14-15-16)	****
30	FEED SC. METRIC (7-14-15-17)	****
31	SADDLE (18-19)	****

ITEM NO.	PART NAME	13" PART NO.	14-1/2" PART NO.	16" & 16/24" PART NO.
1	HANDLE	PT1482	PT1482	PT1482
2	CRANK (1)	*AS830NH1	*AS830NH1	*AS830NH1
3	GRAD COLLAR - ENGLISH (5-6)	*AS829NT1	NLA	NLA
4	GRAD. COLLAR - METRIC (5-6)	NLA	NLA	NLA
5	SET SCREW	122x103	122x104	122x104
6	BRASS PUNCHING	PT1078NK1	PT1078NK1	PT1078NK1
7	PIN	160x46	160x46	160x46
8	FEED SCREW - ENGLISH (7-14-15-17)	NLA	NLA	NLA
9	FEED SCREW - METRIC (7-14-15-17)	NLA	NLA	*AS2242FH1
10	CLAMPING SCREW	PT836T1	PT836FH1	PT836FH1
11	VISE (20-21)	NLA	NLA	NLA
12	CAP SCREW	114x114	114x126	114x120
13	"V" BLOCK	PT831T1	PT831FH1	PT831FH1
14	COLLAR	PT833NT1	PT833FH1	PT833FH1
15	TAPER PIN	168x206	168x208	168x208
16	FEED NUT - ENGLISH	PT828T1	PT828FH1	PT828FH1
17	FEED NUT - METRIC	NLA	NLA	NLA
18	SWIVEL BOLT	PT834T1	PT834FH1	PT834FH1
19	PIN	160x45	160x45	160x45
20	SET SCREW	122x514	122x518	122x518
21	VISE GIB	PT835T1	PT835FH1	PT835FH1
22	WRENCH	PT2455	PT2455	PT2455-1
23	CAP SCREW	112x424	112x428	112x428
24	WASHER	161x27	161x30	161x30
25	HEX. NUT	PT1071-4	PT1071-2	PT1071-2
26	WASHER	161x36	161x42	161x42
27	BASE	PT825T1	NLA	PT825H2
28	SADDLE (18-19)	NLA	NLA	NLA
32	WRENCH (SINGLE END)	PT2454-2	PT2454-2	PT2454-2
33	CAP SCREW SOCKET HD.	114x428	114x428	114x424
34	SOCKET HD. WRENCH	173x13	173x13	173x13

PARTS LIST

FORM 940-A
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER

FOUR POSITION CARRIAGE STOP
FOR 10", 13", 14 1/2", 16", 16/24", & 2H

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	PART NO. 10" & 13"	PART NO. 14-1/2", 16",16/24" &2H
1	STOP SCREW	PT1219NH1	PT1219NH1
2	TAKE UP NUT	PT1218NH1	PT1218NH1
3	SET SCREW	122x108	122x108
4	FRAME	NLA	NLA
5	OILER	155x17	155x17
6	COIL SPRING	162x54	162x54
7	STEEL BALL	172x12	172x12
8	SPINDLE (2-9-10)	*AS1217NH1	*AS1217NH1
9	BINDER SHOE	PT1080NK1	PT1080NK1
10	SET SCREW	126x505	126x505
11	CLAMP (12-13)	*AS1216RT1	*AS1216FH1
12	JAM NUT	139x23	129x25
13	SET SCREW	122x524	122x624
14	WASHER	161x12	161x16
15	CAP SCREW	114x120	114x228
16	STOP SCREW		

PARTS LIST

FORM 940-A CON'T
10", 13", 16" MODELS

SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER "MUST" ACCOMPANY ORDER

FOUR POSITION CROSS SLIDE STOP
FOR 10", 13", 16", SERIES 900, 1000 AND 2H

ITEM NO.	PART NAME	PART NO. 10"	PART NO. 13"	PART NO. 16" & 2H
1	CAP SCREW	114x116	114x120	114x120
2	BUSHING	NLA	NLA	NLA
3	STOP SCREW NUT	PT811NH1	PT811NH1	PT811NH1
4	TAKE UP NUT	NLA	NLA	NLA
5	FRAME	NLA	NLA	NLA
6	SET SCREW	122x102	122x102	122x102
7	STEEL BALL	172x12	172x12	172x12
8	COIL SPRING	162x1	162x1	162x1
9	SET SCREW	126x505	126x505	126x505
10	SPINDLE (4-11-12)	*AS1221NH1	*AS1221NH1	*AS1221NH1
11	SHOE	PT1078NK1	PT1078NK1	PT1078NK1
12	SET SCREW	120x904	120x904	120x904
13	CAP SCREW	112x132	112x224	112x428
14	WASHER	161x63	161x16	116x26
15	STOP SCREW	PT1224NH1	PT1224NH1	PT1224NH1

PARTS LIST

FORM 941-A CON'T
ALL MODELS

REGULAR FOLLOWER REST
FOR 10", 13", 14 1/2", 16", 16/24" 2H

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10" PART NO.	13" PART NO.	14-1/2", 16", 16/24" & 2H PART NO.
1	HEX. CAP SCREW	112x116	112x220	112x220
2	WASHER	161x12	161x17	161x17
3	JAW	PT128NR1	PT128T1	PT128FH1
4	SQ. HD. CAP SCREW	118x128	———	———
4A	SQ. HD. CAP SCREW	118x136	118x240	118x248
5	FRAME	NLA	———	———
5A	FRAME	NLA	———	———
5B	FRAME	———	NLA	———
5C	FRAME	———	———	NLA
5D	FRAME	———	———	NLA
5E	FRAME	———	———	NLA
6	HEX. CAP SCREW	112x132	112x228	112x432
7	WASHER	161x63	161x64	161x65

PARTS LIST

FORM 941-A CON'T
ALL MODELS

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER

TELESCOPING JAW FOLLOWER REST

10", 13", 14½", 16", 16/24" & 2H

*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PAR-ENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	10"	13"	14-1/2", 16", 16/24" & 2H
1	SNAP RING	PT135NR1	PT135T1	PT135FH1
2	PIN	160x25	160x54	160x55
3	SHOE	PT1082NT1	PT1082NT1	PT1082NT1
4	ADJUSTMENT KNOB (1-2-3-6)	*AS132NR1	*AS132T1	*AS132FH1
5	ADJ. KNOB SLEEVE	PT131NR1	PT131T1	PT131FH1
6	JAW ADJ. SCREW	PT133NR1	PT133T1	PT133FH1
7	JAW	PT129NR1	PT129T1	PT129FH1
8	KEY	PT134NR1	PT134TH1	PT134TH1
9	LOCK SCREW	PT137NR1	PT137TH1	PT137TH1
10	PIN	160x46	160x47	160x47
11	FRAME (5-10)	*AS120N1	****	****
11A	FRAME (5-10)	*AS120K1	****	****
11B	FRAME (5-10)	*AS120R1	****	****
11C	FRAME (5-10)	****	*AS120T1	****
11D	FRAME (5-10)	****	****	NLA
11E	FRAME (5-10)	****	****	*AS120H1
11F	FRAME (5-10)	****	****	NLA
12	WASHER	161x63	161x17	161x65
13	CAP SCREW	112x132	112x228	112x432

PARTS LIST

FORM 942-B
10" & 13" MODELS

STEADY REST FOR 10" AND 13" LATHES

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER "MUST" ACCOMPANY ORDER.

PARTS ILLUSTRATED ON THIS PAGE ARE FOR UNIT CODE NOS. SRD101R, AND SRD101T.

ITEM NO.	10" PART NO.	13" PART NO.	DESCRIPTION	QUAN. REQ'D.
			COMPLETE ASSY. ALL PARTS SHOWN	1
	CL2400R		COMPLETE ASSY. ALL PARTS SHOWN	1
		CL2400T	COMPLETE ASSY. ALL PARTS SHOWN	1
1	PT135NR1	PT135T1	RETAINING RING	3
2	160x25	160x54	STRAIGHT PIN	3
3	*AS132NR	*AS132T1	ADJUSTMENT KNOB ASSY. (1-2-4-6)	3
4	PT1082NT	PT1082NT	SHOE	3
5	PT131NR1	PT131T1	KNOB SLEEVE	3
6	PT133NR1	PT133T1	JAW ADJUSTING SCREW	3
7	PT129NR1	PT129T1	JAW	3
8	PT137NR1	PT137TH1	KEY	3
9	PT134NR1	PT134TH1	LOCK SCREW	3
10	138x31	138x35	HEX NUT	1
11	167x6	167x8	WASHER	1
12	160x142	PT1804	STRAIGHT PIN	1
13	PT127R1	PT127T1	CLAMP	1
14	143x309	143x412	BOLT	1
15	138x25	138x27	HEX NUT	1
16	162x12	161x17	WASHER	1
17	PT116NR1	PT116T1	STEADY REST TOP-ORDER ITEM 19	1
18	*AS217NR	*AS217T1	LOCK BOLT ASSY. (15-16-20)	1
19	PA115R1	PA115T1	STEADY REST BASE ASSY.	1
			(5-12-17-*18)	
20	160x56	160x60	STRAIGHT PIN	1
21	160x46	160x47	STRAIGHT PIN	3

PARTS LIST

FORM 943-B
16" MODELS

EXTRA LARGE STEADY REST

FOR 16" AND 16/24"

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER 'MUST' ACCOMPANY ORDER.

PARTS ILLUSTRATED ON THIS PAGE ARE FOR UNIT CODE NOS. SLR102H, SLR102V

ITEM NO.	PART NO. 16"	DESCRIPTION	QUAN
	CL2266H	NLA	
	CL2266V	NLA	
1	PT131FH1	ADJUSTMENT KNOB SLEEVE	3
2	159x14	ROLL PIN 3/16 x 1.5	3
3	PT132FH1	ADJUSTMENT KNOB	3
4	160x55	STRAIGHT PIN 3/16 x 1	3
5	PT1082FH1	BRASS SHOE	3
6	PT135FH1	SNAP RING	3
7	PT133FH1	JAW ADJUSTING SCREW	3
8	PT963H2	JAW 5.25" LONG	3
8	PT6728GJ1	JAW 4-3/8" LONG	3
9	160x156	STRAIGHT PIN 3/8 x 2	2
10	138x39	HEX NUT	1
11	167x9	WASHER	1
12	PT127H1	CLAMP	1
13	143x514	BOLT 3/4-10 x 3.5 FOR 16" LATHE	1
13	143x534	BOLT 3/4-10 x 6 FOR 16/24" LATHE	1
14	PT10218GJ1	NLA	1
15	PT137TH1	KEY	3
16	PT6729GJ1	THUMB SCREW	3
17	PT1072-5	HEX NUT 1/2 x 13	1
18	167x6	WASHER	1
19	PT6691GJ1	LOCK BOLT	1
20	*AS10220H1	NLA	1
21	160x213	STRAIGHT PIN 1/2 x 2	1
22	PT962H2	RAISING BLOCK FOR 16/24" LATHE	1

* AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

PARTS LIST

FORM 943-B CON'T
16" MODELS

REGULAR STEADY REST FOR 16" and 16/24" LATHES

ITEM NO.	PART NO. 16"	DESCRIPTION	QUAN
	CL2400H	STEADY REST COMPLETE FOR 16" LATHE	
	CL2400V	STEADY REST COMPLETE FOR 16/24" LATHE	
1	PT135FH1	SNAP RING	3
2	160x55	STRAIGHT PIN 3/16 x 1	3
3	*AS132FH1	ADJUSTMENT KNOB (1,2,4,6)	3
4	PT1082FH1	SHOE	3
5	PT131FH1	KNOB SLEEVE	3
6	PT133FH1	JAW ADJUSTMENT SCREW	3
7	PT6728GJ1	JAW 4-3/8" LONG	3
8	PT137TH1	KEY	3
9	PT134TH1	LOCK SCREW	3
10	167x9	WASHER	1
11	138x39	HEX NUT 3/4-10	1
12	PT1805	PIN	1
13	160x47	STRAIGHT PIN 3/16 x 7/16	3
14	138x27	HEX NUT 3/8-16	1
15	161x18	WASHER	1
16	PT116FV1	STEADY REST TOP - ORDER ITEM 18	1
17	*AS118FH1	LOCK BOLT (14-15-19)	1
18	*PA115HV1	STEADY REST BASE (5-12-16-*17)	1
19	160x97	STRAIGHT PIN 1/4 x 1-9/16	1
20	PT127H1	CLAMP	1
21	143x514	BOLT FOR 16" LATHE 3/4-10 x 6	1
21	143x534	BOLT FOR 16/24" LATHE 3/4-10 x 6	1
22	PT2003H1	RAISING BLOCK FOR 16/24" LATHE	1

PARTS ILLUSTRATED ON THIS PAGE ARE FOR UNIT CODE SRD101H, AND SRD101V

SERIAL NO. OF LATHE AND UNIT CODE NO. MUST ACCOMPANY ORDER.

***AVAILABLE ONLY AS ASSEMBLY INCLUDED PARTS ARE IN PARENTHESIS AFTER PART NAME.**

PARTS LIST

FORM 979
13" MODEL

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER 'MUST' ACCOMPANY ORDER.

• AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

13" TURRET BASE

ITEM NO.	PART NAME	PART NO.	NO. REQ'D
1	CAP SCREW	112x436	4
2	CLAMP	PT3003T1	2
3	SET SCREW	121x320	4
4	PIN	PT1815	1
5	INDEX LEVER SPRING	PT2028T1	1
6	HEX WRENCH	173x6	1
7	SET SCREW	120x4	2
8	SHOE	PT1078RH1	2
9	CAP SCREW	114x34	1
10	SIDE GIB	PT3036T1	2
11	GIB SCREW	PT219TH1	2
12	HEX WRENCH	173x9	1
13	FEED STOP SHAFT (16)	NLA	1
14	SPRING	162x59	1
15	STOP SCREW STOP (16-17)	*AS3007T1	1
16	TAPER PIN	168x410	1
17	STRAIGHT PIN	160x39	1
18	CAP SCREW	114x712	4
19	TURNSTILE SHAFT BUSHING (18)	*AS3453T1	1
20	LOCK BOLT CAM	PT3020T1	1
21	STRAIGHT PIN	160x74	1
22	TURRET BASE	NLA	
23	INDEX LEVER PIN	PT3027T1	1
24	STRAIGHT PIN	169x236	1
25	TAPER PIN	168x208	1
26	TURRET INDEXING LEVER	*AS3026T1	1
	(4-5-23-25)		
27	HORIZONTAL GIB, FRONT (28)	*AS3441T1	1
28	FELT	NLA	4
29	SOC. HD. CAP SCREW	114x216	1
30	HEX WRENCH	173x12	1
31	CAP SCREW	PT3136T1	7
32	CAP SCREW	114x228	2
33	WASHER	PT1684-1	2
34	BALL OILER	155x14	1
35	RELEASE CAM (34)	NLA	1
36	HORIZONTAL GIB, REAR (28-37)	NLA	1
37	OILER	155x21	1

PARTS LIST

FORM 979 CON'T
13" MODEL

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER 'MUST' ACCOMPANY ORDER. SEE TURRET BASE SHEET FOR LOCATION OF UNIT CODE NUMBER.

* AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

13" TURNSTILE-HAND OPERATED

ITEM NO.	PART NAME	13" PART NO.	NO. REQUIRED
1	BAKELITE BALL	PT406KFH1	4
2	TURNSTILE HANDLE (1-4)	PT3044T1	4
3	TURNSTILE NUT	NLA	1
4	TAPER PIN	168x409	4
5	TURNSTILE HUB (4-6-7-8)	NLA	1
6	PIN	160x80	1
7	HD'LESS CUP PT. SET SCREW	122x605	1
8	HOLL HD CUP PT. SET SCREW	120x206	1
9	KEY (ONE END ROUND)	164x11	1
10	TURNSTILE SHAFT (HAND FEED) (9-11)	NLA	1
11	WOODRUFF KEY	106x606	1
12	GITS OILER	155x20	1
13	TURNSTILE BRACKET (12)	NLA	1
14	DOWEL	153x5	2
15	HEX HD. CAP SCREW	112x416	2
16	TAPER PIN	168x212	1
17	RACK PINION (16)	*AS3034T1	1
18	TURNSTILE SHAFT COLLAR (19)	*AS3454T1	1

PARTS LIST

FORM 980-B
13" MODEL

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER 'MUST' ACCOMPANY ORDER. SEE TURRET BASE SHEET FOR LOCATION OF UNIT CODE NUMBER.

*AVAILABLE ONLY AS SUBASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

13" TURRET RAM AND HEAD
UNIT CODE NUMBERS PFT101T AND HFT101T ONLY

ITEM NO.	PART NAME	PART NO.	NO. REQD.
1	CLAMP FINGER SPRING RETAINER	PT3458T1	1
2	CLAMP FINGER SPRING	PT3014H1	1
3	CLAMP FINGER	PT3447T1	1
4	TURRET RAM	NLA	
5	HEX NUT	NLA	
6	LOCK WASHER	180x310	1
7	CAP SCREW	114x710	1
8	TURRET HEX GEAR	PT3023T1	1
9	INDEX BUSHING (7-8)	*AS3442T1	1
10	BALL	172x12	57
11	LOWER CAM	PT3443T1	1
12	UPPER CAM	PT3444T1	1
13	SCREW	103x610	5
14	PIVOT POST	PT3450T2	1
15	BEARING	PT442FH1	1
16	PIVOT POST NUT	*AS3467T1	1
17	SET SCREW	120x903	1
18	LOCK BOLT INDEXING BUSHING	PT3013H2	6
19	HEX TURRET (18-20-21-22-23-24	NLA	1
	25-26-27-28)		
20	BALL OILER	155x14	1
21	CAP SCREW	114x12	6
22	CLAMPING LEVER	PT3006H2	1
23	LOCK COVER	PT3465T1	1
24	LOCK SHAFT (25)	*AS3455T1	3
25	BALL OILER	155x16	1
26	CAP SCREW	PT2902T1	6
27	BINDER BOLT WASHER	PT3037T1	6
28	TURRET BINDER	PT3010T1	6
29	LOCK BOLT	PT3011T1	1
30	LOCK BOLT SPRING	PT3014H1	1
31	STRAIGHT PIN	PT3459T1	1
32	LOCK BOLT LEVER (31-33-35)	*AS3016T1	1
33	SPRING	162x58	1
34	LOCK BOLT LEVER SPRING	PT3452T1	1
35	PIN	160x270	1
36	STRAIGHT PIN	PT1838-1	1
37	ROLLER BRACKET (34-35-36-38)	*AS3451T1	1
38	LOCK BOLT ROLLER	PT3017T1	1
39	BALL OILER	155x17	2
40	CAP SCREW	114x34	4
41	STOP SCREW INDEX SHAFT (47-48-*54)	*AS3030T1	1
42	STRAIGHT PIN	160x29	2
43	SET SCREW	120x105	6
44	SHOE	PT1084H1	6
45	ORDER ITEM #50	NLA	
46	STOP SCREW	PT3029T1	6
47	WASHER	161x66	1
48	HEX NUT	PT1071-1	1
49	WRENCH	173x7	1
50	STOP SCREW INDEX (42-43-44-45-50A)	*AS3004T1	1
50A	TAPER PIN	168x206	
51	RACK	PT3041T1	1
52	LOCK BOLT SPRING RETAINER	NLA	1
53	LOCK BOLT BUSHING	PT3012T1	1
54	STOP SCREW GEAR (55)	*AS3024T1	1
55	TAPER PIN	168x307	1
56	RELEASE FINGER	PT3448T1	1
57	RELEASE FINGER ROLLER	PT3446T1	1
58	PIN	PT3460T1	1
59	WRENCH	PT2461-3	1
60	WRENCH	AS3073T1	1
61	SET SCREW	120x916	1

PARTS LIST

FORM 981
13" MODEL

* AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER 'MUST' ACCOMPANY ORDER. SEE TURRET BASE SHEET FOR LOCATION OF UNIT CODE NUMBER.

13" TURRET APRON

ITEM NO.	PART NAME	PART NO.	NO. REQ'D
1	KNOCK OUT SHAFT BUSHING	PT3072H1	1
2	SPRING	162x20	1
3	FINISHED WASHER	161x26	1
4	COTTER PIN	170x206	1
5	KNOCK OUT SHAFT	PT3032T1	1
6	BEARING	PT3042T1	2
7	STRAIGHT PIN	160x117	2
8	STATIONARY CAM (7)	*AS3068H1	1
9	REVOLVING CAM (10)	*AS4756T1	1
10	CLUTCH OPERATING PIN	PT4739T1	1
11	SPACER COLLAR	PT4768T1	1
12	FELT WICK	256x3	1
13	CLUTCH GEAR (12)	PT3058T1	1
14	CLUTCH RELEASE	PT3060H1	2
15	SPRING	162x34	2
16	CLUTCH CONE (14-15)	*AS3062T1	1
17	TURNSTILE SHAFT (18)	*AS2033T1	1
18	WOODRUFF KEY #9	106x606	2
19	OILER	155x4	1
20	PLUG	PT4770T1	1
21	BALL	172x20	1
22	SPRING	162x3	1
23	GEAR SHIFTER LEVER (21-22-24)	NLA	1
24	TAPER PIN	168x410	1
25	POWER TURRET FEED PLATE (26)	PT3462T1	1
26	DRIVE SCREW	130x3	8
27	TURRET APRON	NLA	
28	BUSHING	PT3085T1	1
29	RACK PINION (32)	*AS3034T1	1
30	SET SCREW	120x4	1
31	TURNSTILE SHAFT COLLAR (30)	*AS3454T1	1
32	TAPER PIN	168x212	1
33	DIRECTION FEED PLATE (26)	PT3463T1	1
34	PLUG	PT4946-2	2
35	PIPE PLUG	PT1511	1
36	CAP SCREW	114x608	6
37	"O" RING	PT4733T1	1
38	WORM	PT3049T1	1
39	WOODRUFF KEY	106x404	1
40	THRUST BEARING (36)	PT4761TT1	1
41	WORM SHAFT GEAR	PT4743T1	1
42	JAM NUT	PT1072-6	1
43	LEAD SCREW KEY	PT4754T1	1
44	LEAD SCREW GEAR (43)	PT4758T1	1
45	THRUST WASHER	PT4766T1	1
46	GEAR BUSHING	PT4753T1	1
47	CAP SCREW	112x224	2
48	WASHER	161x64	2
49	END BRACKET (47-48)	PT4731TT1	1
50	THRUST WASHER	PT4765T1	1
51	LEAD SCREW GEAR NUT (52-53)	PT4755T1	1
52	BINDER SHOE	PT1077TH1	1
53	HOLL HD. CUP PT. SET SCREW	120x4	1
54	IDLER GEAR (58-59)	NLA	1
55	BRACKET COVER STUD	PT4745T1	1
56	END BRACKET COVER	PT4732T1	1
57	WING NUT	141x19	1
58	TRU-ARC RETAINING RING	165x50	2
59	IDLER GEAR BUSHING	PT4764T1	2
60	IDLER GEAR (58-59)	NLA	1
61	GEAR STUD	PT4748T1	2
62	HEX HD. CAP SCREW	112x116	1
63	FINISHED WASHER	161x66	1
64	IDLER GEAR BRACKET (58-61)	NLA	1
65	OIL PUMP TUBE ASSEMBLY	NLA	1
66	SPRING	162x56	1
67	BALL	172x12	1
68	OIL PUMP (65-66-67-69-70-71-72)	NLA	1
69	STRAIGHT PIN	169x241	1
70	BALL	172x14	1
71	SPRING	162x29	1
72	OIL PUMP PLUNGER	PT3090T1	1
73	SOC. HD. CAP SCREW	114x16	4
74	WORM GEAR	PT3052T1	1
75	DRIVE GEAR (73-76)	PT4750T1	1
76	TAPER PIN	168x410	1
77	SPACER	PT4767T1	1
78	DRIVE GEAR	PT4737T1	1
79	WORM GEAR SHAFT (83)	PT3069T1	1

ITEM NO.	PART NAME	PART NO.	NO. REQ'D
80	SPACER	PT4769T1	2
81	CAM GEAR (82)	PT4749T1	1
82	TAPER PIN	168x409	1
83	WOODRUFF KEY	106x404	1
84	TAPER PIN	168x410	1
85	GEAR PINION (84)	PT4751T1	1
86	SLIDING GEAR SHAFT (84-88)	PT4744T1	1
87	SLIDING GEAR ASSEMBLY	PT4740T1	1
88	TRU-ARC RING	165x75	1
89	FINISHED WASHER	161x43	1
90	GEAR SHIFTED ARM	PT4735T1	1
91	HEX HD. CAP SCREW	112x420	2
92	PIN	153x5	2

PARTS LIST

FORM 945-B
ALL MODELS

ITEM NO.	PART NO.	PART NAME	NO. REQ'D
1	SE7312	CONNECTOR	1
2	SE4642	SWITCH	1
3	250x6	CORD SET	1
4	250x8	CORD SET	1
5	PT1302NH1	1/4 FLEX TUBING	1
6	192x2	1/4 BRASS COCK	1
7	PT1323NH1	PIPE 1/4 x 10"	1
8	PX1287NH2	DRAIN	1
9	PT1289NH1	GASKET	1
10	PT1294NH2	WASHER	1
11	PT1300-415	RETURN PIPE	1
	PT1300-4155	15-1/2" LONG	
	PT1300-4195	19-1/2" LONG	
	PT1300-421	21" LONG	
	PT1300-425	25" LONG	
12	PT1283NH1	PIPE BRACKET	1
13	160x52	PIN	1
14	PT1324RT1	PIPE 1/4x13	1
15	152x50	1/4 ELBOW	1
16	PT134NR1	LOCK SCREW	1
17	112x14	HEX. CAP SCREW	1
18		1/2 PIPE	1
19		1/2 x 3/8 ELBOW	1
20	PT1341-2	RESERVOIR FOR 9", 10-K & 10" LATHES	
20A	PT1345-1	RESERVOIR FOR 13", 14-1/2" & 16" LATHES	
21	181x32	HOSE 1/2"	1
22	192x4	HOSE CLAMP	2
23	NLA	SPLASH GUARD REAR	1
24	PT472T2	"	
25	NLA	"	
26	PT472H3	"	
27	NLA	SPLASH GUARD FRONT	1
28	PT471T2	"	
29	NLA	"	
30	PT471H3	"	
31	PT473R1	WATER SEALS REAR	1
32	PT473T1	"	
33	NLA	"	
34	PT473F3	"	
35	PT474R1	WATER SEALS FRONT	1
36	PT474T1	"	
37	NLA	"	
38	PT474H1	"	
39	PT1305NH1	SUPPORT CLEVIS	1
40	PT466NH1	GASKET	1
41	103x608	MACHINE SCREW	2
42	NLA	COTTER PIN	1
43	NLA	SUPPORT ROD	1
44	139x31	NUT 1/2-13	2
45	182x304	LOCK WASHER	1
46	161x26	FIN. WASHER	2