

DEPARTMENT
OF THE ARMY TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT
AND GENERAL SUPPORT MAINTENANCE
MANUAL INCLUDING REPAIR PARTS LIST

FOR

LATHE, ENGINE: 9-INCH SWING
MODEL CL 670Z
(SOUTH BEND LATHE) (3416-00-235-0551)

HEADQUARTERS,
DEPARTMENT OF THE ARMY
DECEMBER 1980

TECHNICAL MANUAL }
No. 9-3416-235-14&P }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 19 December 1980

**OPERATOR'S, ORGANIZATIONAL, DIRECT
SUPPORT AND GENERAL SUPPORT
MAINTENANCE MANUAL INCLUDING REPAIR PARTS LIST
FOR
LATHE, ENGINE: 9-INCH SWING
MODEL CL 670Z
(NSN 3416-00-235-0551)**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished directly to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this lathe is issued.

Manufactured by: South Bend Lathe
400 West Sample Street
South Bend, Indiana 46621

Procured under Contract No. DAAA09-77-C-6144

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

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INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number - 55985
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number - Model CL 670Z
- 5 - Manufacturer's Serial Number (End Item)
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 55985 followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:
Noun: (nomenclature of repair part)
For: NSN: 3416-00-235-0551
Manufacturer: South Bend Lathe, Inc.

Model: CL 670Z
Serial: (of end item)

Any other pertinent information such as Frame Number,
Type, Dimensions, etc.

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10-K HORZ. DRIVE

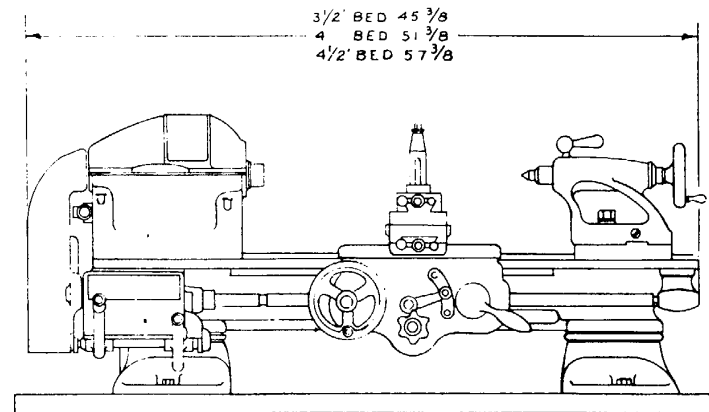
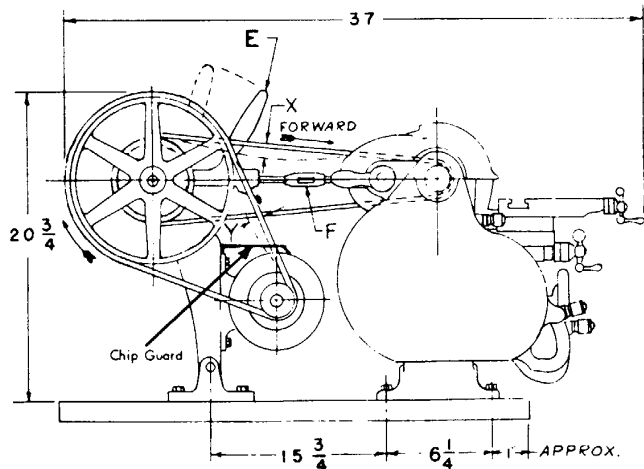
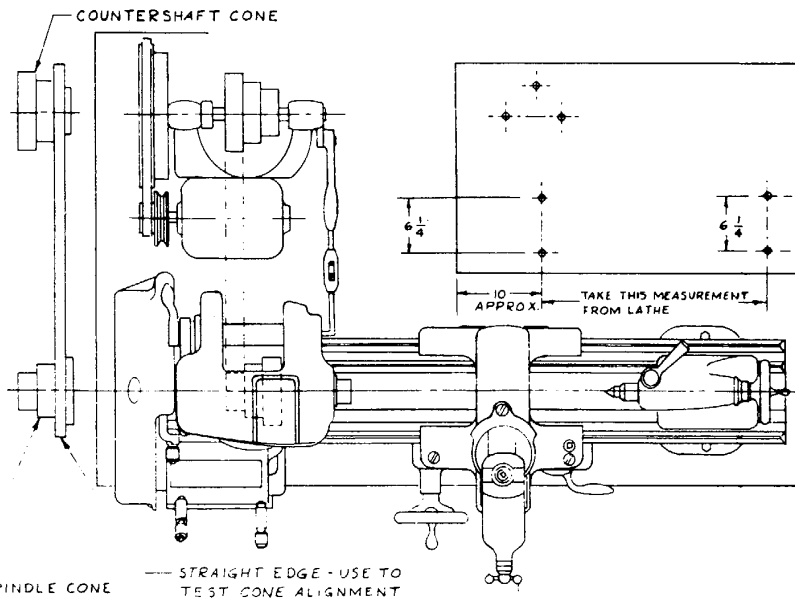
EP 139-4

TO MOUNT MOTOR & CHIP GUARD ON DRIVE UNIT

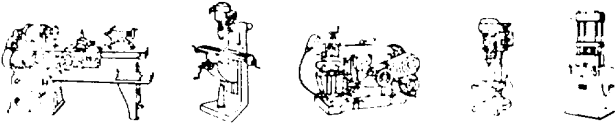
1. Mount the pulley on the motor shaft. Be sure the large step of the pulley is on the inside.
2. With the four hex cap screws and washers provided, mount the motor on the drive unit with the tongue of the chip guard between the drive unit and the motor bracket.
3. Install belt on drive unit.
4. Use a straight edge to check alignment of the motor pulley and the drive unit pulley. Adjust if necessary. Tighten motor mounting screws and motor pulley securely when properly aligned.

TO MOUNT LATHE ON BENCH

1. Set lathe and countershaft drive unit on bench as shown, use straight edge to align both cone pulleys. Scribe outline of holes in lathe and countershaft drive unit. Remove both units and drill holes in bench. Remount lathe with drive unit and align cone pulleys with straight edge. Fasten both units securely with bolts.
2. Place belt tension lever E in tight position and adjust turnbuckle F so that the ends of the rods touch each other.
3. Assemble belt around cone pulleys.
4. Place belt on center step of cone pulleys. Rotate cone pulleys by hand and adjust the drive unit or countershaft pulley until belt runs in center of both pulleys.
5. Do not run lathe with belts too tight, excessive loss of power and damage to bearing may result.
6. Belt tension should be adjusted so that moderate pressure with thumb at X & Y will depress the belts about one inch to positions indicated by dotted lines.



IMPORTANT



Machine tools are designed and manufactured to assure you the greatest measure of long life performance. There remains, however the important factor of getting prompt service when replacement parts are required as a result of natural wear or accidental damage. This parts list was prepared for your convenience to determine quickly the part needed.

PARTS AND ASSEMBLIES. Frequently replacement parts are ordered that appear to be individual parts but in reality the particular part ordered is attached to other parts by press fit, hand scraping, tapered pins or by some other mechanical means which can only be properly done in the factory, and are part of an assembly. The part numbers with prefixes and AS identify assemblies and the parts included in these assemblies are indicated by the item numbers appearing in parenthesis after the part name. Such parts are not sent out individually, but as assemblies.

SERIAL NUMBER OF LATHE.

This number must always appear on your order for replacement parts or attachments to assure prompt shipment of the part or attachment ordered. This number is an index as to the size, type and model of

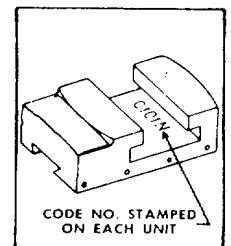
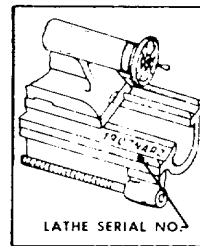
your machine, also date the machine was built. Location of these numbers illustrated at right.

CODE NUMBER. This number should also appear on your order of replacement part. This number is an index to the specific design of part that went into the unit assembly.

We may change the dimension or the appearance of a certain part, yet it is still interchangeable with the old part. You will always receive the benefit of the improved design on orders for replacement parts whenever interchangeability makes this possible. Location of this number (illustrated below) is shown on the repair parts sheet.

Therefore, when ordering have the following information:

1. Serial or Model No. of Machine.
2. Unit code number.
3. Part number & name of part required.
4. Quantity.



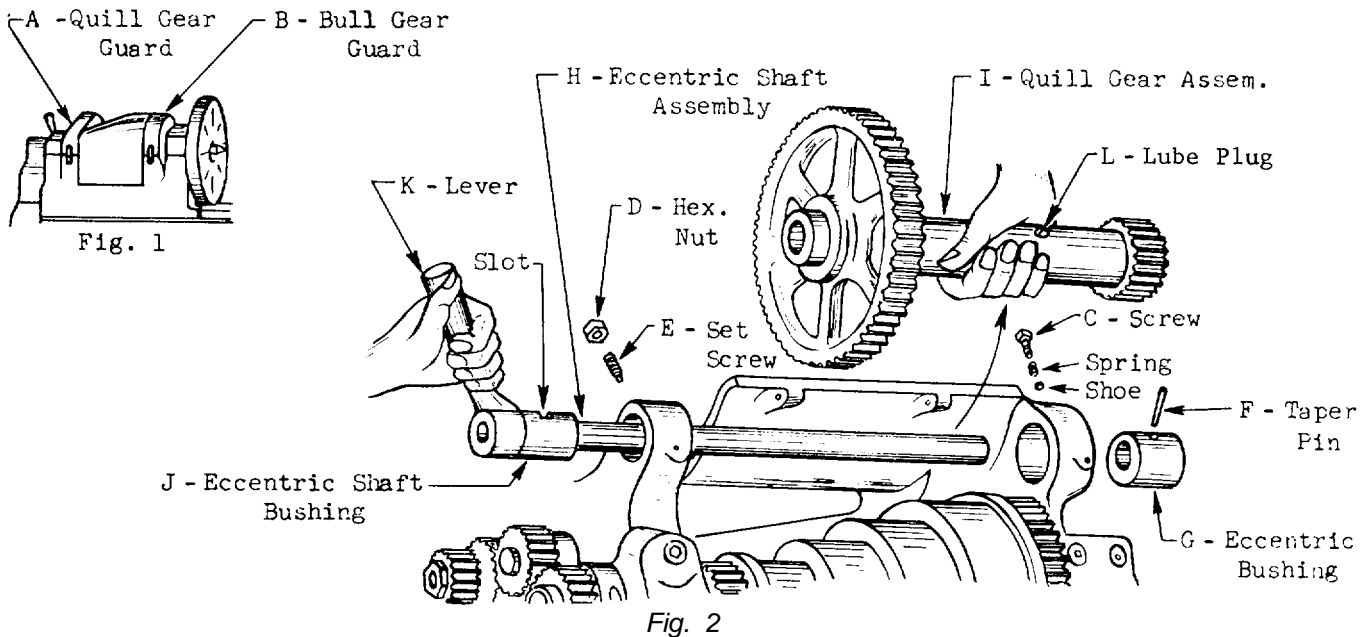
CARE OF MACHINE TOOLS THAT ARE NOT IN USE

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 fender 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 naphtha 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 with a 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. These covers are available for all sizes and types of machines.

MAINTENANCE

BACK GEAR AND ECCENTRIC SHAFT 9", 10K, 10" and 14½" lathes only



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.

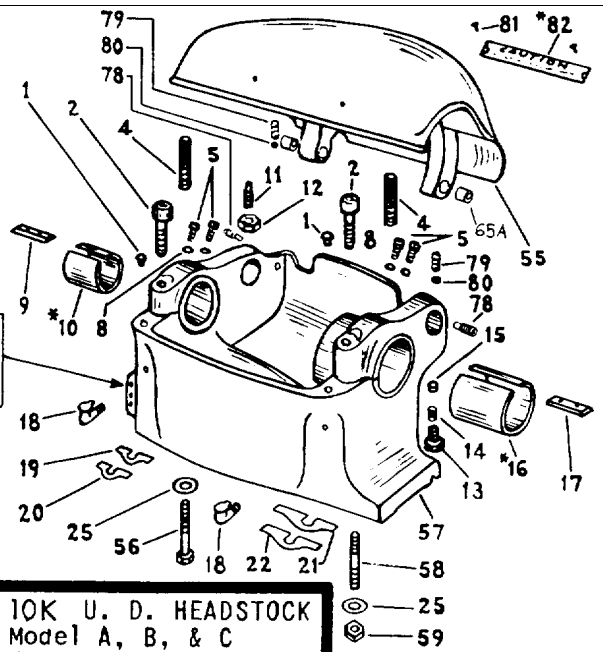
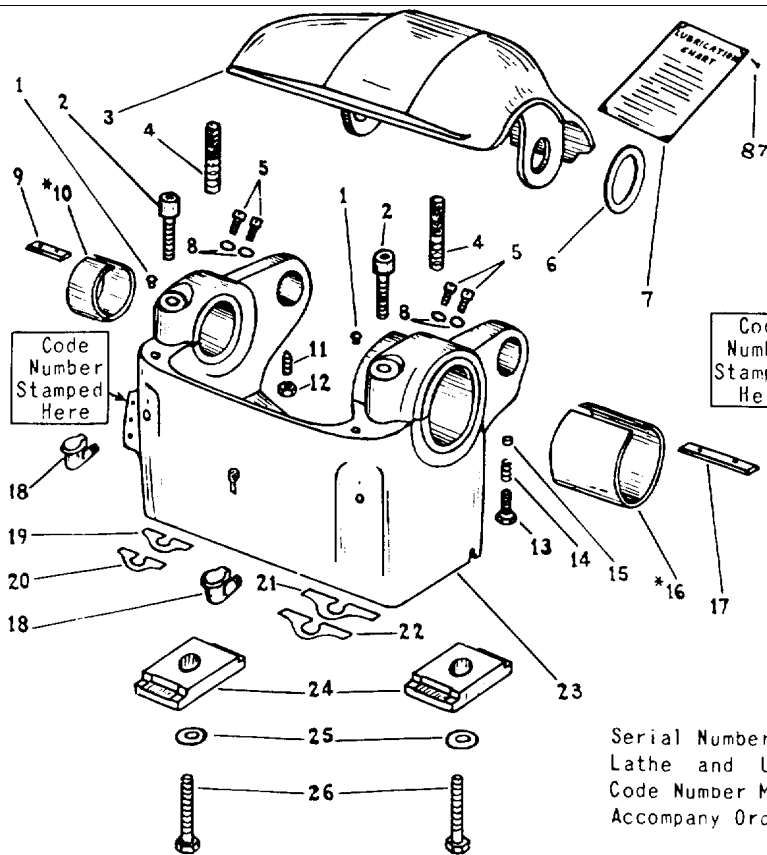
III. ADJUSTING BACK GEARS:

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 C 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

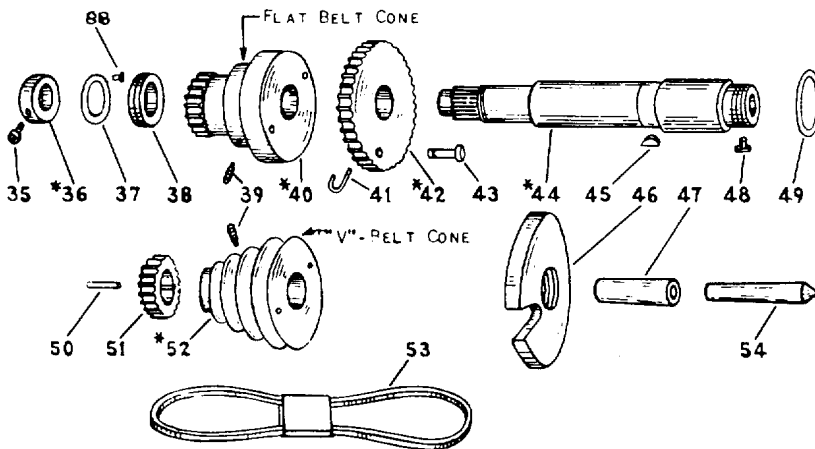
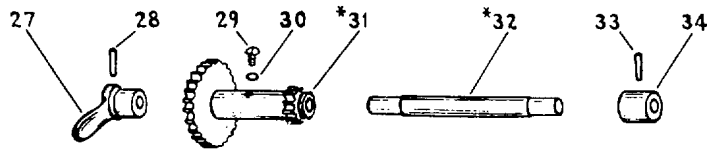
1. Remove plug L and fill with teflon grease. Use CE1625 or equal.

PARTS LIST



IOK HORIZONTAL DRIVE HEADSTOCK Model A, B, & C

Serial Number of
Lathe and Unit
Code Number MUST
Accompany Order.



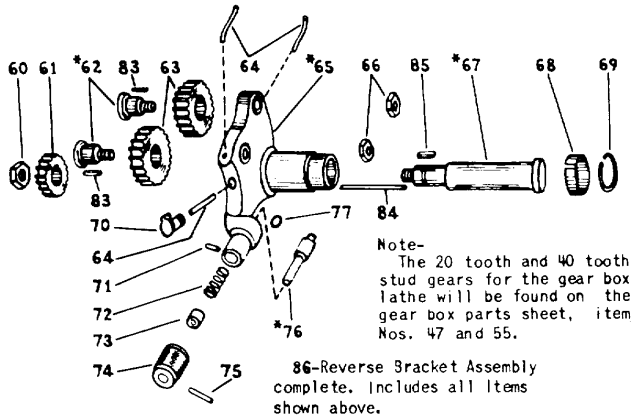
ITEM NO.	PART NO.	PART NAME
1	PT3R7NK1	RUBBER PUMPER
2	114X220	CAPSCREW
3	PT2577K4	COVER
4	AS373KH2	CAPILLARY OILER
5	PT1165RH1	SCREW
6	PT257K1	FLAT SPRING
7	AS441-3	LURE CHART
8	183X103	WASHER
9	PT523K2	EXPANDER(SMALL)
10	*AS512K1	SMALL REARING (4-5-8-9-19-20)
11	PT377NR1	STOP SCREW
12	139X26	NUT
13	112X1112	SCREW
14	PT374NR1	SPRING
15	PT1075NR1	SHOE
16	*AS511K1	LARGE BEARING(4- 5-8-17-21-22)
17	PT524K2	EXPANDER(LARGE)
18	PT2676NK1	OILER
19	PT365K1	LAM. SHIM
20	PT366K1	SOLID SHIM
21	PT363K1	LAM. SHIM
22	PT364K1	SOLID SHIM
23	PT10K3	HEADSTOCK
24	PT13NK1	CLAMP
25	PT1672NK1	WASHER
26	112X228	CLAMP SCREW
27	PT24NK2	ORDER ITEM 32
28	168X312	TAPER PIN
29	PT1151N1	SCREW
31	PT378NK1	OIL HOLE WASHER
32	*AS361NK2	BACK GEAR (29-30)
	*AS202NK1	Ecc. SHAFT(27-28- 33-34)
33	168X310	TAPER PIN
34	PT438NK1	ORDER ITEM 32
35	PT382NK1	SCREW
36	*AS25NK1	TAKE-UP NUT(35-37
37	PT26NK1	TAKE-UP WASHER
38	PT207NK1	THRUST BEARING
39	PT381NH1	OIL- PLUG SCREW
40	*AS14NK1	CONE (39)
41	PT367NR1	SPRING
42	*AS15NK1	BULL GEAR(41.43)
43	PT214NR2	PLUNGER
44	*AS200K2	SPINDLE (48)
45	PT2090	MORTON KEY

* Available only as sub-assembly. Parts included are indicated by the item numbers appearing in parenthesis after part name.

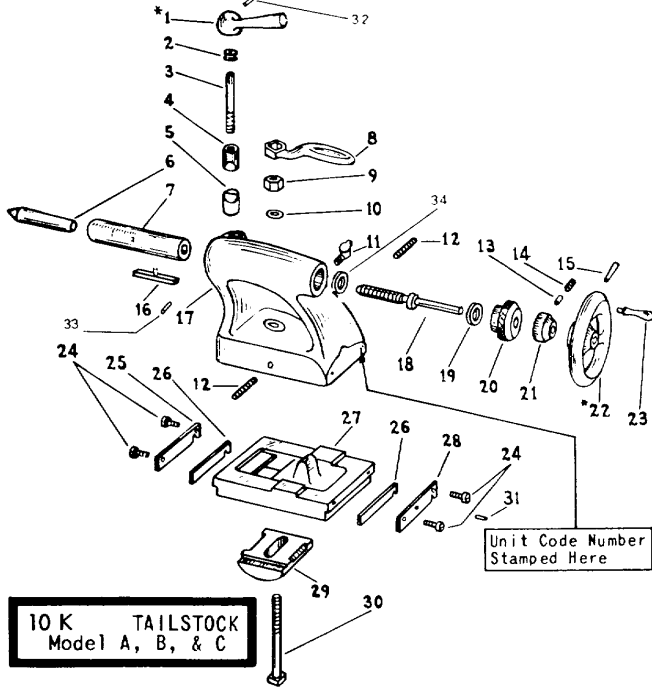
PARTS LIST

Serial Number of Lathe and Unit
Code Number MUST Accompany Order

HEADSTOCK PARTS



10 K HEADSTOCK (REVERSE BRACKET) Model A, B, & C



10 K TAILSTOCK Model A, B, & C

*Available only as sub-assembly. Parts included are indicated by the item numbers appearing in parenthesis after part name.

ITEM NO.	PART NO.	PART NAME
46	CL2175NK	FACE PLATE
47	(L205NK	SPINDLE SLEEVE
48	PT973K1	KEY
49	PT370K1	PROTECTING RING
50	160X23	PIN
51	PT433NK1	V CONE PINION
52	*AS432NK2	V CONE(39-50-1)
53	CF 5L20	V BELT
54	CF2401	CENTER
55	PT2576NK1	CONE COVER
56	112X248	SCREW
57	PT2575K1	U. D. HDSTOCK
58	PT385NK1	CLAMPING STUD
59	138X27	NUT
60	137X29	NUT
61	PT28NK1	REV. GEAR
62	*AS229K1	TWIN STUD (66-83)
63	PT27K32NK1	TWIN GEAR
64	256X14	WICK
65	*AS635K2	REV. BRKT. (70-76)
65 A	PT2589NK1	BUSHING
66	139X25	NUT
67	*AS637NK1	REV. SHAFT (60-85)
68	PT2584K2	LOCK BUSHING
69	PT409T1	SNAP PIN
70	155X38	OILER
71	PT2584K1	PIN
72	162X35	SPRING
73	PT2586K1	BUSHING
74	PT88NK2	PLUNGER KNOB
75	160X10	PIN
76	*AS640K1	REV. PLUNGER (71-72-73-74-75)
77	PT1501	PLUG
78	121X16	SCREW
79	122X106	SCREW
80	PT1080NK1	SHOE
81	132X1	DRIVE SCREW
82	*AS2583NK1	"CAUTION" PLATE (81)
83	256X1	OIL WICK
84	256X3	OIL WICK
85	164X85	KEY
86	AXS635K2	REV. BRKT. ASSEM.
87	130X103	DRIVE SCREW
88	PT383NR1	PIN

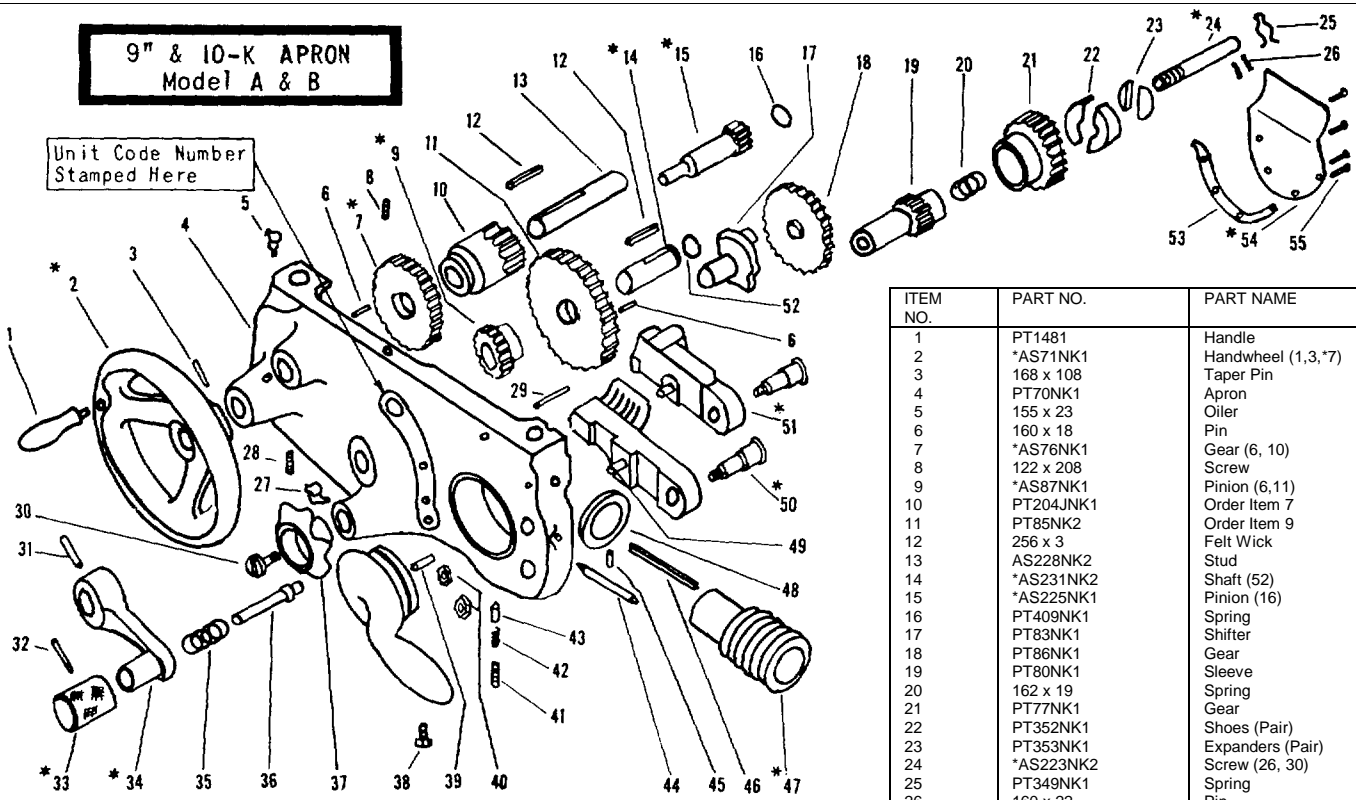
TAILSTOCK PARTS

1	*AS54K6R	LEVER (2-3-32)
2	PT293NR2	ORDER ITEM 1
3	PT206KR3	ORDER ITEM 1
4	PT248KR3	UPPER PLUG
5	PT249KR3	LOWER PLUG
6	CE2401	CENTER
7	PT201KR2	SPINDLE
8	CE2653NK	WRENCH
9	PT283NK1	NUT
10	PT2861NK1	WASHER
11	PT2677NR1	OILER
12	PT278NK1	SET-OVER SCREW
13	PT1076NR1	BINDER SHOE
14	122X104	SCREW
15	168X106	TAPER PIN
16	AS285KR1	KEY
17	PT50K1	T.S. TOP
18	PT226K3	T. S. SCREW
19	PT288NR1	FELT WASHER
20	PT52K2	T.S. NUT
21	*AS278K1	GRAD. DIAL (13-14)
22	*AS53NK1	HANDWHEEL (15-23)
23	PT1480	HANDLE
24	PT1164-1	SCREW
25	PT581K2	RETAINER (FRONT)
26	PT582K1	FELT WIPER
27	PT51K3	T. S. BASE
28	PT580K2	RETAINER (REAR)
29	PT56NK2	T. S. CLAMP
30	143X216	CLAMP BOLT
31	160X18	PIN
32	160X255	PIN
33	160X48	PIN
34	PT3554NR1	RUBBER WASHER

PARTS LIST

9" & 10-K APRON Model A & B

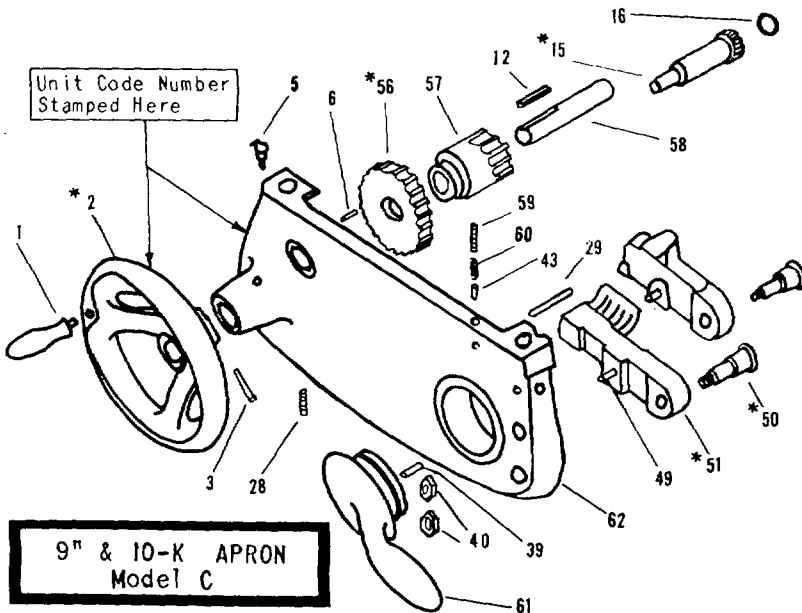
Unit Code Number
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SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER

ITEM NO.	PART NO.	PART NAME
1	PT1481	Handle
2	*AS71NK1	Handwheel (1,3,*7)
3	168 x 108	Taper Pin
4	PT70NK1	Apron
5	155 x 23	Oiler
6	160 x 18	Pin
7	*AS76NK1	Gear (6, 10)
8	122 x 208	Screw
9	*AS87NK1	Pinion (6,11)
10	PT204JNK1	Order Item 7
11	PT85NK2	Order Item 9
12	256 x 3	Felt Wick
13	AS228NK2	Stud
14	*AS231NK2	Shaft (52)
15	*AS225NK1	Pinion (16)
16	PT409NK1	Spring
17	PT83NK1	Shifter
18	PT86NK1	Gear
19	PT80NK1	Sleeve
20	162 x 19	Spring
21	PT77NK1	Gear
22	PT352NK1	Shoes (Pair)
23	PT353NK1	Expanders (Pair)
24	*AS223NK2	Screw (26, 30)
25	PT349NK1	Spring
26	160 x 22	Pin
27	PT2677NR1	Oiler
28	120 x 108	Screw
29	PT2854NK1	Oil Tube
30	PT355NF1	Screw
31	168 x 210	Taper Pin
32	160 x 10	Pin
33	*AS88NK2	Knob (32,35,36)
34	*AS84NK1	Lever (17,31*33)
35	162 x 35	Spring
36	PT89NK1	Order Item 33
37	PT82NK1	Knob
38	PT1511	Pipe Plug
39	160 x 76	Pin
40	137 x 25	Nut
41	122 x 604	Screw
42	162 x 5	Spring
43	PT351NK1	Pin
44	PT97NK2	Plunger
45	160 x 19	Pin
46	PT690NK1	Key
47	*AS203NK1	Worm (45,46,48)
48	PT208NK1	Collar
49	PT172NK1	Pin
50	*AS350NK1	Screw (40)
51	*AS72NK1	Half Nut (49)
52	PT357NK1	Spring
53	PT412NK1	Gasket
54	*AS227NK1	Trough (53,55)
55	101 x 104	Screw
56	*AS76JNK1	Gear (6,57)
57	PT204JNK1	Order Item 56
58	AS228JNK1	Stud
59	122 x 606	Screw
60	162 x 34	Spring
61	AS74JNK1	Cam
62	PT70JNK1	Apron

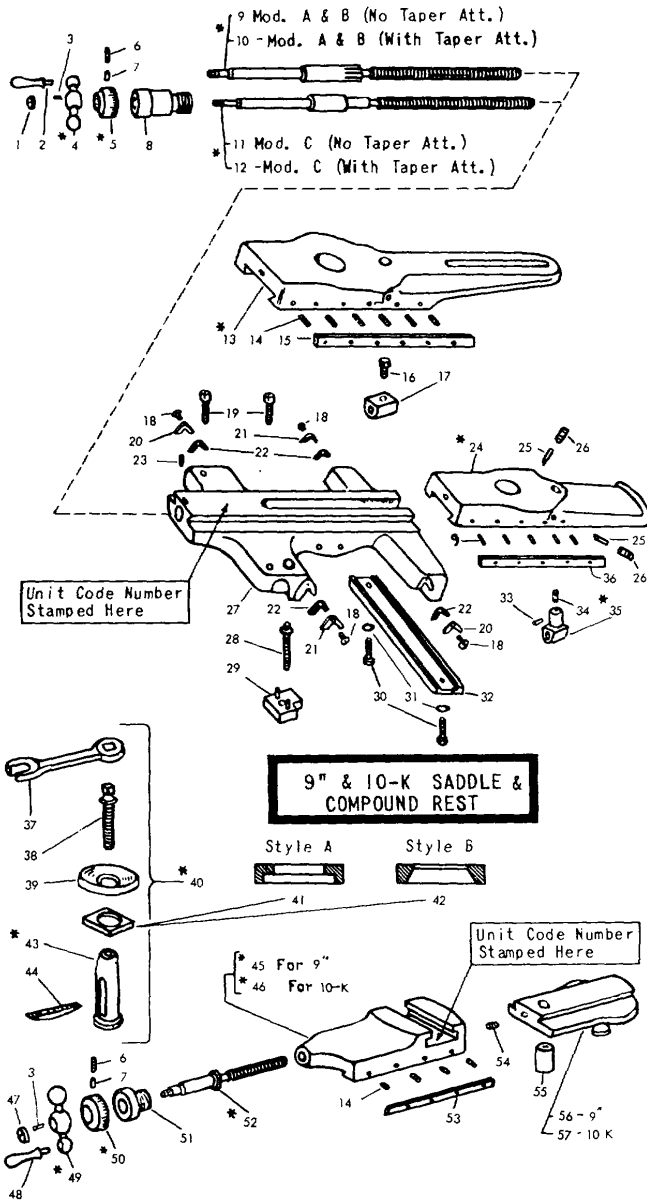
Unit Code Number
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9" & 10-K APRON Model C

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

PARTS LIST



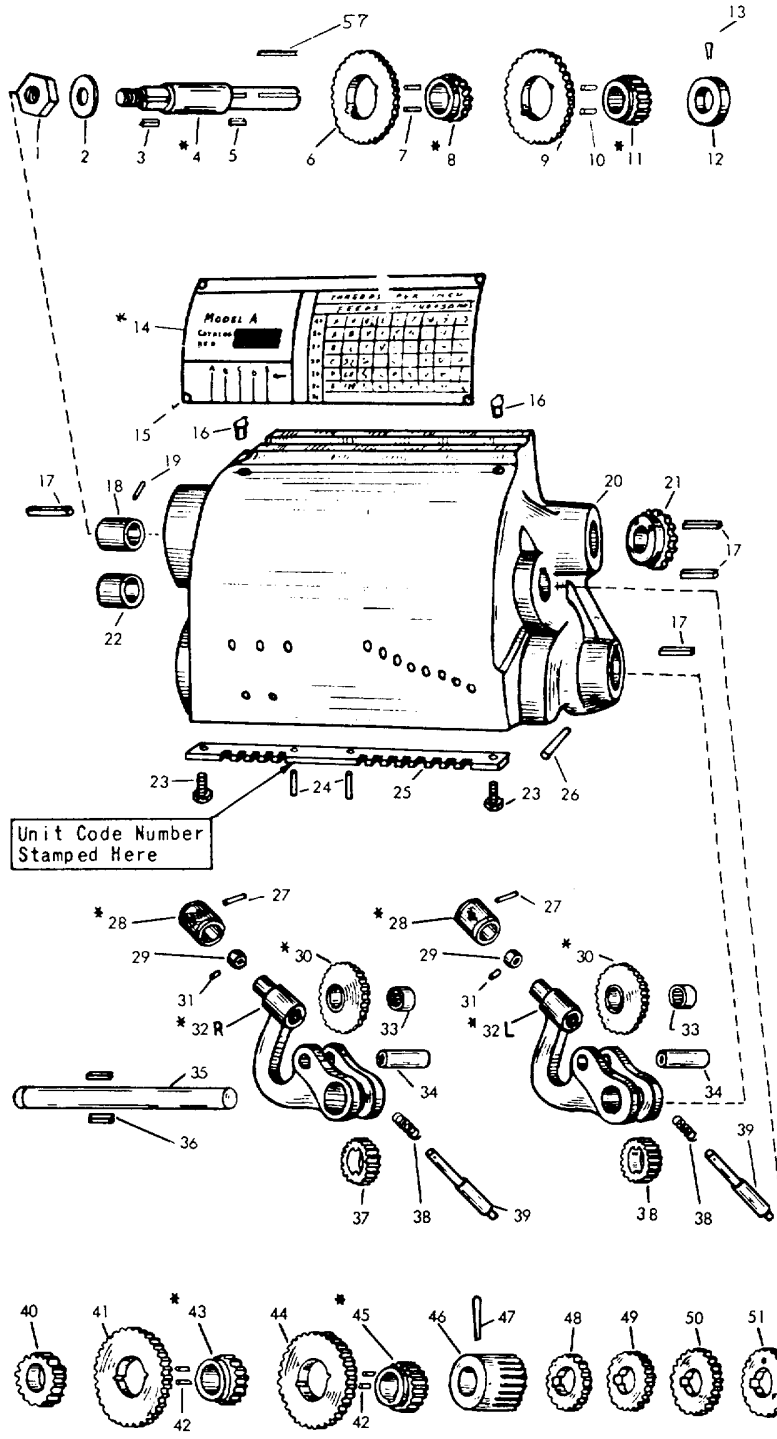
ITEM NO	PART NO.	PART NAME
1	PT295R1	Nut
2	PT1480	Handle
3	160 x 17	Straight Pin
4	*AS276NK1	Ball Crank (2)
5	*AS64NK1	Collar (6,7)
6	122 x 103	Screw
7	PT1076NR1	Binder Shoe
8	PT63NK1	Bushing
9	*AS224NK2	Cross Feed Scr. (1, *4,*5,8,*35)
10	*ATA224NK2	T.A.C.F. Screw (1,*4,*5,8, 16, 17)
11	*AS224JNK2	C. F. Screw (1,*4,*5,8,*35)
12	*ATA224JNK2	T.A.C.F. Screw (1,*4,*5,8, 16,17)
13	*AS485NK1	T. A. Base (14,15,25,26)
14	122 x 444	Screw
15	PT874NK1	Gib
16	PT66NK1	Screw
17	PT486NK1	Cr. Feed Nut
18	107 x 6	Screw
19	PT244NK1	Saddle Screw
20	PT58NK1	Retainer - R
21	PT57NK1	Retainer - L
22	PT59NK1	Felt Wiper
23	122 x 102	Screw
24	*AS92NK2	Base (14,25,26,36)
25	PT211NK1	Shoe
26	121 x 212	Screw
27	AS60NK2	Saddle
28	PT210NK2	Lock Screw
29	AS62NK2	Lock
30	112 x 114	Screw
31	PT3400	Washer
32	PT61NK1	Gib
33	PT358NK1	Pin
34	PT359NK1	Lock Screw
35	*A665NK1	C. F. Nut (33, 34)
36	PT221NK1	Gib
37	CE2650NK	Wrench
38	PT233NK1	T. P. Screw
39	PT251NK1	Ring
40	*CE2450NK	Tool Post Assy.
41	PT209NK1	Block
42	PT209NK2	Block
43	*AS250NK3	Tool Post (41 or 40)
44	PT252NK2	Wedge
45	*AS90N1	C.R. Top (*52, 14, 53, 56)
46	*AS90K1	C.R. Top (*52, 14, 53, 57)
47	PT295NR1	Nut
48	PT1480	Handle
49	*AS277NR1	Crank (48)
50	*AS110NK1	Collar (6,7)
51	PT94NK1	Bushing
52	*AS230NK2	Screw (37, *49 150,51,55)
53	PT257NK1	Gib
54	122 x 508	Screw
55	PT95NK1	C.R. Nut
56	PT91N1	Swivel
57	PT91K1	Swivel

*Available only as sub-assembly. Parts included are indicated by the item numbers appearing in parenthesis after part name.

PARTS LIST

9" & 10-K GEAR BOX Model A

GEAR BOX PARTS



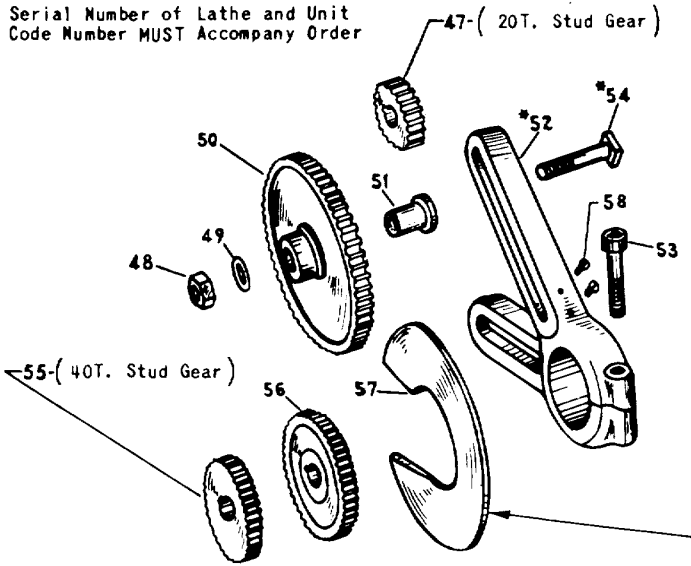
ITEM NO.	PART NO.	PART NAME
1	140 x 29	Nut
2	161 x 73	Washer
3	164 x 86	Key
4	*AS603NK1	Shaft (1,2,3,5, 12, 13)
5	164 x 17	Key
6	PT627NK1	Order Item 8
7	160 x 17	Straight Pin
8	*AS625NK1	Camp Pinion (6,7)
9	PT626NK1	Order Item 11
10	160 x 16	Straight Pin
11	*AS619NK1	Comp. Pinion (9, 10)
12	PT604NK1	Collar
13	168 x 108	Taper Pin
14	*AS1541NK3	Index Pit. (15)
15	132 x 1	Screw
16	155 x 38	Oiler
17	256 x 3	Felt Wick
18	PT606NK2	Bushing
19	160 x 31	Straight Pin
20	AS604NK1	Gear Box
21	PT628NK1	Lead Scr. Gear
22	PT601NK2	Bushing
23	111 x 6	Screw
24	160 x 19	Pin
25	PT607NK1	Guide Bar
26	PT1807	Pin
27	160 x 27	Pin
28	*AS88R2	Knob (27, 38, 39)
29	PT607NR1	Bushing
30	*AS605NK1	Gear (33)
31	160 x 42	Pin
32R	*AS400NK2	R.H. Tumbler (27, 28, 29, 30, 31, 33, 38, 39)
32L	*AS401NK1	L.H. Tumbler (27, 28, 29, 30, 31, 33, 38, 39)
33	PT384NK1	Bearing
34	160 x 252	Shaft
35	PT620NK1	Shaft
36	256 x 1	Felt Wick
37	PT621NK1	Gear
38	162 x 50	Spring
39	PT608NR1	Plunger
40	PT624NK1	Gear
41	PT626NK1	Order Item 43
42	160 x 16	Pin
43	*AS623NK1	Pinion Gear (40,42)
44	PT626NK1	Order Item 45
45	*AS622NK1	Pinion Gear (42,44)
46	PT615K16NK1	Cone Gear 16T
47	168 x 310	Taper Pin
48	PT615K18NK1	Cone Gear 18T
49	PT615K20NK1	Cone Gear 20T
50	PT615K22NK1	Cone Gear 22T
51	PT615K23NK1	Cone Gear 23T
52	PT615K24NK1	Cone Gear 24T
53	PT615K26NK1	Cone Gear 26T
54	PT615K28NK1	Cone Gear 28T
55	160 x 251	Pin
56	*AS614NK1	Shaft (55,57,58)
57	256 x 1	Wick
58	164 x 22	Key

*AVAILABLE ONLY AS SUBASSEMBLY. 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

PARTS LIST

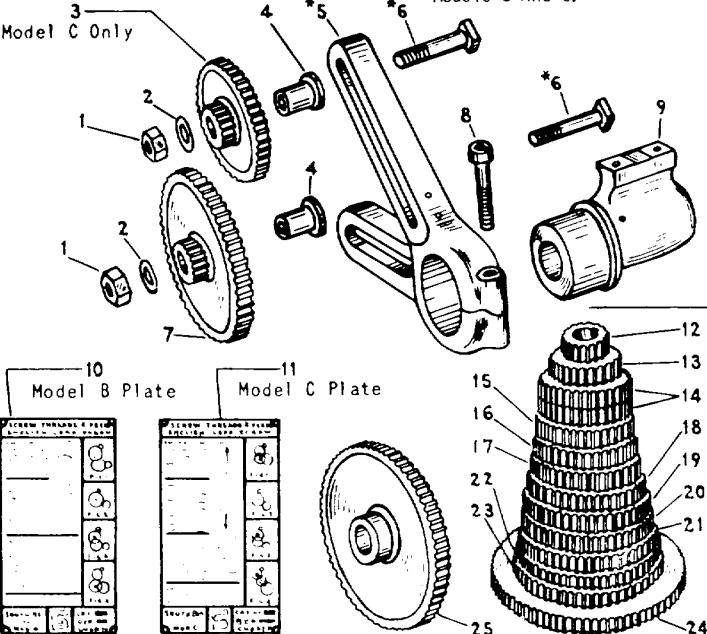
Serial Number of Lathe and Unit Code Number MUST Accompany Order



9" & 10-K GEAR BOX Model A

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

NOTE: This Guard, With Screws, Item No. 57A Also Used On Models B And C.



9" & 10-K STANDARD CHANGE GEAR Model B & C

GEAR BOX PARTS

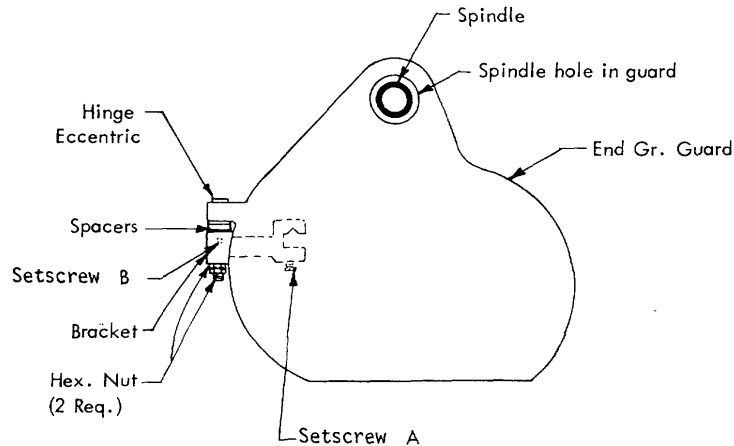
ITEM NO.	PART NO.	PART NAME
47	PT32K20NK1	GEAR, 20 T.
48	140X29	NUT
49	161X21	WASHER
50	PT33NK1	IDLER GEAR
51	PT38NK1	BUSHING
52	*AS31NK1	BRACKET (53)
53	114X228	SCREW
54	*A3247NK1	BOLT (48-49)
55	PT32K40NK1	GEAR, 40 T.
56	PT32K56NK1	GEAR, 56 T.
57	PT389NK3	GUARD
58	PT1150NR	SCREW

STANDARD CHANGE GEAR PARTS

ITEM NO.	PART NO.	PART NAME
1	140X29	NUT
2	161X21	WASHER
3	AS336NK1	COMP. GEAR 18/54T
4	PT38NK1	BUSHING
5	*AS31NK1	BRACKET (8)
6	*AS247NK1	BOLT (1-2)
7	AS36NK1	COMP. GEAR, 18/72T
8	114X220	SCREW
9	PT4NK1	FRONT BRACKET
10	AS1525NK3	INDEX PLATE
11	AS1527JNR2	INDEX PLATE
12	PT32KI9NK1	CHANGE GEAR, 16T
13	PT32K2411K	CHANGE GEAR, 24T
14	PT32K32NK1	CHANGE GEAR, 32T
15	PT32K36NK1	CHANGE GEAR, 36T
16	PT32K40NK1	CHANGE GEAR, 40T
17	PT32K44NK1	CHANGE GEAR, 44T
18	PT32K46NK1	CHANGE GEAR, 46T
19	PT32K48NK1	CHANGE GEAR, 48T
20	PT32K52NK1	CHANGE GEAR, 52T
21	PT32K54NK1	CHANGE GEAR, 54T
22	PT32K56NK1	CHANGE GEAR, 56T
23	PT32K60NK1	CHANGE GEAR, 60T
24	PT32K80NK1	CHANGE GEAR, 80T
25	PT33NK1	IDLER GEAR, 80T
26	*AS32NK1	CHANGE GEARS
27	132X1	SCREW

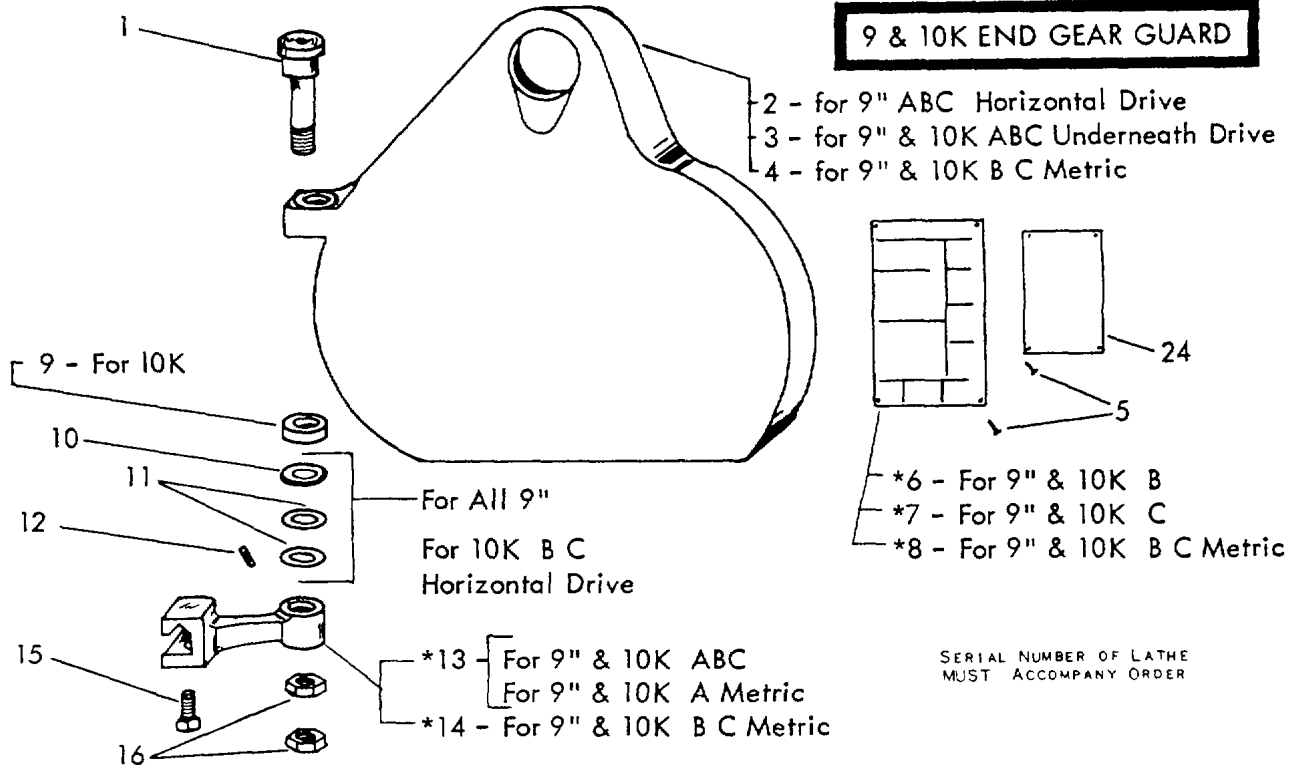
PARTS LIST

TO MOUNT AND ADJUST 9" & 10K END GEAR GUARD



1. Install bracket on bed and secure in place. On horizontal lathes set bracket near end of bed. On underdrive lathes set bracket approximately 1/4" back from end of bed. Tighten setscrew A
2. Place eccentric in guard and mount in bracket with spacers between guard and bracket. (See fig. above) Use any combination of spacers required for proper clearance between spindle end and hole in guard.
NOTE: Spacers of varied thicknesses are supplied for the purpose of using any combination to obtain proper installation.
3. Install one hex nut on end of hinge eccentric just enough to allow the second one to be installed.
4. Install second hex nut and lock with first.
5. Adjust the guard right or left by turning the eccentric by the locked nuts with a wrench.
6. Secure eccentric by tightening setscrew B
7. Unlock nuts and turn one up against bracket tight enough to keep guard closed but loose enough to swing open by hand.
8. Lock with second nut.
NOTE: New machines have hinges tightened to keep guard closed during transit. It may be necessary to loosen hex nuts slightly and relock to allow guard to open easier.

PARTS LIST



COMPLETE ASSEMBLY AS SHOWN TO INCLUDE GUARD, HINGE ECCENTRIC BRACKET, AND ALL HARDWARE FITTINGS REQUIRED.

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

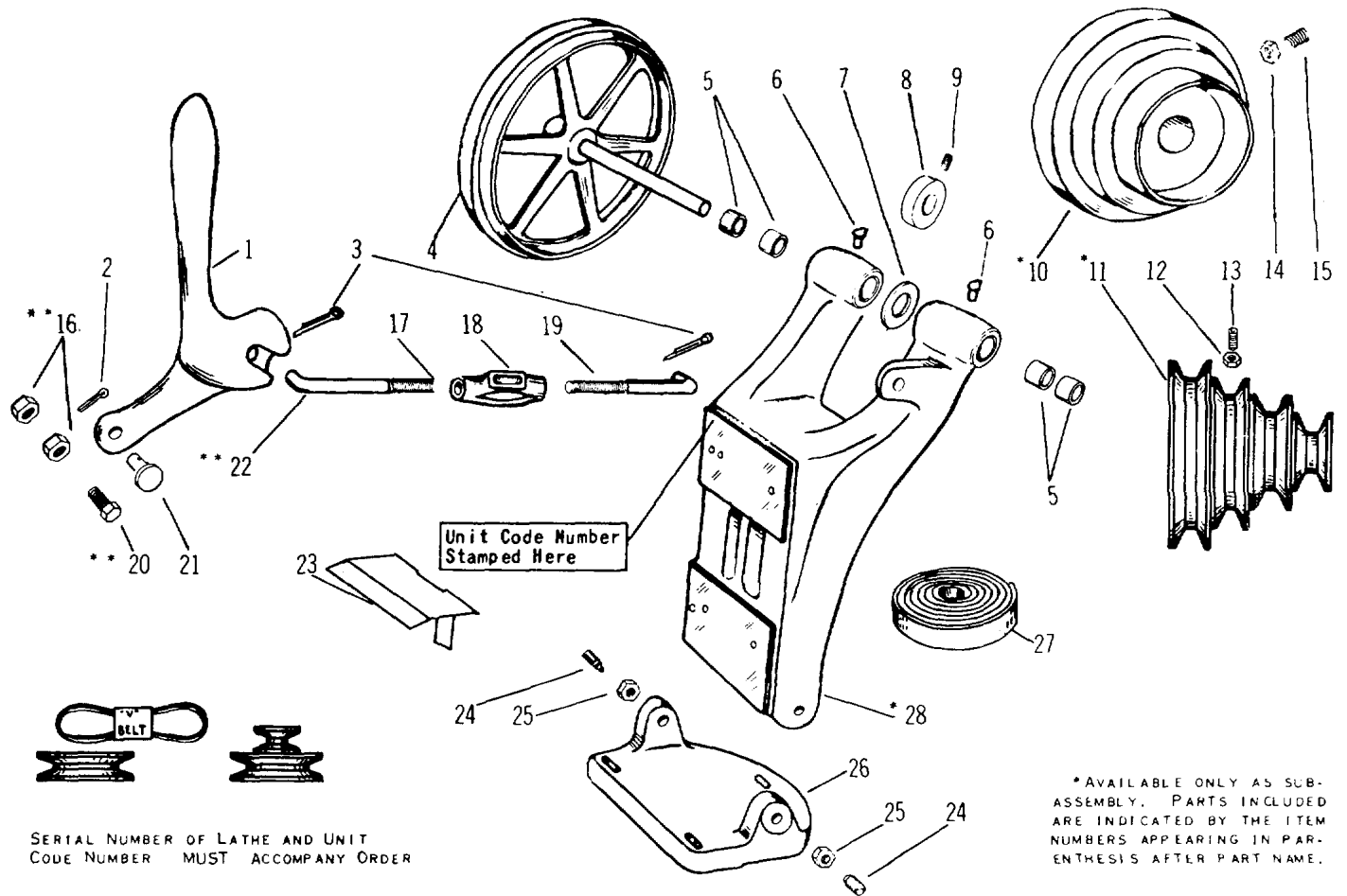
- *17 For 9" & 10K A Underneath Drive
For 9" & 10K A Underneath Drive Metric
- *18 For 9" & 10K B Underneath Drive
- *19 For 9" & 10K C Underneath Drive
- *20 For 9" A Horizontal Drive
For 9" A Horizontal Drive Metric
- *21 For 9" B Horizontal Drive
- *22 For 9" C Horizontal Drive
- *23 For 9" & 10K B C Horizontal Drive Metric

ITEM NO.	PART NO.	PART NAME	NO. REQ.
1	PT145NK1	Eccentric	1
2	PT146N2	Guard	1
3	PT650NK2	Guard	1
4	PT906NK2	Guard	1
5	130 x 103	Drive Screws	4
6	*AS1525NK2	Index Plate (5)	1
7	*AS1527JNR1	Index Plate (5)	1
8	*AS1529NR2	Index Plate (5)	1
9	PT648K1	Spacer	1
10	161 x 27	Finished Washer	1
11	161 x 65	Finished Washer	2
12	120 x 106	Setscrew	1
13	*AS147NK3	Bracket (12, 15)	1
14	*AS907NK3	Bracket (12, 15)	1
15	118 x 214	Setscrew	1

ITEM NO.	PART NO.	PART NAME	NO. REQ.
16	139 x 31	Hex Nuts	2
17	*AS650NK2A	Guard Assembly (1,3,9,10,11,13,16)	
18	*AS650NK2B	Guard Assembly (1,3,6,9,10,11,13,16)	
19	*AS650NK2C	Guard Assembly (1,3,7,9,10,11,13,16)	
20	*AS146N2A	Guard Assembly (1,2,9,10,11,13,16)	
21	*AS146N2B	Guard Assembly (1,2,6,9,10,11,13,16)	
22	*AS146N2C	Guard Assembly (1,2,7,9,10,11,13,16)	
23	*AS906NK2	Guard Assembly (1,4,8,9, 10,11,14,16)	
24	*AS441-3	Lubrication Plate (5)	

PARTS LIST

9" & 10-K HORIZONTAL DRIVE UNIT



SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER

**For 10-K Gap Bed Lathes Only

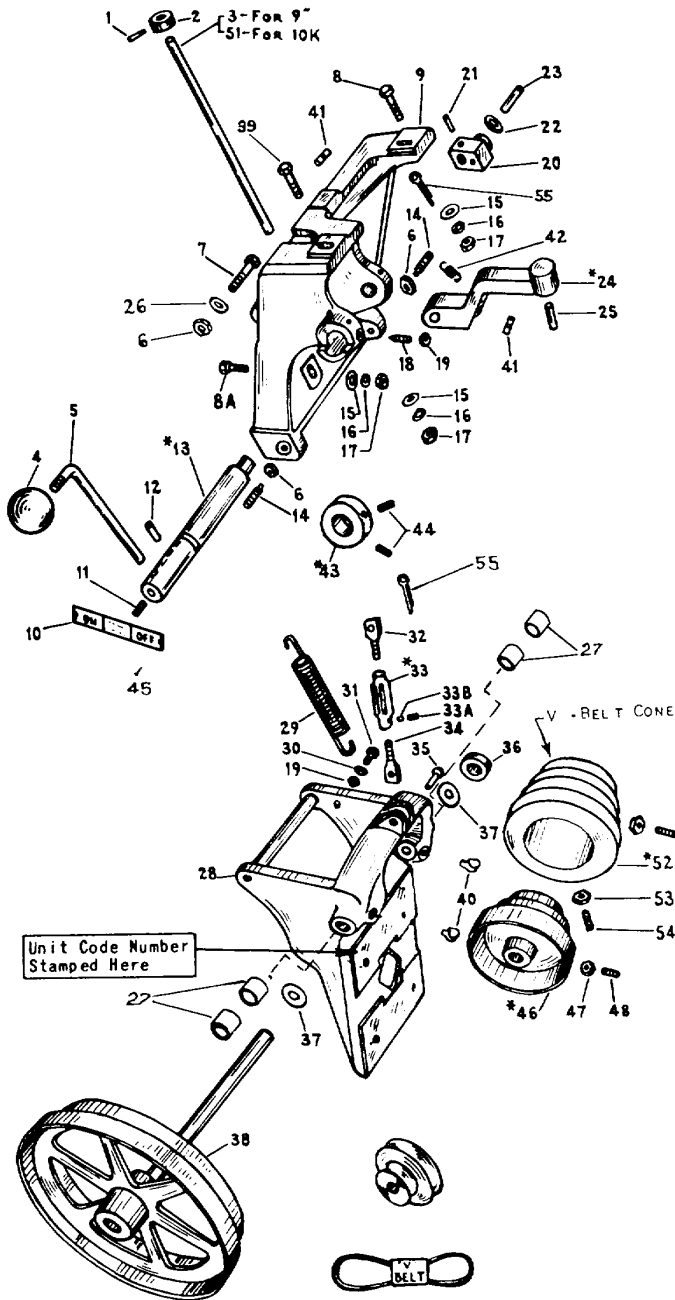
ITEM NO.	PART NO.	PART NAME
1	PT1945N1	Lever
2	170 x 206	Cotter Pin
3	170 x 206	Cotter Pin
4	AS1960N3	Shaft & Pulley
5	PT3658R1	Oilite Bearing
6	155 x 38	Oiler
7	PT1676NK1	Washer
8	AS735NR1	Collar (9)
9	120 x 206	Screw
10	*AS103NK1	Cone (14,15)
11	*AS431NK2	Cone (12,13)
12	139 x 25	Hex Nut
13	120 x 112	Screw
14	139 x 27	Hex Nut
15	120 x 212	Screw

ITEM NO.	PART NO.	PART NAME
16	139 x 27	Hex Nut
17	PT1946N1	R. H. Rod
18	PT1948N1	Turnbuckle
19	PT395 N1	L. H. Rod
20	112 x 224	Hex. Capscrew
21	PT1949NK3	Pin
22	PT1946K1-G	R. H. Rod
23	PT1373	Chip Guard
24	PT243NR1	Pivot Screw
25	139 x 29	Hex Nut
26	PT1944NT	Base
27	CE2323N	Belt 1-Ply
28	*AS1940N3	Standard (6,5)

PARTS LIST

9" & 10K UNDERNEATH DRIVE UNIT

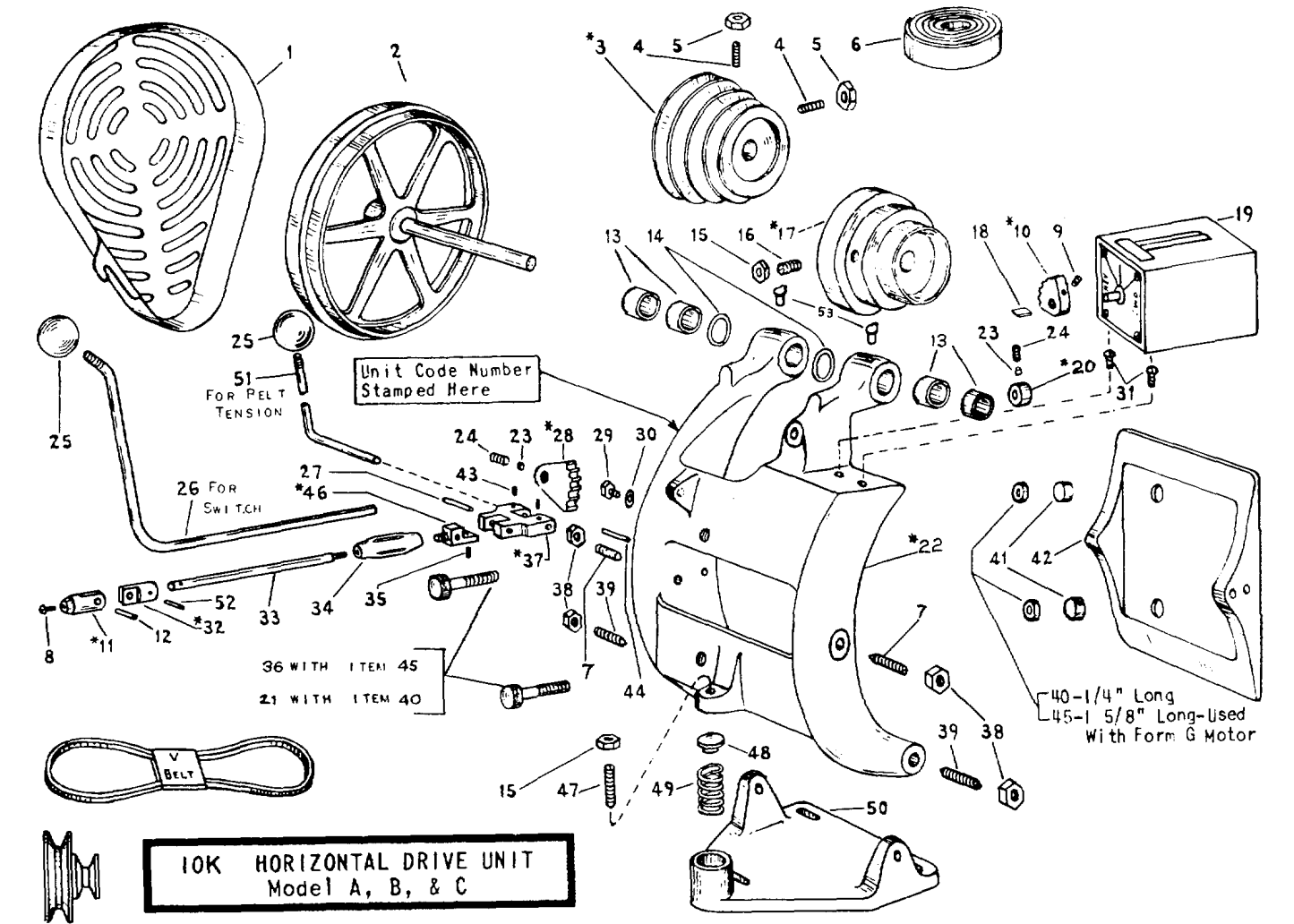
Serial Number of Lathe and Unit
Code Number MUST Accompany Order



ITEM NO.	PART NO.	PART NAME
1	120X 206	SCREW
2	PT2611NK	COLLAR
3	PT2608N1	LOCK PIN
4	PT406K&FMI	KNOB
5	PT2609NKI	HANDLE
6	139X29	NUT
7	112X336	BOLT
8	112X224	BOLT
8A	542X406	BOLT
9	PT2640NKZ	CRADLE SUPPORT
10	AS417NKI	PLATE
11	120X106	SCREW
12	160X116	PIN
13	*AS2605NKI	SHAFT (11-12-20 21-22-23)
14	PT390NK2	PIVOT SCREW
15	167X4	WASHER
16	180X302	LOCK WASHER
17	138X27	NUT
18	121X112	SCREW
19	139X25	NUT
20	PT2603NKI	CRANK
21	168X410	TAPER PIN
22	161X17	WASHER
23	PT2604NKI	RELEASE PIN
24	*AS2607NK2	BRACKET (25)
25	PT1824-3	PIN
26	161 X 21	WASHER
27	PT36 58-1	Oilite Bearing
28	PT2540NK3	CRADLE
28A		
29	PT2638NTI	SPRING
30	161X14	WASHER
31	112X116	SCREW
32	PT2600NKI	R. H. SCREW
33	AS2606NKI	TURNBUCKLE(3334)
33A	120X6	SCREW
33B	PT1081NTI	SHOE
34	PT2601NKI	L. H. SCREW
35	PT1949NK2	CLEVIS PIN
36	AS735HRI	COLLAR
37	PT1676NKI	WASHER
38	AS1960N3	SHAFT & PULLEY
39	112X232	BOLT
40	155X44	OILER
41	PT2615NKI	PIN
42	PT2614NKI	SPRING
43	*AS2613NKI	COLLAR (44)
44	120X108	SCREW
45	144 X I	SCREW
46	WAS103NKI	C. S. CONE(47-48)
47	139X27	NUT
48	120X212	SCREW
49		
50		
51	PT2608KI	COVER LOCK ROD
52	*AS431NKI	C. S. CONE(53-54)
53	139X25	NUT
54	120X1112	SCREW
55	170X206	C. PIN

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

PARTS LIST

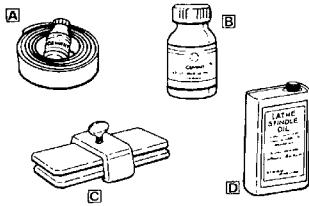


10K HORIZONTAL DRIVE UNIT
Model A, B, & C

ITEM NO.	PART NO.	PART NAME
1	PT4137K1	GUARD
2	AS4128K1	SHAFT & PULLEY
3	*AS431NK2	V CONE (4-5)
4	120X112	SCREW
5	139x25	NUT
6	CE3750K	FLAT BELT
7	PT705K2	SCREW
8	101 x 714	SCREW
9	120 X 6	SCREW
10	*AS4130K2	GEAR SEGMENT(9)
11	*AS4293K1	BELT ROD FORK (12)
12	160x136	PIN
13	PT3660-1	BUSHING
14	PT167NK1	WASHER
15	139 X 27	SCREW
16	120X212	SCREW
17	*AS103NK2	CONE (15-16)
18	PT2042H1	SHAFT EXPANDER
19	CE790	DRUM CONTROL
20	AS4131K1	COLLAR (23-24)
21	PT1855	THUMB SCREW
22	*AS4120K4	FRAME (13-20-53))
23	PT1081NT1	SHOE
24	120x1	SCREW
25	PT403K&	BAKELITE BALL
26	PT41214K2	SWITCH LEVER
27	160 x 148	PIN
28	*AS41372K2	GEAR SEGMENT
29	112X116	

ITEM	PART NO.	PART NAME
30	161X12	WASHER
31	101 X 606	SCREW
32	*AS4292K1	FORK CONNECTOR (52)
33	PT4291K1	PELT ROD
34	PT1948N1	TURNBUCKLE
35	120 X 906	SETScrew
36	PT1853	THUMB SCREW
37	*AS4127K2	ADJ. SCREW FORK (27-43)
38	139X29	NUT
39	PT390NK2	SCREW
40	PT4136K1	SCREW PAD
41	PT4131K1	RUBBER PAD
42	PT4123K2	MOTOR HANGER
43	120 x 1104	SETScrew
44	160x 111	SCREW PAD
45	PT4164K1	ADJ. SCREW (35)
46	*AS4290K1	SCREW
47	PT706K1	SCREW
48	PT4135K1	CAP
49	PT4134K2	SPRING
50	PT4121K1	BASE
51	PT4294K1	FELT TIGHTNER HANDLE
52	160X522	PIN
53	155x38	OILER

PARTS LIST



BELTS AND LUBRICATION

A TEXALON FLAT BELTS. A combination of textile and extruded nylon form a strong flexible belt recommended for use with Lathes. Able to withstand continual flexing without significant stretch and loss of efficiency. Texalon belts are skived on both ends and cement for joining skived ends is included with each belt.

Type of Drive	Cat. No.	Type of Drive	Cat. No.
9" HMD	CE370N	13 UMD 3-Step	CE3753T
10-KHMD	CE3750K	14 1/2" UMD 4-Step	CE3752F
9" UMD	CE3752N	14 1/2" 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 TEXALON BELT CEMENT for bonding skived ends of Texalon Belts.

CE1887. Texalon Belt Cement 1/4 oz. bottle

CE2323N. Oak tan single ply flat leather belt without cord reinforcing for 9" Horizontal Motor Drive only. Ho square ends and lace for joining.

C 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 of belt ends

Catalog Number	Maximum Size of Belt			Ship. Wt.
	Width	Thickness	Skive Length	
CE1898	1 3/4"	1/2"	6 3/8"	4 lbs.
CE1899	3"	1/2"	6 3/8"	5 lbs.

D 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 be used for the lathe spindle and lathe apron 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 at 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 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 (See Oil Chart for Individual Machine)			
CE1602	150-240	1 quart	3 lbs.
CE1904	150-240	12 quart	3 lbs.
CE2018	150-240	Gal can	11 lbs.

LEATHER V-BELTS FOR CONE PULLEYS

Lathe cone pulley V-belts can be replaced without disassembling the lathe



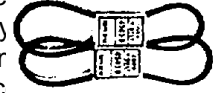
headstock or drive unit by using these cord reinforced leather V-belts. Belts are skived for gluing and belt splicing cement is included.

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.

NOT PERMISSABLE TO SHIP BY ANY OF THE AIR SERVICES

Rubber V-Belts

Rubber V-Belts for use with Lathe and other power driven machinery. Specify catalog number, maximum width, and outside circumference when ordering.



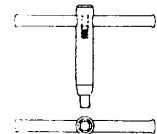
Catalog Number	Outside Length	Catalog Number	Outside Length
V-Belts with 3/8" Top Width			
CE3L210	21"	CE3L240	24"
CE3L220	22"	CE3L260	26"
CE3L230	23"	CE3L270	27"

V-Belts with 1/2" Top Width			
CE4L208	28"	CE4L480	48"
CE4L290	29"	CE4L490	49"
CE4L300	30"	CE4L530	53"
CE4L310	31"	CE4L540	54"
CE4L320	32"	CE4L580	58"
CE4L440	44"	CE4L800	60"
CE4L450	45"	CE4L640	64"
CE4L460	46"	CE4L700	70"
CE4L470	47"	CE4L800	80"

V-Belts with 5/8" Top Width			
CE5L380	36"	CE5L480	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

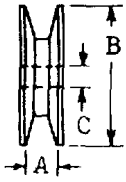
Catalog Number	Size Square	Shipping Weight
CE2748	.277"	2 lb.
CE2742	.297"	1 lb.
CE2743	.375"	2 lbs.
CE2749	.400"	2 lbs.
CE2744	.420"	2 lbs.
CE2746	.570"	2 lbs.



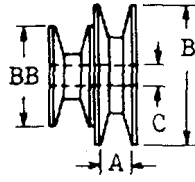
Sizes of Wrenches Required for Various Sizes of Chucks

Cat. No. of Chuck	Size of Chuck	Type of Chuck	Size Square	Cat. No. of Required Wrench
CL4006NK	6"	Independent	.297"	CE2742
CL4206NK	6"	Independent	.297"	CE2742
CL4006R	6"	Independent	.297"	CE2742
CL4206R	6"	Independent	.297"	CE2742
CL4207R	7 1/2"	Independent	.420"	CE2744
CL4006L	6"	Independent	.297"	CE2742
CL4206LQ	6"	Independent	.297"	CE2742
CL4207LQ	6"	Independent	.420"	CE2744
CL42090	9"	Independent	.420"	CE2744
CL4207MH	7 1/2"	Independent	.420"	CE2744
CL4209MH	9"	Independent	.420"	CE2744
CL4210MH	10"	Independent	.420"	CE2744
CL4212H	12"	Independent	.420"	CE2744
CL3005NK	5"	Universal	.277"	CE2748
CL3505NK	5"	Universal	.375"	CE2743
CL3506NK	6"	Universal	.400"	CE2749
CL3005R	5"	Universal	.277"	CE2748
CL3505R	5"	Universal	.375"	CE2743
CL3506R	6"	Universal	.400"	CE2749
CL3005L	5"	Universal	.277"	CE2748
CL3505LQ	5"	Universal	.375"	CE2743
CL3506LQ	6"	Universal	.400"	CE2749
CL3507Q	7 1/2"	Universal	.400"	CE2749
CL3505MH	5"	Universal	.375"	CE2743
CL3506MH	6"	universal	.400"	CE2749
CL3507MH	7 1/2"	Universal	.400"	CE2749
CL3509MH	9"	Universal	.570"	CE2746

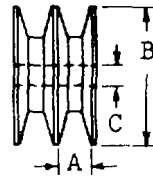
PARTS LIST
MOTOR PULLEYS



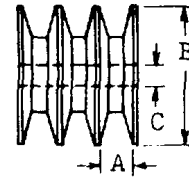
STYLE 1



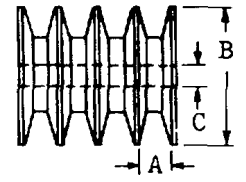
STYLE 2A



STYLE 2



STYLE 3



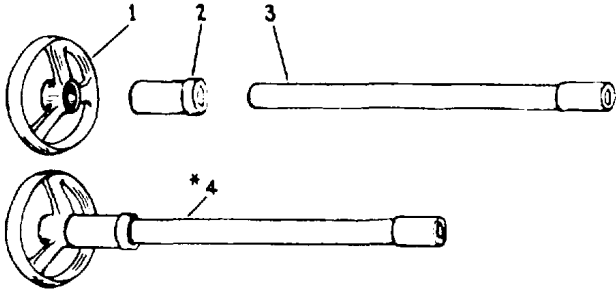
STYLE 4

Part No.	A	B	BB	C
STYLE 1				
PT2101NR1	.635	2- 3/32		5/8
PT2106NR1	.635	2-15/32		5/8
PT2111NR1	.635	3		5/8
PT2116NR1	.635	3-45/64		5/8
STYLE 2A				
PT2131NR1	.635	3.408	2.093	5/8
PT2181NR1	.635	3.570	2.093	5/8
PT2183NR1	.635	3.570	2.093	7/8
PT2131K1	.635	3.956	2.237	5/8
PT2136K1	.635	4- 3/16	2-43/64	5/8
PT2185NK1	.635	4- 3/16	2-23/32	5/8
PT2187NK1	.635	4- 3/16	2-23/32	7/8
PT2136NR1	.635	4- 3/16	2.822	5/8
PT2138NR1	.635	4- 3/16	2.822	7/8
PT2127R1	.635	4-19/32	3- 5/32	5/8
PT2129R1	.635	4-19/32	3- 5/32	7/8
PT2156R1	.635	5- 5/16	2- 3/32	5/8
PT2158R1	.635	5- 5/16	2- 3/32	7/8

Part No.	A	B	C
STYLE 2			
PT2101T1	.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
PT2106F1	.490	2-63/64	7/8
STYLE 4			
PT2101HI	.490	2- 1/8	7/8
PT2102H1	.490	2- 1/8	1
PT2101FH2	.490	2-17/32	7/8
PT2103FHI	.490	2-17/32	1-1/8
PT2106FH2	.490	2-63/64	7/8
PT2108FH1	.490	2-63/64	1-1/8
PT2161HI	.490	3- 9/64	7/8
PT2163H1	.490	3- 9/64	1-1/8
PT2189H1	.490	3-13/64	7/8
PT2191H1	.490	3-13/64	1-1/8
PT2127F1	.490	3- 9/16	7/8
PT2129F1	.490	3- 9/16	1-1/8
PT2166FH1	.490	3-49/64	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

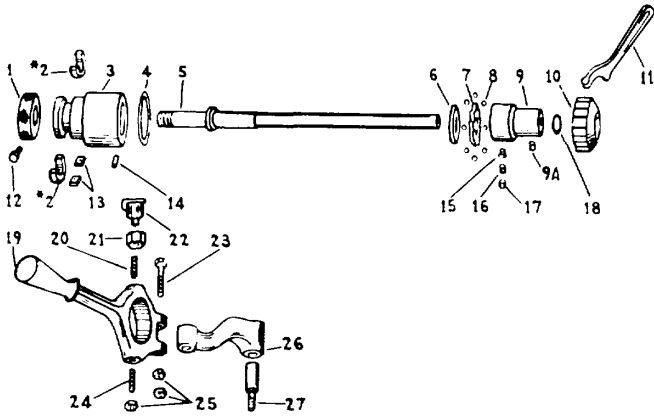
PARTS LIST

**10-K HANDWHEEL COLLET ATT.
MODEL A, B & C**



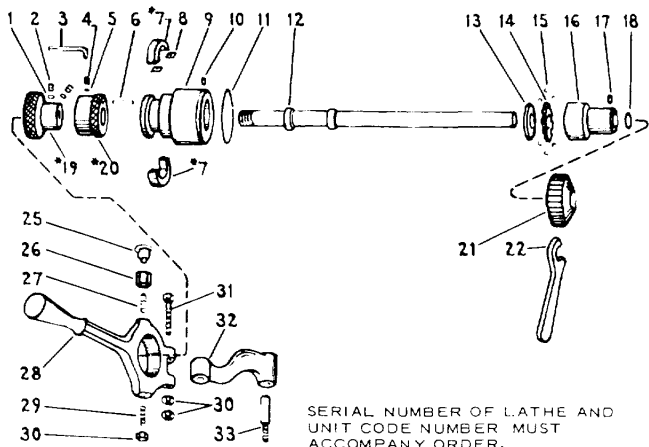
ITEM NO.	PART NO.	PART NAME
1	AS798K1	HANDWHEEL
2	PT794K1	DRAW BAR SLEEVE
3	PT793K1	DRAW BAR
4	*AS793K1	DRAW BAR(1-2-3)

**10-K HANDLEVER COLLET ATT. OLD STYLE
MODEL A, B & C**



1	PT978K1	ADJUSTING NUT
2	*AS988NK1	YOKE SECTOR (13)
3	PT986K1	YOKE CONE
4	PT983NK1	SNAP RING
5	PT975K1	DRAW BAR
6	PT981K1	COLLAR
7	PT488K1	BALL RETAINER
8	172X20	CAM BALL
9	PT979K1	SLEEVE
9A	160X58	PIN
10	PT995NK1	KNOCK-OUT NUT
11	CE2734	SPANNER WRENCH
12	PT490NH1	STOP NUT SCREW
13	256X11	WICK
14	PT1823	PIN
15	PT984NH1	SHOE
16	162X2	SPRING
17	PT489NH1	SCREW
18	PT409R1	SNAP RING
19	PT991NK1	YOKE LEVER
20	PT492NR&T1	SCREW-WITH HOLE
21	PT494NR&T1	YOKE NUT
22	155X5	OILER
23	PT991NK1	YOKE BOLT
24	PT377NR1	SCREW
25	PT1058NR1	NUT
26	PT993NK2	YOKE BRACKET
27	PT997NK1	BRACKET STUD

**10-K HANDLEVER COLLET ATT. NEW STYLE
MODEL A, B & C**

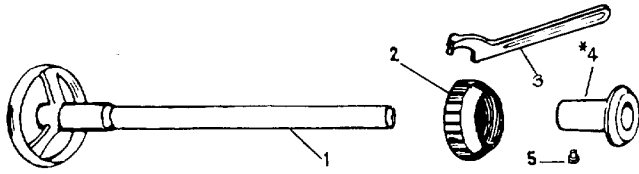


1	PT4809RH1	SHOE
2	120X903	SETSCREW
3	CE2392	WRENCH
4	126X503	SETSCREW
5	PT1078RH1	SHOE
6	PT1159-1	PIN
7	*AS989NK1	YOKE SEGMENT(B)
9	256x11	FELT WICKS
9	P1986K2	CLUTCH YOKE CONE
10	PT1823	PIN
11	PT983NK1	CONE SNAP RING
12	PT975K2	DRAW BAR
13	PT981K1	COLLAR
14	PT488K1	BALL RETAINER
15	172x20	STEEL BALL
16	PT979K2	CLUTCH SLEEVE
17	160x58	SPINDLE PIN
18	PT409R1	SPRING
19	*AS978K2	CL. STOP NUT(I-2)
20	*AS988K1	LOCK COLLAR(4-5)
21	PT995NK1	KNOCK-OUT NUT
22	CE2734	SPANNER WRENCH
23		
24		
25	155x5	OILER
26	PT494NR&T1	YOKE LEVER NUT
27	PT492NR&T1	YOKE LEVER SCREW
28	PT990NK1	YOKE LEVER
23	PT377NR1	SCREW
30	PT1058NR1	JAM NUT
31	PT991NK1	YOKE BOLT
32	PT993NK2	YOKE BRACKET
33	PT997NK1	BRACKET STUD

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

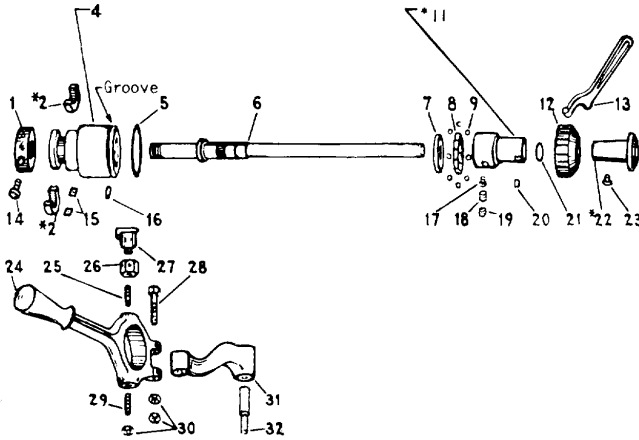
PARTS LIST

**9" HANDWHEEL COLLET ATT.
MODEL A, B & C**



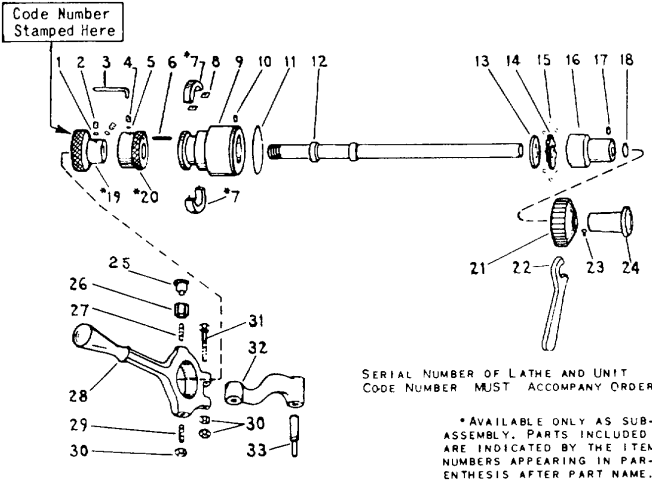
ITEM NO.	PART NO.	PART NAME
1	AS793N4	DRAW BAR ASM.
2	PT995NK	KNOCK-OUT NUT
3	CE2734	SPANNER WRENCH
4	*AS795N1	SLEEVE (5)
5	PT493NH1	KEY

**9" HANDLEVER COLLET ATT. OLD STYLE
MODEL A, B & C**



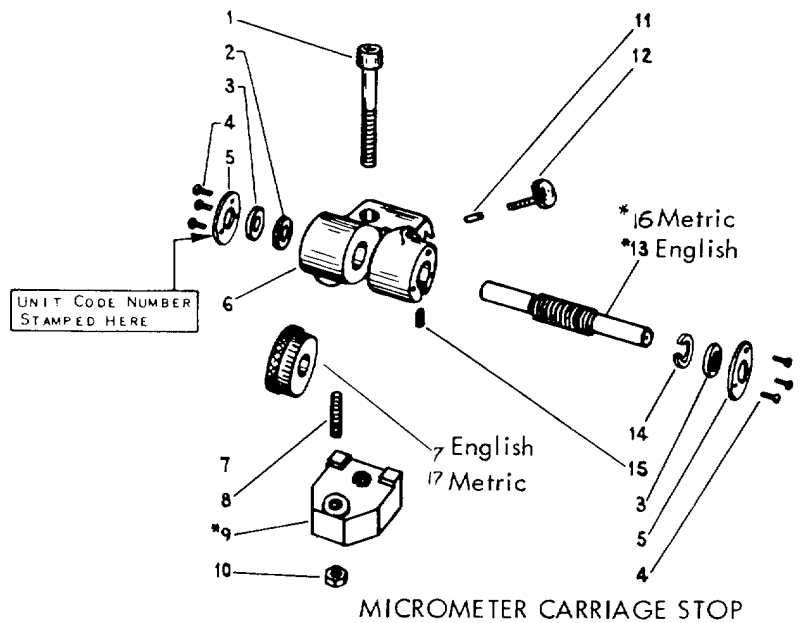
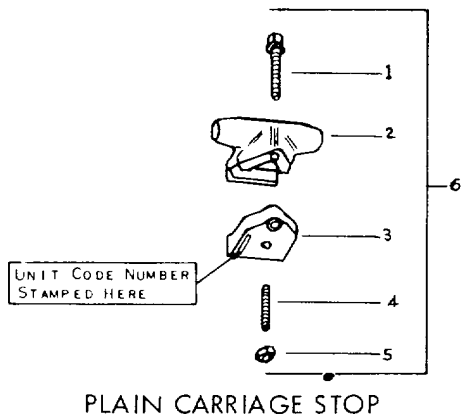
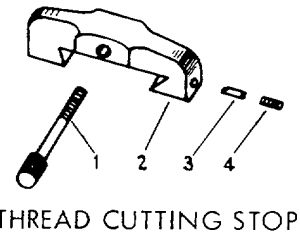
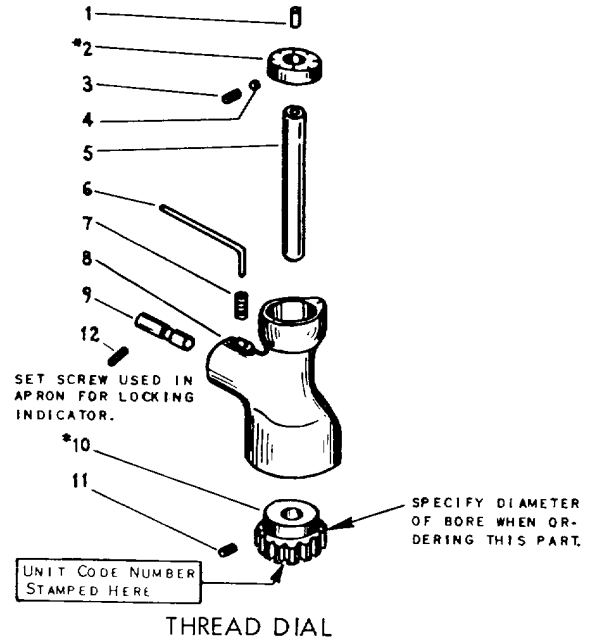
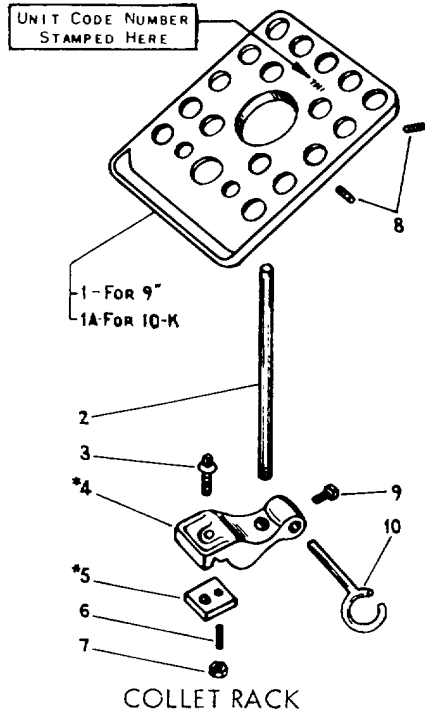
1	PT978N1	ADJUSTING NUT
2	*AS988NK1	YOKE SECTOR (15)
3		
4	PT986N3	Order Item II
5	PT983MK1	SNAP RING
6	PT975N2	DRAW BAR
7	PT981N2	COLLAR
8	PT488N2	BALL RETAINER
9	172x20	CAM BALL
10	PT979N3	SLEEVE
11	*AS979N3	SLEEVE(4-5-7-8-9 16-17-18-19-21)
12	PT995NK1	KNOCK-OUT NUT
13	CE2734	SPANNER WRENCH
14	PT490NH1	STOP NUT SCREW
15	256x11	WICK
16	PT1823	PIN
17	PT984NH1	SHOE
18	162x52	SPRING
19	PT489NH1	SCREW
20	160x58	PIN
21	PT976N1	SNAP RING
22	*AS795N1	SLEEVE (23)
23	PT493NH1	KEY
24	PT990NK1	YOKE LEVER
25	PT492NR&T1	SCREW, WITH HOLE
26	PT494NR&T1	YOKE NUT
27	155x5	OILER
28	PT991NK1	YOKE BOLT
29	PT377NR1	SCREW
30	PT1058NR1	NUT
31	PT993NK2	YOKE BRACKET
32	PT997K1	BRACKET STUD

**9" HANDLEVER COLLET ATT. NEW STYLE
MODEL A, B & C**



1	PT4809RH1	SHOE
2	120x903	SETSCREW
3	CE2392	WRENCH
4	126 x503	SETSCREW
5	PT1078RH1	SHOE
6	PT1859-1	PIN
7	*AS988NK1	YOKE SEGMENT(8)
9	256x11	FELT WICKS
9	PT986N4	CLUTCH YOKE CONE
10	PT1823	PIN
11	PT983NK1	CONE SNAP RING
12	PT975N3	DRAW BAR
13	PT981N2	COLLAR
14	PT488N2	BALL RETAINER
15	172x20	STEEL BALL
16	PT979N4	CLUTCH SLEEVE
17	160x58	SPINDLE PIN
18	PT976N1	BAR SNAP RING
19	*AS97BN2	CL. STOP NUT(1-2)
20	*AS998N1	LOCK COLLAR(4-5)
21	PT995NK1	KNOCK-OUT NUT
22	CE2734	SPANNER WRENCH
23	PT493NH1	KEY
24	*AS795N1	SLEEVE (23)
25	155x5	OILER
26	PT494NR&T1	YOKE LEVER NUT
27	PT492NR&T1	YOKE LEVER SCREW
28	PT990NK1	YOKE LEVER
29	PT377NR1	SCREW
30	PT1058NR1	JAM NUT
31	PT991NK1	YOKE BOLT
32	PT993NK2	YOKE BRACKET
33	PT997NK1	BRACKET STUD

PARTS LIST
9" & 10-K ACCESSORIES



* 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

PARTS LIST

9" & 10-K MICROMETER CARRIAGE STOP

ITEM NO.	PART NAME	PART NO.
1	CAPSCREW	114 x 124
2	FELT WASHER	PT1207NT1
3	BUSHING	PT1206NT1
4	PHILLIP SCREW	104 x 206
5	COVER PLATE	PT1209NT1
6	MICROMETER STOP FRAME	
7	ORDER ITEM 13	PT1203NT2
8	SETSCREW	122 x 520
9	CLAMP (8 10)	AAS1201NK1
10	JAM NUT	137 x 23
11	SHOE	PT1083NT1
12	LOCK SCREW	PT1204NT2
13	SHAFT (7) English	*AS1202NK2
14	FELT WASHER -- SLOTTED	PT1208NT1
15	KEY	PT1210NH1
16	Shaft (17) Metric	PT2271NK1
17	Order Item 16	

9" & 10-K COLLET RACK

ITEM NO	PART NAME	PART NO.
1	COLLET RACK	P-780N2
1A	COLLET RACK	PT780KR2
2	RACK PIPE	PT497NK1
3	COLLAR SCREW	PT371NK1
4	BRACKET (3-*5-9)	*AS782NK1
5	CLAMP (6-7)	*AS863NR1
6	SETSCREW	122 x 624
7	JAM NUT	137 x 25
8	SETSCREW	122 x 505
9	SQUARE HD. SETSCREW	118 x 108
10	DRAW BAR HOOK	PT781NR & T1

9" & 10K THREAD DIAL

ITEM NO.	PART NAME	PART NO.
1	OILER	155 X 16
2	INDICATOR DIAL (3-4)	*AS888NK2
3	SETSCREW	122 x 903
4	SHOE	PT1078NK1
5	INDICATOR SHAFT	PT891NK2
6	WRENCH	CE2392
7	SETSCREW	120 x 6
8	INDICATOR FRAME	
9	MOUNTING STUD	PT889NK1
10	WORM WHEEL (11)	*A887NR2
11	SETSCREW	120 x 6
12	SETSCREW	120 X 6

9" & 10-K PLAIN CARRIAGE STOP

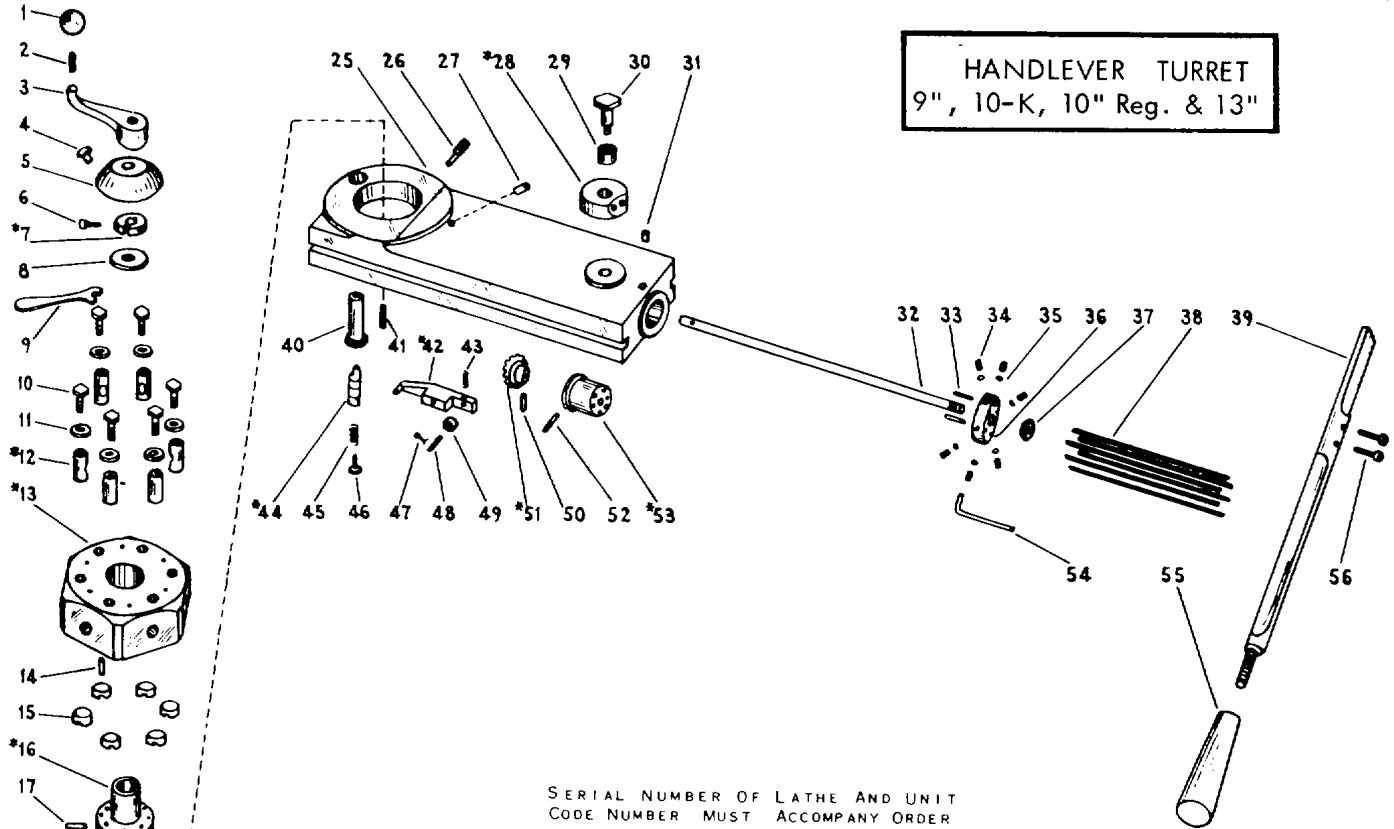
ITEM NO.	PART NAME	PART NO.
1	Collar. Screw	PT210NK2
2	Stop	PT1489NK1
3	Clamp	PT1201NK1
4	Setscrew	122 x 520
5	Hex Nut	137 x 23
6	Complete Unit	CL758NK1

9" & 10-K THREAD CUTTING STOP

ITEM	PART NAME	PART NO.
1	SCREW	PT245NR1
2	CUTTING STOP	PT67NK1
3	BINDER PLUG	PT418NK1
4	SETSCREW	122 x 606

PARTS LIST

HANDLEVER TURRET
9", 10-K, 10" Reg. & 13"

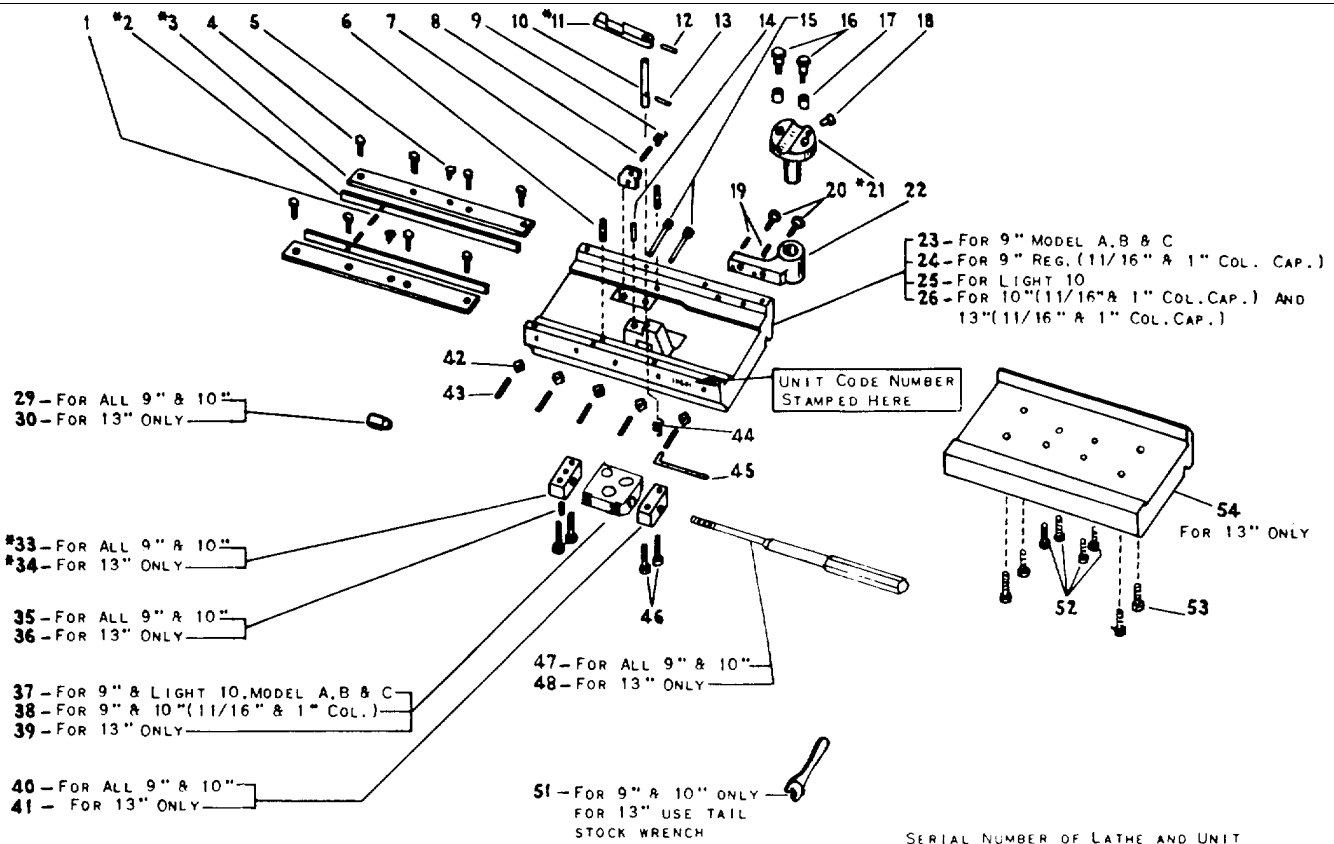


SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER

ITEM NO.	PART NAME	PART NO.
1	BAKELITE BALL	PT3131NR1
2	SETScrew	122x510
3	CLAMPING LEVER	PT3006NR1
4	OILER	155X38
5	TURRET CLAMP	PT3003NR1
6	SETScrew	114x710
7	ADJ. NUT (6)	*AS3009NR1
8	STUD GUIDE	PT3130NR2
9	WRENCH	CE2657
10	CAPSCREW	PT2901NT1
11	WASHER	PT3037NR1
12	TURRET BINDER (10-11)	*AS3010NR1
13	HEX. TURRET(12-15-16, 18-19-20)	AS3002NR2
14	DOWEL	153x16
15	INDEX BUSHING	PT3013NR2
	NOTE: CUSTOMERS ORDER FOR THIS PART MUST BE ACCOMPANIED WITH UNIT CODE NUMBER.	
16	TURRET PLUG (17)	*AS3129NR1
17	PIN	160x21
18	SETScrew	120X105
19	TURRET GEAR	PT3023NR2
20	INDEXING PIN	PT477NR2
21	SPRING	162 X 16
22	WASHER	161 x 26
23	WOODRUFF KEY	PT2070
24	TURRET STUD	PT3008NR1
25	TURRET RAM	PT3001NR3
26	PIVOT PIN	PT3019NR1
27	OILER	155x16
28	SWIVEL (2q-.30)	*AS3119NR2
29	NEEDLE REARING	PT3134NR1
30	SWIVEL STUD	PT3173NR2
31	OILER	155 X 17
32	INDEX SHAFT	PT3030NR1
33	PIN	160 X 25
34	SETScrew	126x505
35	SHOE	PT1081NT1

ITEM NO.	PART NAME	PART NO.
36	END PLATE	PT3005NR1
37	NUT	139x23
38	STOP SCREW	PT3029NR1
39	HANDLEVER	PT3121NR1
40	LOCK BOLT BUSHING	PT3012NR1
41	SETScrew	120x1006
42	LOCK BOLT LEVER(47-48-49)	*AS3016NR1
43	SPRING	162x34
44	LOCK BOLT(40-45)	*AS3011NR3
	NOTE: CUSTOMERS ORDER FOR THIS PART MUST BE ACCOMPANIED WITH UNIT CODE NUMBER.	
45	SPRING	PT3014NR3
46	SPRING RETAINER	PT3015NR2
47	COTTER PIN	170x103
48	PIN	PT3018NR2
49	ROLLER	PT3017NR1
50	TAPER PIN	168X6
51	STOP SCREW GEAR (32-50)	*AS3024NR1
52	TAPER PIN	168x5
53	STOP SCREW INDEX(32-33-34-35-36-37-51)	*AS3004NR1
54	WRENCH	CE2392
55	HANDLE	PT3122NR1
56	CAPSCREW	114x616

PARTS LIST



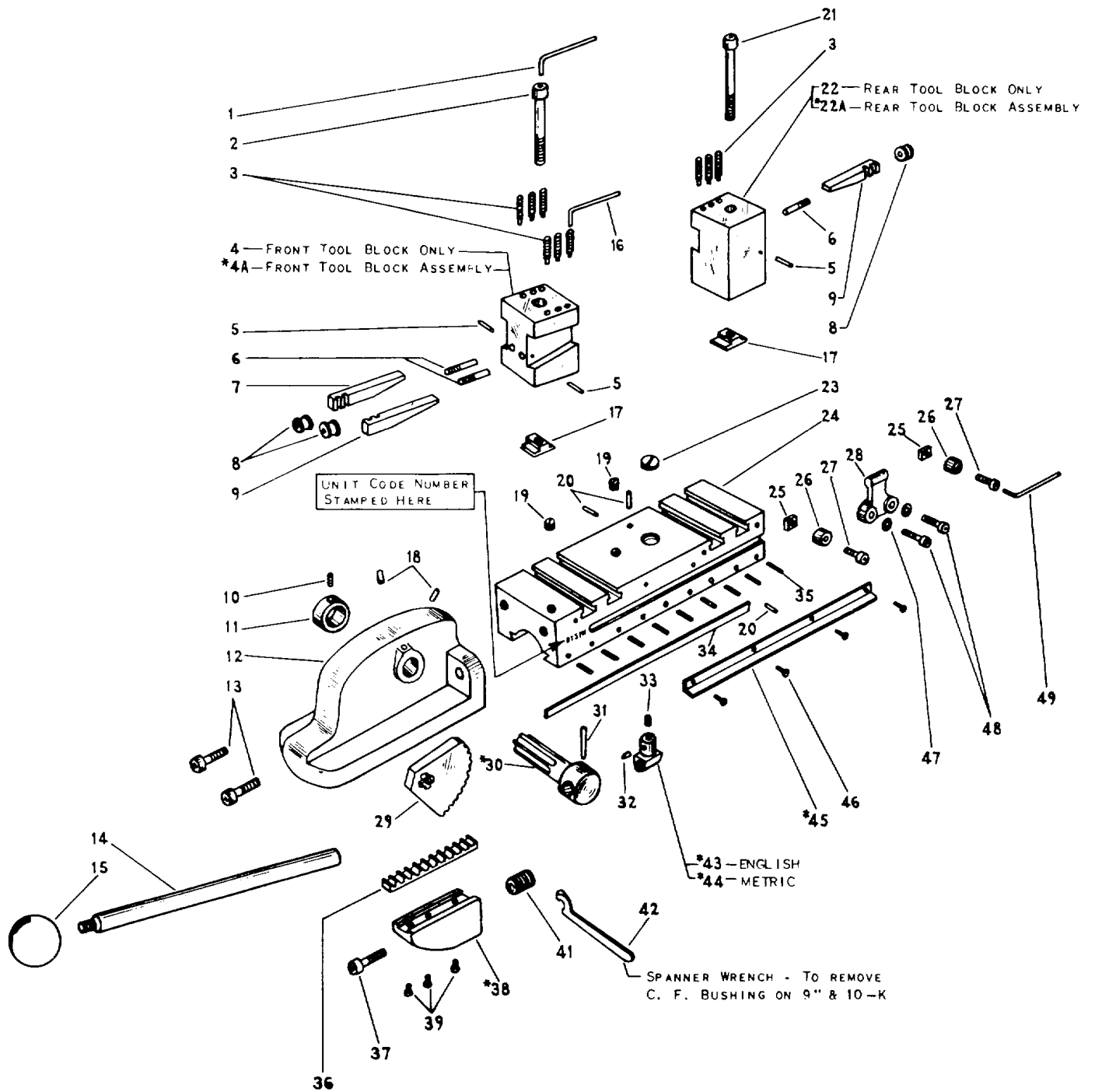
SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER

ITEM NO.	PART NAME	PART NO.
1	PIN	160X18
2	SIDE GIB (1)	*AS3036NR1
3	HORIZ. GIB (5)	*AS3035NR1
4	HORIZ. GIB SCREW	111X110
5	OILER	155X38
6	ROUND FELT	256X8
7	LOCK BOLT CAM	PT3020NR1
8	PIN	160X48
9	SPRING	PT3021NR1
10	LEVER PIN	PT3027NR1
11	INDEXING LEVER (10-12-13)	AS302NR2
12	TAPER PIN	168 X 5
13	PIN	160 x21
14	PIN	160 x 48
15	CAM PIVOT PIN	PT3022NR1
16	HINGE STUD	PT3124NR1
17	NEEDLE BEARING	PT384NK1
18	OILER	155x16
19	PIN	160X52
20	CAPSCREW	114x114
21	SWIVEL HINGE(16-17-18)	AS3120NR1
22	H. L. BRACKET	PT3118NR1
23	TURRET BASE FOR 9" MODEL A. B. & C	PT3000N1
24	TURRET BASE FOR 9" REG. 1 1/16 R 1" COL.	PT3000S1C
25	TURRET BASE FOR LIGHT 10, MODEL A. B. & C	PT3000K1
26	TURRET BASE FOR 10' 13"-11/16" & 1" COL.	PT3000R1
27		
28		
29	FRONT CONE	PT3127NR1
30	FRONT CONE	PT3127T1
31		
32		
33	CONE BEARING-FRONT (35)	*AS3125NR1

ITEM NO.	PART NAME	PART NO.
34	CONE BEARING. FRONT(36)	AS3125T1
35	PIN	160x16
36	PIN	160X50
37	BASE CLAMP	PT3139NK2
38	BASE CLAMP	PT3139R2
39	BASE CLAMP	PT3139T1
40	CONE BEARING-REAR	PT3137NR1
41	CONE BEARING-REAR	PT3137T1
42	HEX. NUT	138x18
43	SETSCREW	125x112
44	SPRING	PT3028NR1
45	WRENCH	CE2391
46	CAPSCREW	114X124
47	REAR CONE	PT3126NR2
48	REAR CONE	PT3126T2
49		
50		
51	WRENCH	CE2658
52	CAPSCREW	114x124
53	CAPSCREW	114x340
54	ADAPTER BASE	PT3135T1

PARTS LIST

**H. L. DOUBLE TOOL CROSS SLIDE
FOR 9", 10-K, 10" REG.**



PARTS LIST

ITEM NO.	PART NAME	9"	10-K	10" REG
		PART NO	PART NO	PART NO
1	WRENCH	CE2389	CE2389	CE2389
2	HOL. HD. CAPSCREW	11 4x244	114x252	114X244
3	SETSCREW	121x116	121x116	121x116
4	FRONT TOOL BLOCK	PT812NR2	PT812K1	PT812NR2
4A	FRONT TOOL BLOCK ASSEM. (2-3-5-6-7-8.9-17)			
5	PIN	*AS812NR2 160x21	*AS812 I 160X21	*AS812 NR2 160x21
6	STUD SCREW	PTS17NR1	PT817NR1	PT817NR1
7	BLOCK GIB - LEFT	PT449NR1	PT449NR1	PT449NR1
8	STUD SCREW NUT	PT818NR1	PTBIBNR1	PTBIBNR1
9	BLOCK Gib - RIGHT	PT448NR1	PT448NR1	PT448NR1
10	SETSCREW	121x5	121x5	121x5
11	COLLAR	PT453NR1	PT453NR1	PT453NR1
12	GEAR RETAINER	PT824NK1	PT824NK1	PT824R1
13	CAPSCREW	114x216	114x216	114x216
14	SHAFT LEVER	PTB08NR1	PT808NR1	PT808NR1
15	BAKELITE BALL	PT406K & FH1	PT406K & FH1	PT406K & PH1
16	WRENCH	CE2385	CE2385	CE2385
17	TEE SLOT NUT	PT741NR2	PT741NR2	PT741NR2
18	OILER	155x17	155X17	155X17
19	SETSCREW	122x706	122x706	122x706
20	PIN	160x240	160240	160x240
21	HOL. HD. CAPSCREW	114x252	114x256	114x252
22	REAR TOOL BLOCK	PT813NR2	PT813K1	PT813NR2
22A	REAR TOOL BLOCK ASSEM. (3-5 6.8-9-17-21)			
23	OIL PLUG	AS8 I 3NR2 PT823NH1	*AS813K1I PT823NH1	*AS8 13NR2 PT823NH1
24	BASE	PT800NK3	PT800NK3	PT800NK3
25	NUT	PTB11NH1	PT811NH1	PT811H1
26	BUSH1NG	PT810NH1	PTBIONH1	PT810H1
27	CAPSCREW	114x110	114x110	114x1 10
28	STOP	PT809NK1	PT809NK1	PT809R1
29	PINION SEGMENT	PT805NK1	PT805NK1	PTB05R1
30	SEGMENT SHAFT (10-11-31)			
31	TAPER PIN	* AS807N R 168x210	* AS07N R1 168x210	AS807NR1 168x210
32	LOCK PIN	PT358NK1	PT358NK1	PT358NK1
33	SETSCREW	PT359NK 1	PT359NK1	PT359NK1
34	BASE GIB	PT801NK1	PT801NK1	PT8OIRI
35	SETSCREW	122x444	122x444	122x513
36	RACK	PT82ONK1	PT82ONK1	PT82ORI
37	CAPSCREW	114x216	114x216	114x216
38	RACK SUPPORT (36 37 39-40)			
39	MACH1NE SCREW	*AS804NK1 103x106	AS804NK1 103x106	*AS804R1 103x107
40	PIN			
41	BUSH1NG	PT814NK1	PT814NK	PT814R1
42	WRENCH	CE2739	CE2739	
43	C. F. NUT ENGLISH (32-33)			
44	C. F. NUT METRIC (32-33)	*AS799NR1	*AS799NR1	* AS799NR1
45	CH1P GUARD (46)	*AS2252NR1	'AS2252NR1	'AS2252NR1
46	SCREW	*AS821NK2 110x106	*AS821NK2 10IXI06	*AS821R2 101X106
47	WASHER	161x11	161x11	161x11
48	CAPSCREW	112x116	112x116	112x116
49	WRENCH	CE2387	CE2387	---

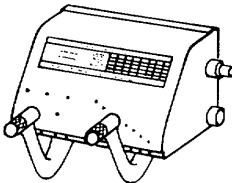
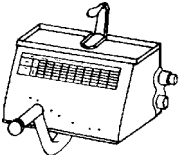
• AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APP EARING IN PARENTHESIS AFTER PART NAME.

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER MUST ACCOMPANY ORDER

PARTS LIST

27 THREADS PER INCH

It is possible to NUT 27 threads per inch on any Lathe by procuring an additional gear. 9" and Light Ten Models B & C Lathes and 10"-1" Collet Lathes with wide range gear box are already equipped to nut 27 threads. For other Lathes see list below:

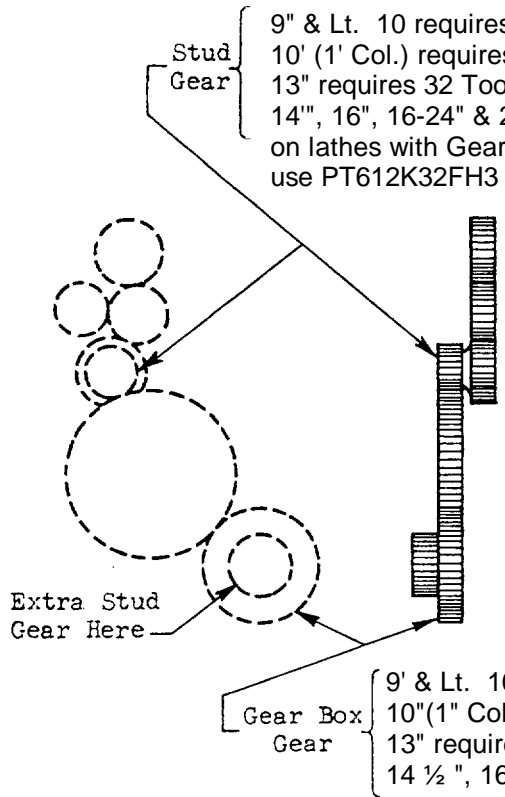
SIZE AND TYPE OF LATHE	PART NO.	
DOUBLE TUMBLER GEAR BOXES		
	9" & Lt. 10AA, Model A, Double Tumbler	PT32K42NK1
	10" (11/16 or 1" Col. Cap.) Double Tumbler	PT32K42R1
	13" Double tumbler .	PFT612K32T1
	14", 16" 16-24" & 2H Double Tumbler For Gear Box Code No. Q.C.G. 103...	PT612K32F52
	For Gear Box Code No. D. T.'; 104...	PT612K32FH3
SINGLE TUMBLER GEAR BOXES		
	10" (11/16 or 1" Col. Cap.) Single Tumbler	PT612K32R1
	13" Single Tumbler .	PT612K24T1
	145", 16', 16-24" & 2H Single Tumbler	PT612K24FH1
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 doublecheck and to determine if correct gear is being ordered.

PARTS LIST

SET-UP CHART FOR CUTTING 27 THREADS PER INCH

DOUBLE TUMBLER GEAR BOX



Stud Gear

- 9" & Lt. 10 requires: 20 Tooth Gear. Furnished With Lathe
- 10" (1" Col.) requires: 20 Tooth Gear. Furnished With Lathe
- 13" requires 32 Tooth Special Gear, PT612K32T1
- 14", 16", 16-24" & 2H requires 32 Tooth Special Gear. Use PT612K32FH2 Gear on lathes with Gear Box Code QCG103. For lathes with Gear Box Code DTG104 use PT612K32FH3 Gear

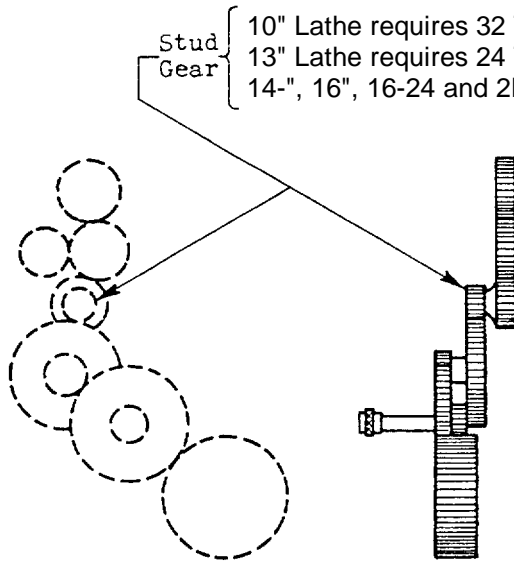
Extra Stud Gear Here

Gear Box Gear

- 9' & Lt. 10 requires 42 Tooth Special Gear, PT32K421, TYI
- 10" (1" Col.) requires 42 Tooth Special Gear, PT32K42R1
- 13" requires 64 Tooth Gear. Furnished On Lathe
- 14 1/2", 16", 16-24 and 2H requires 64 Tooth Gear. Furnished On Lathe

Stud Gear	Left Hand Tumbler	Threads per Inch							
		A							
See Note Above	A								
	B								
	C		27						
	D								
	E								

SINGLE TUMBLER GEAR BOX

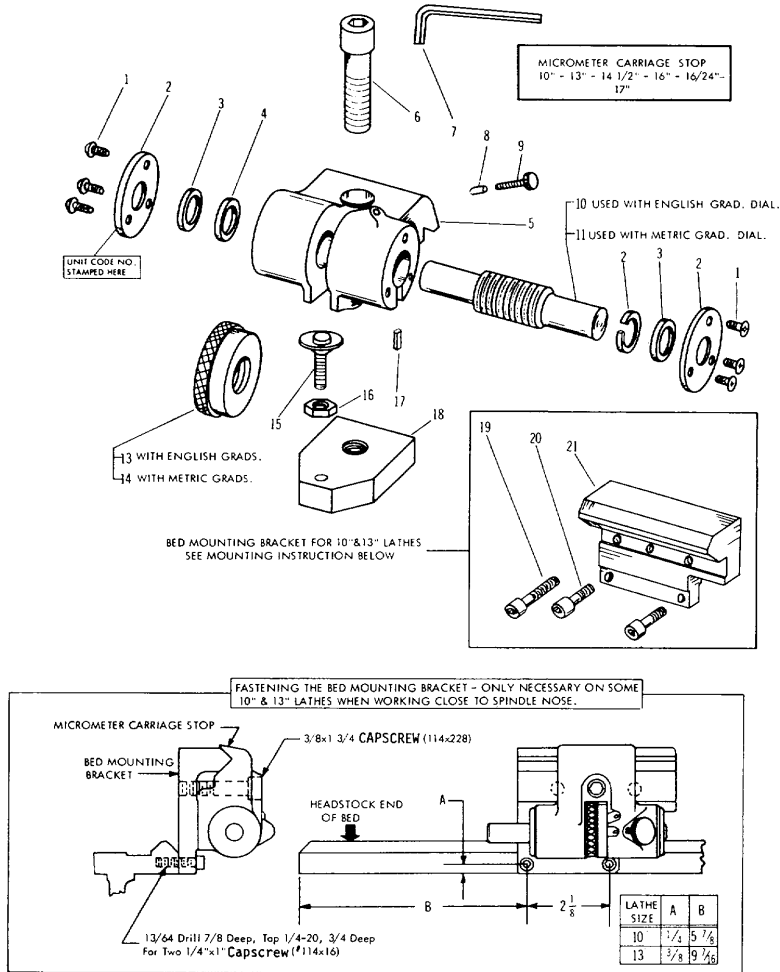


Stud Gear

- 10" Lathe requires 32 Tooth Special Gear, PT612K32R1
- 13" Lathe requires 24 Tooth Special Gear, PT612K2LT1
- 14", 16", 16-24 and 2H Lathes requires 24 Tooth Special Gear, PT6L2K24FH1

Sliding Gear	Top Lever	Threads Per Inch							
In	Left								
	Center								
	Right								
Out	Left	27							
	Center								
	Right								

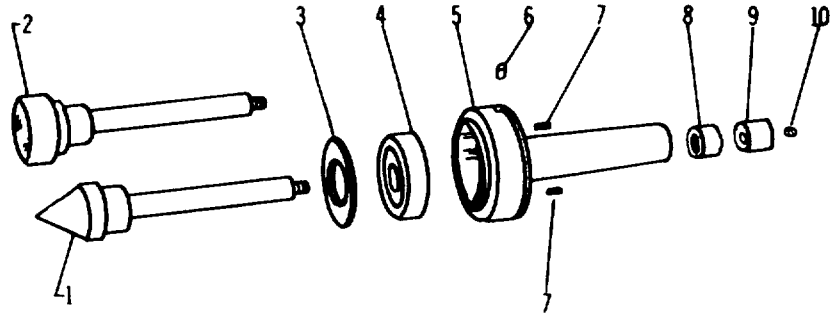
PARTS LIST



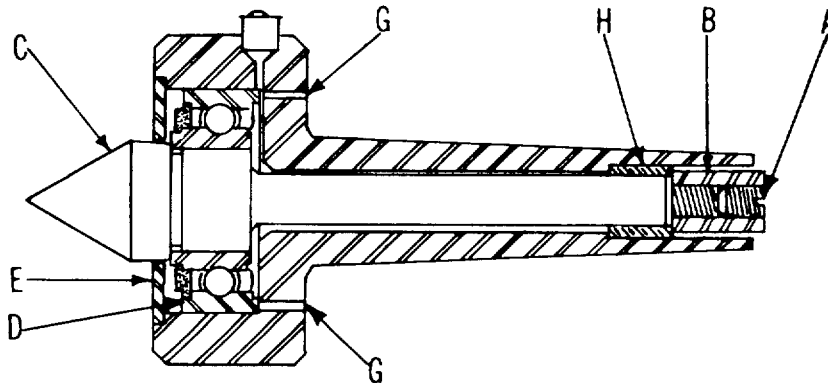
ITEM NO.	PART NAME	10" PART NO	13" PART NO	14 1/2" PART NO	16", 16/24 & 17" PART NO	SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER MUST ACCOMPANY ORDER
1	PHILLIPS SCREW	104 . 206	104 x 206	104 x 206	104 x 206	
2	COVER PLATE	PT1209NT1	PT1209NT1	PT1209FH1	PT1209FH1	
3	BUSHING	PT1206NT1	PT1206NT1	PT1206FH1	PT1206FH1	
4	FELT WASHER	PT1207NT1	PT1207NT1	PT1207FH1	PT1207FH1	
5	MICRO STOP FRAME					
6	CAPSCREW	114 x 236	114 x 236	114 .444	114 x 444	
7	HEX. WRENCH	CE2389				
8	SHOE	PT1083NT1	PT1083NT1	PT1083FH1	PT1083FH1	
9	LOCK SCREW	PT1204NT2	PT1204NT2	PT1204FH2	PT1204FH2	
10	MICRO SHAFT (ENGLISH)	PT1202RT1	PT1202RT1	PT1202FH2	PT11202FH2	
11	MICRO SHAFT (METRIC)	PT2271RT1	PT2271RT1	PT2271FH1	PT2271FH1	
12	FELT WASHER (SLOTTED)	PT1208NT1	PT1208NT1	PT1208FH1	PT1208FH1	
13	MICRO STOP DIAL (ENGLISH)	PT1203NT2	PT1203NT2	PT1203FH2	PT1203FH2	
14	MICRO STOP DIAL (METRIC)	PT2270NT1	PT2270NT1	PT2270FH1	PT2270FH1	
15	CLAMP SCREW	PT121 IRT1	PT1 21IRT1	PT121 IFH1	PT121 IFH1	
16	JAM NUT	137 x 25	137 x 25	137 x 25	137 x25	
17	KEY	PT1210NH1	PT1210NH1	PT1210NH1	PT1210NH1	
18	CLAMP	PT1201R2	PT1201T2	PT1201FH2	PT 1201FH2	
19	CAPSCREW	114 n 228	114 X 22B			
20	CAPSCREW	114x6	114x6			
21	BED MOUNTING BRACKET	PT1121RI	PT1121RI			

PARTS LIST

BALL BEARING LIVE CENTERS



ITEM NO.	9" & 10" PART NO.	13", 14 1/2" & 16" PART NO.	PART NAME
1	PT3276NR1	PT3276TH1	SPINDLE POINT
2	PT3281NR1	PT3281TH1	SPINDLE HOLLOW
3	PT3277NR1	PT3277TH1	PROTECTING COLLAR
4	PT502NH1	PT3280TH1	BALL BEARING
5	PT3275NR1	PT3275TH1	BODY
6	155 x 17	155 x 17	OILER
7	-----	120 x 904	SETSCREW
8	PT3278NR2	PT3278TH2	REAR BUSHING
9	PT3279NR1	PT3274TH 1	TAKE-UP NUT
10	120 x 1104	120 x 1104	SETSCREW



LUBRICATION

Use CE1602 Machine Oil or equal. No. 2 M. T. Center Bearings are sealed but No. 3 :MT. Center Bearings are not: therefore should be periodically repacked with grease.

ADJUSTMENT

Screw Take-up NUT B tight so Spindle can hardly be turned by hand. Back up fraction of a turn so the Spindle will just barely turn freely. Proper tension is important. Cannot be too tight or loose. Lock the setscrew A snug, but not too tight.

TO DISASSEMBLE

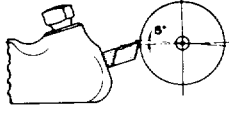
Loosen setscrew A and remove Take-up NUT B. Drive out Spindle C along with bearing D and collar E with a punch through.; the two holes as shown at G. (Drive out with two set screws on No. 3 ;.T.) If necessary to remove rear bushing H drive out by inserting bar into front end of body. Bar diameter must be just slightly under hole size of Body.

TO ASSEMBLE

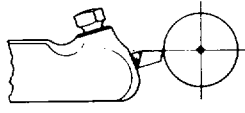
Flush center of body with mineral spirits or equal before assembling. Drive in rear bushing, if it has been removed. Place Spindle into Body, tapping lightly on outer bearing race if necessary. Press on protective collar.

CUTTING TOOLS DATA

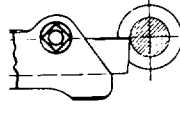
CORRECT HEIGHT OF THE CUTTING EDGE



STRAIGHT TURNING

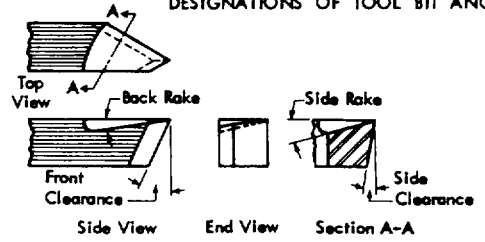


TAPER TURNING, THREAD CUTTING, BRASS TURNING



CUTTING OFF

DESIGNATIONS OF TOOL BIT ANGLES



APPLICATIONS

TOOL BIT ANGLES

APPLICATIONS

	<p>LEFT HAND TURNING TOOL</p>		<p>RIGHT HAND TURNING TOOL</p>
	<p>LEFT HAND SIDE TOOL</p>		<p>RIGHT HAND SIDE TOOL</p>
	<p>ROUND NOSED TURNING TOOL</p>		<p>BRASS TURNING TOOL</p>
	<p>SCREW THREAD CUTTING TOOL</p>		<p>CUTTING OFF TOOL</p> <p>Cutting off tool cannot be ground in block</p>

Cutting Speeds for Turning With High Speed Steel Cutting Tools

Material	Ft. per Minute	Lubricant	Material	Ft. per Minute	Lubricant
Aluminum	300-400	Comp. or Kerosene	Malleable Iron	80-130	Dry or Comp.
Brass, leaded	300-700	Dry or Comp.	Mang. Bronze	150-300	Comp.
Brass, red & yellow	150-300	Comp.	Mang. Steel	20-40	Comp.
Bronze, leaded	300-700	Comp.	Moly. Steel	100-120	Comp.
Bronze, phosphor	75-150	Comp.	Monel Metal	100-125	Comp. or Sul. Base
Cast Iron	30-110	Dry	Nickel Silver 18%	75-150	Comp.
Cast Steel	45-90	Comp.	Nickel Silver, leaded	150-300	Comp.
Copper, leaded	300-700	Comp.	Nickel Steel	85-110	Comp. or Sul. Base
Copper, electro.	75-150	Comp.	Plastics, hot-set molded	200-600	Dry
Chrome Steel	65-115	Comp.	Rubber, Hard	200-300	Dry
Die Castings	225-350	Compound	Stainless Steel	100-150	Sul. Base
Duralumin	275-400	Compound	Tool Steel	70-130	Comp.
Fiber	200-300	Dry	Tungsten Steel	70-130	Comp.
Machine Steel	115-225	Compound	Vanadium Steel	85-120	Comp.

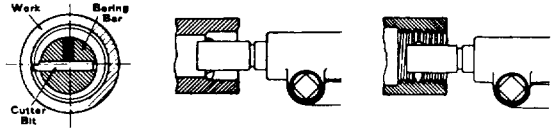
The above speeds have been collected from several sources and are suggested as general for average work. Special conditions may necessitate the use of higher or lower speeds for maximum efficiency.

HONING the CUTTER BIT



After grinding, hone cutting edge of tool on oil stone. It will improve cutting quality of cutter bit.

Boring and Inside Threading Tool

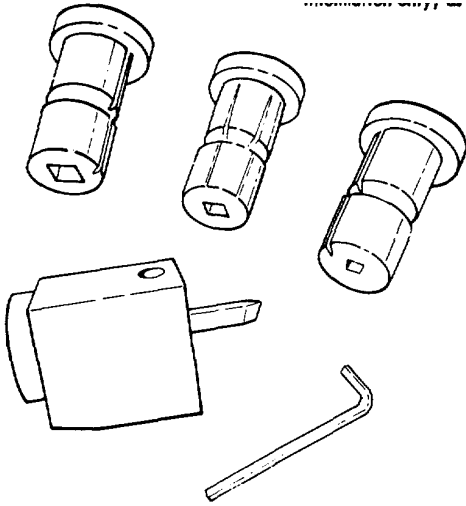


The boring tool is ground exactly the same as the left hand turning tool except the front clearance of boring tool must be ground at a slightly greater angle so that the heel of the tool will not rub in the hole of the work. The inside threading tool is ground the same as the screw thread cutting tool except that the front clearance must be increased for the same reason as for the boring tool.

NOTE: These are suggested starting angles for general work. Slightly smaller or larger angles may prove more efficient, depending on the texture of the material machined, finish required, cutting speed and the type of cutting tool used.

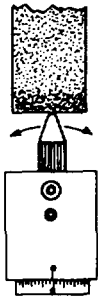
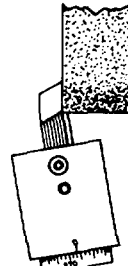
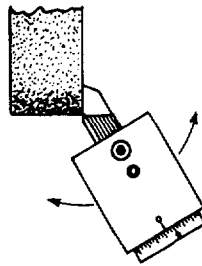
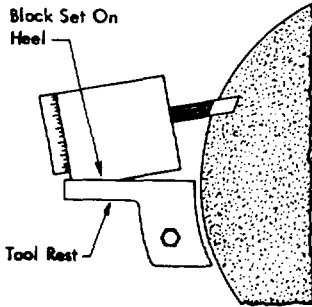
INSTRUCTIONS ON USE OF CUTTER BIT GRINDING BLOCK

Suggested CNUtt1ng Off Tool grinding angles a illustrated re given as general informaT1on only, m cutting off tools CANNOT be ground In the Universal cutter Bit Grinding Block.

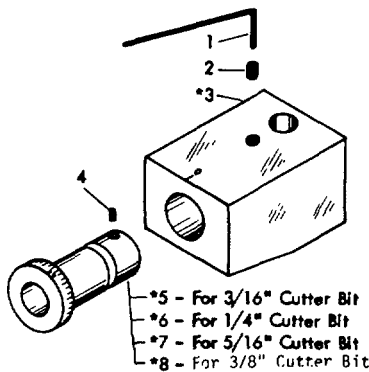


1. cutter bit in proper sleeve and tighten securely, allowing approximately of the cutter bit to protrude from the nose of the sleeve.
2. Place sleeve in block, set cutter bit to desired angle (graduations on sleeve are In Increments of 50) and lock In position with set screw on top of block. Reset for top and side clearance angles, if desired.
3. Due to the many variations that enter into correct grinding angles such as: cutting peed, type of finish and kind of material to be macH1ned with cutter bit, no attempt has been made to show these angles in the instructions, however, suggested clearances are charted on the reverse side of this sheet. This is for the average type of work and may not agree with the various other publicaT1ons on cutter bit grinding.

Note: If tool rest on your grinder is not large enough to accommodate cutter Bit Grinding Block, clamp an auxiliary plate to extend the tool rest.



1. Heel the block as shown for grinding all clearances. Unless a small degree of front clearance is required then lay on flat of block.
2. Use both sides of wheel for grinding side clearances on all shapes of tools. Angle block to get proper shape.
3. Use sides of wheel for grinding back and side rake. Angle block to get proper top back rake. Heel block if desired.
4. Use face of wheel for grinding radius, on round nose tools, rotaT1ng the block to develop the proper radius. Heel the block as shown in Fig. 1.



Item No.	Part Name	Part No.
1	Hex Wrench	173x6
2	Setscrew	149xS05
3	Block (2)	*AS4635-1
4	Setscrew	126x503
5	Sleeve (4) For 3/16" Bit	*A5636
6	Sleeve (4) For 1/4" Bit	*AS4637-1
7	Sleeve (4) For 5/16" Bit	*AS4638-1
8	Sleeve (4) For 3/8" Bit	*A54639-1

Available only as sub-assembly. Parts included are indicated by the item numbers appearing in parenthesis after part name.

HOW TO USE YOUR 10-IN-1 TOOL BLOCK

The Ten-in-One Tool Block will replace practically all of the tool holders and boring bar holders ordinarily required, combining them into one practical easy-to-use unit. It may be used for heavy duty operations or, because of its compactness, for similar classes of work. An outstanding advantage is the screw adjustments for tool height which are easily made and need never be changed until all change in the height of the cutting edge of the tool becomes necessary. cutter bits may be removed, ground and replaced without the usual height adjustments. The tool block may be revolved to permit mounting the tools from either the right or the left hand side. Instructions for using and a few of the many applications are shown in the diagrams below.

TURNING AND CUTTING OFF

To mount the 10 in 1 Tool Holder on the compound rest, first remove the NUT A and block from stud S. Then slide stud assembly into T-slot and tighten flat head screws F. Replace block and NUT, but do not tighten NUT until adjustment for tool height is made.

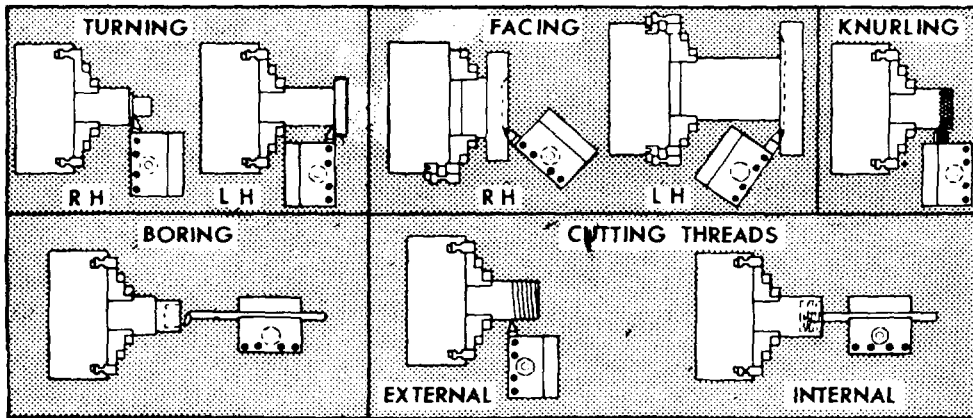
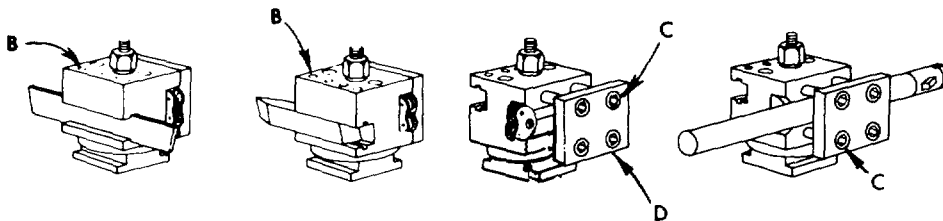
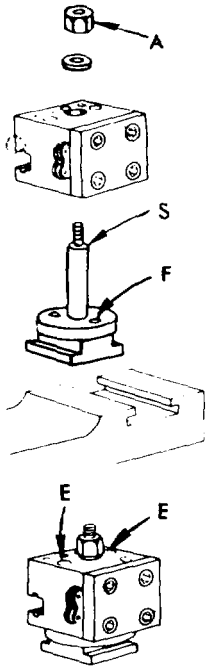
Vertical adjusting screws are used to position the cutting tool. First make sure NUT A is loose enough to permit complete adjustment, then unscrew the back (adjusting screw (one farthest from work) and adjust front screw until cutting edge is at the desired height. Swivel the tool block to the correct position for taking the cut, and tighten NUT A with fingers only. Now tighten back vertical adjusting screw, and you are ready to take the cut.

CNUT-off blades and cutter bits are held in the tool slots by the 4 set screws labeled B in the diagram. Loosen these screws sufficiently to allow entry of the tool and then tighten the to lock the tool in place.

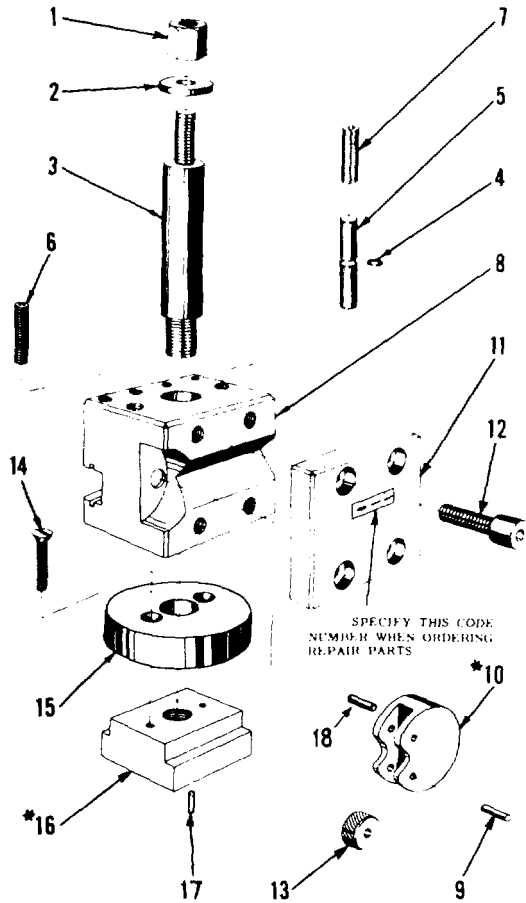
BORING AND KNURLING

Your Tool Block comes equipped with a self-aligning knurling head having No. 1151 medium diamond knurls. To change knurls or for using a boring bar, loosen the 4 cap screws labeled C and move plate A away from the main body to allow sufficient clearance for removal of the knurling head. When replacing, always tighten these screws enough to bring the plate solidly against the main body of tool block.

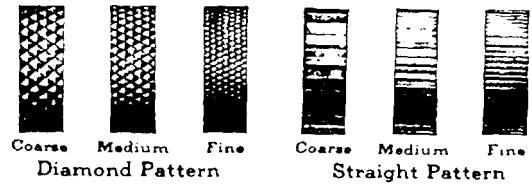
For all boring and knurling operations, invert the entire tool block. This place the boring or knurling tool at the correct height, without disturbing the height adjustment for the turning tool.



PARTS LIST



Extra Knurls for Knurling Tool



THE TEN IN ONE TOOL BLOCK COMES EQUIPPED WITH A SELF-ALIGNING KNURLING HEAD HAVING No. CE3151 MEDIUM DIAMOND KNURLS. OTHER KNURLS ARE AVAILABLE AT EXTRA COST. ILLUSTRATIONS ABOVE SHOW ACTUAL SIZES OF KNURLING PRODUCED. SUPPLIED IN PAIRS

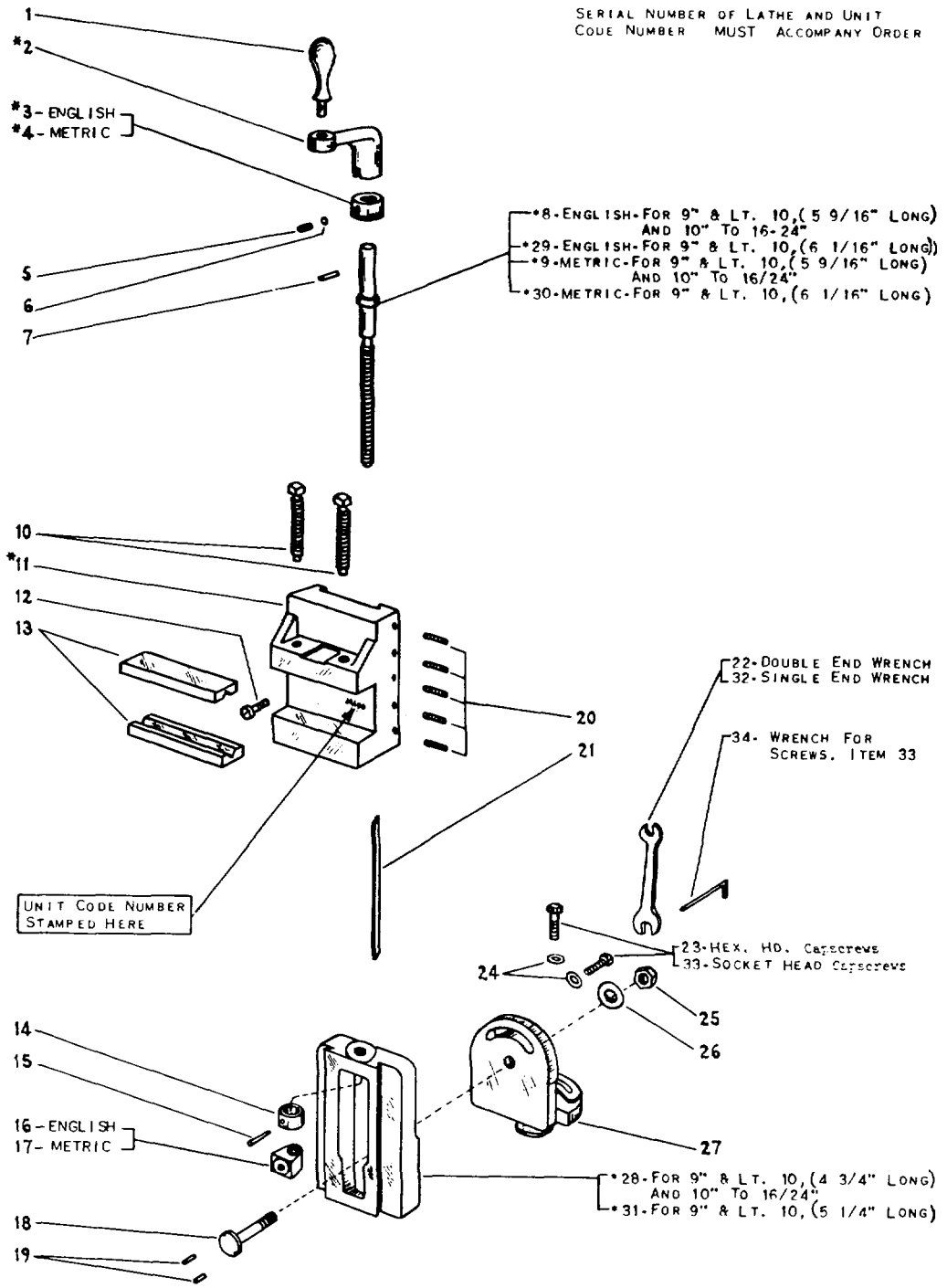
CAT. NO.	PATTERN	SIZE
CE3150	FINE DIAMOND	5/8" x 5/16"
CE3151	MED. DIAMOND	5/8" x 5/16
CE3152	COARSE DIAMOND	5/8" x 5/16
CE3153	FINE STRAIGHT	5/8" x 5/16
CE3154	MED. STRAIGHT	5/8" x 5/16
CE3155	COARSE STRAIGHT	5/8" x 5/16

10 in 1 Tool Block
For 9", LT. 10, 10", 13", 14 1/2" 16" & 16/24

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

ITEM NO.	PART NAME	9" & LT 10 (A, B, & C)	10" (1" COL)	13"	14 1/2 "	16" & 16/24"
		PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
1	NUT	PT283NK1	PT283NK1	PT283R1	PT283R1	PT283R1
2	WASHER	PT1673NR1	PT1673NR1	PT1674T1	PT1675T1	PT1675T1
3	STUD	PT1464NR1	PT14E4NPI	PT1464T1	PT1464T1	PT1464T1
4	SNAP RING	NOT USED	NOT USED	PT1474T1	PT1474FFII	PTI74FH1
5	ADJ. PIN	NOT USED	NOT USED	PT1473FH1	PT1473FH1	PT1473FH1
6	DOG PT. SCR	121 X 16	121 X 16	121 X 224	121 X 224	121 X 224
7	ADJ. DOG PT. SCR	121 X 228	121 X 228	121 X 312	121 X 412	121 X 412
8	BLOCK					
9	KNURL STUD	PT1476NH1	PT1476NH1	PT14674T1	PT1476NH1	PT1476NH1
10	KNURL HD. (18)	*AS1475NH1	*AS1475NH1	*AS1475NH1	*AS1475NH1	*AS1475NH1
11	CLAMP	PT1461NK1	PT1461R1	PT1461R1	PT1461F1	PT1461H1
12	CAPSCREW	114 x 16	114 x 16	114 x 124	114 x 224	114 x 224
13	KNURLS		SEE	TABULAT1ON	ABOVE	
14	FLAT HD. SCR	103 x 212	103 x 212	103 x 212	103 x 614	103 x 618
15	BASE	PT1462NR1	PT1462NR1	PT1462E1	PT1463F1	PT1462H1
16	CLAMP (1-2-3- 17)	*AS1463NK1	*AS1463R1	*AS1463T1	*AS1463F1	*AS1463H1
17	PIN OR SCREW	160 x 18	160 x 18	120 x 906	160 X 45	160 X 45

PARTS LIST



MILLING ATTACHMENT
ENGLISH AND METRIC

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

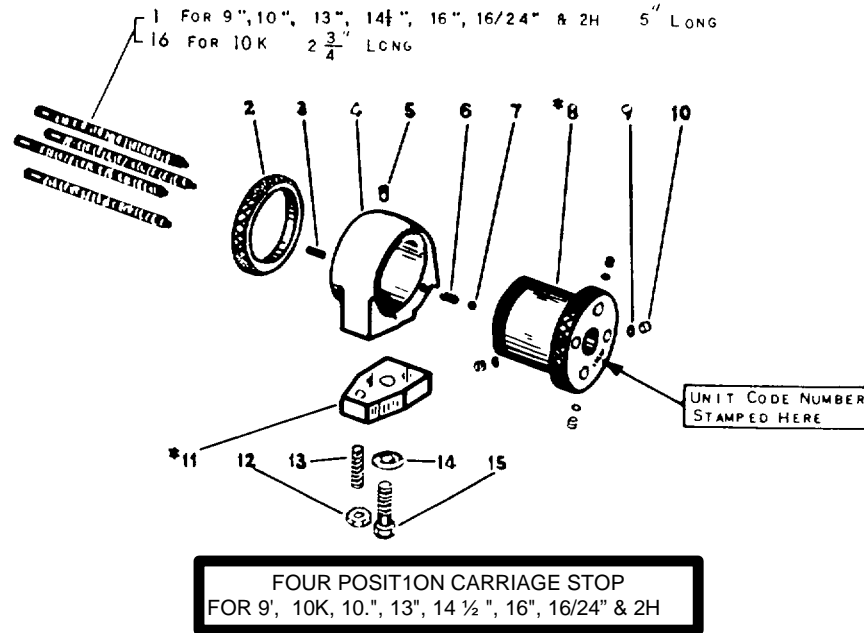
PARTS LIST

ITEM NO.	PART NAME	9" & LIGHT 10	10" (11/16" & 1" COL)
		PART NO.	PART NO.
1	HANDLE	PT1482	PT1482
2	CRANK (1)	*AS830NH1	* AS830NH1
3	GRAD. COLLAR - ENGLISH (5-6)		
4	GRAD. COLLAR - METRIC (5-6)	*AS829NT1	*AS829NT1
5	SETSCREW	*AS2243NT1	*AS2243NT1
6	BRASS PUNCH1NG	122x103	122x103
7	PIN	PT1078NK 1	PT1078NK 1
8	FEED SCREW-ENGLISH (7 14- 15- 16)	160x46	160x46
9	FEED SCREW-METRIC (7- 14 1 5- 17)	*AS832NK2	AS832R2
10	CLAMPING SCREW	*AS2242NK1	*AS2242R1
11	WISE (20-21)	PT836NR1	PT83;NR1
12	CAPSCREW	*AS827NK1	*AS827R1
13	V PLOCK	111 x 12	111 x 14
14	COLLAR	PT831NK1	PT831R1
15	TAPER PIN	PT833NT1	PT833NT1
16	FEED NUT-ENGLISH	168X206	168X206
17	FEED NUT-METRIC	PT828NR1	PT82PNR1
18	SWIVEL 90LT	PT2241NR1	PT2241NR1
19	PIN	PT834NK1	PT834R1
20	SETSCREW	160x18	160x18
21	WISE GIB	122x210	122x512
22	WRENCH	PT835NK1	PT835RI
23	CAPSCREW	CE2655	CE2655
24	WASHER	112x120	112X120
25	HEX. NUT	112 x12	161x12
26	WASHER	136x29	136x31
27	BASE	161X21	161X27
28	SADDLE(18- 1q)	PT8 25NK2	PT825R1
29	FEED SC. ENGLISH (7- 14- 1 5- 1)	*AS826NK1	*AS826R1
30	FEED SC. METRIC (7- 14- 15- 17)	*AS832NK	
31	SADDLE (IR- 19)	*AS2242NK2	
		*AS826FNK2	

ITEM NO	PART NAME	13' (11/16" & 1" COL.)	14 ½ " (3/4 " & 1" COL)	16" & 16/24" (1" COL)
		PART NO	PART NO	PART NO.
1	HANDLE	PT1482	PT1482	PT1482
2	CRANK (1)	*ASP30NH1	*AS830NH1	*AS830NH1
3	GRAD. COLLAR - ENGLISH (S- 6)			
4	(RAD. COLLAR - METRIC (F- F)	*AS824NT1	*AS829FH1	*AS29 FH 1
5	SETSCREW	*AS2243NT1	*AS2243FH1	*AS243FH1
6	PRASS PUNCH1NG	122x103	122x104	122x104
7	PIN	PT107RNK1	PT1078NK1	PT107RNK 1
8	FEED SCREW- ENGLISH (7- 14- 15- 17)	160X46	160X46	160X46
9	FEED SCREW-METRIC (7-14-15-17)	*ASR32T2	*AS832FH2	*ASR32FH2
10	CLAMP ING SCREW	*AS2242T1	*AS2242FH1	*AS2242FH1
11	WISE (20-21)	PT836T1	PT836FH1	PT836FH1
12	CAPSCREW	*ASR27T1	*ASR27FH1	*ASR27FH1
13	V BLOCK	111x114	111 x120	111x120
14	COLLAR	PT831T1	PT831FH1	PTRSFH
15	TAPER PIN	PTR33NT1	PT833FH1	PT833FH1
16	FEED .NUT- ENGLISH	168X206	168 X208	168 X208
17	FEED NUT-METRIC	PT828T1	PT828FH1	PTR28FH 1
18	SWIVEL BOLT	PT2241T1	PT2241FH1	PT2241FH1
19	PIN	PT834T1	PT834FH	PT834FH1
20	SETSCREW	160x45	160X45	160x45.
21	WISE -GIB	122x514	122x518	122x51R
22	WRENCH	PTR35T1	PT835FHPI	PT835FH1
23	CAPSCREW	CE2656	CE2656	CE2656
24	WASHER	11 2x4 24	112x427	112x42P
25	HEX. NUT	1 1 x27	161x30	161X30
26	WASHER	13FX35	136 X39	136X38
27	RASE	161x36	161 x42	161 x42
28	SADDLE 1P-10	PTP25T1	PT825FI	PT825H2
32	WRENCH (SINGLE END)	*AS826T1	*AS826FH2	*AS826FH2
33	CAPSCREW SOCKET HD	CE2R76	CE267c	CE267E
34	SOCKET HO. WRENCH	114x42R	114x428	114x424
		CE2390	CF2390	CF2390

PARTS LIST

SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER

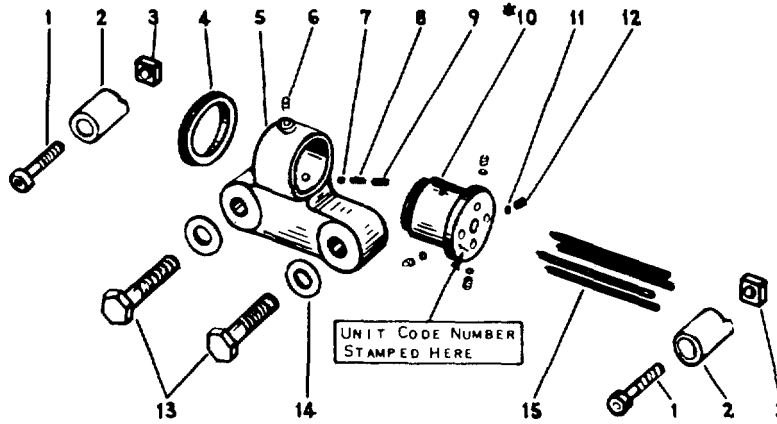


AVAILABLE ONLY AS SUBASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO	PART NAME	9" & 10K	10"	13"	14 1/2", 16", 16/24" & 2H
		PART NO	PART NO	PART NO	PART NO
1	STOP SCREW	PT1219NH1	PT1219NH		PT1219NH1
2	TAKE UP NUT	PT1218NH1	PT1218NH1		PT1218NH1
3	SETSCREW	122x108	122x108		122x108
4	FRAME				
5	OILER	155x17	155x17		155x17
6	COIL SPRING	162X 54	162X 54		16 2x 54
7	STEEL BALL	172X12	172x12		172X12
8	SPINDLE (2-9-10)	*AS1217NH1	*AS1217NH		*AS1217NH1
9	BINDER SHOE	PT1080NK1	PT1080NK1		PT1080NK1
10	SETSCREW	126x505	126x505		126x505
11	CLAMP (12-13)	*AS1216NK1	*AS1216RT1		*AS1216FH1
12	JAM NUT	139X23	139X23		139x25
13	SETSCREW	122x518	122x524		122x624
14	WASHER	161X63	16 1X2		16 1 16
15	CAPSCREW	114x120	114x120		114x228
16	STOP SCREW	PT1236K1			

PARTS LIST

SERIAL NUMBER OF LATHE AND UNIT
 COOE, NUMBER MUST ACCOMPANY ORDER



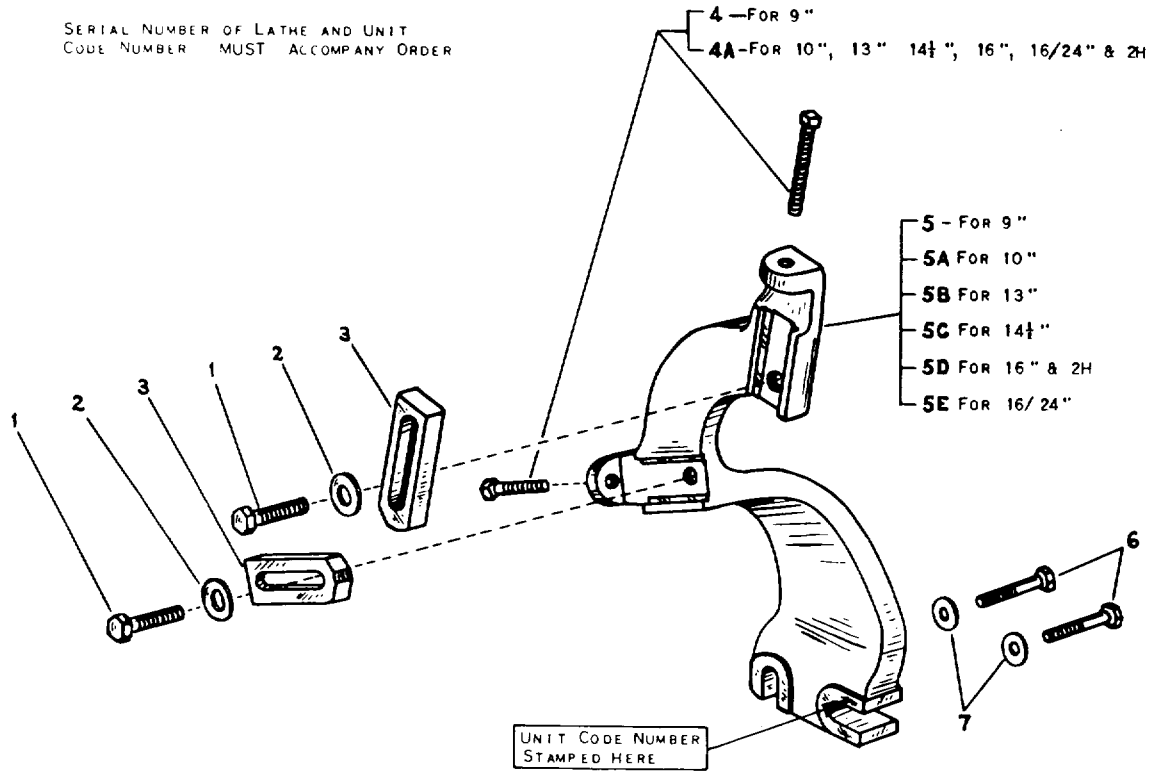
**FOUR POSITION CROSS SLIDE STOP
 FOR 9" 10K, 10", 13, 16", SERIES 900, 1000 AND 2H**

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

ITEM NO	PART NAME	10K,	13"	16" & 2H
		PART NO	PART NO	PART NO.
1	CAPSCREW	114x116	114x120	114x120
2	RUSHING	PT1223NR2	PT1223TH1	PT1223TH
3	STOP SCREW NUT	PT811NH1	PT811NH1	PT811NHQ
4	TAKE UP NUT	PT1222NH1	PT1222NH1	PT1222NH1
5	FRAME			
6	SETSCREW	122x102	122x102	122x102
7	STEEL BALL	172x12	172x12	172x12
8	COIL SPRING	162x1	162x1	162x1
9	SETSCREW	126x505	126x505	126x505
10	SPINDLE (4-11-12)	*AS1221NH1	*AS1221NH1	*AS1221NH1
11	SHOE	PT1078NK1	PT1078NK1	PT1078NK1
12	SETSCREW	120x904	120X904	120x904
13	CAPSCREW	112x132	112x224	112x428
14	WASHER	161x63	161x16	161x26
15	STOP SCREW	PT1224NH1	PT1224NH1	PT1224NH1

PARTS LIST

SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER



REGULAR FOLLOWER REST
FOR 9 ; 10", 13", 14 1/2 ", 16", 16/24" & 2H

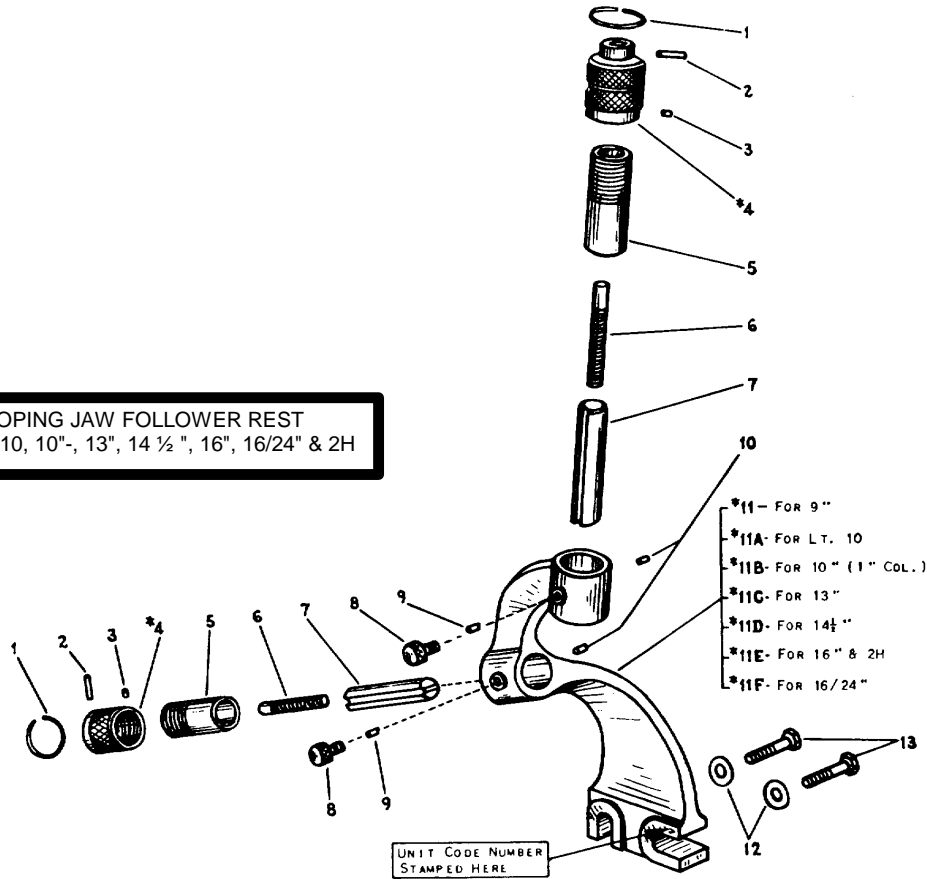
AVAILABLE ONLY AS SUBASSEMBLY PARTS
INCLUDED ARE INDICATED BY THE ITEM NUMBERS
APPEARING IN PAR. ENTESISIS AFTER PART NAME.

ITEM NO	PART NAME	9" & 10" (1 COL)	13"	14 1/2", 16", 16/24" & 2H
		PART NO	PART NO	PART NO.
1	HEX. CAPSCREW	112X116	112x220	112x220
2	WASHER	161X12	161X17	161X17
3	JAW	PT128NR1	PT128T1	PT128FH1
4	Sq. HD. CAPSCREW	118x128	---	---
4A		118 x136	118x240	118x248
5	FRAME	PT1 30N1		
5A	FRAME	PT130R1		
5B	FRAME	---	PT130T1	---
5C	FRAME	---	---	PT130F1
5D	FRAME	---	---	PT130H1
5E	FRAME	---	PT2010H1	
6	HEX. CAPSCREW	112x132	112x228	112x432
7	WASHER	161X63	161X64	161X65

PARTS LIST

SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER

TELESCOPING JAW FOLLOWER REST
FOR 9", LIGHT 10, 10"-, 13", 14 1/2", 16", 16/24" & 2H

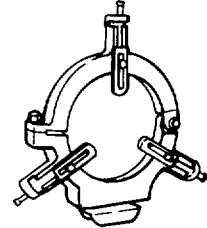
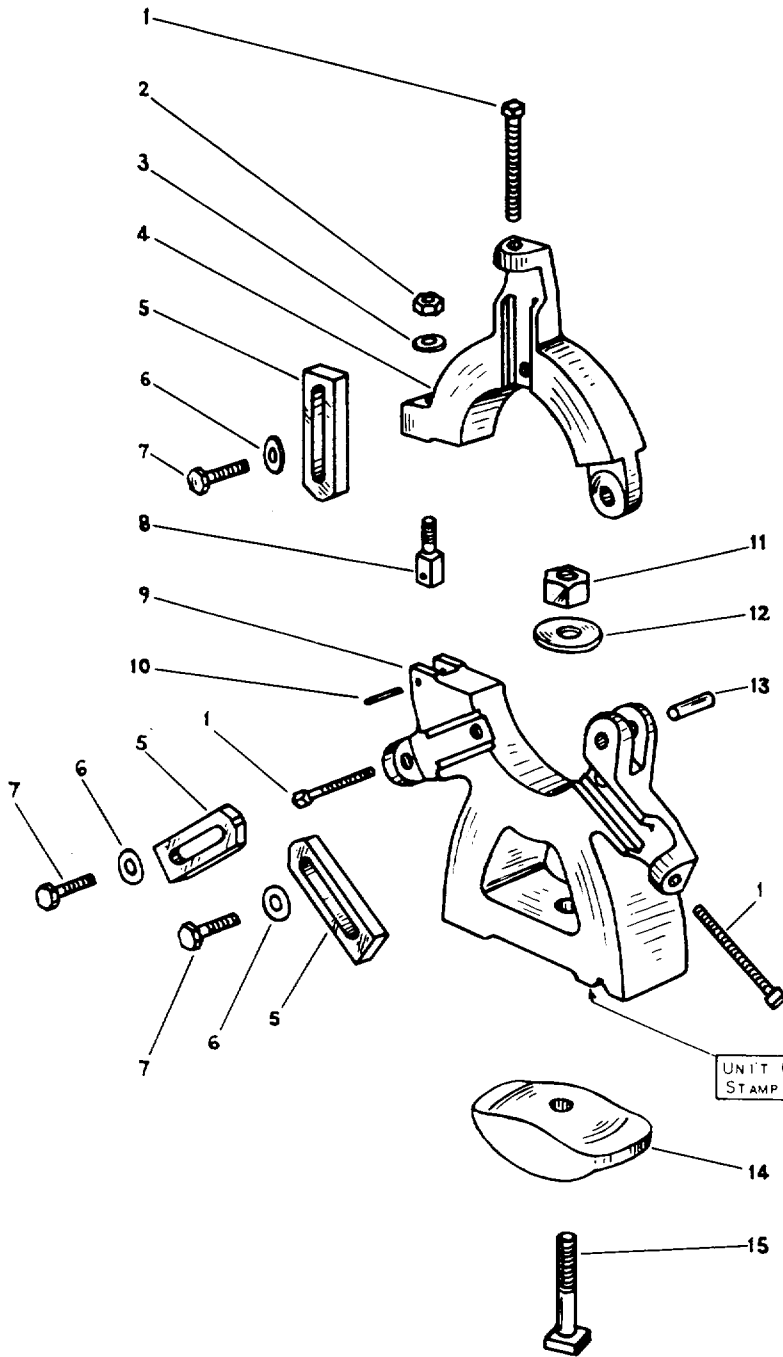


AVAILABLE ONLY AS
SUBASSEMBLY. PARTS INCLUDED ARE
INDICATED BY THE ITEM NUMBERS
APPEARING IN PARENTHESIS AFTER
PART NAME.

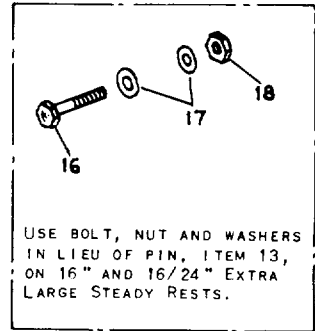
ITEM NO	PART NAME	9", LT. 10 & 10"(1'COL)	13"	13" 14 1/2", 16", 16/24" 2H
		PART NO	PART NO	PART NO.
1	SNAP RING	PT135NR1	PT135T1	PT135FH1
2	PIN	160x25	160X54	160x55
3	SHOE	PT1082NT1	PT10 2NT1	PT1082FH1
4	ADJUSTMENT KNOB (1-2-3-6)	*AS132NR1	*AS132T1	*AS132FH1
5	ADJ. KNOB SLEEVE	PT131NR1	PT131T1	PT131H1
6	JAW ADJ. SCREW	PT133NR1	PT133T1	PT133FH1
7	JAW	PT129NR1	PT129T1	PT129FH1
8	LOCK SCREW	PT134NR1	PT134TH1	PT134TH
9	KEY	PT137NR1	PT137TH1	PT1 37TH I
10	PIN	160X46	160X47	160X47
11	FRAME (5-10)	*AS 120N1	---	---
11A	FRAME (5-10)	*AS120K 1	---	---
11B	FRAME (5-10)	*AS120RI	---	---
11C	FRAME (5-10)	---	*AS120T1	---
11D	FRAME (5-10)	---	---	*AS120F1
11E	FRAME (5-10)	---	---	*A5120H1
11F	FRAME 5- 10)	---	---	*AS2009VI
12	WASHER	161X63	161X17	161x65
13	CAPSCREW	112x132	112x228	112x432

PARTS LIST

SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER



16/24" EXTRA LARGE STEADY REST
ALTHOUGH SLIGHTLY DIFFERENT IN
DESIGN, PARTS ARE SAME AS
STANDARD RESTS.



USE BOLT, NUT AND WASHERS
IN LIEU OF PIN, ITEM 13,
ON 16" AND 16/24" EXTRA
LARGE STEADY RESTS.

**REGULAR STEADY REST
FOR 9", 10", 13", 14", 16" AND 16/24"
ALSO 16" AND 16/24" EXTRA LARGE**

19
RAISING BLOCK - FOR 16/24" ONLY

PARTS LIST

FOR 9", 10", 13" AND 14 1/2 "

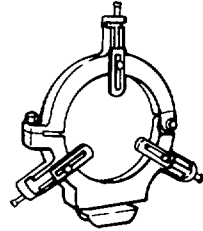
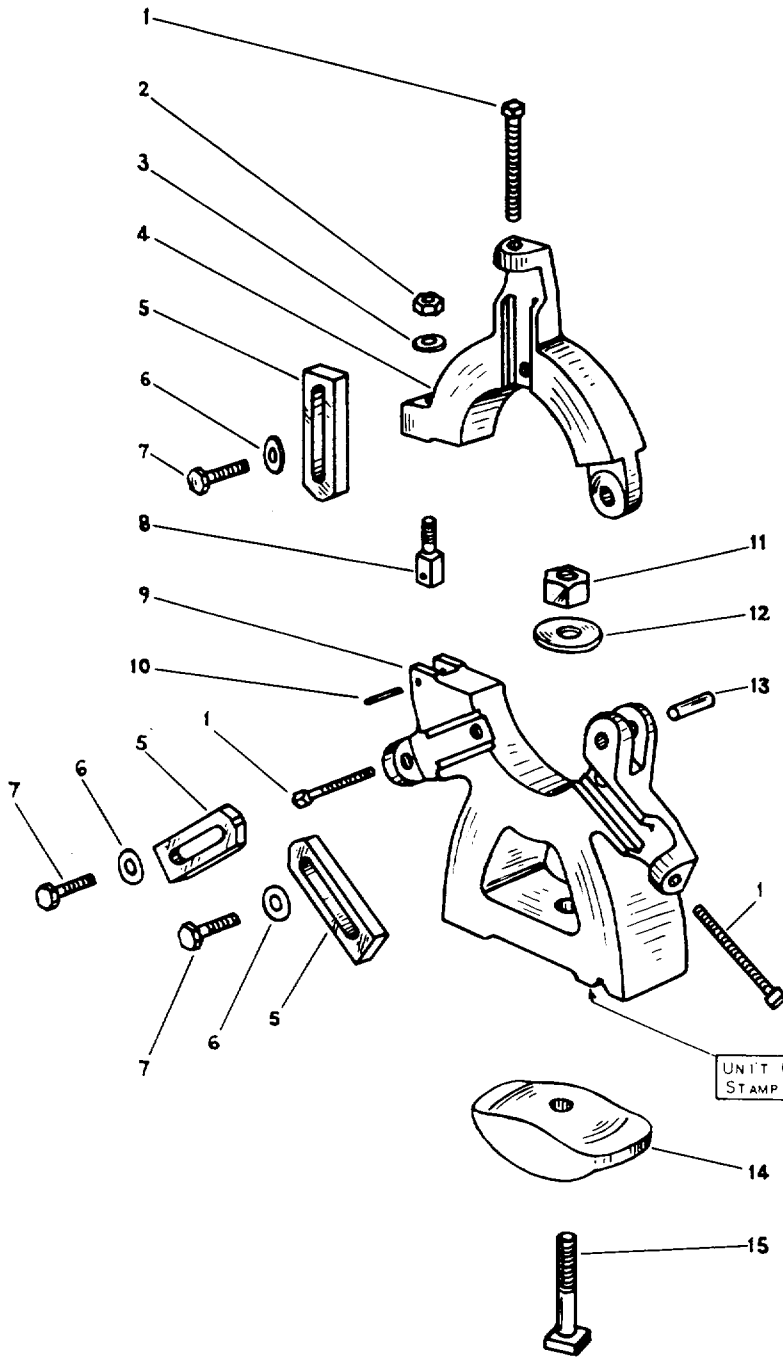
ITEM NO.	PART NAME	9"	10" (1" COL)	13"		14 1/2 "
		PART NO.	PART NO.	PART NO.		PART NO.
1	Sq HD. SETSCREW	118x136	118x136	118 x244	.30	118 x248
2	HEX. NUT	138x25	138x25	138x27	.05	138x27
3	WASHER	161X12	161X12	161X17	.05	161X18
4	STEADY REST TOP					
5	STEADY REST JAW	PT128NR1	PT128NR1	PT128T1	1.65	PT12RFH1
6	WASHER	161x12	161X12	161X17	.05	161x17
7	HEX. HD. CAPSCREW	112x120	112x120	112x220	.05	112x220
8	LOCK BOLT	PT217NR1	PT217NR1	PT217T1	1.35	PT217FH1
9	STEADY REST BASE					
10	PIN	160X56	160x56	160X60	.05	180x97
11	HEX. NUT	138X29	138x31	138x35	.15	138x39
12	WASHER	167X5	1R7x6	167x8	.05	167x4
13	PIN	160X160	160x60	PT1804	.10	PT1804
14	CLAMP	PT127NK4	PT127R1	PT127T1	1.80	PT1 27FI
15	MACH1NE BOLT	143X208	143X309	143x412	.40	147x 514
16	CAPSCREW	----	----	----	.-	----
17	WASHER	----	----	----	.-	----
IS	JAM NUT	----	----	----	.-	----
19	RAISING BLOCK					

FOR 16" AND 16/24" REGULAR AND EXTRA LARGE

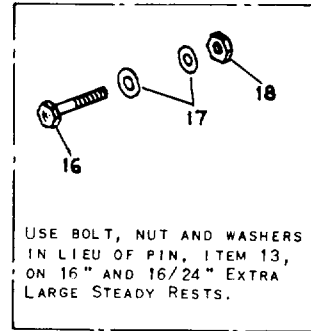
ITEM NO.	PART NAME	16" REGULAR	16" EXTRA LARGE	16/24" REGULAR	16/ 24" EXTRA LARGE
		PART NO.	PART NO.	PART NO.	PART NO.
1	Sq. HD. SETSCREW	118x248	118x464	118x248	118x248
2	HEX. NUT	138x25	138x31	138x27	138x31
3	WASHER	161x18	161X65	161x18	161x65
4	STEADY REST TOP				
5	STEADY REST JAW	PT128FH1	PT963H1	PT128FH1	PT963H1
6	WASHER	161x17	161x65	161x17	161x65
7	HEX. HD. CAPSCREW	112x220	112x424	112x220	112x424
8	LOCK BOLT	PT217FH1	PT464H1	PT217FH1	PTq64H1
9	STEADY REST BASE				
10	PIN	160x97	160x124	160 x97	160x124
11	HEX. NUT	138x39	138x39	138x39	138x39
12	WASHER	167x9	167x9	167x9	167x9
13	PIN	PT1805	----	PT1805	----
14	CLAMP	PT127H1	PT127H1	PT127H1	PT1 27H1
15	MACH1NE BOLT	143x514	143x514	143x534	143X34
16	CAPSCREW	----	112x440	----	112x440
17	WASHER	----	161x27	----	161X27
18	JAM NUT	----	139x31	----	139x31
19	RAISING BLOCK	----	----	PT2003H1	PT962H1

PARTS LIST

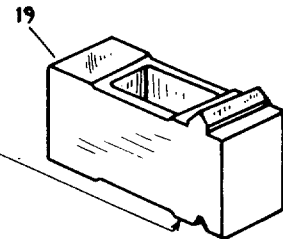
SERIAL NUMBER OF LATHE AND UNIT
CODE NUMBER MUST ACCOMPANY ORDER



16/24" EXTRA LARGE STEADY REST
ALTHOUGH SLIGHTLY DIFFERENT IN
DESIGN, PARTS ARE SAME AS
STANDARD RESTS.



USE BOLT, NUT AND WASHERS
IN LIEU OF PIN, ITEM 13,
ON 16" AND 16/24" EXTRA
LARGE STEADY RESTS.



RAISING BLOCK - FOR 16/24" ONLY

TELESCOPING JAW STEADY REST
FOR 9", LT. 10, 10", 13", 14 1/2"; 16" AND 16/24"
ALSO 16" AND 16/24" EXTRA LARGE

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

PARTS LIST

FOR 9", LT. 10, 10", 13" AND 14 1/2 "

ITEM NO	PART NAME	9" & LIGHT 10		10"		13"		14 1/2"	
		PART NO.		PART NO		PART NO		PART NO.	
1	RING	PT135NR1		PT135NR1		PT135T1		PT135FH1	
2	PIN	160x25		160x25		160x54		160x55	
3	ADJUSTMENT KNOB (1-2-4-6)	*AS132NR1		*AS132NR1		*AS132T1		*AS132FH1	
4	SHOE	PT1082NT1		PT1082NT1		PT1082NT1		PT1082FH1	
5	KNOB SLEEVE	PT131NR1		PT131NR1		PT131T1		PT131FH1	
6	JAW ADJ. SCREW	PT133NR1		PT133NR1		PT133T1		PT133FH1	
7	JAW	PT129NR1		PT129NR1		PT129T1		PT129FH1	
7A	JAW - 4 5/8"	----		----		----		----	
7B	JAW - 5 1/4"	----		----		----		----	
8	KEY	PT137NR1		PT137NR1		PT137TH1		PT137TH1	
9	LOCK SCREW	PT134NR1		PT134NR1		PT134TH1		PT134TH1	
10	HEX, NUT	138x29		138x31		138x35		138x39	
11	WASHER	167x5		167x6		167x8		167x9	
12	PIN	160x160		160x160		PT1804		PT1805	
13	CLAMP	PT127NK4		PT127R1		PT127T1		PT127F1	
14	SQ. HD. BOLT	143x208		143x309		143x412		143x514	
15	HEX, NUT	138x25		138x25		138x27		138x27	
16	WASHER	161x12		161x12		161x17		161x18	
17	STEADY REST TOP								
18	LOCK BOLT (15-16-20)	*AS217NR1		*AS217NR1		*AS217T1		*AS118FH1	
19	STEADY REST BASE								
20	PIN	160x56		160x56		160x60		160x97	
21	PIN	160x46		160x46		160x47		160x47	
22	SETSCREW	----		----		----		----	
23	RAISING BLOCK	----		----		----		----	

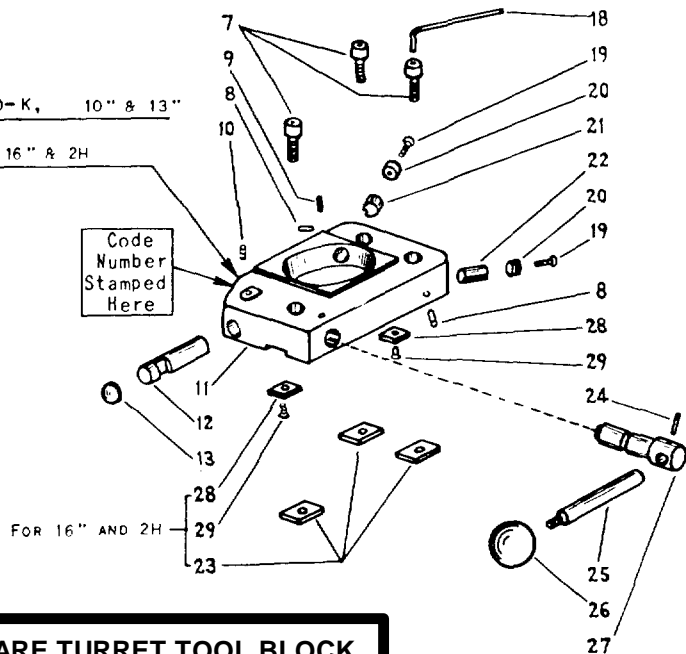
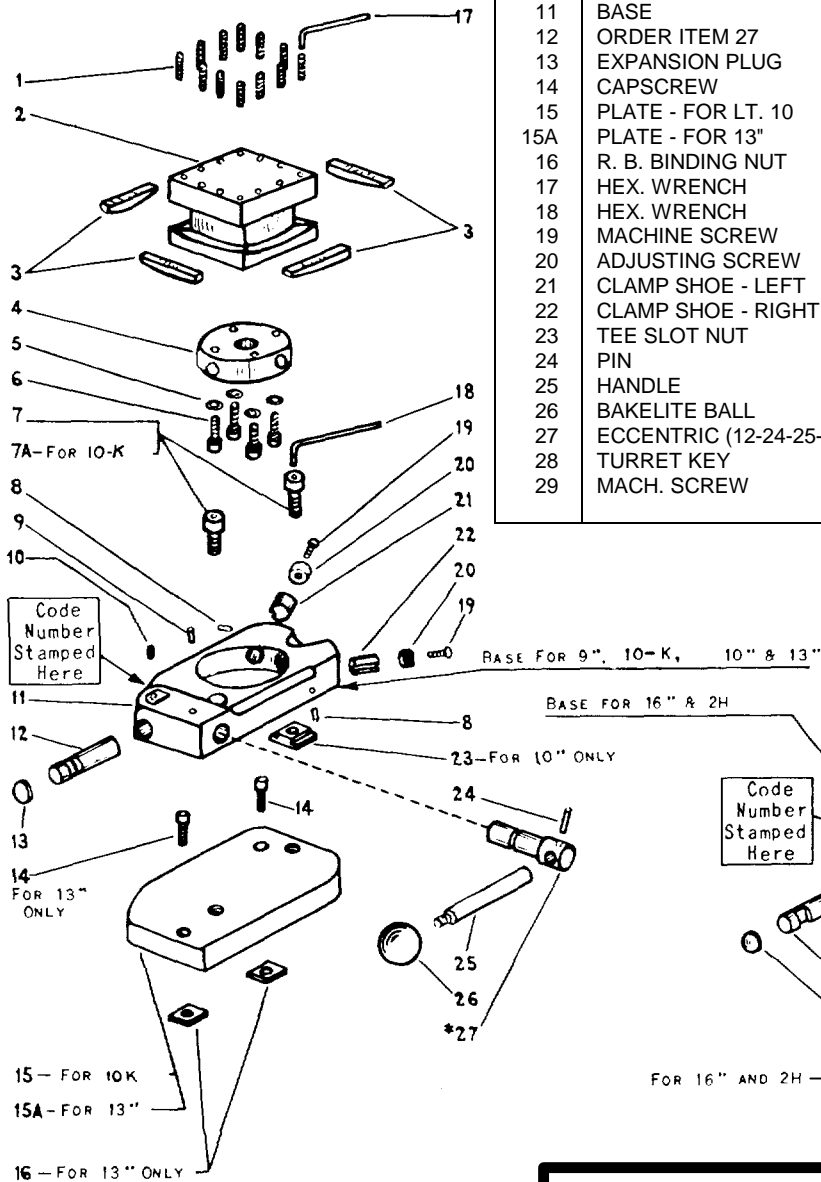
FOR 16" AND 16/24" REGULAR AND EXTRA LARGE

ITEM NO	PART NAME	16"		16" EXTRA LARGE		16/24"		16/24" EXTRA LARGE	
		PART NO.		PART NO		PART NO		PART NO.	
1	RING	PT135FH1		PT135FH1		PT135FH1		PT135FH1	
2	PIN	160x55		160x55		160x55		160x55	
3	ADJUSTMENT KNOB (1-2-4-6)	*AS132FH1		*AS132FH1		*AS132FH1		*AS132FH1	
4	SHOE	PT1082FH1		PT1082FH1		PT1082FH1		PT1082FH1	
5	KNOB SLEEVE	PT131FH1		PT131FH1		PT131FH1		PT131FH1	
6	JAW ADJ. SCREW	PT133FH1		PT133FH1		PT133FH1		PT133FH1	
7	JAW	PT129FH1		----		PT129FH1		----	
7A	JAW - 4 5/8"	----		PT129FH1		----		PT129FH1	
7B	JAW - 5 1/4"	----		PT963H2		----		PT963H2	
8	KEY	PT137TH1		PT137TH1		PT137TH1		PT137TH1	
9	LOCK SCREW	PT134TH1		PT134TH1		PT134TH1		PT134TH1	
10	HEX, NUT	138x39		138x39		138x39		138x39	
11	WASHER	167x9		167x9		167x9		167x9	
12	PIN	PT1805		PT1805		PT1805		PT1805	
13	CLAMP	PT127H1		PT127H1		PT127H1		PT127H1	
14	SQ. HD. BOLT	143x514		143x514		143x534		143x534	
15	HEX, NUT	138x27		138x31		138x27		138x31	
16	WASHER	161x18		161x65		161x18		161x65	
17	STEADY REST TOP								
18	LOCK BOLT (15-16-20)	*AS118FH1		*AS964H1		*AS118FH1		*AS964H1	
19	STEADY REST BASE								
20	PIN	160x97		160x124		160x97		160x124	
21	PIN	160x47		160x47		160x47		160x47	
22	SETSCREW	----		109x12		----		109x12	
23	RAISING BLOCK	----		----		PT2003H1		PT962H1	

PARTS LIST

SERIAL NUMBER OF LATHE AND UNIT CODE NUMBER MUST ACCOMPANY ORDER

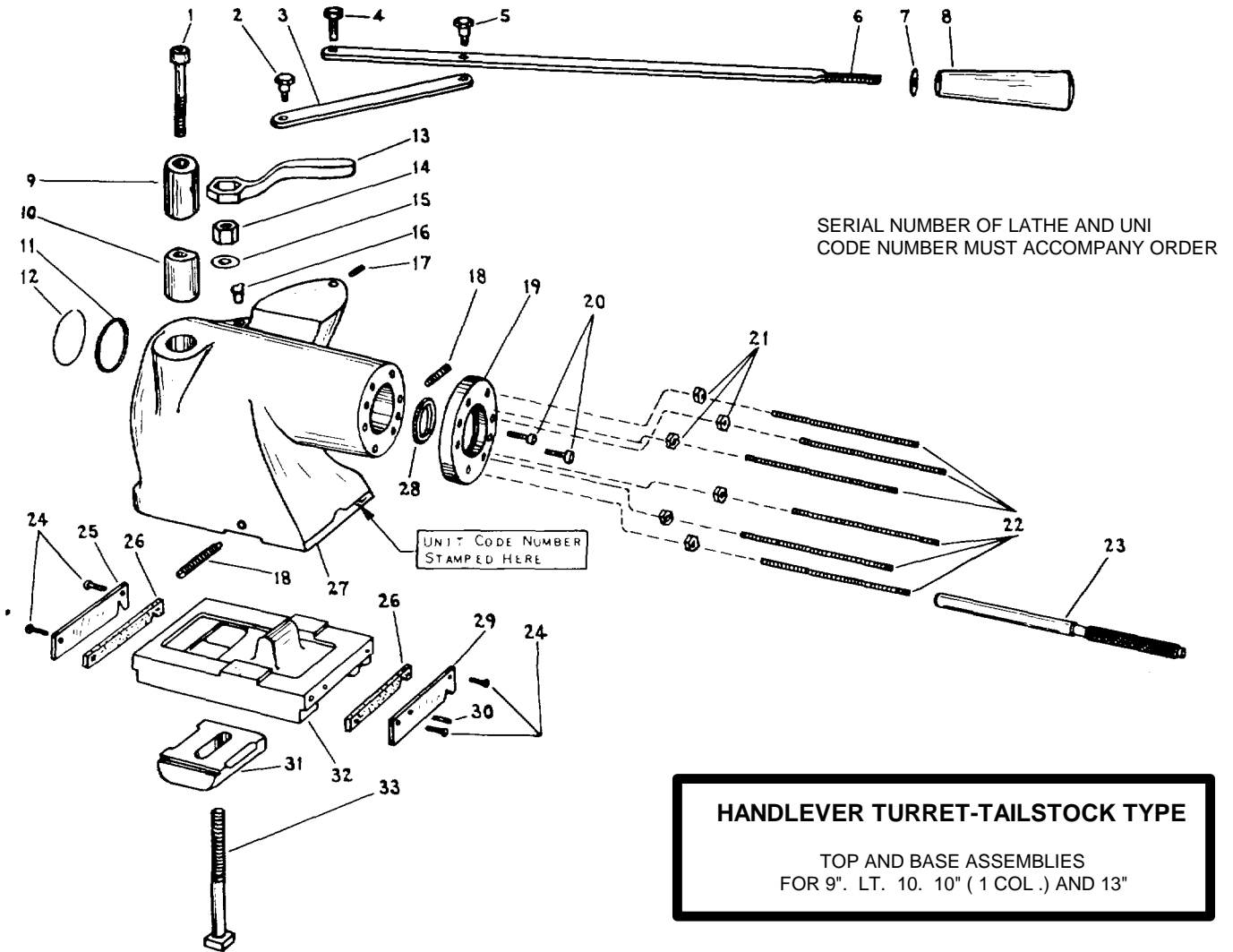
ITEM NO	PART NAME	9", 10-K, 10" & 13"		14 1/2", 16", 16/24", 17"	
		PART NO		PART NO	
1	SETSCREW	121x116		121x320	
2	SQUARE TURRET				
3	TOOL ADJ. WEDGE	PT744NT2		PT744FH2	
4	INDEX PILOT	PT759NT1		PT759FH1	
5	WASHER	180x300		PT3400	
6	CAPSCREW	114x12		114x120	
7	CAPSCREW - FOR 9", 10", 13" & 16"	114x212		114x424	
7A	CAPSCREW - FOR LT. 10	114x220		----	
8	PIN	160x258		160x258	
9	PIN	160x28		160x59	
10	SETSCREW	122x102		122x102	
11	BASE	PT740NT2		PT740FH2	
12	ORDER ITEM 27	PT751NT1		PT751FH2	
13	EXPANSION PLUG	PT1502		PT1503	
14	CAPSCREW	114x228		----	
15	PLATE - FOR LT. 10	PT770K1		----	
15A	PLATE - FOR 13"	PT770T2		----	
16	R. B. BINDING NUT	PT772T1		----	
17	HEX. WRENCH	CE2385		CE2387	
18	HEX. WRENCH	CE2389		CE2390	
19	MACHINE SCREW	107x110		107x316	
20	ADJUSTING SCREW	PT761NT1		PT761FH1	
21	CLAMP SHOE - LEFT	PT764NT1		PT764FH1	
22	CLAMP SHOE - RIGHT	PT763NT1		PT763FH1	
23	TEE SLOT NUT	PT741NR2		PT741FH1	
24	PIN	160x25		160x33	
25	HANDLE	PT750NT1		PT750FH2	
26	BAKELITE BALL	PT406NT1		PT406K&FH1	
27	ECCENTRIC (12-24-25-26)	*AS758NT1		*AS758FH1	
28	TURRET KEY	----		PT753FH1	
29	MACH. SCREW	----		103 X 208	



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

SQUARE TURRET TOOL BLOCK
 for Double Tool Cross Side
 For 9", 10-K", 13", 16" and 2h

PARTS LIST



HANDLEVER TURRET-TAILSTOCK TYPE

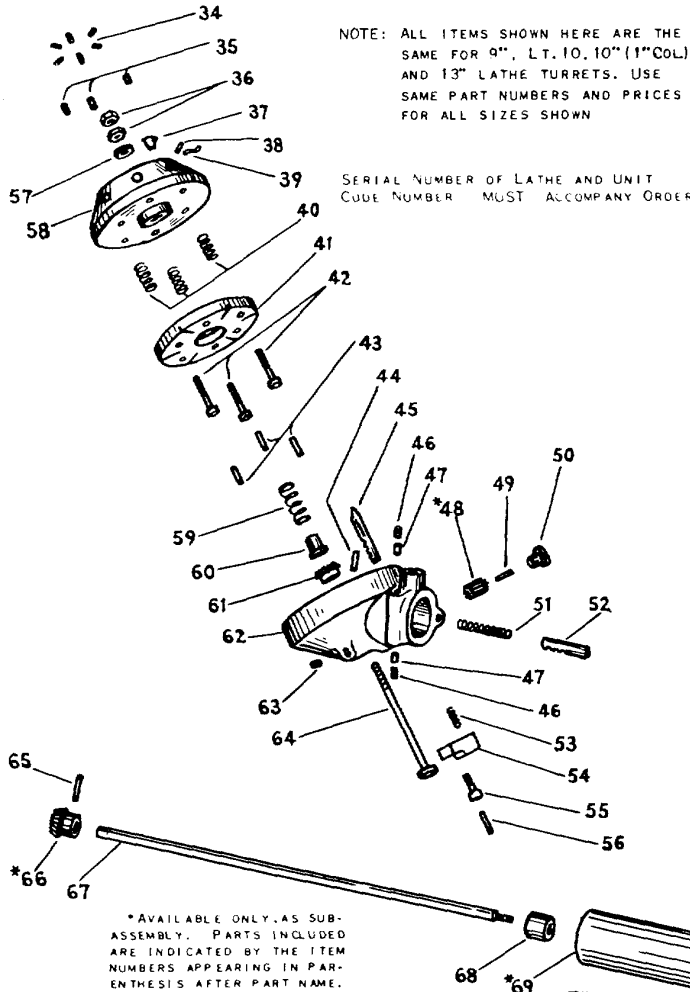
TOP AND BASE ASSEMBLIES
FOR 9". LT. 10" (1 COL.) AND 13"

ITEM NO	PART NAME	9"		LT. 10		10" (1" COL.)		13"	
		PART NO.		PART NO		PART NO		PART NO.	
1	CAPSCREW	114x340		114x340		114x340		114x340	
2	BOWL SCREW	PT173BNT1		PT1738NT1		PT1738NT1		PT1738NT1	
3	LINK	PT1745NT1		PT1745NT1		PT1745NT1		PT1745NT1	
4	LEVER PIN	PT1735NT2		PT1735NT2		PT1735NT2		PT1735NT2	
5	LINK SCREW	PT1734NT1		PT1734NT1		PT1734NT1		PT1734NT1	
6	LEVER	PT1746NT1		PT1746NT1		PT1746NT1		PT1746NT1	
7	WASHER	PT1709NR1		PT1709NR1		PT1709NR1		PT1709NR1	
8	HANDLE	PT3122NR1		PT3122NR1		PT3122NR1		PT3122NR1	
9	UPPER PLUG	PT1747NT1		PT1747NT1		PT1747NT1		PT1747NT1	
10	LOWER PLUG	PT249T2		PT249T2		PT249T2		PT249T2	
11	FELT WICK	256x2		256x2		256x2		256x2	
12	SNAP RING	PT1737NT1		PT1737NT1		PT1737NT1		PT1737NT1	
13	CLAMP WRENCH	CE2653NK		CE2653NK		CE2653R		CE2653T	
14	CLAMP NUT	PT283NK1		PT283NK1		PT283R1		PT283T1	
15	WASHER	PT2861NK1		PT2861NK1		PT1720R1		PT238T1	
16	OILER	155x20		155x20		155x20		155x20	
17	SETSCREW	120x5		120x5		120x5		120x5	
18	SET-OVER SCREW	PT278NK1		PT278NK1		PT278R1		PT278TF1	
19	STOP SCREW RING	PT1729NT2		PT1729NT2		PT1729NT2		PT1729NT2	
20	CAPSCREW	114X10		114x10		114x10		114x10	
21	HEX NUT	138x24		138x24		138x24		138x24	
22	STOP SCREW	PT1730NT1		PT1730NT1		PT1730NT1		PT1730NT1	
23	STOP SCREW WRENCH	PT1727NT1		PT1727NT1		PT1727NT1		PT1727NT1	

PARTS LIST

ITEM NO.	PART NAME	9"		LT. 10		10" (1" COL.)		13"	
		PART NO.		PART NO.		PART NO.		PART NO.	
24	MACH, SCREW	PT1164-1		PT1164-1		PT1164-1		PT1164-1	
25	FELT RETAINER-FRONT	PT581K2		PT581K2		PT581K2		PT581K2	
26	WIPER	PT582K1		PT582K1		PT582K1		PT582K1	
27	T. S. TURRET TOP								
28	FELT WICK	256x1		256x1		256x1		256x1	
29	FELT RETAINER-REAR	PT580K2		PT580K2		PT580R2		PT580T2	
30	PIN	160x18		160x18		160x18		160x18	
31	CLAMP	PT56NK2		PT56NK2		PT56R1		PT56T1	
32	BASE	PT51K3		PT1717K2		PT51R3		PT51T3	
33	CLAMP BOLT	143x214		143x216		143x317		143x422	

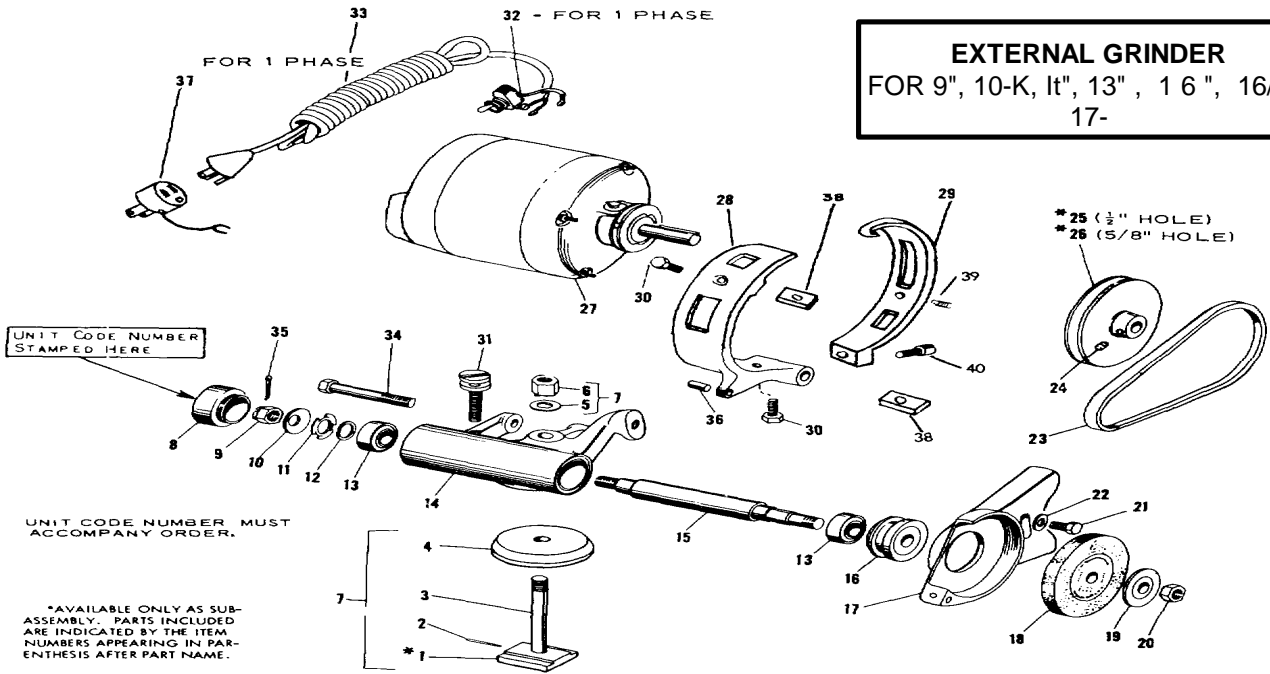
ITEM NO.	PART NAME	9". LT. 10. 10" & 13"	
		PART NO.	
34	SETSCREW	120x10	
35	SETSCREW	126 x505	
36	JAM NUT	PT1062- 1	
37	OILER	155x20	
38	PIN	160x240	
39	FELT WICK	256x1	
40	COMPRESSION SPRING	PT1715NT1	
41	INDEX PLATE	PT1722NT1	
42	CAPSCREW	114x20	
43	DOWEL PIN	153x10	
44	PIN	160x25	
45	INDEX PIN	PT1744NT1	
46	SETSCREW	126 x604	
47	BINDER PLUG	PT4931S1	
48	PINION (49)	*AS1741NT1	
49	PIN	PT1822	
50	PLUG	PT1742NT1	
51	SPRING	162x53	
52	PLUNGER	PT1743NT1	
53	SPRING	162x49	
54	SPRING HOUSING	PT1716NT1	
55	CAPSCREW	11 4x10	
56	PIN	160x25	
57	WASHER	PT3037NR1	
58	HEAD	PT1721NT2	
59	COIL SPRING	162x20	
60	DR IVER	PT17 24NT2	
61	BEVEL GEAR	PT1726NT2	
62	BOWL		
63	SETSCREW	126x505	
64	CENTER POST	PT1740NT2	
65	TAPER PIN	168x107	
66	BEVEL GEAR (65)	*AS1725NT2	
67	ROTOR ROD	PT1732NT1	
68	BUSHING	PT1739NT2	
69	SPINDLE (68-70-71) *	*AS1733NT2	
70	KEY	PT285KR1	
71	PIN	160x19	
72	SETSCREW	120x4	
73	ROTOR (72)	*AS1731NT2	
74	JAM NUT	139x23	
75	BORING BAR	CE3420	



HANDLEVER TURRET-TAILSTOCK TYPE HEAD AND SPINDLE ASSEMBLIES FOR 9". LT. 10. 10" (1 COL.) AND 13"

PARTS LIST

EXTERNAL GRINDER
FOR 9", 10-K, 11", 13", 16", 16 1/4"
17-



ITEM NO	PART NAME	9" & 10-K PART NO.	10" PART NO.	13" PART NO.	14-1/2" PART NO.	16" & 16 1/4" PART NO.	17" PART NO.
1	CLAMP (2-3)	AS1577NK1	*AS1577R1	*AS1577T1	*AS1577F1	*AS1577H1	*AS1577H1
2	PIN	160 x 19	160 x 19	160 x 21	160 x 21	160 x 21	
3	CLAMP STUD	PT1585NR1	PT1585NR1	PT1585T1	PT1S85F1	PT1585H1	PT1585H1
4	RAISING BLOCK	-----	-----	PT1586T1	PT596F1	PT1586H1	PT1586GJ1
5	WASHER	161 x 22	161 x 22	161 x 22	161 x 22	161 x 22	
6	CLAMPING NUT	PT283NK1	PT283NK1	PT283NK1	PT283NK1	PT283NK1	PT283NK1
7	CLAMP BOLT EQUIPMENT (1-4-5-6)	CE307NK	CE307R	CE307T	CE307F	CE307H	CE307GJ

ITEM NO.	PART NAME	PART NO	ITEM NO.	PART NAME	PART NO.
8	GRINDER CAP	PT1592NH1	24	SETSCREW	120 x 4
9	CASTELLATED NUT	PT1070NH1		SETSCREW	120 x 6
10	WASHER	161 x 27	25	MOTOR PULLEY - 1/2" (24)	*AS1583NH2
11	SPRING	PT1588NH1	26	MOTOR PULLEY 5/8" (24)	*AS1582NH2
12	WASHER	161 x 68	27	MOTOR-SPECIFY, H.P., PHASE, CYCLE & VOLT	
13	BEARING	PT502NH1	28	MOTOR BASE	PT1574NH1
14	GRINDER FRAME	PT1575NH1	29	MOTOR BASE	PT1573NH1
15	GRINDER SPINDLE	PT1579NH1	30	CAPSCREW	112 x 110
16	GRINDER SPINDLE PULLEY	PT1584NH1	31	BELT TIGHTENER ADJ. SCREWW	PT1587NH1
17	WHEEL GUARD	PT1576NH1	32	TOGGLE SWITCH	SE4679
18	GRINDING WHEEL	CE2759	33	CORD SET	CE3659
19	WHEEL FLANGE	PT1580NH1	34	CAPSCREW	PT2900NH1
20	NUT	PT11056NH1	35	COTTER PIN	170 x 206
21	CAPSCREW	112 x 110"	36	PIN	PT1803
22	WASHER	161 x 12	37	ADAPTER	PT6883
23	BELT	CE3L220	38	SPACER	PT1580-2
39				SETSCREW	126 x 762
40				SOC. HD. SCREW	114 x 220

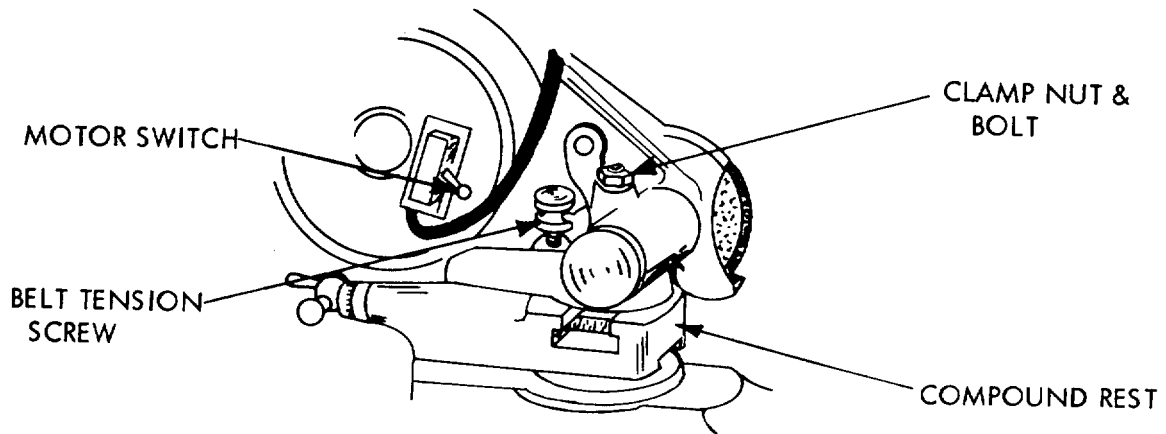
PARTS LIST

EXTERNAL GRINDER

		GRINDING WHEELS CUP 4" DIAMETER, ½" FACE, AND 1" HOLE	GRINDING WHEEL 3 ¼" ON OUTSIDE DIAMETER, 1 ¼" FACE. 1" HOLE CE3236 FOR SHARPENING REAMERS & CUTTERS
CE2759	FOR	GENERAL WORK - ROUGH OR FINISH	
CE2758	"	CUTTING TOOLS- " " "	
CE2774	"	AUTOMOBILE VALVES- " " "	
CE2757	"	CAST IRON - FINISH GRINDING	
CE2769	"	SOFT STEEL - " " "	

INSTRUCTION

The External Grinder Attachment is mounted in the compound T-slot with item 7 clamp assembly as shown below:



LUBRICATION - GRINDER.

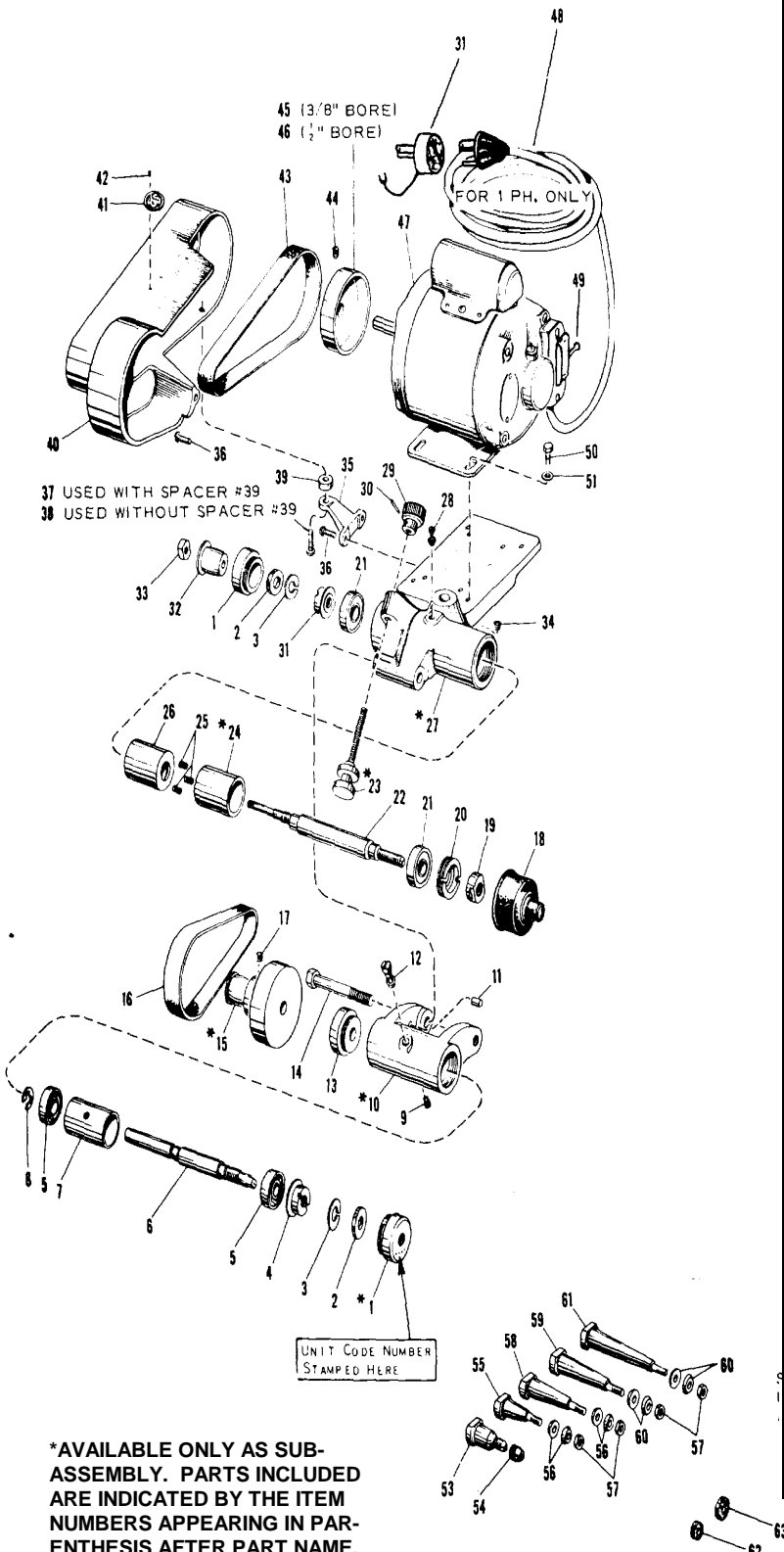
The spindle revolves in pre-lubricated, precision ball bearings which are sealed to protect them from damage and requires no further lubrication.

LUBRICATION - MOTOR (1-PHASE)

After 3 years normal or 1 year heavy duty service add oil annually. No recoiling normally required for light duty with total operating Time under 25,000 hours. Use electric motor oil. Do not over oil.

PARTS LIST

INTERNAL GRINDER
FOR 9", 10-K, 10",
13", 14 1/2", 16", 16/24" AND 17"

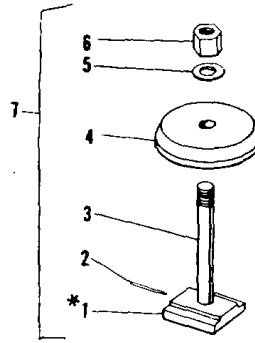


ITEM NO.	PART NAME	PART NO.
1	RETAINER CAP (2-3)	*AS2411NH1
2	FELT	PT2421NH1
3	SPLIT WASHER	PT2422NH1
4	RETAINER NUT	PT2410NH1
5	BALL BEARING	PT2450NH1
6	JACKSHAFT SPINDLE	PT2430NH2
7	JACKSHAFT SPACER	PT2424NH1
8	RETAINING RING	PT2444NH1
9	SETSCREW	121 X 5
10	JACKSHAFT HOUSING (9-11-12)	*AS2429NH2
11	STRAIGHT PIN	PT1825-1
12	OILER	PT2679-1
13	RETAINER CAP	PT2443NH1
14	CAPSCREW	115 X 248
15	JACKSHAFT PULLEY (17)	*AS2419NH2
16	BELT	PT2438NH1
17	SETSCREW	120 X 903
18	SPINDLE NOSE PROTECTOR	PT2449NH1
19	RETAINER NUT	PT2406NH1
20	RETAINER SEAL	PT2407NH1
21	BEARING	PT2437NH1
22	SPINDLE	PT2401NH1
23	BELT ADJ. SCREW (29-30)	*AS2432NH1
24	SPACER - FRONT (25)	*AS2408NH1
25	COIL SPRING	162 X 54
26	SPACER- REAR	PT2409NH1
27	FRAME (28-34)	*AS2400NH2
28	OILER	PT2679-1
29	BELT TIGHTNER ADJ, KNOB	PT2433NH1
30	PIN	160 X 25
31	Adapter	PT6883
32	SPINDLE PULLEY	PT2412NH1
33	LOCK NUT	PT2415NH1
34	SETSCREW	121 X 5
35	BRACKET	PT2470NH1
36	SCREW	101 X 308
37	SCREW	101 X 312
38	SCREW	101 X 308
39	SPACER	PT2471NH1
40	BELT GUARD (41-42)	*AS2431NH1
41	INSIGNIA PLATE	PT3300
42	DRIVE SCREW	130 X 100
43	BELT	PT2439NH1
44	SCREW	122 X 505
45	MOTOR PULLEY	*AS2472NH1
46	MOTOR PULLEY (44)	*AS2414NH1
47	MOTOR - SPECIFY	
48	CORD SET (FOR 1 PH, ONLY)	PT1104-2
49	SWITCH (FOR 1 PH. ONLY)	SE4679
50	CAPSCREW	112 X 8
51	WASHER	PT1679-1
52	END WRENCH	PT2458-2
53	CHUCK (54)	*AS2403NH2
54	CHUCK NUT	PT2402NH2
55	ARBOR (56-57)	*AS2425NH1
56	WASHER	PT2442NH1
57	NUT	138 X 24
58	ARBOR (56-57)	*AS2426NH 1
59	ARBOR (57-60)	*AS2427NH1
60	WASHER	PT2404NH1
61	ARBOR (57-60)	*AS2428NH1
62	GRINDING WHEEL	CE2925
63	GRINDING WHEEL	CE2926

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

PARTS LIST

CLAMP BOLT ASSEMBLY



ITEM NO.	PART NAME	9" AND 10 K	10"	13"	14 1/2"	16" & 16/24"	17"
		PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
1	CLAMP (2-3)	*AS1577NK1	*AS1577R1	*AS1577T1	*AS1577F1	*AS1577H1	*AS1577H1
2	PIN	160 X 19	160 X 19	160 X 19	160 X 21	160 X 21	160 X 21
3	CLAMP STUD	PT1585NR1	PT1585NR1	PT1585T1	PT1585F1	PT1585H1	PT1585H1
4	RAISING BLOCK	-----	-----	PT1586T1	PT1586F1	PT1586H1	PT1586GJ1
5	WASHER	161 X 22	161 X 22	161 X 22	161 X 22	161 X 22	161 X 22
6	CLAMPING NUT	PT283NK1	PT283NK1	PT283NK1	PT283NK1	PT283NK1	PT283NK1
7	CLAMP BOLT EQUIPMENT (1-4-5-6)	CE307NK	CE307R	CE307T	CE307F	CE307H	CE307GJ

INSTRUCTION

The internal grinder attachment mounts on the compound rest top. Adjust the belt to proper tension with belt adjusting screw item 23. The grinder spindle and the jackshaft spindle run on high speed ball bearings which require no adjustment.

LUBRICATION - GRINDER

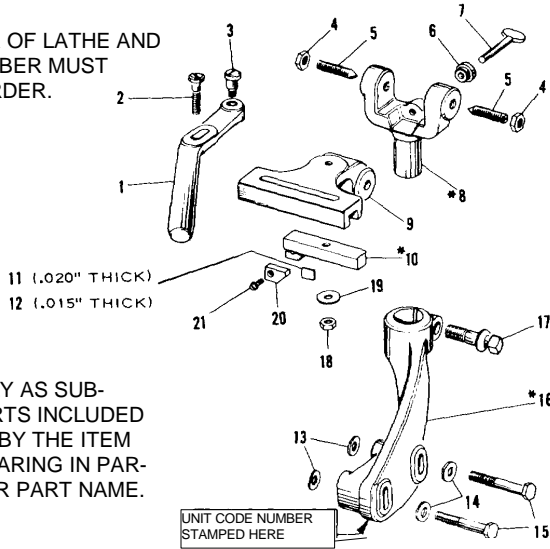
Remove oil screws periodically, items 12 and 18, and add a few drops of spindle bearing oil at both points. Use SBL CE1600 oil or equal.

LUBRICATION - MOTOR (1 PHASE)

Motors having ball bearings are packed with grease sufficient for about two years of normal service. At the end of that time, the bearings should be cleaned thoroughly of the old grease and repacked about one-third full with General Electric ball-bearing grease.

PARTS LIST

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



MICA UNDERCUTTING ATTACHMENT
FOR 9", 10 K 10", 13", 14 1/2", 16"

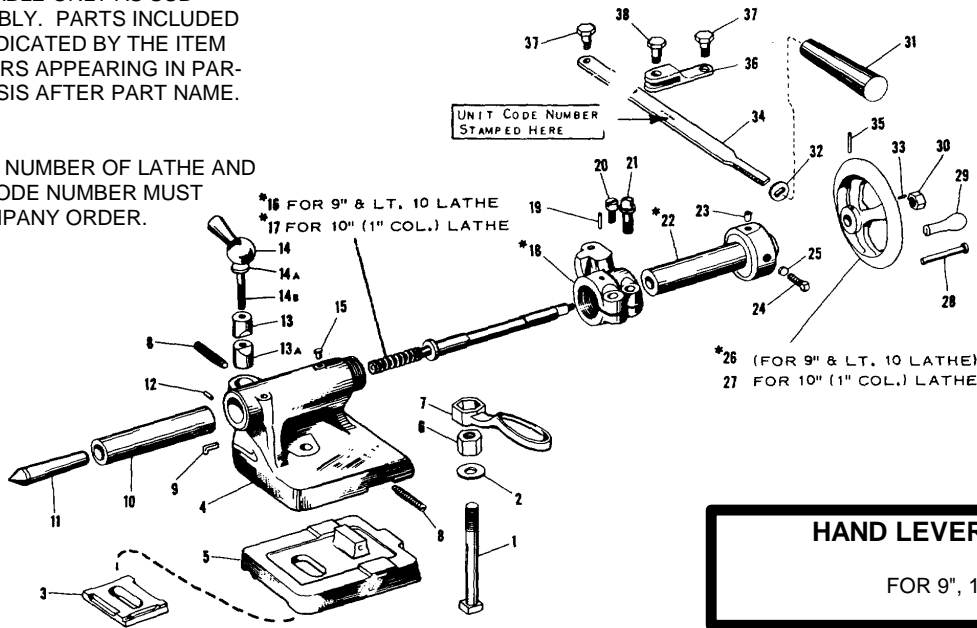
*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

ITEM NO.	PART NAME	9"		10 K & 10" (1" COL)		13"	
		PART NO.		PART NO.		PART NO.	
1	LEVER	PT1446NH2		PT1446NH2		PT1446NH2	
2	STUD SCREW	PT1448NH1		PT1448NH1		PT1448NH1	
3	SHOULDER SCREW	PT1447NH1		PT1447NH1		PT1447NH1	
4	JAM NUT	139 X 27		139 X 27		139 X 27	
5	SETSCREW	PT703NH1		PT703NH1		PT703NH1	
6	LOCK NUT	PT 1437NH1		PT 1437NH1		PT1437NH1	
7	THUMB SCREW	131 X 26		131 X 26		131 X 26	
8	FORK (4-5)	*AS1449NH1		*AS1449NH1		*AS1449NH1	
9	GUIDE	PT1443NH2		PT1443NH2		PT1443NH2	
10	BLADE HOLDER (14-15)	*AS1444NH1		*AS1444NH1		*AS1444NH1	
11	BLADE - .020" THICK	CE2029		CE2029		CE2029	
12	BLADE - .015" THICK	CE2028		CE2028		CE2028	
13	WASHER	161 X 63		161 X 63		-----	
14	WASHER	161 X 12		161 X 12		161 X 16	
15	CAPSCREW	112 X 132		112 X 132		112 X 236	
16	BRACKET (16)	*AS1442N1		*AS1442KR1		*AS1442T1	
17	COLLAR SCREW	PT212R1		PT212R1		PT1436T1	
18	HEX JAM NUT	139 X 25		139 X 25		139 X 25	
19	WASHER	161 X 12		161 X 12		161 X 12	
20	BLADE CLAMP	PT1441NH1		PT1441NH1		PT1441NH1	
21	MACHINE SCREW	102 X 310		102 X 310		102 X 310	
ITEM NO.	PART NAME	14 1/2"		16"			
		PART NO.		PART NO.			
1	LEVER	PT1446NH2		PT1446NH2			
2	STUD SCREW	PT1448NH1		PT1448NH1			
3	SHOULDER SCREW	PT1447NH1		PT1447NH1			
4	JAM NUT	139 X 27		139 X 27			
5	SETSCREW	PT703NH1		PT703NH1			
6	LOCK NUT	PT1437NH1		PT1437NH1			
7	THUMB SCREW	131 X 26		131 X 26			
8	FORK (4-5)	*AS1449NH1		*AS1449NH1			
9	GUIDE	PT1443NH2		PT1443NH2			
10	BLADE HOLDER (14-15)	*AS1444NH1		*AS1444NH1			
11	BLADE - .020" THICK	CE2029		CE2029			
12	BLADE - .015" THICK	CE2028		CE2028			
13	WASHER	-----		-----			
14	WASHER	161 X 26		161 X 26			
15	CAPSCREW	112 X 436		112 X 436			
16	BRACKET (16)	*AS1442F1		*AS1442H1			
17	COLLAR SCREW	PT1436FH1		PT1436FH1			
18	HEX JAM NUT	139 X 25		139 X 25			
19	WASHER	161 X 12		161 X 12			
20	BLADE CLAMP	PT1441NH1		PT1441NH1			
21	MACHINE SCREW	102 X 310		102 X 310			

PARTS LIST

*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.



HAND LEVER TAILSTOCK

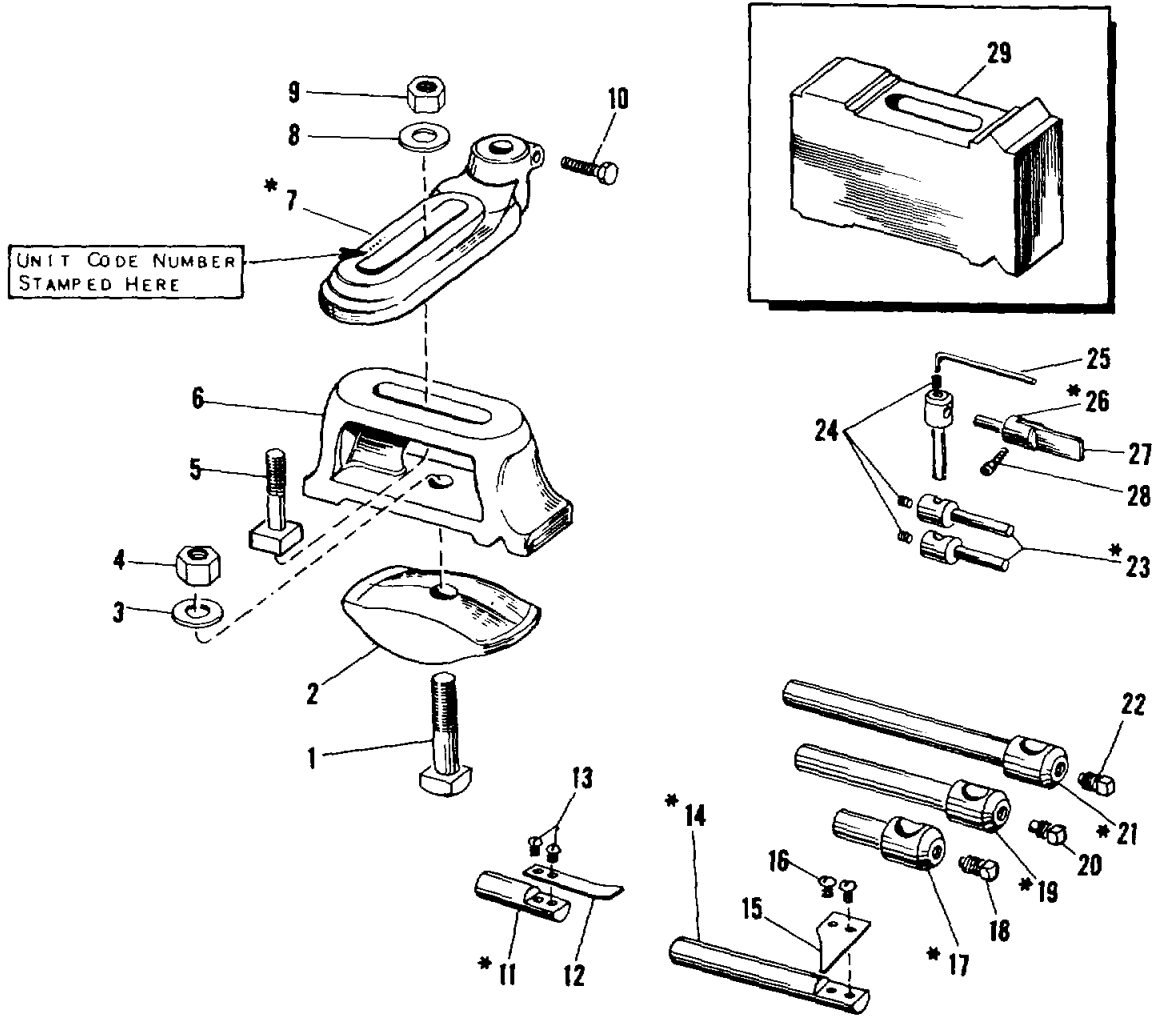
FOR 9", 10-K, & 10"

ITEM NO.	PART NAME	9"		LIGHT 10		10" (11/16" & 1" COL.)	
		PART NO.		PART NO.		PART NO.	
1	BOLT	143 X 214		143 X 216		143 X 317	
2	WASHER	PT2861NK1		PT2861NK1		PT1720R1	
3	TAILSTOCK CLAMP	PT56NK2		PT56NK2		PT56R1	
4	TAILSTOCK TOP						
5	TAILSTOCK BASE	PT51N1		PT1701K1		PT51R1	
6	NUT	PT283NK1		PT283NK1		PT283R1	
7	TAILSTOCK WRENCH	CE2653NK		CE2653NK		CE2653R	
8	SET OVER SCREW	PT278NK1		PT278NK1		PT278R1	
9	TAILSTOCK SPINDLE KEY	PT286NR1		PT286NR1		PT286NR1	
10	TAILSTOCK SPINDLE	PT201NR1		PT201NR1		PT201NR1	
11	HARD CENTER	CE2401		CE2401		CE2401	
12	PIN	-----		-----		160 X 48	
13	UPPER PLUG	-----		-----		PT248KR3	
13A	LOWER PLUG	-----		-----		PT249KR3	
14	BINDING LEVER (14A-14B)	PT54NK1		PT54NK1		*AS54KR2	
15	OILER	-----		-----		155 X 23	
16	TAILSTOCK SCREW	*AS1706NK1		*AS1706NK1			
17	TAILSTOCK SCREW	-----		-----		*AS1706R1	
18	BARREL BUSHING (19-20-21)	*AS1700NK1		*AS1700NK1		*AS1700R1	
19	PIN	160 X 46		160 X 46		-----	
20	SCREW	111 X 112		111 X 112		111 X 112	
21	COLLAR SCREW	PT872NK1		PT872NK1		PT872R1	
22	SLIDING BUSHING (23-24-25)	*AS1703NR1		*AS1703NR1		*AS1703NR1	
23	OILER	155 X 17		155 X 17		155 X 17	
24	SCREW	118 X 112		118 X 112		118 X 112	
25	BINDER SHOE	PT1075NR1		PT1075NR1		PT1075NR1	
26	HANDWHEEL (28-29-35)	*AS53NK1		*AS53NK1			
27	HANDWHEEL (28-29-35)	-----		-----		*AS1262R1	
28	HANDLE STUD	-----		-----		PT1242	
29	HANDLE PT 1480	PT1480		PT1480		PT1492	
30	NUT	-----		-----		136 X 25	
31	HANDLE	PT3122NR1		PT3122NR1		PT3122NR1	
32	LEVER WASHER	PT1709NR1		PT3122NR1		PT1709NR1	
33	PIN	-----		-----		160 X 19	
34	HAND LEVER	PT1707NR1		PT1707NR1		PT1707NR1	
35	PIN	168 X 106		168 X 106			
36	LEVER LINK	PT1711NR1		PT1711NR1		PT1711NR1	
37	LINK SCREW	PT1710NR1		PT1710NR1		PT1710NR1	
38	LINK SCREW	PT1712NR1		PT1712NR1		PT1712NR1	

PARTS LIST

**TOOL and REAMER
ATTACHMENT**

FOR 9", LT. 10, 10", 13", 14 1/2", 16" & 16/24"

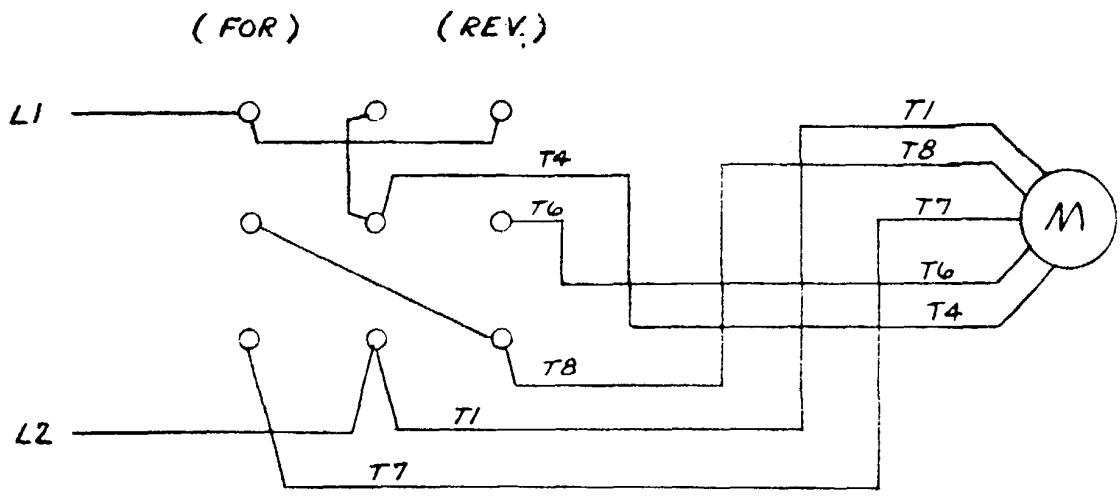


*AVAILABLE ONLY AS SUB-ASSEMBLY. PARTS INCLUDED ARE INDICATED BY THE ITEM NUMBERS APPEARING IN PARENTHESIS AFTER PART NAME.

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

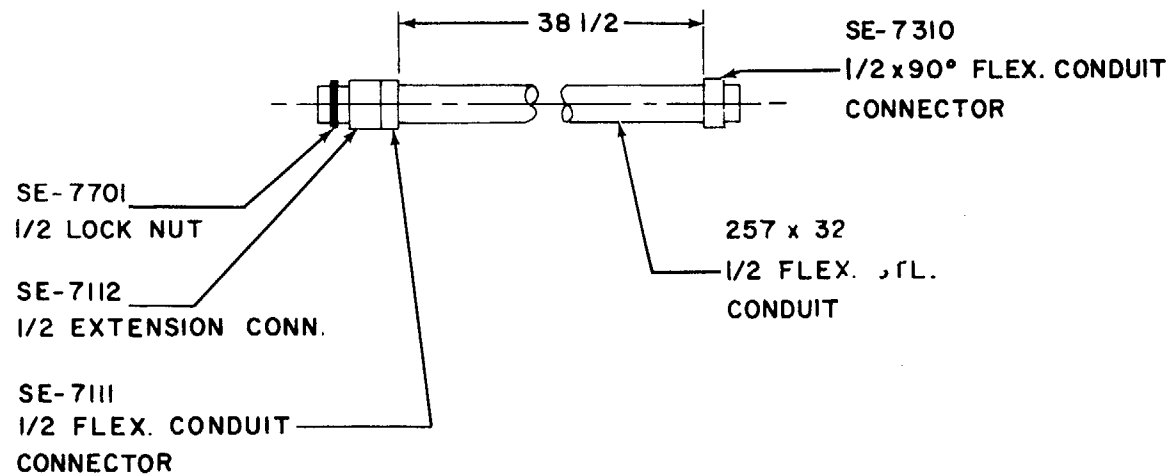
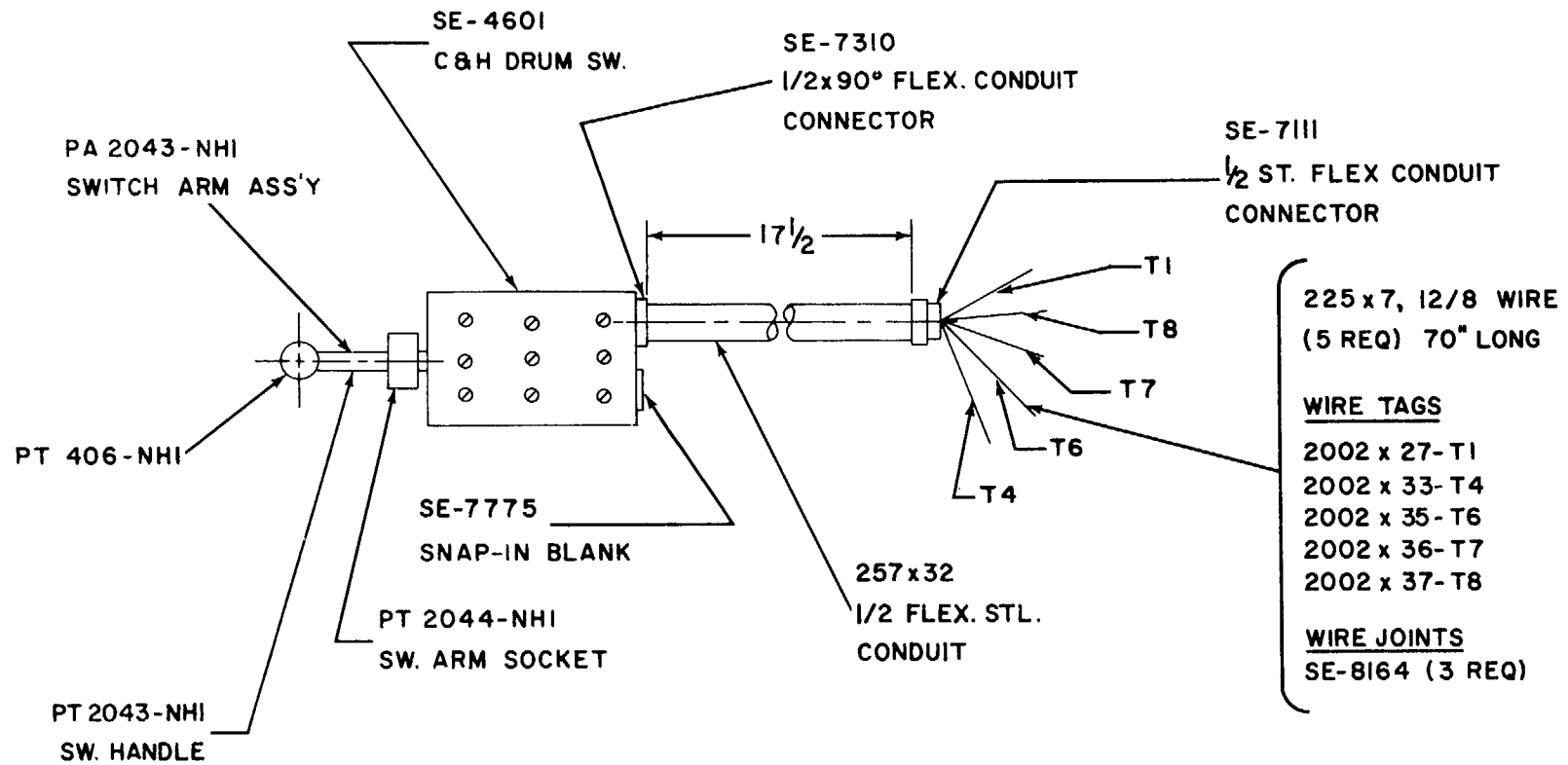
PARTS LIST

ITEM NO.		9" & LIGHT 10		10" (11/16" & 1" COL.		13"	
		PART NO.		PART NO.		PART NO.	
1	BOLT	143 X 210		143 X 312		143 X 410	
2	CLAMP	PT127NK4		PT127R1		PT127T1	
3	WASHER	161 X 25		161 X 30		161 X 36	
4	NUT	136 X 29		136 X 30		136 X 35	
5	BOLT (8-9)	NOT USED		NOT USED		PTS17T1	
6	SPRING STOP PLATE	NOT USED		NOT USED		PT122ST1	
7	SPRING STOP SOCKET (10)	*AS1226NR1		*AS1226NR1		*AS1226T1	
8	WASHER	NOT USED		NOT USED		161 X 65	
9	NUT	NOT USED		NOT USED		136 X 31	
10	CAPSCREW	112 X 16		112 X 16		112 X 116	
11	SPRING STOP SHANK (12-13)	*AS1227NH1		*AS1227NH 1		*AS1227NH1	
12	SPRING STOP - VERTICAL	PT1229NH1		PT1229NH1		PT1229NH1	
13	SCREW	101 X 107		101 X 107		101 X 107	
14	SPRING STOP BAR (15-16)	*AS1234NH1		*AS1234NH1		*AS1234NH1	
15	SPRING STOP - HORIZONTAL	PT1235NH1		PT1235NH1		PT1235NH1	
16	SCREW	101 X 306		101 X 306		101 X 306	
17	SWIVEL BAR - SHORT (18)	*AS1231NH1		*AS1231NH1		*AS1231NH1	
18	SETSCREW	119 X 108		119 X 108		119 X 108	
19	SWIVEL BAR - MEDIUM (20)	*AS1232NH1		*AS1232NH1		*AS1232NH1	
20	SETSCREW	119 X 108		119 X 108		119 X 108	
21	SWIVEL BAR - LONG (22)	*AS1233NH1		*AS1233NH1		*AS1233NH1	
22	SETSCREW	119 X 108		119 X 108		119 X 108	
23	SWIVEL BAR (24)	*AS1594NH11		*AS1594NH1		*AS1594NH1	
24	SETSCREW	120 X 4		120 X 4		120 X 4	
25	HEX WRENCH	173 X 6		173 X 6		173 X 6	
26	SPRING STOP SHANK (27-28)	*AS1595NH1		*AS1595NH1		*AS1595NH1	
27	SPRING STOP	PT1596NH1		PT1596NH1		PT1596NH1	
28	SCREW	103 X 210		103 X 210		103 X 210	
29	RAISING BLOCK	
		14 1/2"		16"		16/24"	
ITEM NO.		PART NO.		PART NO.		PART NO.	
1	BOLT	143 X 514	1	143 X 514	1	143 X 534	1
2	CLAMP	PT127F	1	PT127H1	1	PT127H1	1
3	WASHER	161 X 41	1	161 X 41	1	161 X 41	1
4	NUT	136 X 39	1	136 X 39	1	136 X 39	1
5	BOLT (8-9)	PTS17FH1	1	PT517FH1	1	PT517FH1	1
6	SPRING STOP PLATE	PT1225F1	1	PT1225H1	1	PT1225H1	1
7	SPRING STOP SOCKET (10)	'AS1226FH1	1	*AS1226FH1	1	*AS1226FH1	1
B	WASHER	161 X 65	1	161 X 65	1	161 X 65	1
9	NUT	136 X 31	1	136 X 31	1	136 X 31	1
10	CAPSCREW	112 X 216	1	112 X 216	1	112 X 216	1
11	SPRING STOP SHANK (12-13)	*AS1227NH1	1	*AS1227NH1	1	*AS1227NH1	1
12	SPRING STOP - VERTICAL	PT1229NH 1	1	PT1229NH 1	1	PT1229NH1	1
13	SCREW	101 X 107	1	101 X 107	1	101 X 107	1
14	SPRING STOP BAR (15-16)	*AS1234NH1	1	*AS1234NH1	1	*AS1234NH1	1
15	SPRING STOP - HORIZONTAL	PT1235NH1	1	PT1235NH1	1	PT1235NH1	1
16	SCREW	101 X 306	1	101 X 306	1	101 X 306	1
17	SWIVEL BAR - SHORT (18)	*AS1231NH1	1	*AS1231NH1	1	*AS1231NH1	1
18	SETSCREW	119 X 108	1	119 X 108	1	119 X 108	1
19	SWIVEL BAR - MEDIUM (20)	*AS1232NH1	1	*AS1232NH1	1	*AS1232NH1	1
20	SETSCREW	119 108	1	119 X 108	1	119 X 108	1
21	SWIVEL BAR - LONG (22)	*AS1233NH1	1	*AS1233NH1	1	*A51233NH1	1
22	SETSCREW	119 X 108	1	119 X 108	1	119 X 108	1
23	SWIVEL BAR (24)	*AS1594NH1	1	*AS1594NH1	1	*AS1594NH1	1
24	SETSCREW	120 X 4	1	1120 X 4	1	120 X 4	1
25	HEX WRENCH	173 X 6	1	173 X 6	1	173 X 6	1
26	SPRING STOP SHANK (27-281)	*AS1595NH1	1	*AS1595NH1	1	*AS1595NH1	1
27	SPRING STOP	PT1596NH1	1	PT1596NH1	1	PT1596NH1	1
28	SCREW STOP	103 X 210	1	103 X 210	1	103 X 210	1
29	RAISING BLOCK		PT2003H1	



SINGLE SPEED - SINGLE PHASE

SYM.	BY	CHANGE	DATE



By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

J. C. PENNINGTON
Major General, United States Army
The Adjutant General

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