

OPERATING INSTRUCTIONS AND PARTS LIST

Model 45 Lathe

POWERMATIC MACHINE COMPANY

McMinnville, Tennessee

PRICE \$1.00

GENERAL SET-UP AND ALIGNMENT

1. RECEIVING

Uncrate and check for shipping damage. Clean all coated and greased surfaces. Read instructions thoroughly. Locate all lubrication points, adjustments; methods of drive.

2. MOUNTING

Mount machine securely to solid foundation. Locate in clean, dry and well ventilated building if possible. Motor and electrical connections should be protected when not in operation or if exposed to weather elements.

3. INSPECTION

The above machine requires the minimum amount of attention in service. Periodic or regular inspections are recommended to insure machine is in proper adjustment, positive electrical connections; worn or loose "V" belts and bearings heating or loose.

4. BEFORE OPERATING

Check motor nameplate data or wiring diagram of motor and switch for proper voltage connection before wiring into line. Run motor without load to check the connections and direction of rotation. Always refer to motor nameplate for rotation connections.

MACHINE DESCRIPTION

The Model 45—12" Lathe is ruggedly constructed for woodturning and metal spinning. Proper care of your machine will result in long life and trouble-free operation. This Lathe is designed in both a Variable Speed and Step Pulley drive. Motor is mounted under the head-stock in the base of the Lathe and is accessible through the door in the base.

OPERATING ADJUSTMENTS

The Variable Speed model has a speed range from 350 to 2800 RPM. Speed is regulated with a dial and handle mounted on Lathe head stock. Turn dial to right to increase spindle speed and left to decrease.

To change speed on the Step pulley model, raise the motor by turning dial handle on head stock to the left. This will slack drive belt so it may be changed to a higher or slower speed groove. To increase speed, run drive belt in smaller grooves on lathe spindle. To decrease, run in larger grooves. To increase or decrease tension on motor drive belt (step pulley model), loosen set screws on each side of lathe bed, adjust, and re-set screws.

LATHE SPINDLE: To remove Lathe spindle, remove the two cap screws that lock inboard bearing in place. Remove large nut on the out-board end of the spindle, and drive spindle out by bumping with a wooden block.

TAIL STOCK: The tail stock is held in place with a bolt that tightens or loosens clamp under bed ways. To remove the tailstock, loosen clamp and slide assembly off the end of the lathe bed. Tail stock quill may be removed by turning tailstock handwheel until screw backs out of the quill. When replacing screw, be SURE it does NOT cross thread in the quill and damage screw thread.

SPINDLE AND QUILL CARE: The head and tailstock spindles are fitted with a Number 2 Morse Taper, and care should be taken when inserting centers or other tools. Make sure tapers are clean and free from burrs—or tapers may be damaged. To remove centers or other tools from tailstock, turn handwheel counter-clockwise until screw forces center from quill. Head stock tools should be removed with a center drift rod.

TOOL REST BASE: This base supports the tool rest, and can be locked in any desired position with lock handle. If tool rest base does not lock properly, adjust the nut in lock bar under tool rest base. The tool rest is locked in position with a "lock" bushing on the side of the tool rest base, and should be set approximately $\frac{1}{8}$ " above the center of the work to be turned. For more detailed instruction on the operation of lathes and the many projects which may be performed in this machine, we would suggest that you purchase one of the many excellent books on woodturning.

INDEXING MECHANISM: The indexing plate is mounted on lathe spindle and features 60 notches which can be indexed with a lock pin mounted on the back of the head stock. It is used to lay out work in the lathe and to cut reeds. This indexing stop should NOT BE USED TO REMOVE FACT PLATES.

MODEL 45 LATHE PARTS LIST

	<i>Number Required</i>	
45-01	Guard, belt	1
45-02	Hinge, belt guard	1
45-03	Pin, belt guard hinge	1
45-04	Handle, belt guard	1
45-05	Bushing, belt guard handle	1
45-06	Knob, belt guard handle	1
45-07	Spindle, Lathe head	1
45-08	Bearing, Infeed spindle	1
45-09	Spacer, spindle bearing	1
45-10	Head casting	1
45-11	Bearing, outboard spindle	1
45-12	Lathe bed	1
45-13	Key, cam shaft	1
45-14	Shaft, cam	1
45-15	Key, cam shaft	1
45-16	Dial, variable speed	1
45-17	Handle, variable speed dial	1
45-18	Set-screw, variable speed dial handle	1
45-19	Clamp, tail stock	1
45-20	Bolt, tail stock clamp	1
45-21	Tail stock	1
45-22	Nut, tail stock bolt	1
45-23	Wrench, tail stock locking	1
45-24	Sleeve, quill lock	1
45-25	Washer, tail stock quill clamp bolt	1
45-26	Bolt, tail stock quill clamp	1
45-27	Quill, Tail stock	1
45-28	Screw, quill adjusting	1
45-29	Nut, quill adjusting screw	1
45-30	Handwheel, tail stock	1
45-31	Nut, tail stock handwheel	1
45-32	Tool rest (6")	1
45-33	Clamp, tool support	1
45-34	Bolt, tool support clamp	1
45-35	Bracket, tool support clamp	1
45-36	Washer, tool support locking bolt	1
45-37	Nut, tool support locking bolt	1
45-38	Bolt, tool support clamp	1
45-39	Bushing, tool support clamp	1
45-40	Shaft, tool rest eccentric	1
45-41	Handle, tool rest	1
45-42	Pin, tool rest handle	1
45-43	Cabinet base	1
45-44	Rod, motor base mounting	1
45-45	Base, motor	1
45-46	Bolt, motor base	1
45-47	Bolt, motor mounting (4 each)	4
45-48	Pulley, motor	1
45-49	Nut, motor base bolt	4
45-50	Washer, motor base bolt	4
45-51	Bushing, motor belt (rubber)	4
45-52	Screw, cabinet door	1
45-53	Door, cabinet	1
45-54	Nut, spindle	1
45-55	Spacer, spindle	1
45-56	Lock-ring, variable sheave	1
45-57	Washer, variable speed spring	1

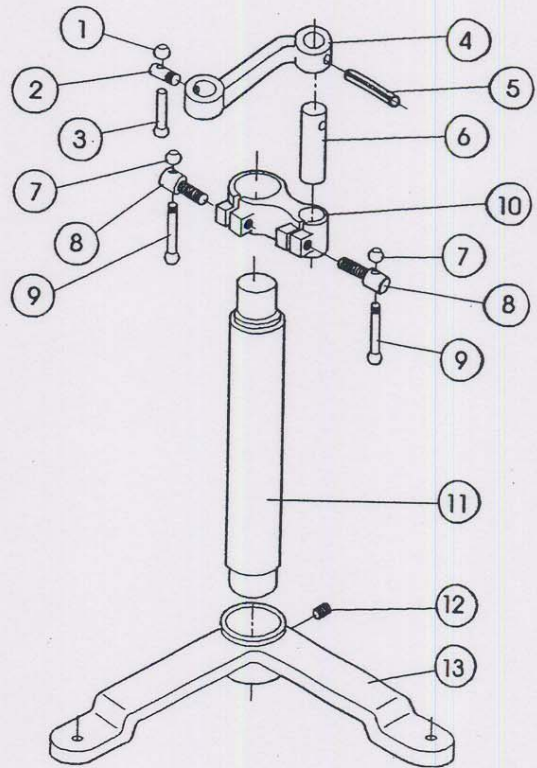
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34118009

	Required Number	
45-58	Spring, variable speed pulley	1
45-59	Sheave, variable speed, sliding	1
45-60	Sheave, variable speed, rigid	1
45-61	Wheel, index	1
45-62	Knob, plunger	1
45-63	Housing, indexing plunger	1
45-64	Spring, indexing plunger	1
45-65	Pulley, variable speed driven	1
45-66	Sheave, variable speed lower, rigid	1
45-67	Sheave, variable speed lower, sliding	1
45-68	Bearing, variable speed	1
45-69	Ball, variable speed thrust	1
45-70	Pin, variable speed arm	1
45-71	Arm, variable speed	1
45-72	Set-screw, variable speed arm	1
45-73	Nut, variable speed arm pin	1
45-74	Arm, variable speed cam	1
45-75	Bracket, variable speed mounting	1
45-76	Bolt, variable speed mounting bracket (4 each)	4
45-77	Washer, variable speed mounting bracket bolt (4) each	4
45-78	Set-screw, cam arm	1
45-79	Pin, cam arm	1
45-80	Screw, cam arm bearing	1
45-81	Bearing, cam arm	1
45-82	Washer, cam arm bearing screw (c'sunk 1/2", Drill, 1/4")	1
45-83	Washer, cam arm bearing screw (1/4" Drill)	1
45-84	Spring, cam	1
45-85	Cam	1
45-86	Shaft, lower variable speed	1
45-87	Bearing, lower variable speed	1
45-88	Housing, lower variable speed shaft	1
45-89	Cap-screw, lower variable speed housing	1
45-90	Washer, lower variable speed housing cap screw	1
45-91	Nut, lower variable speed housing cap-screw	1
45-92	Belt, variable speed	1
45-93	Belt, motor drive	1
45-94	Spacer, spindle	1
45-95	Key, spindle drive pulley	1
45-96	Pulley, spindle drive	1
45-97	Spacer, bearing	1
45-98	Pulley, motor drive	1
45-99	Key, motor drive pulley	1
45-100	Spacer, motor drive pulley	1
45-101	Stud, belt tension arm mounting	1
45-102	Cotter-key (3)	3
45-103	Pivot rod, motor base	1
45-104	Motor base	1
45-105	Mounting bracket, motor base	1
45-106	Adjusting rods, motor base (2)	2
45-107	Bolt, motor base adjusting rod (2)	2
45-108	Arm, belt tension	1
45-109	Bolt, belt tension arm mounting	1
45-110	Washer, belt tension arm mounting	1
45-111	Cam, belt tension arm	1
45-112	Set-screw, cam locking	1
45-113	Key, cam locking	1
45-114	Belt, spindle drive	1

OPTIONAL EQUIPMENT

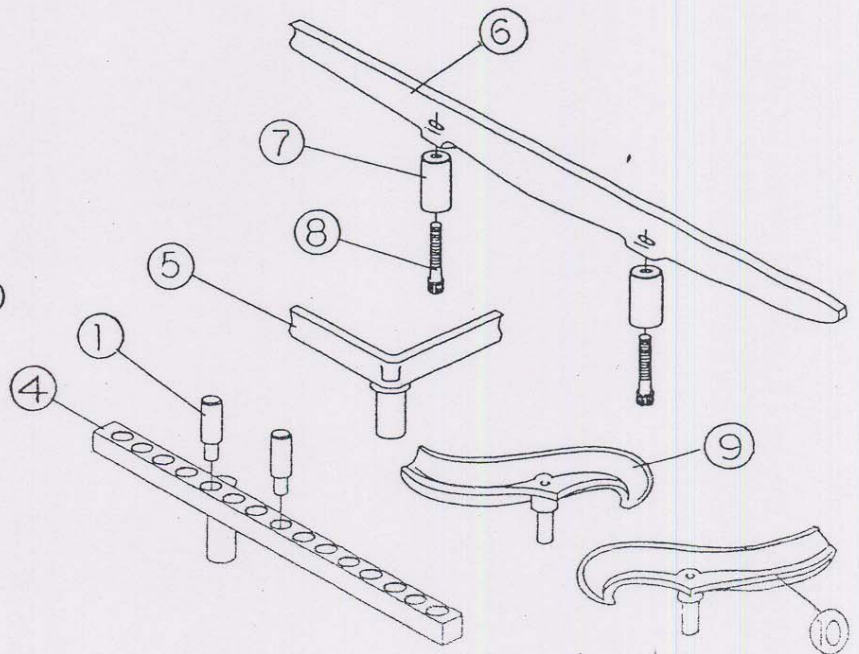
OUTBOARD TURNING STAND ASSEMBLY

ITEM No.	PART No.	DESCRIPTION
	2025016	OFFSET TOOL REST ARM (1 THRU 6)
	2695026	OFFSET TOOL REST ARM LOCK SCR. ASSY. (1 THRU 3)
1	3406016	KNOB, HANDLE
2	3695017	SCR., OFFSET TOOL REST ARM 5/8-18 x 2-5/8"
3	3268002	SCR., HANDLE LOCK
4	3658005	ARM, TOOL REST, OFFSET
5	6626043	PIN, SPRING, 1/4 x 2"
6	3584014	PIN, SWIVEL, OFFSET TOOL REST
	2759009	STD., OUTBOARD TURNING TOOL (7 THRU 13)
	2658003	TOOL REST OFFSET ASSY. (7 THRU 10)
	2695016	LOCK SCREW ASSEMBLY (7 THRU 9)
7	3406016	KNOB, HANDLE
8	3058005	BOLT, TOOL SUPPORT CLAMP
9	3268002	SCR., HANDLE LOCK
10	3289018	OUTBOARD & SWIVEL TOOL RESTHOLDER
11	2096035	COLUMN ASSY. (WELDMENT)
12	6718034	SCR., SOC. 1/2 DOG PT., 1/2-13 x 1/2"
13	3042063	STAND BASE, TOOL REST



TOOL REST AND RELATED PARTS

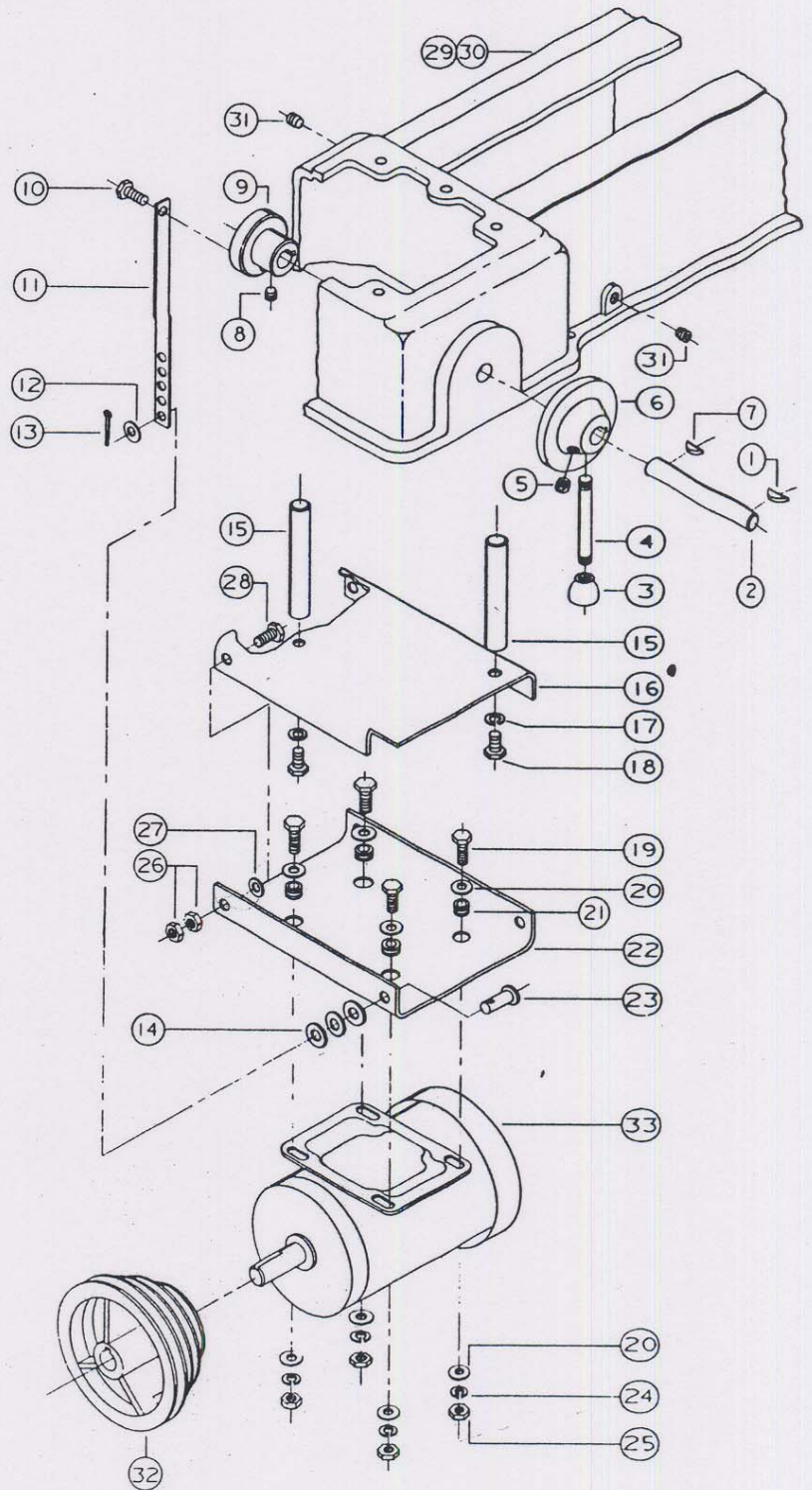
ITEM NO.	PART NO.	DESCRIPTION
1	3585011	TOOL REST PIN 5/8 x .495 x 3.50
2	2084002	BALL BRG. TAILSTOCK CENTER (NOT SHOWN)
3	6829019	TOOLS, SET OF 8, WOOD TURNING (NOT SHOWN)
4	2658002	12" METAL SPINNING TOOL REST
5	3658007	90 DEGREE TOOL REST
	2658007	24" TOOL REST ASSY (6 THRU 8)
6	3658006	24" TOOL REST
7	3607001	TOOL REST POST
8	6716020	SCREW SOC HD 3/8-16 x 3
9	3658019	TOOL REST R.H.
10	3658024	TOOL REST L.H.



STEP CONE DRIVE AREA

ITEM PART

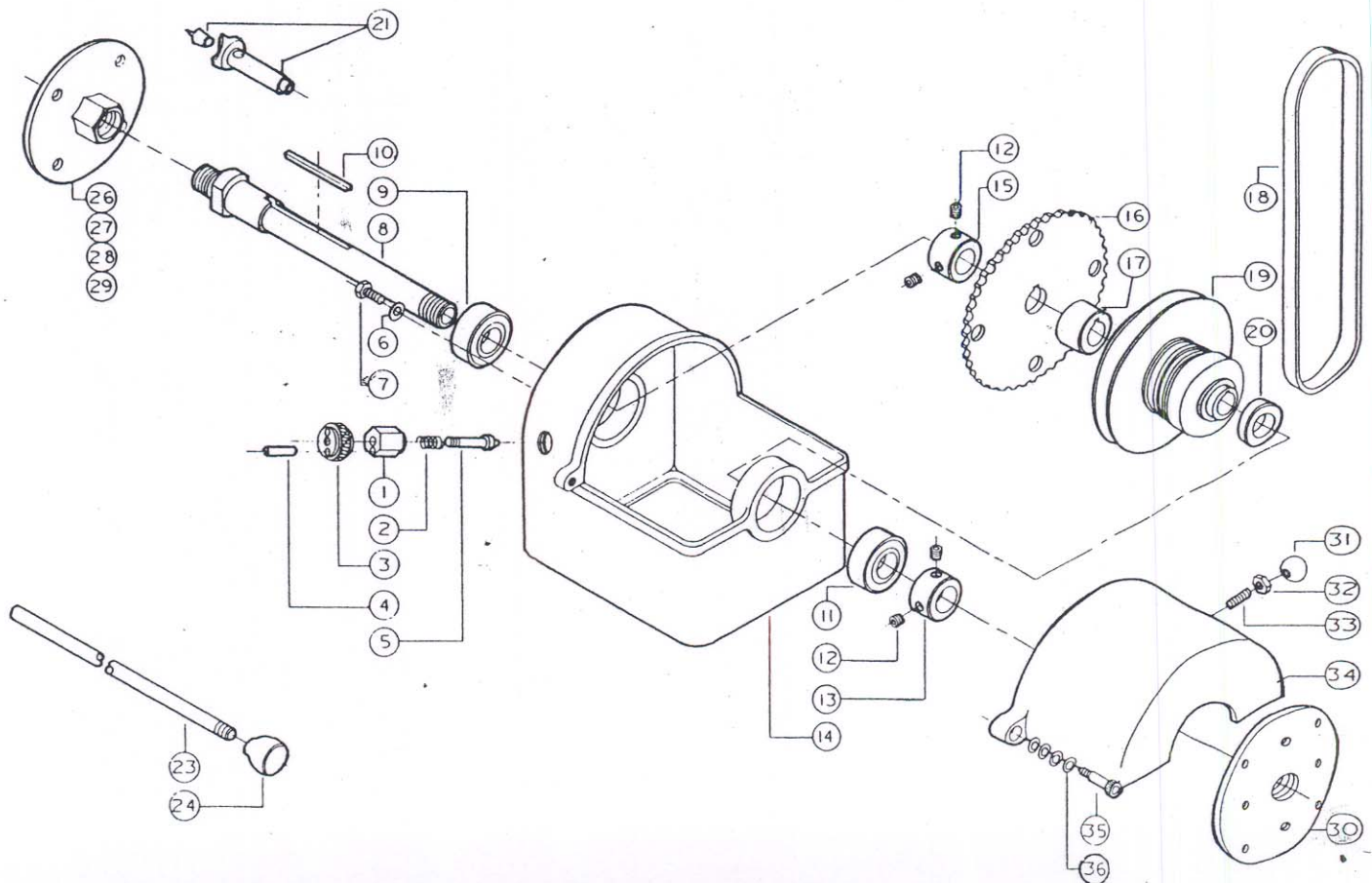
No.	Part No.	DESCRIPTION
1	6420002	KEY, WOODRUFF No. 608
2	3703001	SHAFT, CAM
	2698007	SELECTOR ASSY., 4SPEED (3 THRU 6)
3	3406201	KNOB, SPEED SELECTOR
4	3709009	SHAFT, SPEED SELECTOR
5	6716003	SCR., SOC. SET CUP PT., 3/8-16 x 3/8"
6	3406020	KNOB, SPEED SELECTOR
	2445002	LINKAGE ASSY., BELT TENS. (ITEMS 7 THRU 14)
7	6420002	KEY, WOODRUFF NO. 608
8	6715013	SCR., SOC. SET CUP PT., 5/16-18 x 3/8"
9	3076007	CAM, BELT TENSION
10	6715035	SCR., HEX HD. CAP, 5/16-18 x 3/4"
11	3025007	ARM, BELT TENSION
12	6861101	WASHER, FLAT, 1/4"
13	6622009	PIN, COTTER, 3/32 x 1-1/4 x 3/16"
14	3741201	SPACER, RUBBER. 7/16 I.D. x 10.D. x 1/8" THK.
	2042007	BASE ASSY., MOTOR STEP CONE (ITEMS 15 THRU 28)
15	3670020	ROD, MOTOR BASE ADJUST
16	3063066	MOUNTING BRKT, MOTOR BASE
17	6861300	WASHER, LOCK, 3/8"
18	6716031	SCR., HEX HD. 3/8-16 x 1" (FOR ROD, MOTOR BASE ADJ.)
19	6715032	SCR., HEX HD. CAP, 5/16-18 x 1"
20	6861201	WASHER, FLAT 5/16"
21	6336000	GROMMET, BLACK RUBBER 5/16"
22	3042023	BASE, MOTOR
23	3584001	PIN, PIVOT, 5/16 DIA. x 1"
24	6861200	WASHER, LOCK, 5/16"
25	6515001	NUT, HEX, 5/16"
26	6516009	NUT, HEX JAM, 3/8-16
27	6861301	WASHER, FLAT, 3/8"
28	6716039	SCR., HEX HD. CAP, 3/8-16 x 1-1/4"
29	3797077	BED, STRAIGHT, 45 LATHE
30	3797063	BED, W/GAP, 45 LATHE
31	6716003	SCR., SOC.SET, CUP PT.3/8-16 x 3/8"
32	6807083	SHEAVE, STEP CONE, 5/8" BORE
33	6470716	MOTOR, ELEC., 3/4HP, 1PH, 1800RPM, 115/230V, 56FR. TEFC
	6470707	MOTOR, ELEC., 3/4HP, 3PH 1800RPM, 230/460V, 56FR. TEFC
	7470712	MOTOR, ELEC., 3/4HP, 3PH, 1800RPM, 200V, 56FR, TEFC



V.S. HEAD AREA ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
	2601009	PLUNGER ASSY., INDEXING (1 THRU 5)	19	2719091	SHEAVE, V.S., UPPER
1	3298202	HOUSING, INDEXING PLGR.	20	3742010	SPACER, SPINDLE (THIN)
2	6813016	SPRING, COMP., 15/32" O.D. x 1-1/2" I.D.	21	2084001	CTR. SPUR & PIN ASSY., (21, 22)
3	3406013	KNOB, PLUNGER		2670008	ROD ASSY., KNOCKOUT (23 & 24)
4	6626001	PIN, SPRING, 1/8 x 5/8" L	23	3670021	ROD, KNOCKOUT
5	3601205	PLUNGER, INDEXING	24	3406201	KNOB, TEARDROP
	2277020	HEAD ASSY., V.S. (6 THRU 20)	26	3193001	3" FACE PLATE, RT. HAN. (OPT.)
6	6861201	WASHER, FLAT, 5/16"	27	3193003	4" FACE PLATE, RT. HAN. (OPT.)
7	6715033	SCR., HEX HD. CAP 5/16-18 x 1/2"	28	3193034	7" FACE PLATE, RT. HAN. (STD.)
8	3749004	SPINDLE, LATHE HEAD	30	3193036	7" FACE PLATE, LT. HAN. OUTBOARD; (OPT.)
9	6060017	BEARING, BALL, FAFNIR W206PP	31	3406208	KNOB, ROUND
10	3387004	KEY, SQ., 1/4 x 1/4 x 4"	32	6514008	NUT, HEX JAM, 1/4-20
11	6060012	BEARING, BALL, R-16ZZ MRC R 16	33	6714155	SCR. SLOT HD. SET CUP PT. 1/4-20x1"
12	6715016	SCR., SOC. SET CUP PT., 5/16"-18 x 5/16"	34	3250053	GUARD, BELT
13	3096015	COLLAR, SPINDLE	35	6715064	SCR., SHOULDER, 5/16-18 x 3/4"
14	3277009	HEAD, 45 LATHE	36	6813071	SPRING, BELLVILLE, 1 1/16 O.D. x .382 I.D. x .0275" TK
15	3096005	COLLAR, SPINDLE HEAD			
16	3850010	WHEEL, INDEXING			
17	3742013	SPACER, SPINDLE (LONG)			
18	6077051	BELT, V.S. NO. 1422V420			

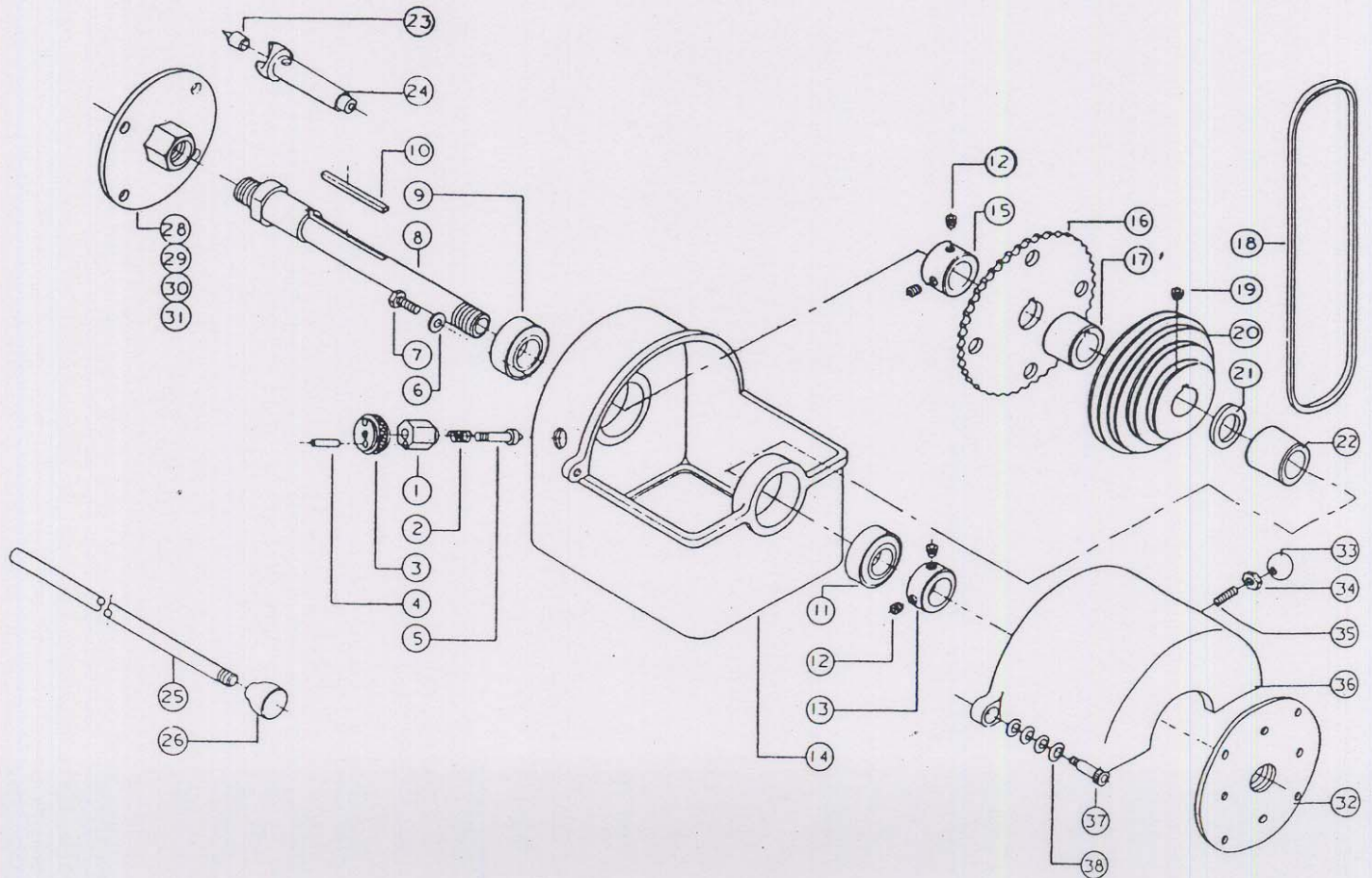
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STEP CONE HEAD AREA ASSEMBLY

ITEM No.	PART No.	DESCRIPTION
	2601009	PLUNGER ASSY., INDEXING (ITEMS 1 THRU 5)
1	3298202	HOUSING, INDEXING PLGR.
2	6813016	SPRING, COMP. 15/32O.D.x1-1/2" I.D.
3	3406013	KNOB, PLUNGER
4	6626001	PIN, SPRING, 1/8 x 5/8" L
5	3601205	PLUNGER, INDEXING
	2277002	HEAD ASSY., STEP CONE (ITEMS 6 THRU 22)
6	6861201	WASHER, FLAT, 5/16"
7	6715033	SCR., HEX HD. CAP 5/16-18 x 1/2"
8	3749004	SPINDLE, LATHE HEAD
9	6060017	BEARING, BALL, FAFNIRW206PP
10	3387004	KEY, SQ., 1/4 x 1/4 x 4"
11	6060012	BEARING, BALL, R-16ZZ MRC
12	6715016	SCR. SOC. SET, CUP PT. 5/16-18x5/16"
13	3096015	COLLAR, SPINDLE
14	3277009	HEAD, 45 LATHE
15	3096005	COLLAR, SPINDLE HEAD
16	3850010	WHEEL, INDEXING
17	3742001	SPACER, SPIN. (LONG) STEP CONE
18	6077024	BELT, V-4L-520
19	6715013	SCR. SOC. SET, CUP PT. 5/16-18 x 3/8"
20	3718002	SHEAVE, STEP CONE

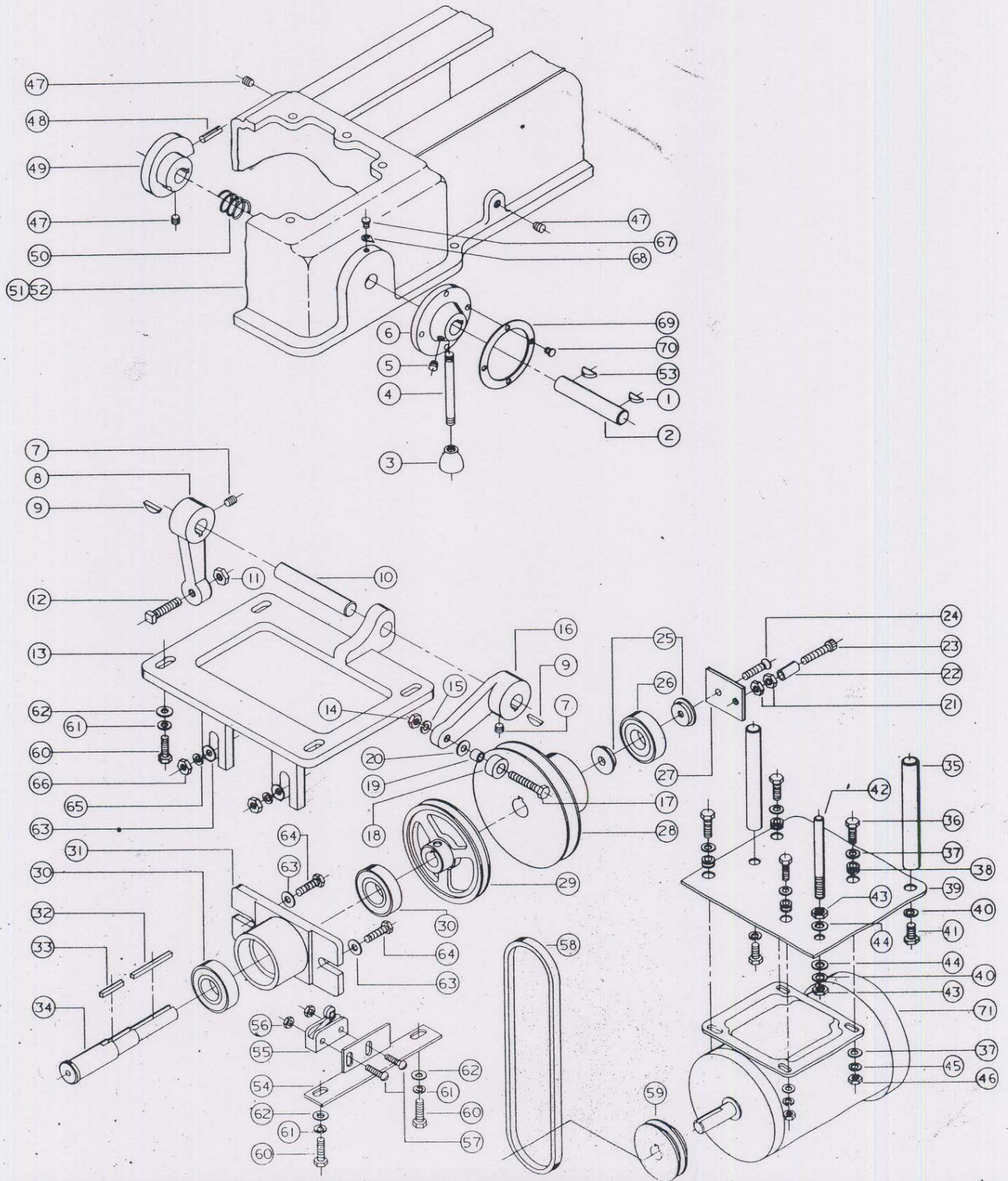
ITEM No.	PART No.	DESCRIPTION
21	3742011	SPACER, SPINDLE (THIN)
22	3742012	SPACER, SPINDLE
	2084001	CENTER SPUR & PIN ASSY., (ITEMS 23 & 24)
	2670008	ROD ASSY., KNOCKOUT (ITEMS 25 & 26)
25	3670021	ROD, KNOCKOUT
26	3406201	NOB, TEARDROP
	3193001	3" FACE PLATE, RT. HND. (OPT.)
29	3193003	4" FACE PLATE, RT. HND. (OPT.)
30	3193034	7" FACE PLATE, RT. HND. (STD.)
32	3193036	7" FACE PLATE, LT. HAND (OUTBOARD; OPT.)
33	3406208	KNOB, ROUND
34	6514008	NUT, HEX JAM, 1/4"-20
35	6714155	SCR., SLOTTED HD. SET, CUP PT., 1/4-20 x 1"
36	3250053	GUARD, BELT
37	6715064	SCR., SHOULDER, 5/16-18x3/4"
38	6813071	SPRING, BELLVILLE, 1 1/16 O.D. x .382 I.D. x .0275" THK.



VARIABLE SPEED DRIVE AREA

ITEM PART		DESCRIPTION	ITEM PART		DESCRIPTION
No.	No.		No.	No.	
	2698003	SELECTOR ASSY., V.S. (ITEMS 1 THRU 6)	36	6715032	SCR., HEX HD. CAP, 5/16-18 x 1"
1	6420002	KEY, WOODRUFF NO. 608	37	6861201	WASHER, FLAT, 5/16"
2	3703001	SHAFT, CAM	38	6336000	GROMMET, BLACK RUBBER
3	3406201	KNOB, SPEED SELECTOR	39	3042022	BASE, MOTOR
4	3709009	SHAFT, SPEED SELECTOR	40	6861300	WASHER, LOCK, 3/8"
5	6716003	SCR., SOC. SET, CUP PT., 3/8-16 x 3/8"	41	6716139	SCR., FLAT HD. CAP, 3/8-16 x 1"
6	3406019	KNOB, SPEED SELECTOR	42	3691009	SCR., JACK, MOTOR BASE
	2063014	BRACKET ASSY., V.S. W/MICRO SW. (ITEMS 7 THRU 20)	43	6516001	NUT, HEX, 3/8-16"
7	6715016	SCR., SOC. SET, CUP PT., 5/16-18 x 5/16"	44	6861301	WASHER, FLAT, 3/8"
8	3025006	ARM, PIVOT, V.S.	45	6861200	WASHER, LOCK, 5/16"
9	6420002	KEY, WOODRUFF NO. 608	46	6515007	NUT, HEX JAM, 5/16-18"
10	3703002	SHAFT, CAM ARM	47	6716003	SCR., SOCSET, CUP PT., 3/8-16x3/8"
11	6518008	NUT, HEX JAM, 1/2-13	48	6626029	PIN, SPRING, 3/16 x 1"
12	6718046	SCR., SQ. HD., 1/2-13 x 1-3/4"	49	3076008	CAM, MICRO SWITCH
13	3063067	BRACKET, V.S. MOUNTING	50	6813033	SPRING, COMP. NO. 18156
14	6515007	NUT, HEX JAM, 5/16-18	51	3797077	BED, STRAIGHT, 45 LATHE
15	6861200	WASHER, LOCK, 5/16"	52	3797063	BED, W/GAP, 45 LATHE
16	3025027	ARM, V.S. CAM	53	6420002	KEY, WOODRUFF NO. 608
17	6715037	SCR., HEX HD., 5/16-18 x 1-1/2"	54	3062007	BRACKETT, MICRO SWITCH MTG.
18	3673032	ROLLER, V.S. CAM	55	6816005	SWITCH, MICRO NO. BZ2G822
19	6095043	BUSHING, PS-R 306 x 3/8"	56	6506001	NUT, HEX, NO. 6-32
20	6861201	WASHER, FLAT, 5/16"	57	6706043	SCR., RND. HD. MACH., 6-32 x 1"
	2298030	HOUSING ASSY., V.S. LOWER SHEAVE (ITEMS 21 THRU 34)	58	6077007	BELT, "V" -4L280
	2595003	PLATE ASSY., V.S. BEARING (ITEMS 21 THRU 27)	59	6807027	SHEAVE, BROWN. AK-25 5/8" BORE (MOTOR)
21	6514011	NUT, HEX JAM, 1/4-20 (PLTD)	60	6716032	SCR., HEX HD. CAP, 3/8-16 x 1-1/2"
22	3070201	BUSHING, BLACK RUBBER BUMP., 1/4 I.D. x 1/2 O.D. x 1" LG.	61	6861300	WASHER, LOCK, 3/8"
23	6714040	SCR., FILLISTER HD. MACH., 1/4-20 x 1-1/2"	62	6861301	WASHER, FLAT, 3/8"
24	6714056	SCR., FLAT HD. MACH., 1/4-20 x 1"	63	6861401	WASHER, FLAT, 7/16"
25	3598005	PLUG, V.S. BEARING	64	6717016	SCR., HEX HD. CAP, 7/16-14 x 2"
26	6060013	BEARING, BALL, FAFNIR #9106NPP	65	6861400	WASHER, LOCK, 7/16"
27	3595005	PLATE BEARING	66	6517006	NUT, HEX JAM, 7/16"
28	2719090	SHEAVE ASSY., V.S. LOWER	67	6746001	SCR. PAN HD. SELF TAP. 6 x 1/4"
29	6807040	SHEAVE, BROWNING AK-54 7/8" BORE	68	3604008	POINTER
30	6060010	BEARING, BALL, FAFNIR # 205NPP	69	3747217	PLATE, SPEED, V.S.
31	3298016	HOUSING, V.S. SHAFT, LOWER	70	6747000	SCR., RD. HD. DRIVE 4 x 3/16"
32	3388015	KEY, SQ., 3/16 x 3/16 x 2-1/4"	71	6470716	MOTOR, ELEC., 3/4HP, 1PH. 1800RPM, 115/230V, 56 FR. TEFC
33	3388004	KEY, SQ., 3/16 x 3/16 x 1"		6470707	MOTOR, ELEC., 3/4HP, 3PH 1800RPM, 230/460V, 56FR. TEFC
34	3704037	SHAFT, LOWER V.S.		6470712	MOTOR, ELEC., 3/4HP, 3PH, 1800RPM, 200V, 56FR, TEFC
	2042006	BASE ASSY., V.S. MOTOR (ITEMS 35 THRU 46)			
35	3670051	ROD, V.S. MOTOR BASE			

VARIABLE SPEED DRIVE AREA SCHEMATIC

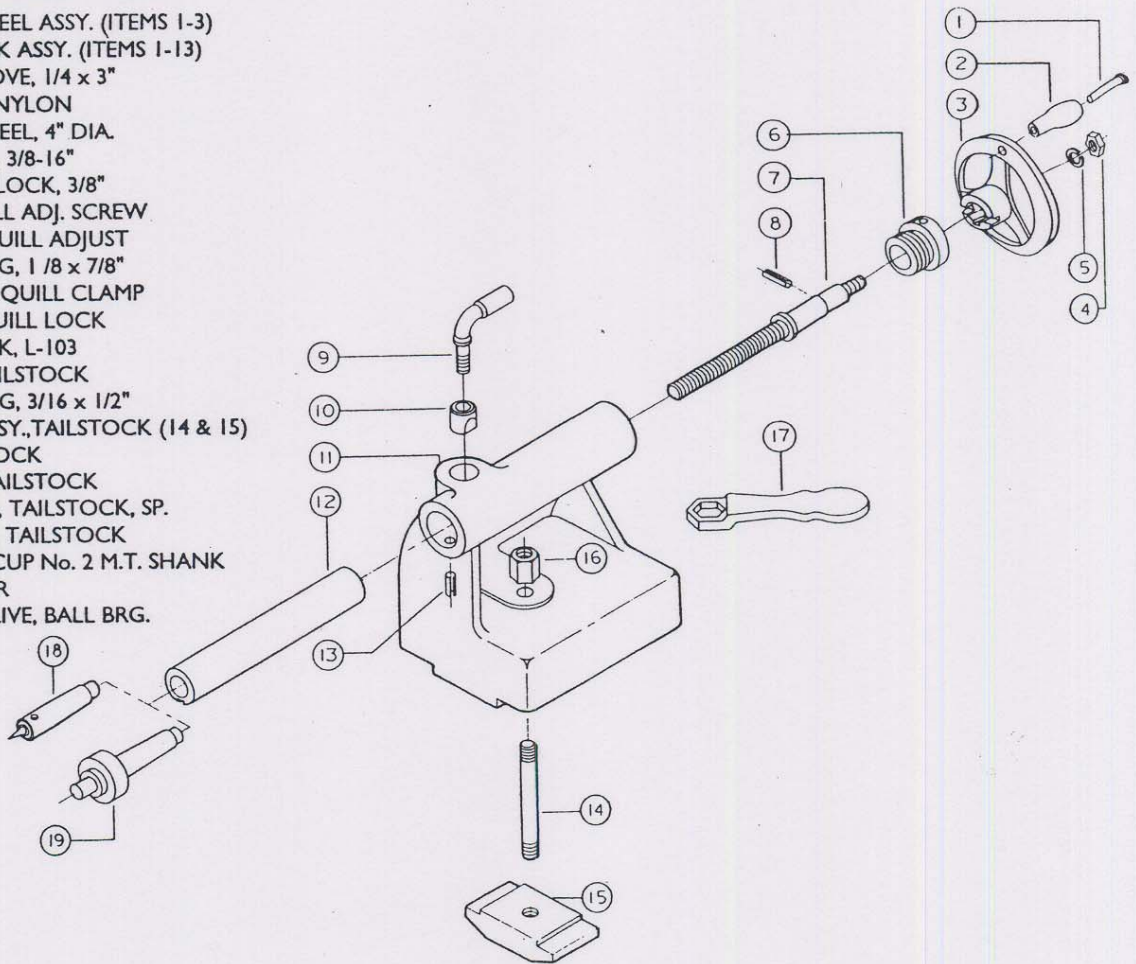


TAILSTOCK AND TOOL REST ASSEMBLY

TAILSTOCK

ITEM PART

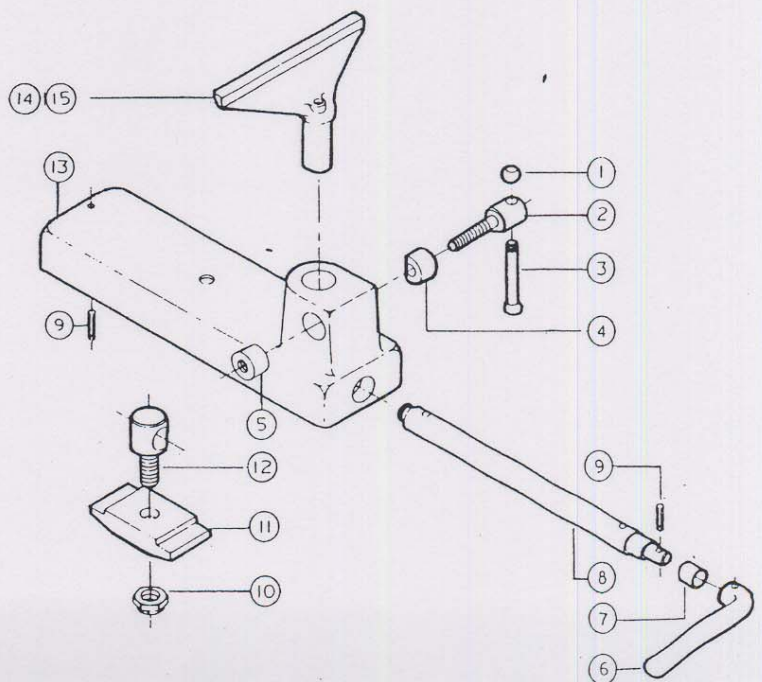
NO.	NO.	DESCRIPTION
	2271013	HANDWHEEL ASSY. (ITEMS 1-3)
	2800001	TAILSTOCK ASSY. (ITEMS 1-13)
1	6624006	PIN, GROOVE, 1/4 x 3"
2	3268201	HANDLE, NYLON
3	3271048	HANDWHEEL, 4" DIA.
4	6516001	NUT, HEX, 3/8-16"
5	6861300	WASHER, LOCK, 3/8"
6	3530001	NUT, QUILL ADJ. SCREW
7	3690013	SCREW, QUILL ADJUST
8	6626005	PIN, SPRING, 1/8 x 7/8"
9	3268001	HANDLE, QUILL CLAMP
10	3728005	SLEEVE, QUILL LOCK
11	3799001	TAILSTOCK, L-103
12	3640001	QUILL, TAILSTOCK
13	6626028	PIN, SPRING, 3/16 x 1/2"
	2092003	CLAMP ASSY., TAILSTOCK (14 & 15)
14	3695030	SCREW, LOCK
15	3092004	CLAMP, TAILSTOCK
16	3526204	NUT, HEX, TAILSTOCK, SP.
17	3868001	WRENCH, TAILSTOCK
18	6112002	CENTER, CUP No. 2 M.T. SHANK W/CENTER
19	2084002	CENTER, LIVE, BALL BRG.



TOOL REST

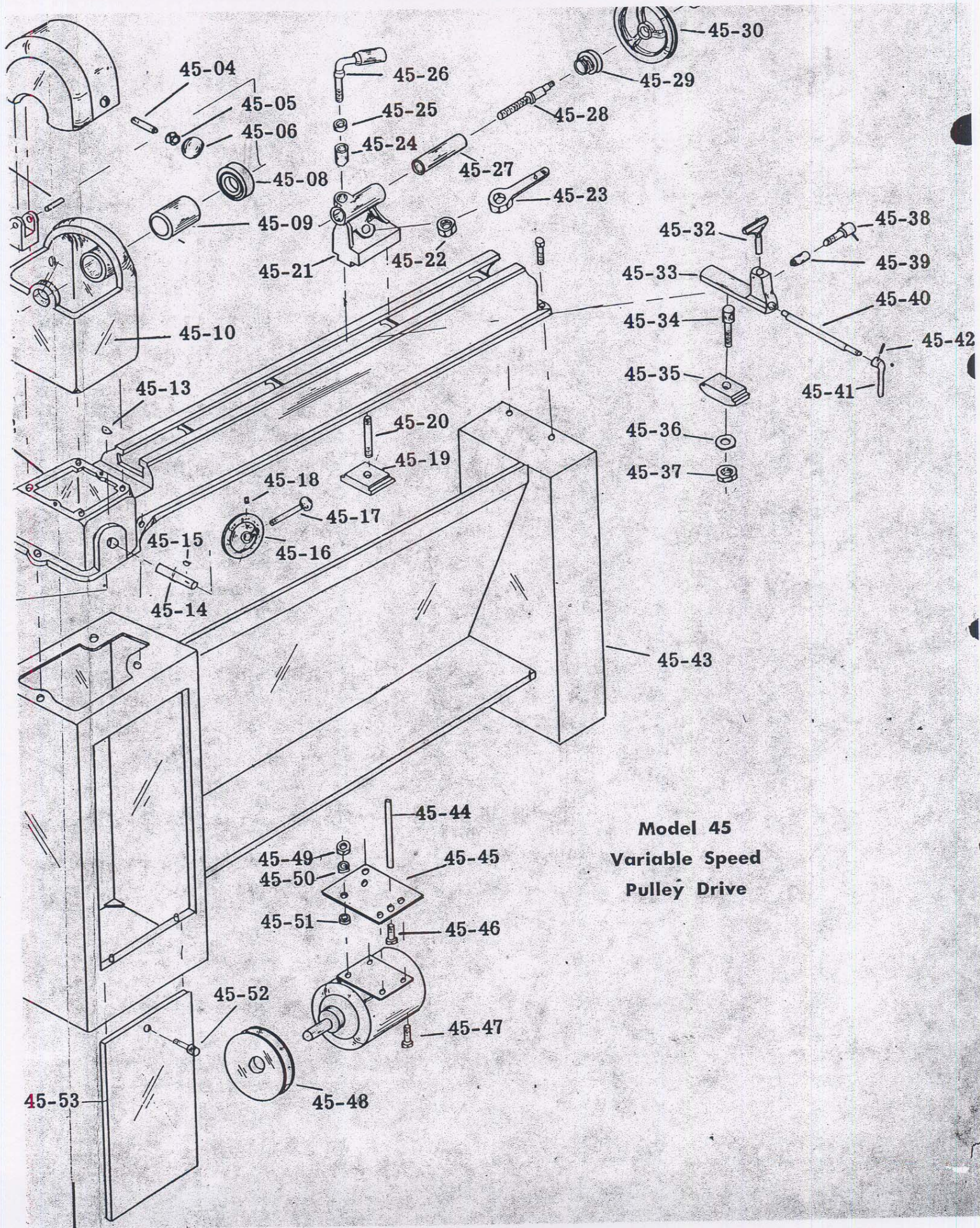
ITEM PART

No.	No.	DESCRIPTION
	2440003	LOCK ASSY., TOOL REST (ITEMS 1 THRU 5)
	2695016	SCREW ASSY., LOCK (ITEMS 1 THRU 3)
1	3406016	KNOB, HANDLE
2	3058005	BOLT, TOOL SUPPORT CLP.
3	3268002	HANDLE
4	3448008	LOCK, TOOL REST, PLAIN
5	3448009	LOCK, TOOL REST, THRD.
	2063011	BRACKET ASSY., TOOL REST (6 THRU 13)
6	3268003	HANDLE, TOOL REST
7	6095038	BUSHING, BRONZE, 7/8 I.D.x1" O.D. x 7/8" LG.
8	3708006	SHAFT, TOOL REST CLPNG.
9	6626032	PIN, SPRING, 3/16x1-1/4"
10	6520009	NUT, HEX, LOCK, 5/8-11 THIN HEIGHT, FLEXLOC
11	3092005	CLAMP, TOOL REST
12	3058001	BOLT, TOOL SUPPORT CLP.
13	3658001	REST, TOOL
14	3658010	TOOL REST, 6"
15	3658022	TOOL REST, 16"



TROUBLESHOOTING

TROUBLE	POSSIBLE CAUSE	REMEDY
Excessive Vibration	<ol style="list-style-type: none"> 1. Defective Spindle Bearings. 2. Worn or defective belt. 3. Defective motor. 4. Workpiece warped, out-of-round, has major flaw, or was improperly prepared for turning. 	<ol style="list-style-type: none"> 1. Replace bearings. 2. Replace belt. 3. Replace motor. 4. Correct problem by planing or sawing, or scrap workpiece.
Motor or Spindle Stalls	<ol style="list-style-type: none"> 1. Excessive cut. 2. Defective motor. 3. Motor clogged with sawdust. 4. Excessive belt wear. 5. Improper belt adjustment. 6. Fixed sheave on spindle out of position or frozen. 7. Belt between motor and jackshaft slipping. 8. Spring loaded pulley frozen. 	<ol style="list-style-type: none"> 1. Reduce cut depth. 2. Replace motor. 3. Clean motor. 4. Replace belt. 5. Readjust belt. 6. Readjust position or lubricate sleeve with light weight oil. 7. Re-tension belt. 8. Free pulley and lubricate with silicone spray.
Motor Overheats.	<ol style="list-style-type: none"> 1. Motor overloaded. 2. Improper cooling on motor. 	<ol style="list-style-type: none"> 1. Correct overload condition, such as reducing cut depth. 2. Clean sawdust from fan and duct areas of motor.
Motor Starts Slowly or Fails to Come Up to Speed.	<ol style="list-style-type: none"> 1. Low voltage. 2. Centrifugal switch not operating. 3. Defective motor. 	<ol style="list-style-type: none"> 1. Request voltage check from power company and correct low voltage condition. 2. Replace switch or motor. 3. Replace motor.
Motor Fails To Develop Full Power.	<ol style="list-style-type: none"> 1. Power line overloaded. 2. Undersize wires in supply system. 3. Low voltage. 4. Clogged motor fan areas. 5. Defective motor. 	<ol style="list-style-type: none"> 1. Correct overload condition. 2. Increase supply wire size. 3. Request voltage check from power company and correct low voltage condition. 4. Clean motor fan area. 5. Replace motor.
Excessive Speed.	<ol style="list-style-type: none"> 1. Excessive wear on belt. 2. Fixed spindle sheave is out of position. 3. Motor or jackshaft out of position. 	<ol style="list-style-type: none"> 1. Replace belt. 2. Readjust per maintenance instructions. 3. Readjust per maintenance instructions.
Tools Tend To Grab Or Dig In.	<ol style="list-style-type: none"> 1. Dull tools. 2. Tool rest set too low. 3. Tool rest set too far from workpiece. 4. Improper tool being used. 	<ol style="list-style-type: none"> 1. Sharpen tools. 2. Reposition tool rest height. 3. Reposition tool rest closer to workpiece 4. Use correct tool for operation.
Lathe With Variable Speed Runs At One Speed.	<ol style="list-style-type: none"> 1. Drive or driven variable speed pulley frozen. 	<ol style="list-style-type: none"> 1. Free and lubricate with SAE 10 oil.



**Model 45
 Variable Speed
 Pulley Drive**

