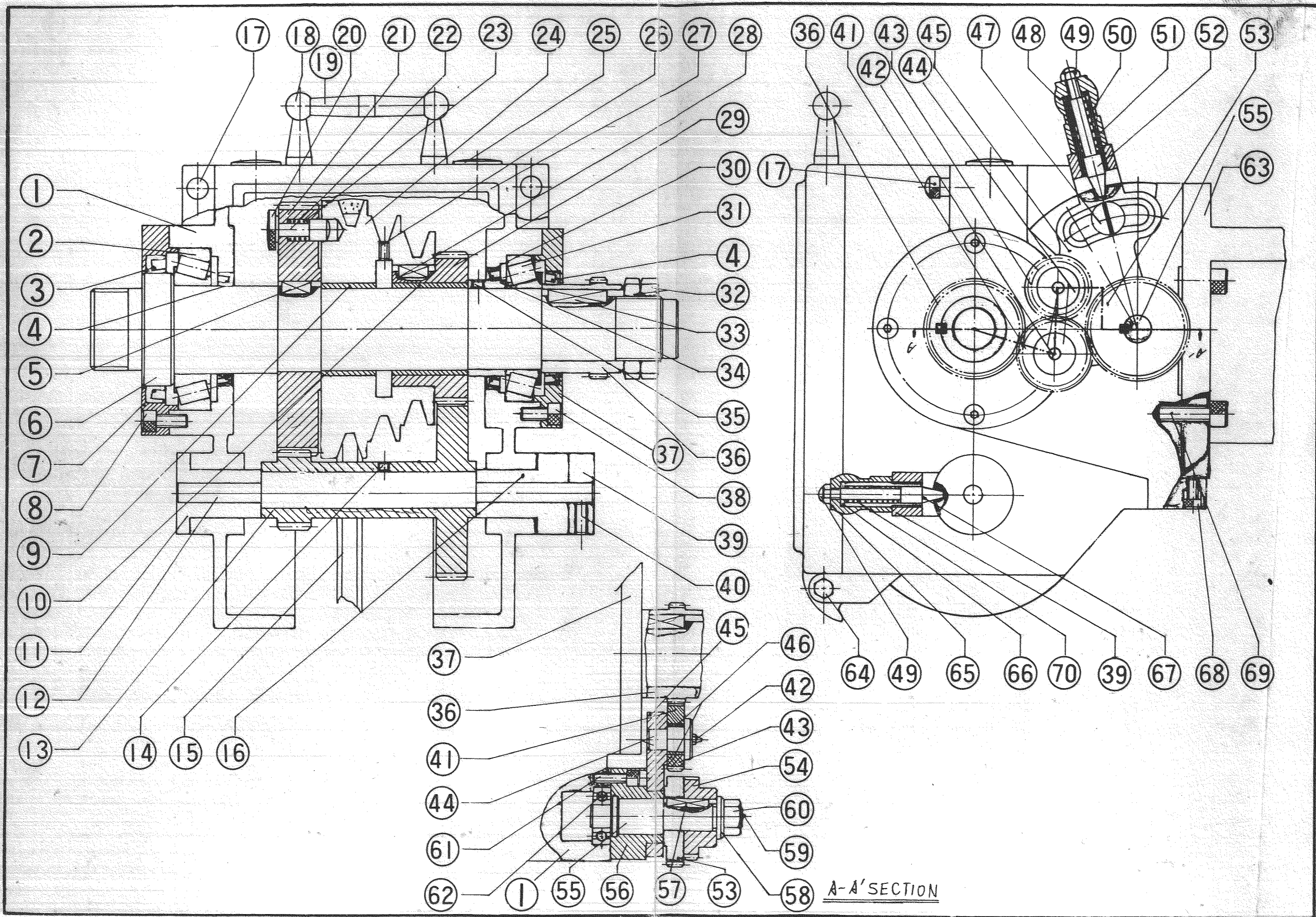


PARTS LIST

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1. Headstock.....	1
2. Bed.....	5
3. Apron.....	8
4. Gear Box.....	13
5. Tailstock.....	17
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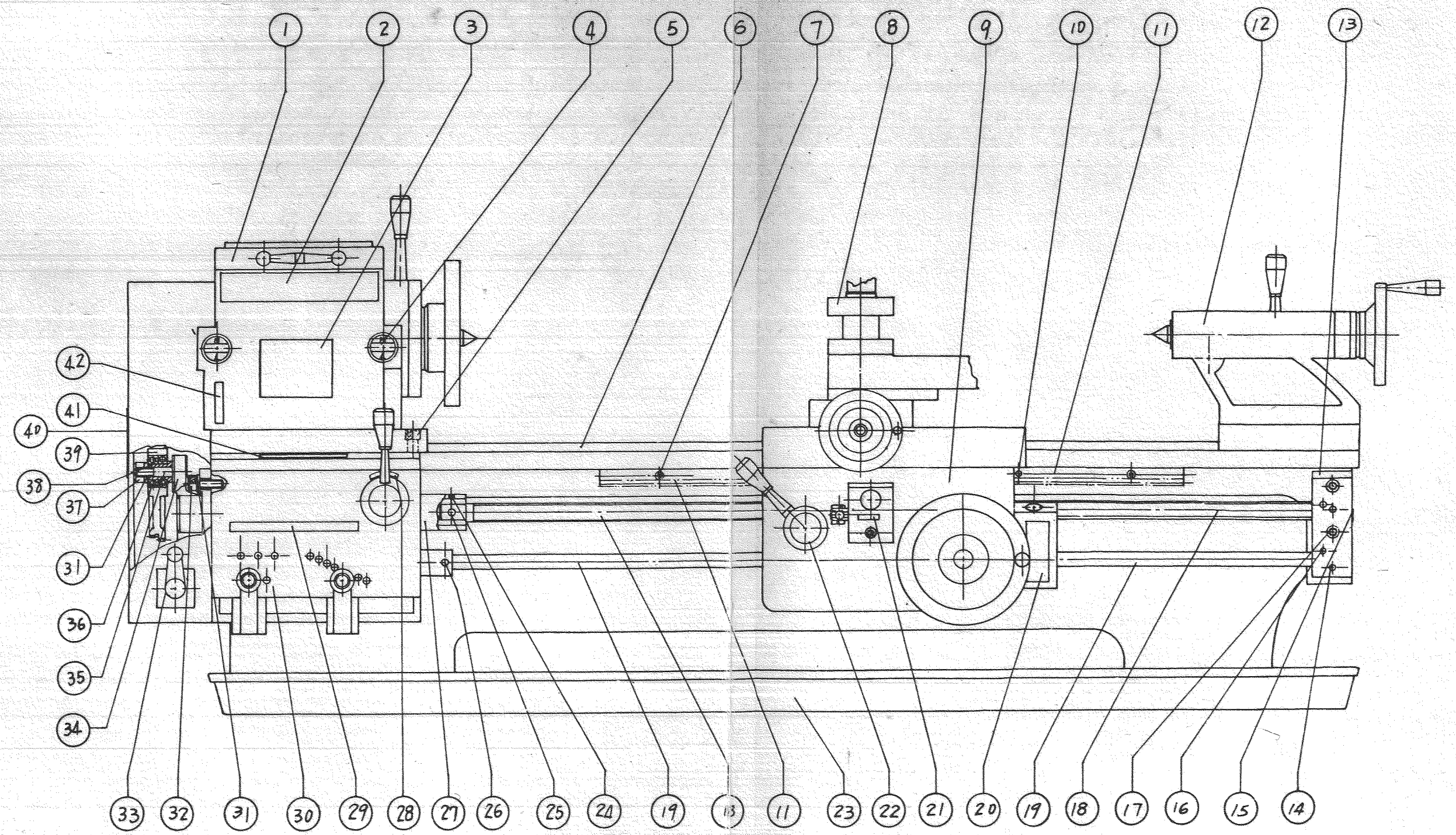


A-A' SECTION

PARTS		LIST	No.1	
Ref. No.	Part No.	Parts Name	Material Spec.	AMT USED
1	3A-1	Head stock	FC 25	1
2		Taper roller bearing	# 32211	1
3		Oil seal	TC 70x92x12	1
4		Oil seal	TC 55x70x10	2
5		Key	8x8x18	1
6	3A-3	Main spindle	S 45C	1
7	3A-2	Main spindle front cover ..	FC 25	1
8		Socket head screw	M 8x20	4
9	3A-9	Bush of v-pulley	gun metal	1
10	3A-11	Bush of helical gear	gun metal	1
11	3A-19	Front cover of back gear ..	FC 25	1
12	3A-17	Eccentric shaft	S 45C	1
13	3A-18	Back gear	FC 25	1
14		Headless set screw	M 6x6	1
15		V-Belt	B-42"	1
16	3A-16	Eccentric shaft rear cover	FC 25	1
17	3A-40	Oil plug	SS 20	2
18	3A-42	Handle arm	S 20C	1
19	3A-43	Handle	S 20C	1
20	3A-7	Round nut	SS 41	1
21	3A-4	Helical gear (74T)	FC 25	1
22	3A-5	Transmission pin	SS 41	1
23		Comp. spring	SUP 6 ϕ	1
24	3A-8	V-pulley	FC 25	1
25		Oil gauge	ϕ 28	2
26		Headless set screw	M6x8	1
27	3A-41	Cover of head stock		
28		Key	8x8x18	1

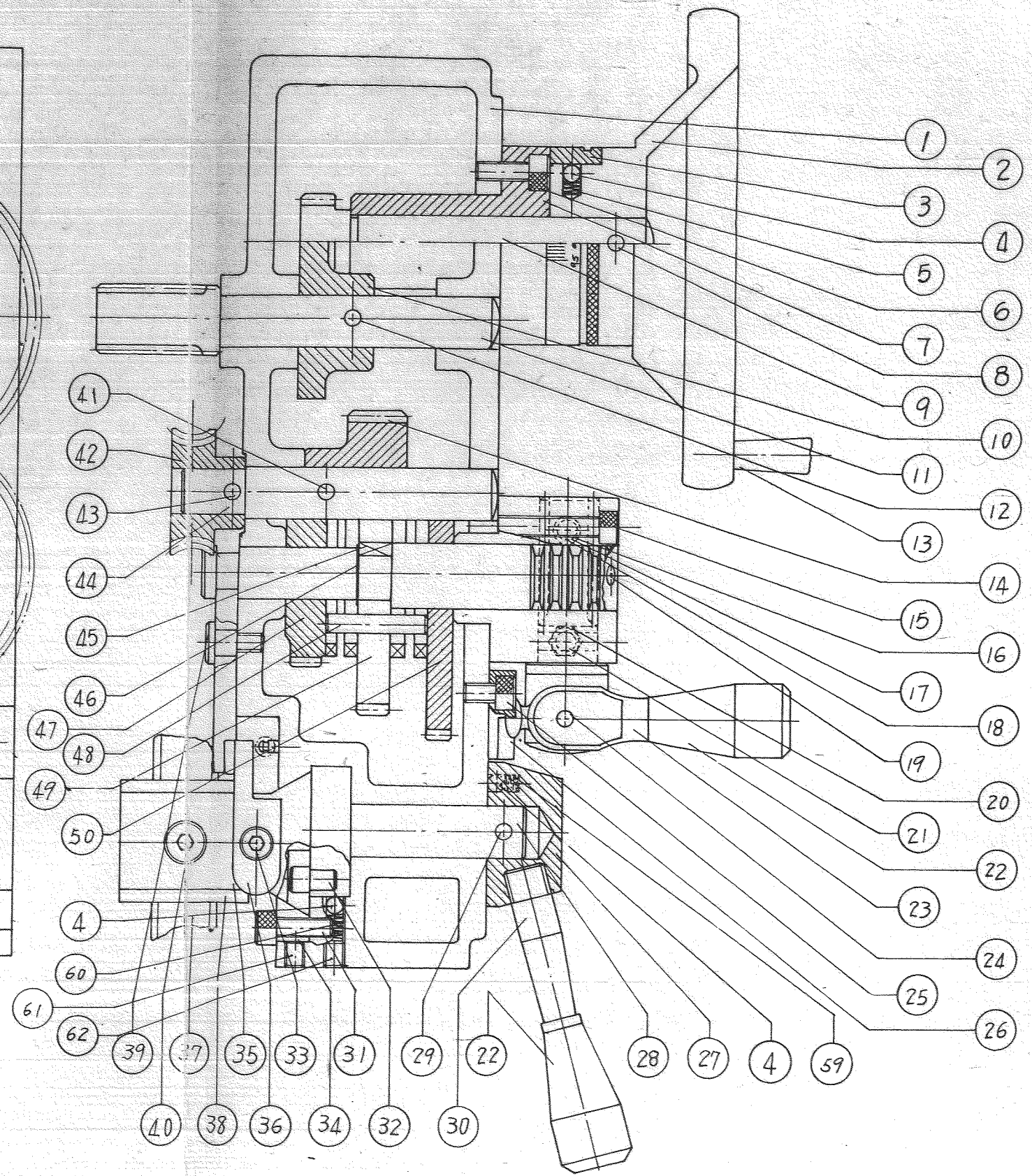
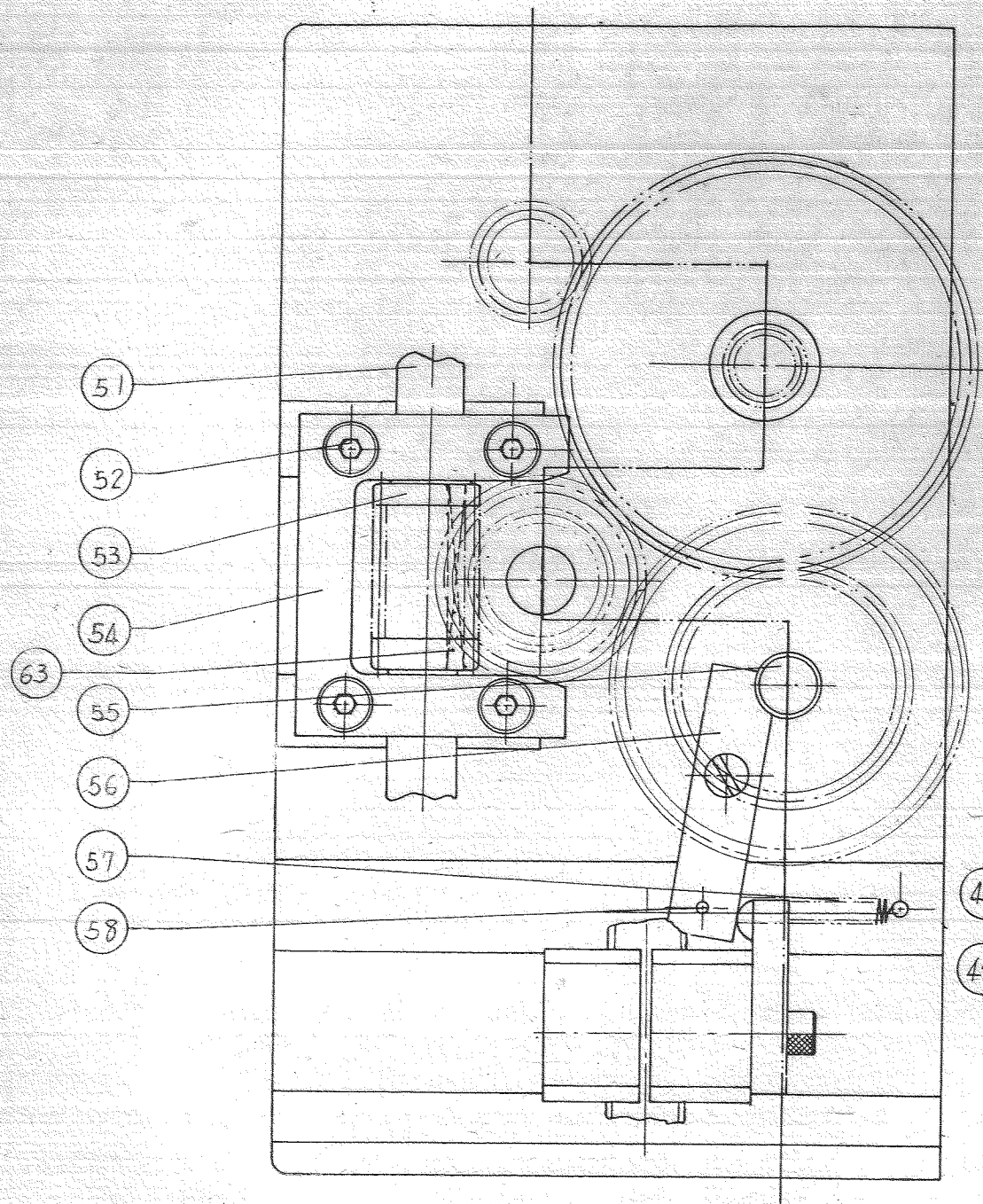
PARTS			LIST	No.2
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
29	3A-10	Helical gear (44T)	FC 25	1
30		Oil seal	TC 60x75x9	1
31		Taper roller bearing	# 30210	1
32	3A-15	Locking nut	S 20C	2
33		Key	6x6x36	1
34	3A-12	Space collar	SS 41	1
35		Collar fixing screw	M 8x8	1
36	3A-14	Spur gear	SS 41	1
37	3A-13	Main spindle rear cover	FC 25	1
38		Bolts for rear cover	M 8x20	4
39	3A-20	Supporting plate for spindle change device	FC 25	1
40		Headless set fixing screw ...	M 8x10	1
41	3A-30	Spur gear (M1.5x30T)	SS 41	1
42		Oiler	# 1/16"	2
43	3A-29	Spur gear (M1.5x25T)	SS 41	1
44	3A-28	Stub arbor	SS 41	2
45	3A-27	Tumbler	FC 25	1
46	3A-31	Sleeve of tumbler gear	gun metal	2
47	3A-38	Fixing screw of Tumbler	SS 20	1
48	3A-34	Knob of Tumbler	SS 20	1
49		Cup nut	1/4"	2
50	3A-37	Compression spring	SUP6 ϕ 1	1
51	3A-36	Sleeve of Tumbler	SS 20	1
52	3A-35	Plunger of Tumbler	SS 20	1
53	3A-32	Spur gear (M1.5x40T)	SS 41	1
54	3A-33	Spur gear (M1.25x40T)	SS 41	1
55	3A-25	Shaft of Tumbler	SS 41	1
56	3A-11	Fixing cover of shaft	FC 25	1

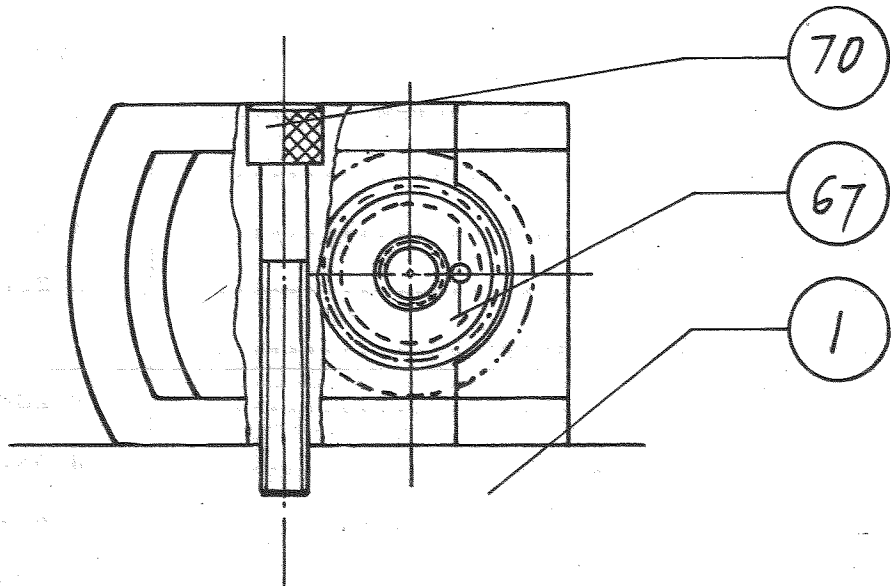
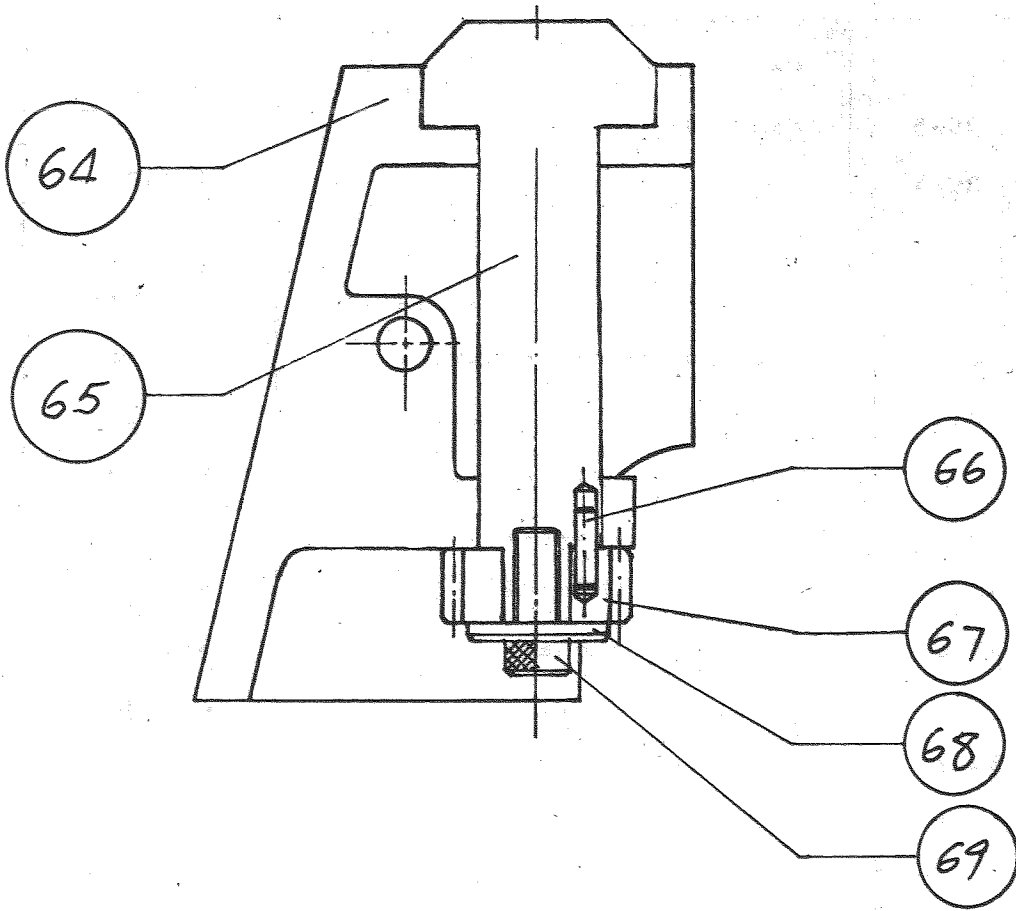
PARTS		LIST		No.3
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
57		Key	4x4x20	1
58	3A-39	Washer	S 20C	1
59		Oiler	∅ 1/4"	1
60		Hexagon nut	∅ 1/2"	1
61		Socket head cap screw	M 6x16	3
62		Ball bearing	# 6202	1
63	3B-1	Bed	FC 30	1
64		Hexagon bolt	5/16"x2"	2
		Hexagon nut	5/16"	2
65	3A-21	Knob of supporting plate	S 20C	1
66	3A-22	Sleeve of supporting plate	S 20C	1
67	3A-23	Pluger of supporting plate	S 20C	1
68		Socket head cap screw	M 8x12	2
69		Socket head cap screw	M 10x25	4
70	3A-24	Compression spring	SUP 6∅1	1



PARTS		LIST		NO. 1
REF. NO	PART NO.	PARTS NAME	MATERIAL & SPEC.	AMT USED
1	3A	Head stock.....	FC 25	1
2		Company plate.....		1
3		Plant location indicating plate	al	1
4		Oil gauge		2
5		Socket head cap screw.....	M 10x25	4
6	3B-1	Bed.....	FC 30	1
7		Socket head cap screw.....	M 6x20	3
8	3H-34	Tool rest	SS 41	1
9	3C	Apron.....	FC 25	1
10		Spring pin.....	∅ 5x35	2
11	3B-3	Rack.....	SS 41	1
12	3E-1	Tailstock body.....	FC 25	1
13	3B-4	Support of lead screw.....	FC 25	1
14		Spring pin.....	∅ 5x55	2
15		Plate.....	AL	1
16		Oiler.....	1/4"	2
17		Socket head cap screw.....	M 8x50	2
18	3B-5	Lead screw.....	SS 41	1
19	3B-7	Feed rod.....	SS 41	1
20		Indication plate.....	AL	1
21		Indicator table.....	Al	1
22	3C-22	Lever seat.....	S 20C	1
23	3B-2	Chip pan.....	S 20C	1
24		Headless set screw.....	M 6x6	1
25		Taper pin.....	# 3x25	1
26		Taper pin.....	# 3x25	1
27	3B-6	Sleeve of lead screw.....	S 20C	1
28		Indication plate.....	AL	1
29		Indication plate.....	AL	1
30	3D-39	Front cover of gear box.....	FC 25	1
31	3B-12	Washer.....	S 20 C	1
32		Socket head cap screw.....	3/8x1 1/4	1
33		Main swith.....		1
34	3B-8	Support of transmission selective.....	FC 25	1

PARTS		LIST		NO.2
REF. NO.	PART NO.	PARTS NAME	Material & Spec.	AMT USED
35	3B-9	Shaft of transmission selective	SS 41	1
36		Ball bearing.....	# 6003 ^Z	2
37		Hexagon nut.....	3/8"	1
38	3B-10	Sleeve of transmission selective.....	SS 41	1
39	3B-11	Transmission selective.....	S 45 C	1
40		Indication plate.....	AL	1
41		Threads cutting chart.....	AL	1
42		Indication plate of tumbler	AL	1

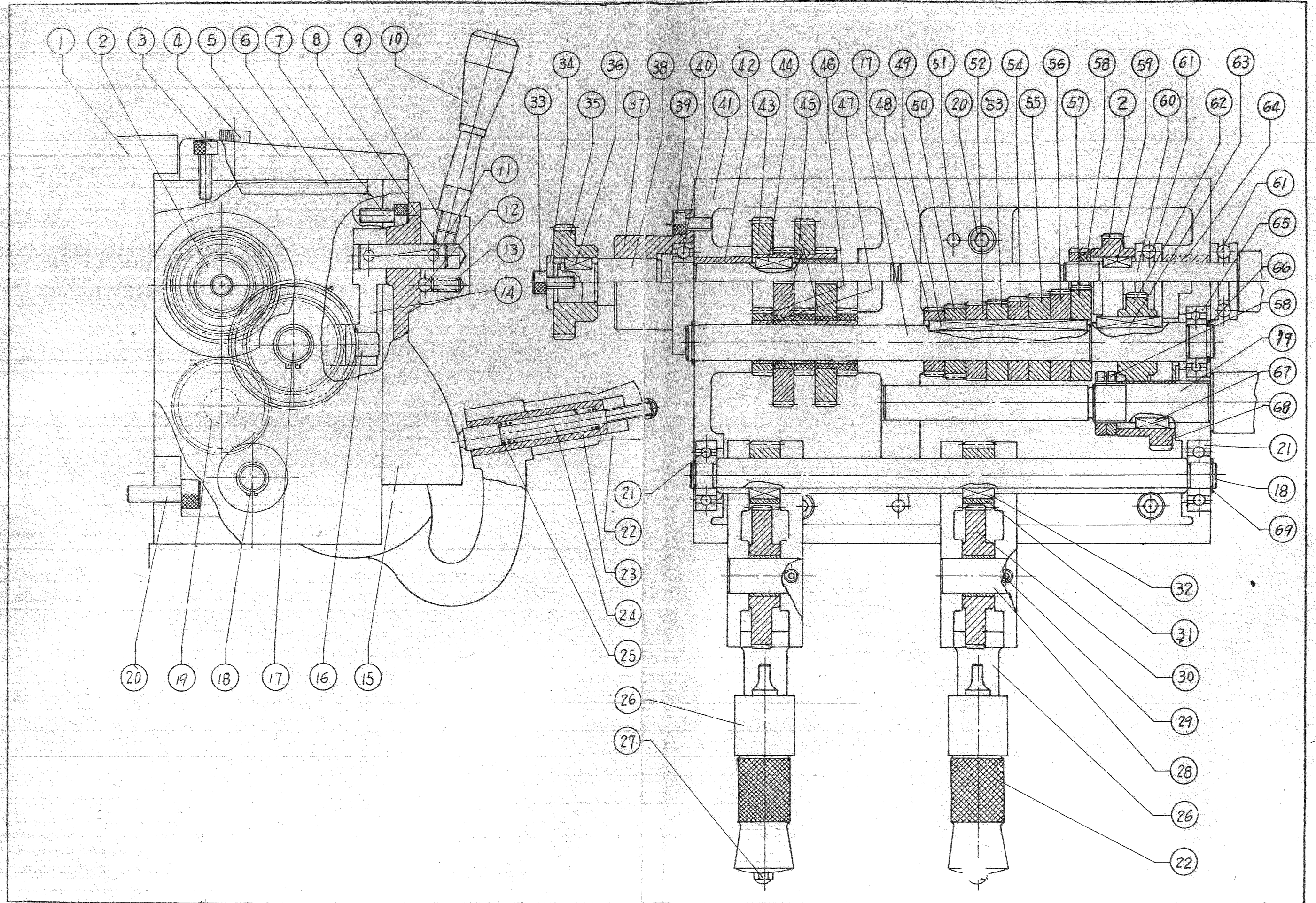




PARTS		LIST	No. 1	
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
1	3C-1	Case of apron	FC 25	1
2	3C-5	Handwheel	FC 25	1
3	3C-4	Granduation collar	S 20C	1
4		Steel ball	∅ 1/4"	3
5		Spring	SUP 6∅1	1
6		Socket head cap screw	M 6x16	2
7	3C-3	Axle bush	FC 25	1
8		Spring pin	∅ 5x60	1
9	3C-2	Axle	S 45C	1
10	3C-7	Spur gear (M2x50T)	S 45C	1
11	3C-6	Transmission shaft	S 45C	1
12		Spring pin	∅ 5x30	1
13	3E-9	Grip hand	S 20C	1
14	3C-10	Spur gear (2Mx24T)	S 40C	1
15		Socket head cap screw	M 6x40	3
16		Steel ball	∅ 1/4"	1
17		Compression spring	SUP 6∅1	1
18		Headless set screw	M 8x8	1
19		Oiler	1/4"	1
20		Hexagon nut	∅ 5/16"	1
21	3C-18	Fixing bolt	S 20C	1
22	3C-38	Handle grip		2
23	3C-20	Lever	S 20C	1
24		Spring pin	∅ 5x25	1
25		Socket head cap screw	M 6x12	2
26	3C-21	Safety stopper	FC 25	1
27	3C-22	Lever seat	S 20C	1
28	3C-23	Clutch of half nut	S 20C	1
29		Spring pin	∅ 5x35	1

PARTS			LIST	No.2
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
30	3C-24	Lever	S 20C	1
31		Socket head cap screw	M 6x16	2
32	3C-23	Pin	S 20C	1
33		Socket head cap screw	M 6x12	1
34	3C-25	Guide plate	FC 25	1
35	3C-26	Half nut supporter	FC 25	1
36	3C-28	Arm	FC 25	1
37	3B-5	Lead screw	SS 41	1
38	3C-27	Half nut	gun metal	1
39	3C-26	Set screw	S 20C	1
40		Socket head cap screw	M 6x12	2
41		Spring pin	3 ϕ x25	1
42	3C-9	Worm gear	gun metal	1
43		Taper pin	3 $\#$ x25	1
44	3C-8	Gear shaft	S 45C	1
45		Key	4x4x10	1
46		E-Type snap ring	ϕ 12	1
47	3C-12	Clutch gear	S 45C	1
48	3C-15	Safety pin		1
49	3C-13	Clutch gear	S 45C	1
50	3C-14	Clutch gear	S 45C	1
51	3B-7	Feed rod	S 45C	1
52		Socket head cap screw	M 6x25	4
53	3C-33	Worm	SS 41	1
54	3C-32	Seat frame	FC 20	1
55	3C-11	Change shaft	SS 41	1
56	3C-31	Safety piece		1
57	3C-30	Spring	SUP 6	1

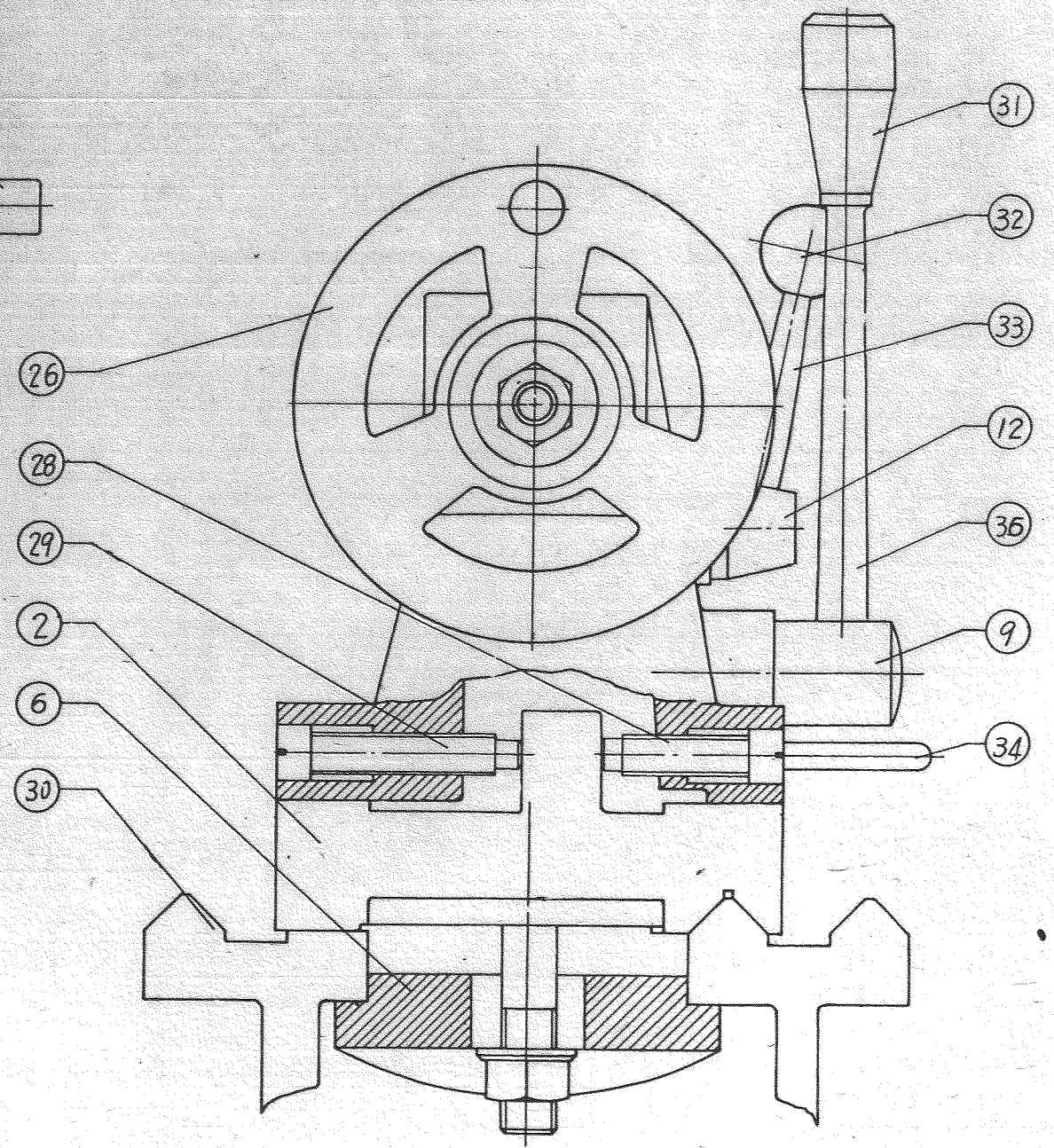
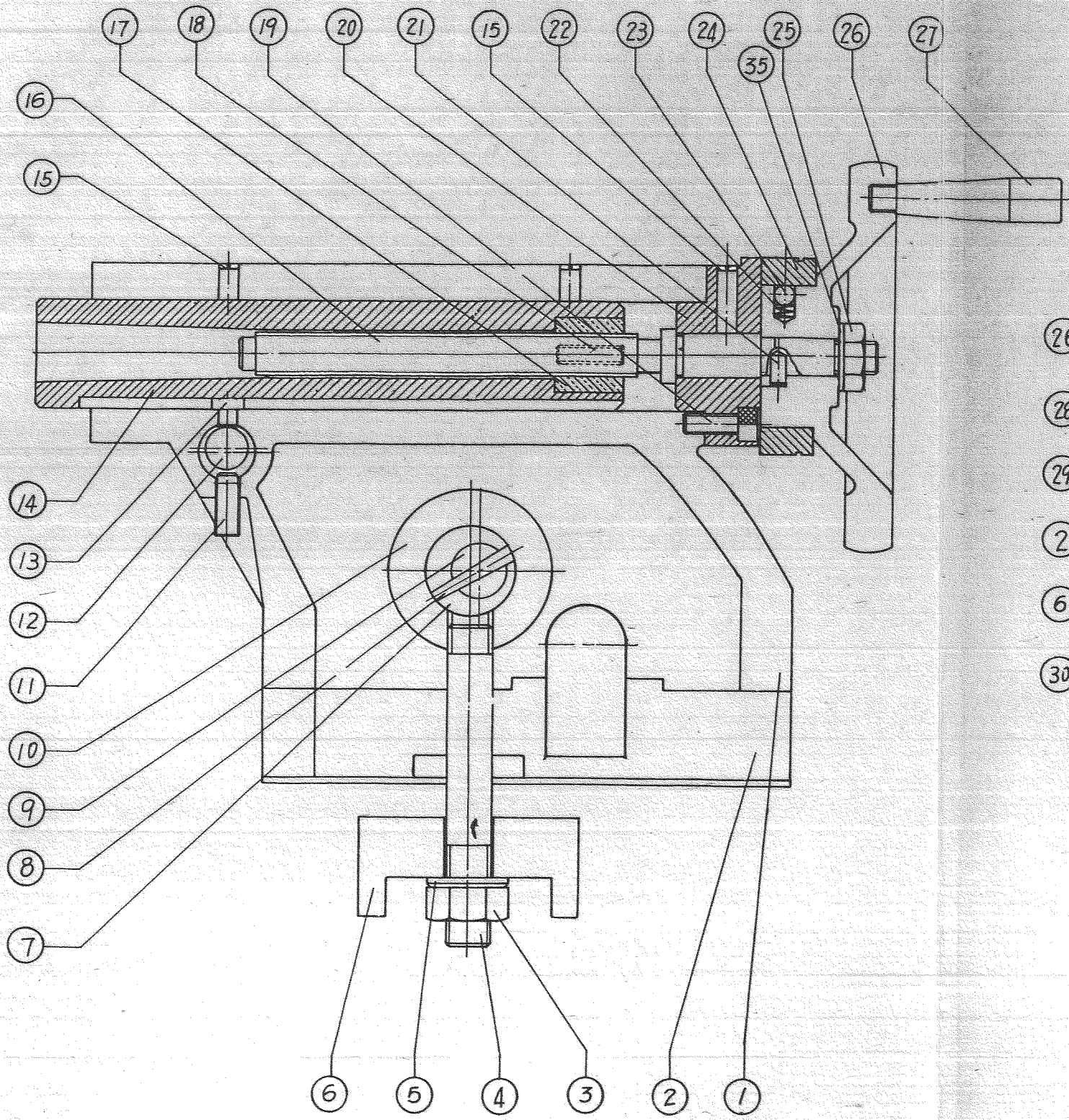
PARTS		LIST		
Ref. No.	Part No.	Parts Name	Material & Spec.	No.3 AMT USED
58	3C-29	Pin	S 20C	2
59		Spring	SUP 6	1
60		Spring	SUP 6	1
61		Headless set screw	M 6x12	2
62		Headless set screw	M 8x8	1
63		Key	5x5x45	1
64	3C-34	Thread cutting indicator seat	FC, 20	1
65	3C-35	Indicator shaft	SS 41	1
66	3C-37	Pin	SS 41	1
67	3C-36	Indicator gear	gun metal	1
68	3C-40	Washer	S 20C	1
69		Socket head cap screw	M 6x20	1
70		Socket head cap screw	M 6x45	1



PARTS			LIST	No. 1
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
1	3B-1	Bed	FC 30	1
2	3D-15	Spur gear	S 45C	1
3		Socket head cap screw	M6x20	2
4	3D-41	Plug	M6x16	2
5	3D-40	Gear box up cover	FC 20	1
6		Woolen rug		1
7		Socket head cap screw	M 6x16	4
8	3D-34	Shaft	S 45C	1
9	3D-33	Lever seat	SS 41	1
10	3C-38	Knob		
11		Spring pin	5 ϕ x35	1
12		Steel ball	5 ϕ x25	1
			$\frac{1}{4}$ "	1
13		Spring	SUP 6	1
14	3D-35	Connecting rod	FC 20	1
15	3D-39	Gear box front cover	FC 20	1
16	3D-36	Fork	FC 20	1
17	3D-13	Shaft	S 45C	1
18	3D-24	Shaft	S 45C	1
19	3D-22	Shaft	S 45C	1
20		Socket head cap screw	M 8x25	3
21		Ball bearing	# 6201 ^{ZZ}	2
22	3D-19	Gripper	SS 41	2
23	3D-30	Sleeve of gripper	S 20C	2
24	3D-32	Axle of gripper	SS 41	2
25	3D-31	Spring	SUP 6	2
26	3D-28	Gripper seat	FC 25	2
27		Cap nut	ϕ $\frac{1}{4}$ "	2
28	3D-27	Gear shaft	S 45C	2
29		Headless set screw	M 6x6	4

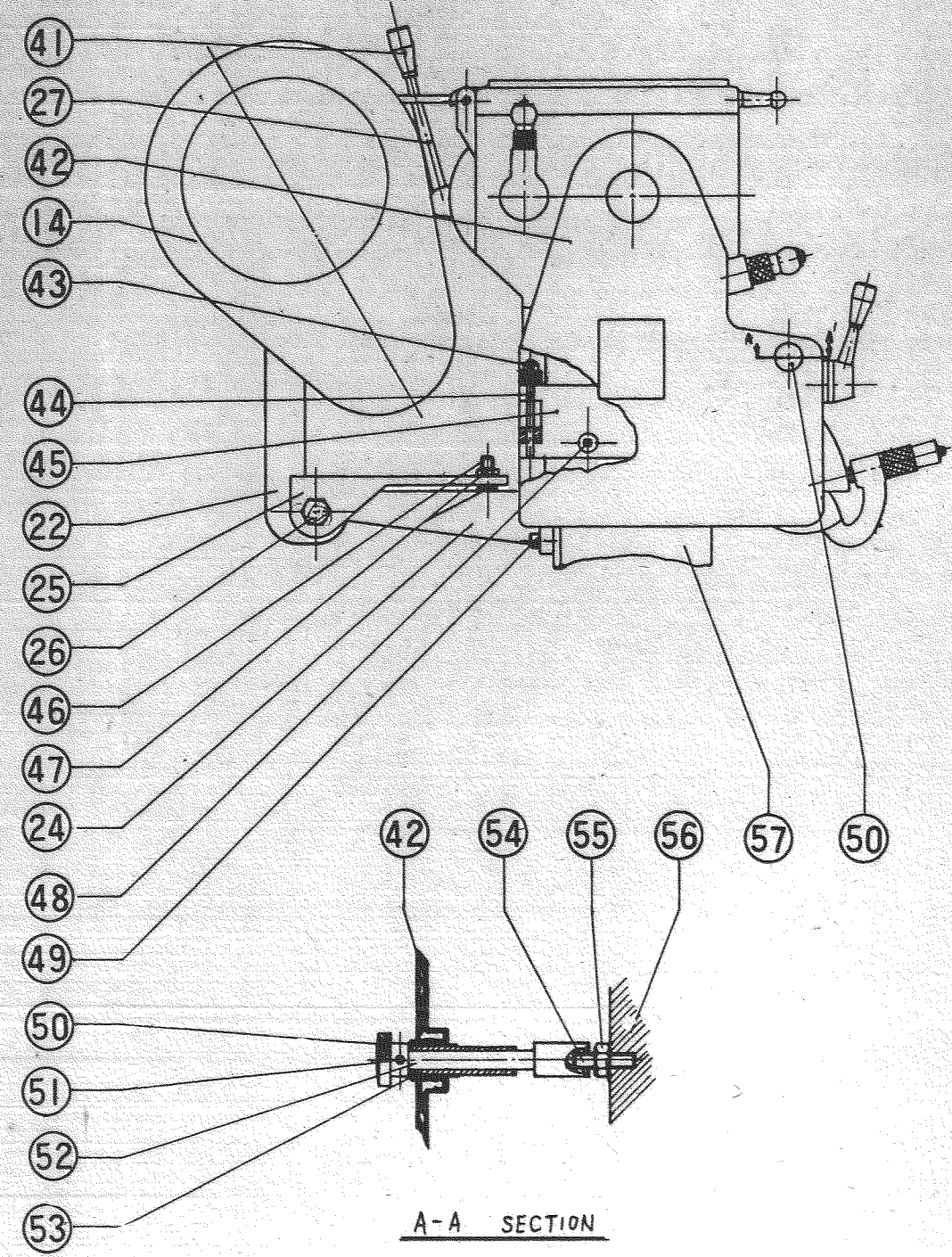
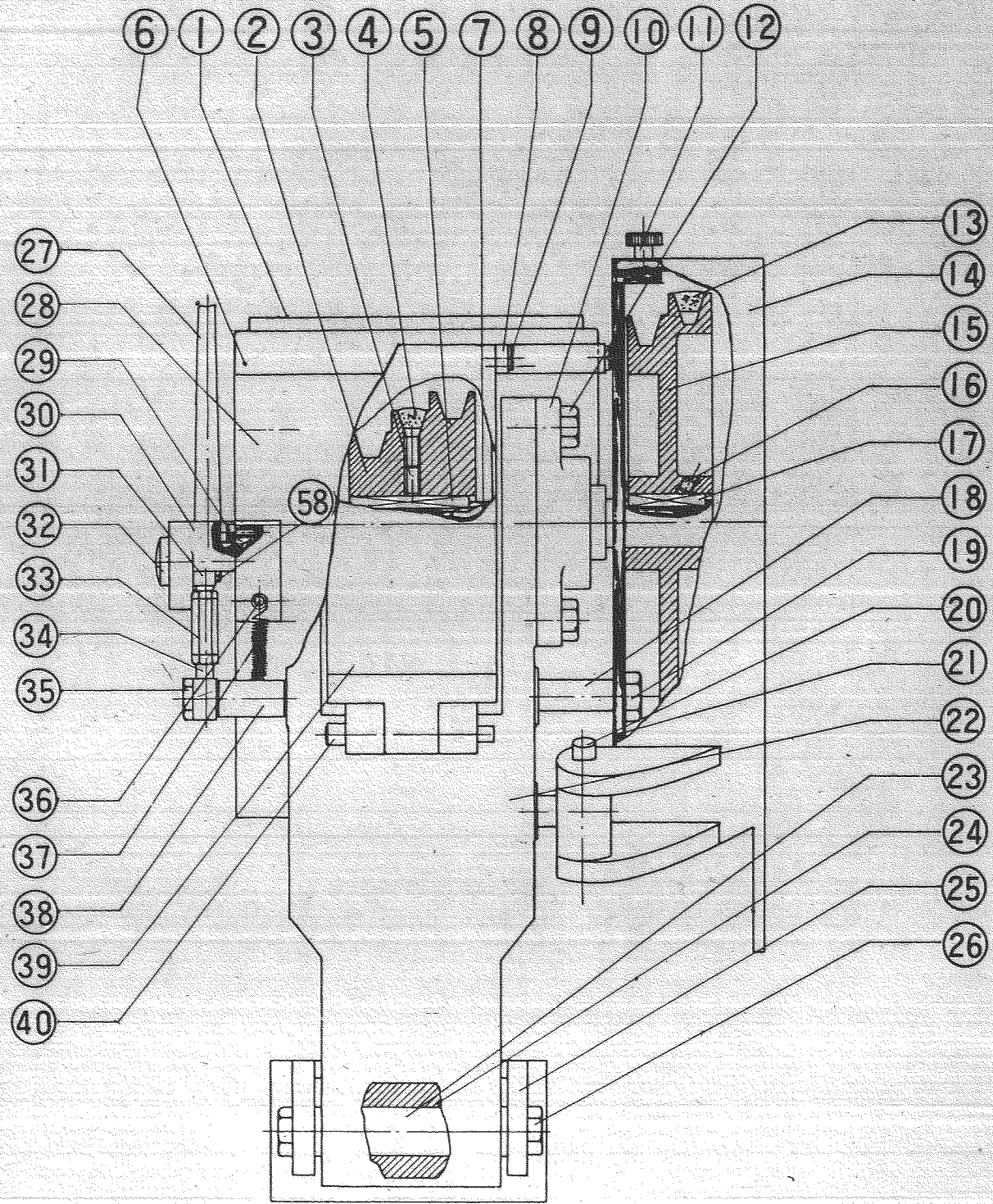
PARTS			LIST	No. 2
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
30	3D-26	Gear	S 45C	2
31	3D-25	Gear	S 45C	2
32		Key	5x5x14	2
33		Socket head cap screw	M 6x12	1
34	3D-21-1	Washer	SS 41	1
35	3D-20	Gear	S 45C	1
36		Key	5x5x13	1
37	3D-19	Bearing case	FC 20	1
38	3D-21	Shaft	SS 41	1
39		Cap screw	M 6x12	3
40		Ball bearing	# 6003	1
41	3D-1	Gear box body	FC 25	1
42	3D-1-2	Bushing	gun metal	1
43	3D-17	Gear	SS 41	1
44		Key	5x5x15	1
45	3D-3	Gear	SS 41	3
46	3D-2	Gear	SS 41	1
47	3D-2-1	Bushing	gun metal	1
48	3D-4	Gear	S 45C	1
49		Key	5x5x72	1
50	3D-5	Gear	S 45C	1
51		Spring pin	Ø 5x20	2
52	3D-6	Gear	S 45C	1
53	3D-7	Gear	S 45C	1
54	3D-8	Gear	S 45C	1
55	3D-9	Gear	S 45C	1
56	3D-10	Gear	S 45C	1
57	3D-11	Gear	S 45C	1

PARTS		LIST No. 3		
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
58	3D-16	Nut	SS 41	4
59		Key	5x5x15	1
60	3D-14	Lead screw	S 45C	1
61		Thrust ball bearing	# 2901	2
62	3D-12	Gear	S 45C	4
63		Key	5x5x15	1
64	3D-1-1	Bushing	gun metal	1
65		Ball bearing	# 6002ZZ	1
66		C-Type snap ring	∅ 16	2
67		Key	5x5x15	1
68	3D-23	Gear	S 45C	1
69		C-Type snap ring	∅ 12	2



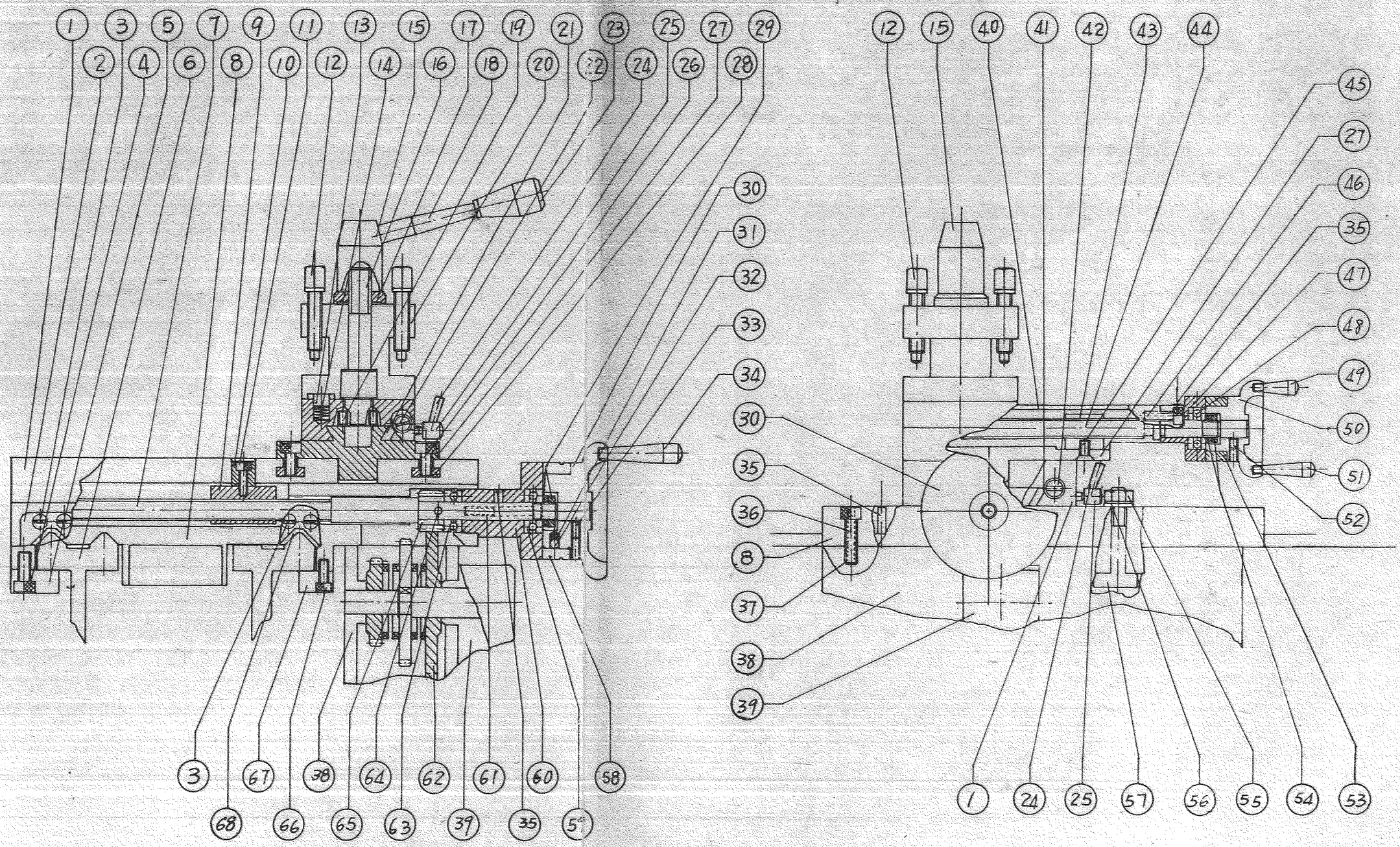
PARTS		LIST		No. 1
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
1	3E-1	Tailstock	FC 25	1
2	3E-2	Base plate	FC 25	1
3		Hexagon nut	$\phi \frac{1}{2}$ "	1
4	3E-17	Clamping bolt	S 20C	1
5		Washer	$\phi \frac{1}{2}$ "	1
6	3E-18	Clamping block	FC 20	1
7	3E-15	Sleeve	S 20C	1
8		Taper pin	# 3x25	1
9	3E-14	Clamping axle	S 20C	1
10	3E-16	Sleeve	S 20C	1
11	3E-23	Fixing bolt	S 20C	1
12	3E-11	Eccentric axle	S 20C	1
13		Key	S 20C	1
14	3E-3	Tailstock quill	S 45C	1
15		Oiler	$\phi \frac{1}{4}$ "	3
16	3E-5	Lead screw of tailstock ...	S 45C	1
17	3D-4	Bush of Tail stock quill....	gun metal	2
18		Headless set screw	M 6x20	4
19		Socket head cap screw	M 6x16	1
20	3E-6	Bracket	FC 25	1
21	3E-12	Pin	S 20C	1
22		Compression spring	SUP 6	1
23		Steel ball	$\phi \frac{1}{4}$ "	1
24	3E-7	Graduation collar	S 20C	1
25		Hexagon nut	$\phi \frac{3}{8}$ "	1
26	3E-8	Handwheel	S 20C	1
27	3E-9	Handle	S 20C	1
28	3E-20	Adjustable screw	S 20C	1

PARTS			LIST	No. 2
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
29	3E-19	Adjustable screw	S 20C	1
30	3B-1	Bed	FC 30	1
31	3C-38	Knob		1
32	3E-22	Knob		1
33	3E-10	Clamp lever	S 20C	1
34	3E-21	Stud	S 20C	1
35		Washer	∅ 3/8"	1
36	3E-13	Clamp lever	S 20C	1



PARTS		LIST		No. 1
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
1		Carpet.....		1
2	3G-14	Pulley.....	FC 25	1
3		Headless set screw.....	M 8x12	1
4		V-belt.....	B-42	1
5		Key.....	6x6x56	1
6	3A-41	Cover.....	FC 25	1
7	3G-13	Shaft.....	S45C	1
8	3G-25	Connecting rod.....	S20C	1
9	3G-26	Fixing screw.....	S20C	2
10		Bearing.....	UCFL205	2
11	3G-22	Fixing screw.....	S 20C	1
12		Hexagon bolt.....	$\frac{1}{2} \times \frac{1}{4}$	4
13		V-belt	B-38	1
14	3G-20	Pulley cover.....	AL	1
15	3G-16	V-pulley.....	FC 25	1
16		Headless set screw.....	M 8x12	1
17		Key.....	6x6x40	1
18	3G-18	Sleeve.....	S 20C	2
19		Hexagon bolt.....	3/8x1-7/8	2
20	3G-21	Set pin	S 20C	1
21	3G-19	Bracket.....	FC 25	1
22	3G-12	Bracket.....	FC 25	1
23	3G-10	Shaft.....	S 20C	1
24	3G-8	Bracket.....	FC 25	1
25	3G-9	Motor base plate	FC 25	1
26	3G-11	Hexagon bolt.....	S 20C	2
27	3G-28	Lever.....	S 20C	1
28	3A-1	Head stock.....	FC 25	1
29		Cap screw.....	M5x10	1
30	3G-27	Lever seat.....	FC 25	1
31	3G-31	Adjustable screw.....	S 20C	1
32	3G-29	Pin.....	S 20C	1
33	3G-32	Adjustable nut.....	S 20C	1
34	3G-33	Screw.....	S 20C	1
35	3G-34	Fixing screw.....	S 20C	1
36	3G-36	Set screw.....	S 20C	2
37	3G-37	Spring.....	SUP 6	1

		PARTS		LIST	No.2
Ref. No.	Part No.	Parts	Name	Material & Spec.	AMT USED
38	3G-35	Sleeve.....		S 20C	1
39	3G-23	Pulley cover.....		AL	1
40	3G-24	Set pin.....		S 20C	1
41	3C-38	Knob.....			1
42	3G-1	Cover.....		AL	1
43		Hexagon nut.....		5/16	1
44	3G-3	Set pin.....		S 20C	1
45	3G-2	Cover seating.....		FC 25	1
46		Hexagon bolt.....		1/2x3"	1
47		Hexagon nut.....		5/16"	2
48		Socket head cap screw.....		5/16"x1"	3
49		Socket head cap screw.....		M 8x30	4
50	3G-7	Knob.....		S 20C	1
51		Spring pin.....		3x15	1
52	3G-5	Clamping axle.....		S 20C	1
53	3G-6	Sleeve of cover.....		S 20C	1
54	3G-4	Fixing screw.....		S 20C	1
55		Nut.....		5/16"	1
56	3D-1	Gear box.....		FC 25	1
57	3B-1	Bed.....		FC 30	1.



PARTS		LIST	No.1	
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
1	3H-6	Cross slide	FC 25	1
2	3H-39	Wiper	Rubber	2
3		Round head screw	3/16" x 1/2"	8
4		Socket head cap screw	M 8x16	3
5	3H-3	Block slide (back)	FC 20	1
6	3B-1	Bed	FC 30	1
7	3H-11	Lead screw of cross slide ...	S 45C	1
8	3H-1	Saddle	FC 25	1
9	3H-10	Lead screw nut	gun metal	1
10	3H-9	Fixing sleeve	S 20C	1
11		Socket head cap screw	M 6x15	1
12	3H-35	Clamping bolt	SS 41	1
13	3H-33	Locating pin	SS 41	1
14	3H-32	Spring	SUP 6	1
15	3H-37	Tool post clamp lever seat ..	S 20C	1
16	3H-30	Clamping axle	SS 41	1
17	3H-36	Washer	S 20C	1
18	3H-38	Clamping lever	S 20C	1
19		Headless set screw	M 6x6	2
20	3H-34	Tool post	SS 41	1
21	3H-28	Gib	FC 20	1
22	3H-29	Adjustable screw of gib	S 20C	1
23	3C-38	Knob		1
24		Pin	# 3	2
25	3H-31	Clamping bolt	S 20C	1
26		Socket head cap screw	M 8x12	2
27	3H-19	Swivel base	FC 25	1
28	3H-18	Fixing block	S 20C	2

PARTS			LIST	No.2
Ref. No.	Part No.	Parts Name	Material & Spec	AMT USED
29		Nut	$\phi \frac{1}{2}$ "	2
30	3H-15	Gross slide handwheel	FC 25	1
31		Spring	SUP 6	1
32		Steel ball	$\phi \frac{1}{4}$ "	1
33		Headless set screw	M 6x12	1
34	3H-16	Handle	S 20C	1
35		Oiler.....	$\phi \frac{1}{4}$ "	6
36		Socket head cap screw	M 8x30	2
37		Spring pin	5x5x35	2
38	3C-1	Case of apron	FC 25	1
39	3C-16	Bracket	FC 25	1
40	3H-22	Compound slide.....	FC 25	1
41	3H-7	Gib	FC 20	1
42	3H-8	Adjustable screw of gib ..	S 20C	2
43	3H-20	Nut	Cu	1
44	3H-21	Lead screw of compound slide	S 45C	1
45		Set screw	M 6x12	1
46		Socket head cap screw	M 6x20	2
47	3H-23	Bearing seat	FC 25	1
48		Thrust ball bearing	# 2901	1
49	3H-26	Handle	S 20C	1
50	3H-25	Handwheel	FC 25	1
51	3H-27	Handle	S 20C	1
52		Headless set screw	M 6x6	2
53	3H-24	Graduation collar	S 20C	1
54		Nut	$\phi \frac{7}{16}$ "	2
55		Nut	$\phi \frac{3}{8}$ "	1
56		Washer	$\phi \frac{3}{8}$ "	1

PARTS			LIST	No.3
Ref. No.	Part No.	Parts Name	Material & Spec.	AMT USED
57	3H-4	Fixing bolt	SS 41	1
58	3H-14	Graduation collar	S 20C	1
59		Thrust ball bearing	# 2901	1
60	3H-13	Bearing seat	FC 25	1
61		Socket head cap screw	M 6x50	2
62	3C-14	Clutch gear	S 45C	1
63		Thrust ball bearing	# 2901	1
64		Spring pin	5x5x20	1
65	3H-12	Pinion	S 45C	1
66		Socket head cap screw	M 6x16	4
67	3H-2	Block slide (front)	FC 20	2
68	3H-40	Wiper	Rubber	2