



KONG YIH

INSTRUCTIONS MANUAL
OF
POWERFUL VERTICAL DRILL MACHINES



S600 $\frac{A}{B}$

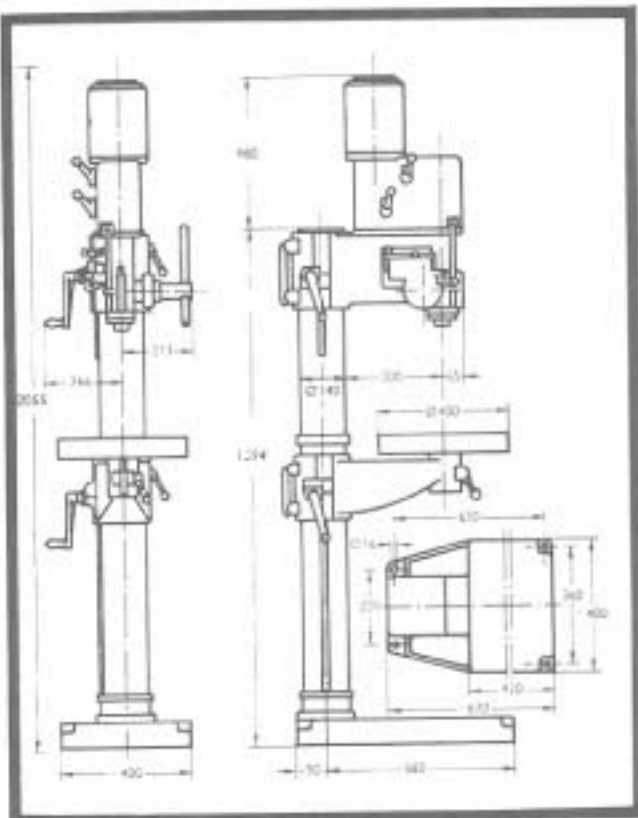
MODEL S 600B

- Drilling capacity 1 1/2"
- Power feed to spindle
- built-in drill ejector

BIEIF SPECIFICATION

	S 600A	S 600B
Distance from centre of drill spindle to column	12"	12"
Max. distance from spindle nose to table	32 $\frac{1}{2}$ "	32 $\frac{1}{2}$ "
Max. distance from spindle nose to baseplate	47"	47"
Diameter of ground column	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "
Table size	15 $\frac{1}{4}$ "	20" x 16"
Working surface of standard baseplate	16 x 16 $\frac{1}{2}$ "	16 x 16 $\frac{1}{2}$ "
Quill movement	6 $\frac{1}{4}$ "	6 $\frac{1}{4}$ "
Spindle bore, Morse taper	M. T. No. 4	4
Max. drilling capacity in steel	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "
No. of spindle speeds	8	8
Range of spindle speeds	r.p.m. 80, 125 160, 250 300, 475 600, 950	80, 125 160, 250 300, 475 600, 950
Rate of power feed per rev. of spindle	.004"-.007"	0.004-0.007"
H.P. of pole change motor, 3-phase A.C., 60 cycles	1.5/2.2	1.5/2.2
Nett weight (unpacked)	330KGS	330KGS
Gross weight	380KGS	380KGS
Packing size	(A) 32 $\frac{1}{2}$ " x 26" x 85"	(B) 32 $\frac{1}{2}$ " x 26" x 85"
MEASUREMENT	41cft/1set	41cft/1set

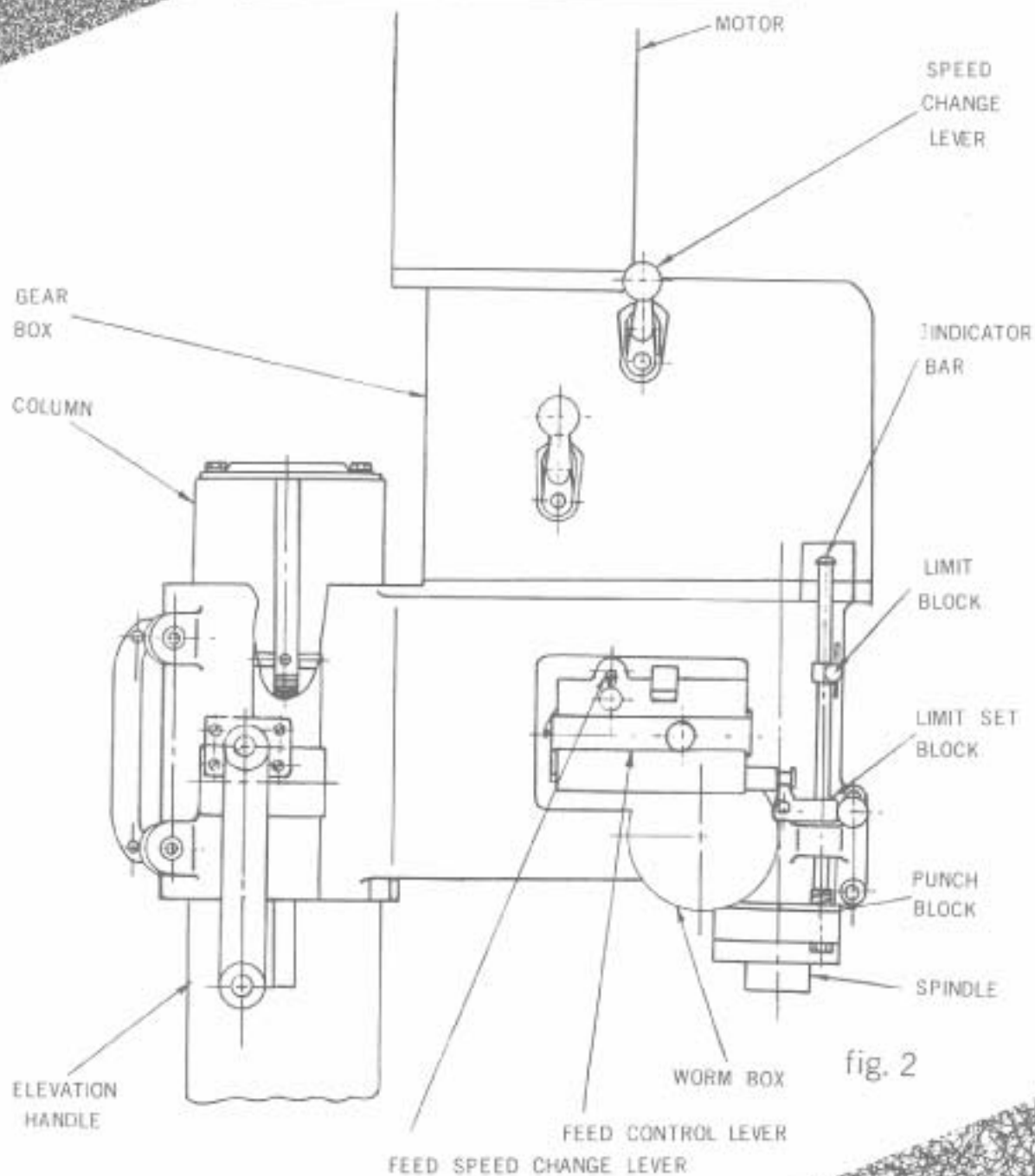
DIMENSIONED SKETCH



S600A

S600B

(2) MACHINE ASSEMBLY



ELECTRIC SUPPLY

The control station of electricity are divided into 3 switches.

The first one is poles change switch, (fig. 3) the second one is select switch, (fig. 3) the third one is pedal switch (Foot Switch). Pole change switch control the "high" or "low" speed of motor. The select switch is for drilling or tapping selection. When select switch is put on for tapping function the pedul switch is control the change of forward rotation and reverse rotation. When select switch is put on for drilling function, the pedal switch are for selection of stop and rotation.

Foot Switch SFS 335

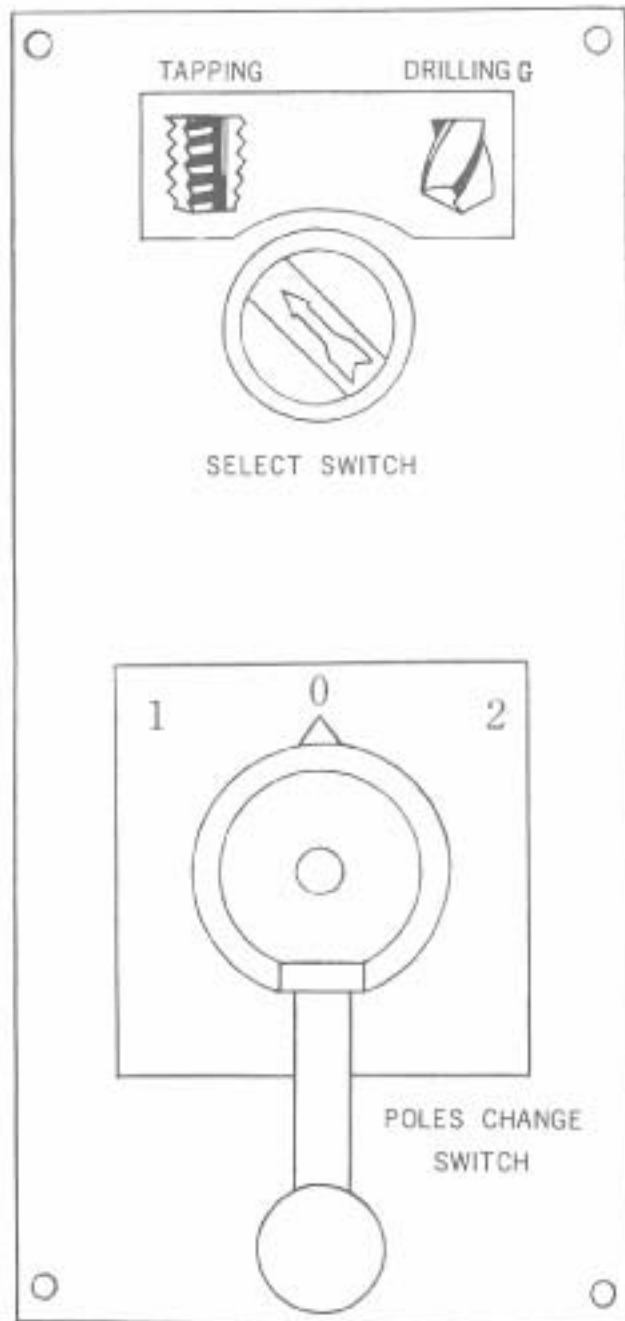
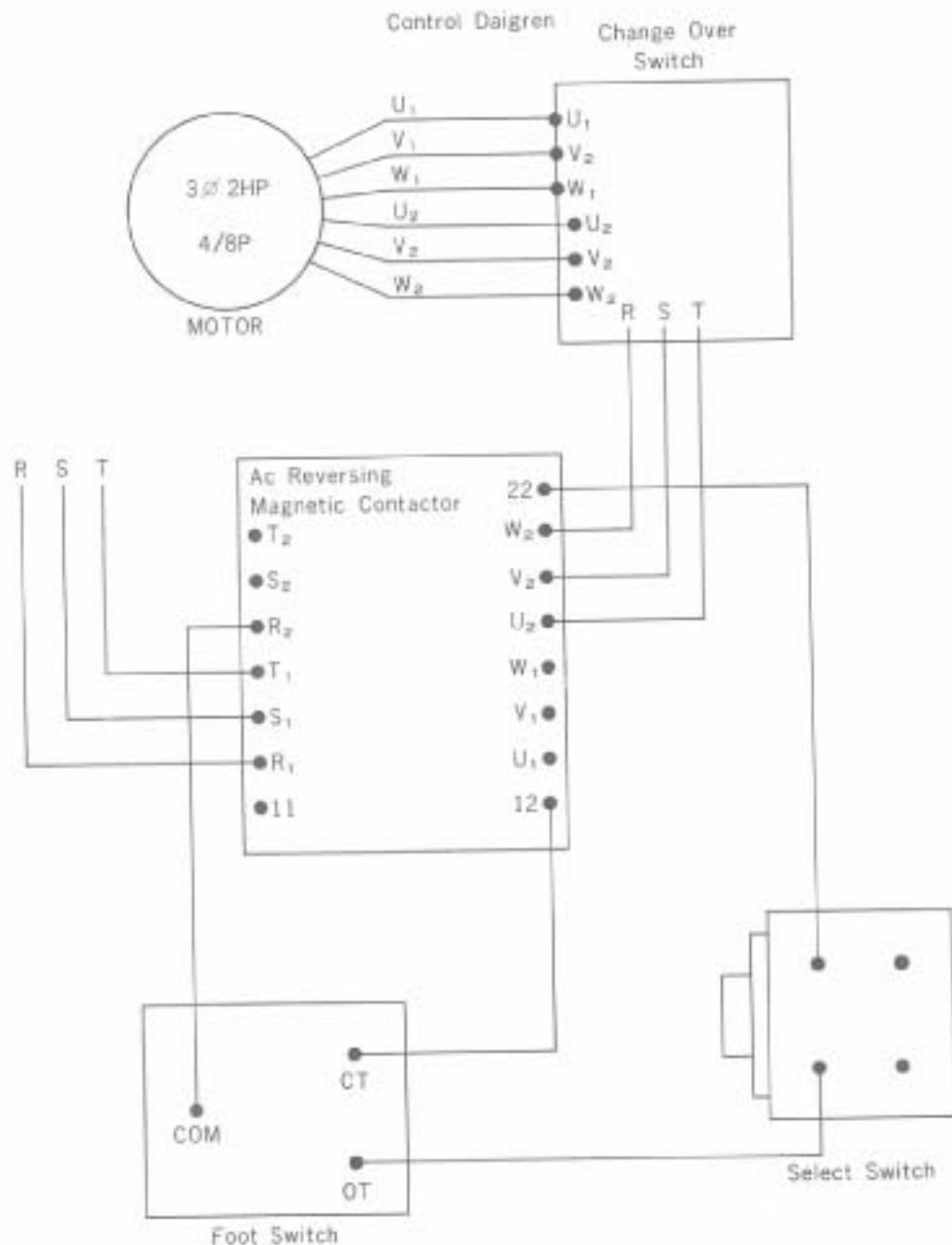


fig. 3

TAPPING

When tapping please operate at low speed of motor, so the motor's service life will be prolonged. Please be assure do not push down ward the auto-feed lever. (fig. 2) You must the lever at neutrol position. When in operation all the lock handles should be put to locking position.



MCF: FOR Magnetic Contactor.....

Spindle For. & Rev. (Interlock)

MCR: Rev Magnetic Contactor.....

SS: Select Switch.....Tapping or Drilling select

PCS: Poles change switch..... 2p & 4p (or 4p & 8p) Change

FS: Foot Switch..... PEDAL SWITCH

SPEED CHANGE

The speed change can be done during operation of machine. The 2 speed change lever (fig. 2) control 4 rinds of speed. You may Refer to the speed table, fig. 4

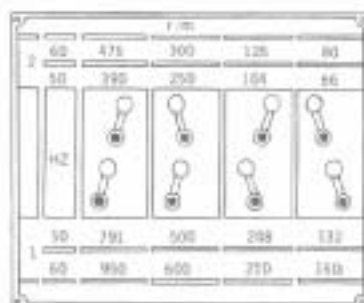
AUTO FEED OF SPINDLE

The auto feed worm box (fig. 2) is equipped at left side bottom of head part. the auto feed is with two speed, respectively, 0.004" and 0.007". (fig. 5)

When drawing the auto feed lever (fig. 2) downward, you can get auto feed.

The depth of auto feed can be controlled by indicator bar. And take advantage of the limit block. (fig. 2) Built-in Drill Ejector equipment is for taking off the drill chuck. After taking off the punch block and moving the quill upward you can take off the drill chuck.

SPEED CHANGE



		1 / min				
2	60	475	300	125	80	
	50	390	250	104	66	
1	50	791	500	298	132	
	60	950	600	370	160	

fig. 4

LUBRICATION

This machine is designed for simple maintenance as the lubrications are built-in.

The only lubrication needed the simple surface oiling and the oil nozzles need to be refilled occasionally.

MACHINE ALIGNMENT

Every machine is carefully inspected and equipped with an accurate record. Chuck alignments and levelling at regular periods will ensure you the maximum performance of machine.

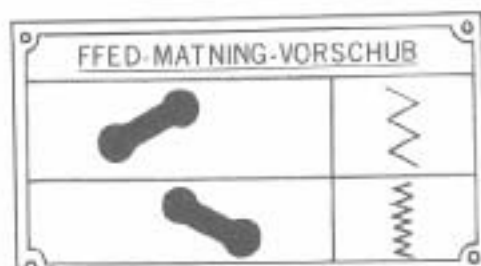
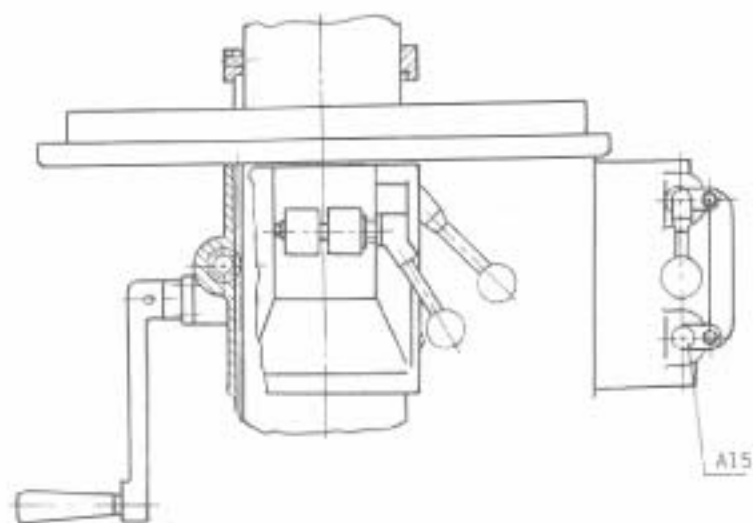
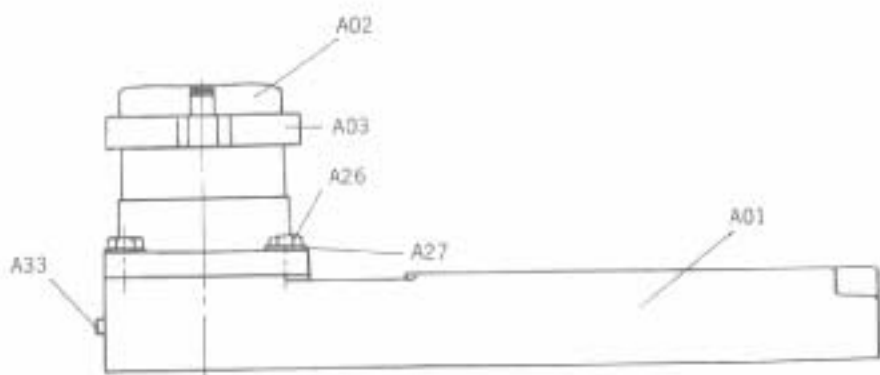
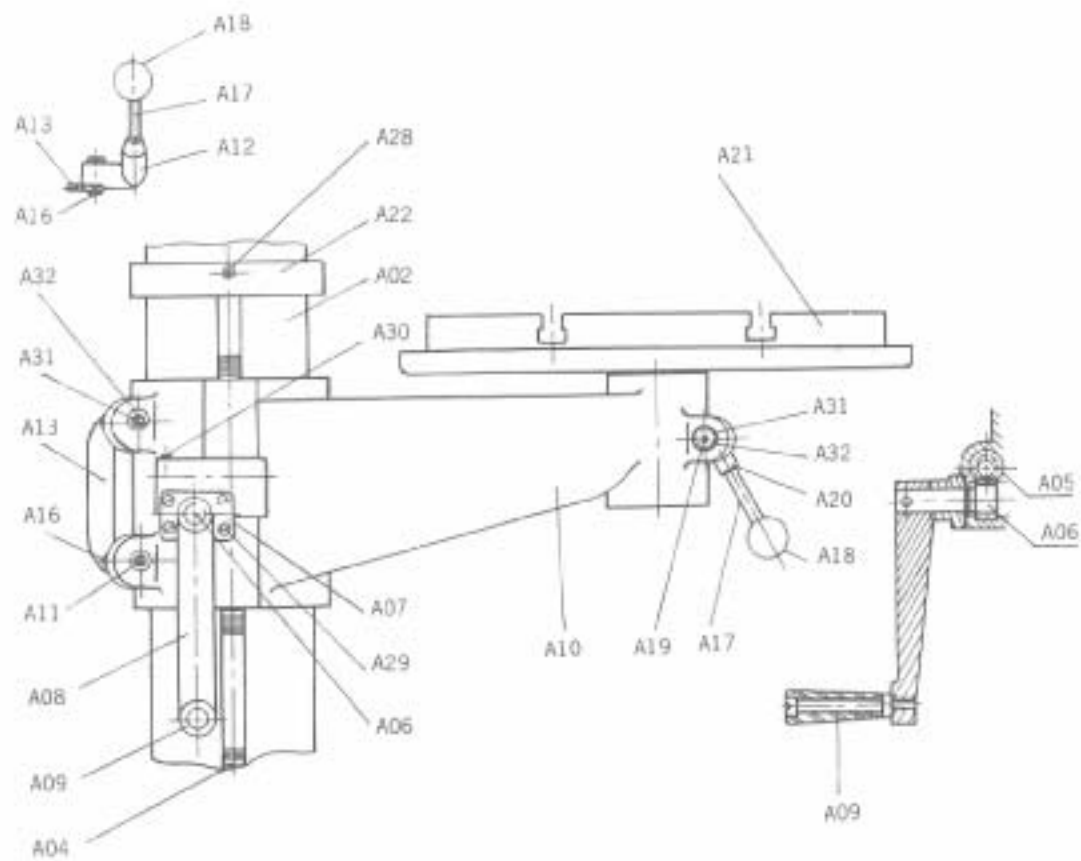
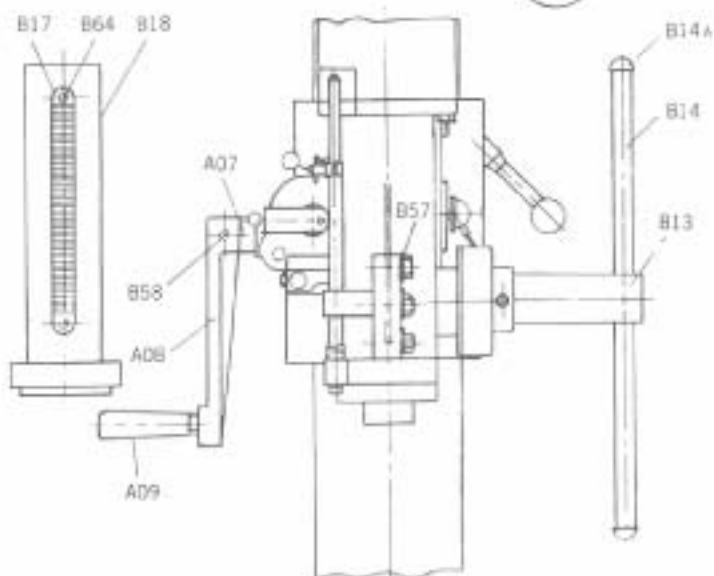
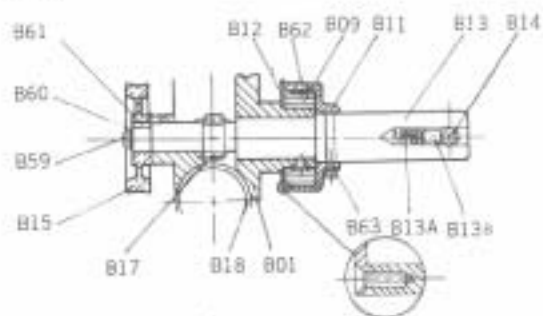
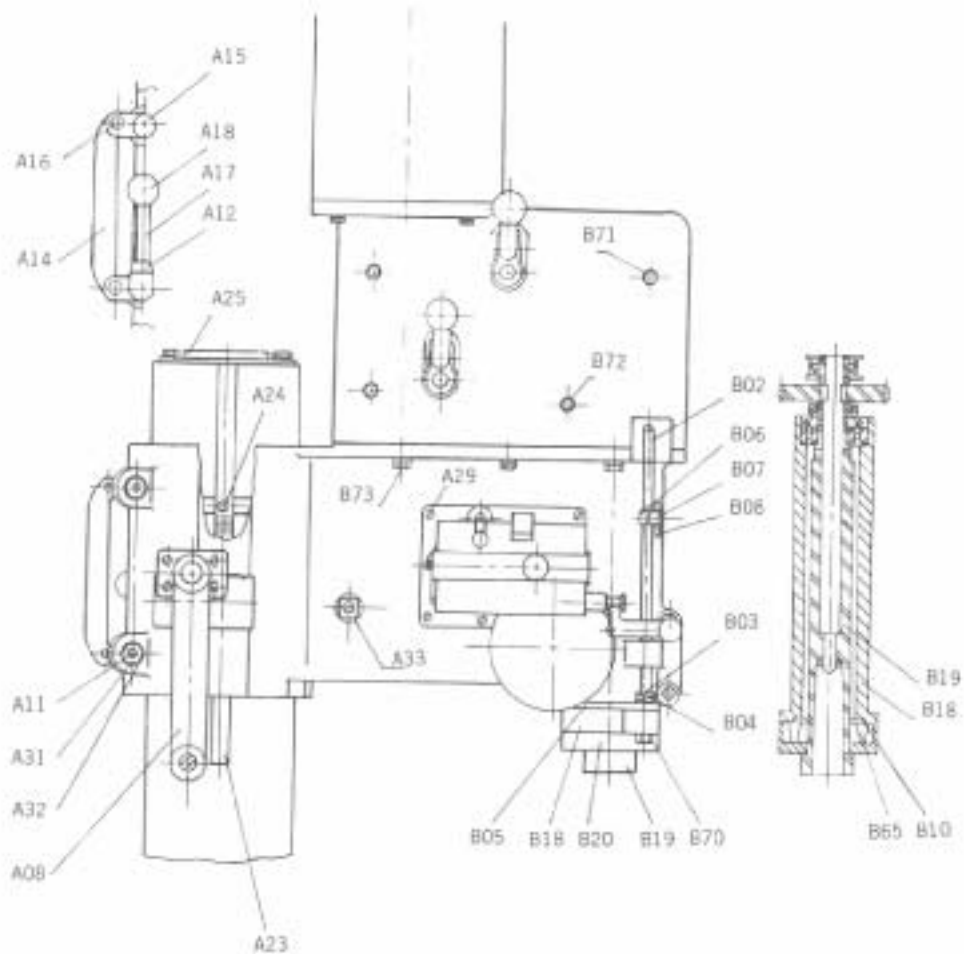


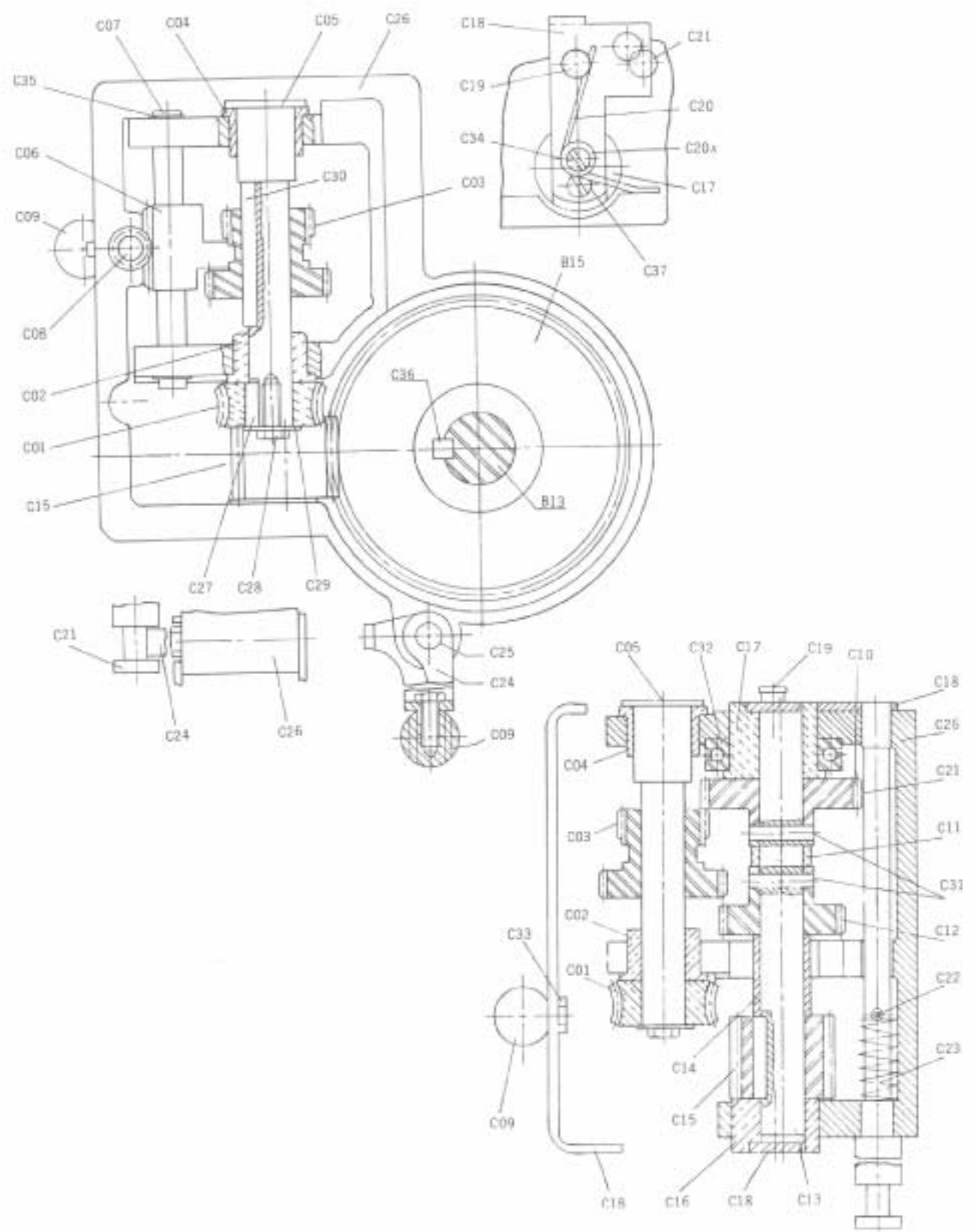
fig. 5

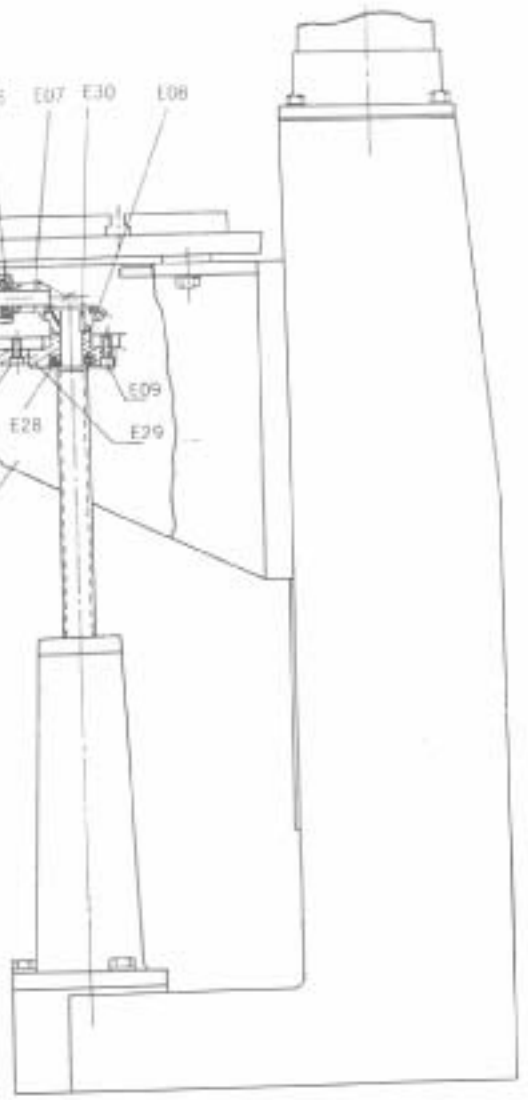
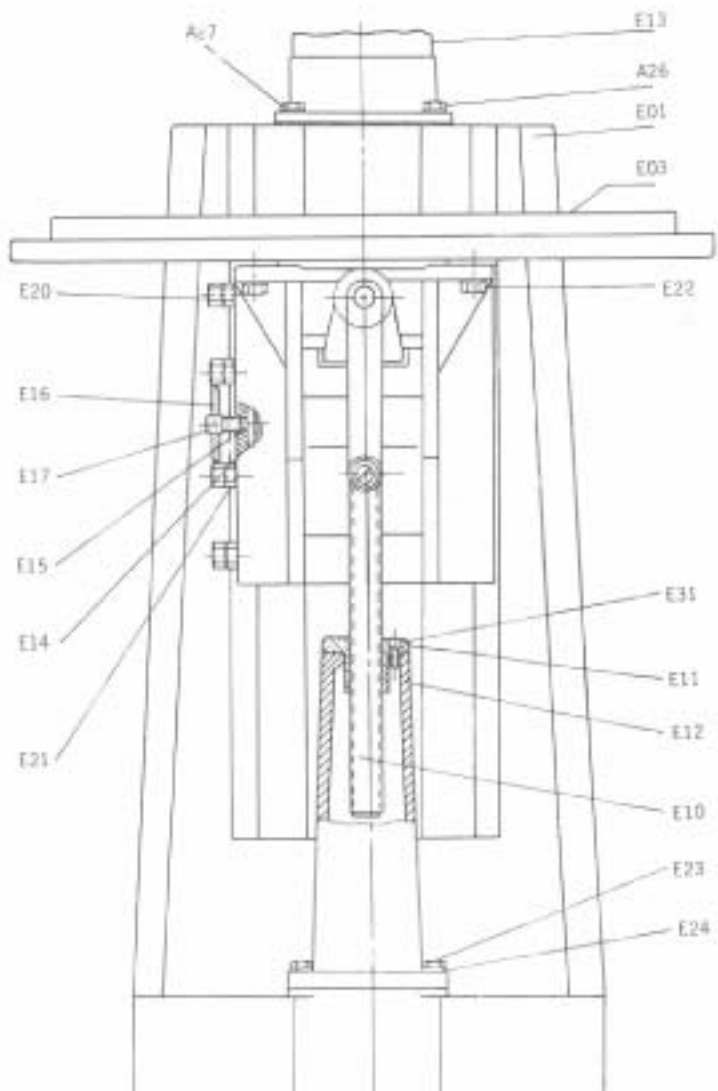
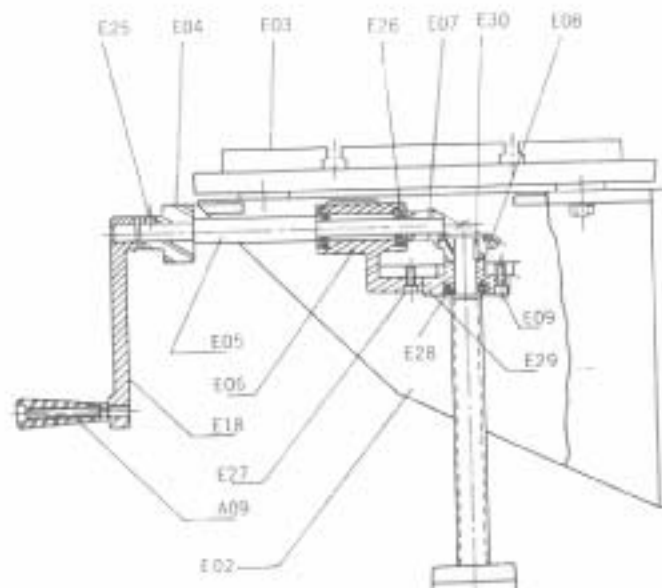
NOTICE

When ordering parts or making enquiries. Please quote model number, part number.









A01	BASEPLATE	A18	PLASTIC HAND BALL
A02	COLUMN	A19	LOCK BOLT
A03	RACK SLEEVE	A20	LOCK BOLT
A04	RACK	A21A	φ15 3/4" TABLE
A05	INTERMEDIATE GEAR	A21B	20" × 16" TABLE
A06	WORM	A22	RACK BUSH
A07	WORM BRACKET	A23	RACK
A08	HANDLE CRANK	A24	RACK SUSPENSION PIVOT
A09	HAND BAR	A25	WIRE GUARD
A10	TABLE BASE	A26	5/8" - 11 NC × 2" L SCREW
A11	BOLT	A27	5/8" SPRING WASHER
A12	LOCK BLOCK	A28	1/4-20 NC × 3/4" L SCREW
A13	CRANK	A29	3/16-24 NC × 3/4" SCREW
A14	CRANK	A30	SET SCREW
A15	SUB LOCK NUT	A31	3/8" NUT
A16	SET SHAFT	A32	3/8" WASHER
A17	HAND BAR	A33	PLASTIC COCK

B01	HEAD	B42	SET PLATE
B02	INDECATOR BAR	B43	CHANGE SPEED PIVOT
B03	BAR BUSH	B44	CHANGE SPEED CRANK
B04	SPRING	B45	CHANGE SPEED HANDLE
B05	PUNCH BLOCK	B45A	SPRING
B06	LIMIT BLOCK	B46	GEAR
B07	SET SCREW	B47	SPACER
B08	SCREW HANDLE	B48	GEAR
B09	CLOCK SPRING	B49	GEAR
B10	BEARING COVER	B50	GEAR
B11	SPRING BOX	B51	SHAFT
B12	SPRING BOX COVER	B52	GEAR
B13	PINION SHAFT	B53	GEAR
B14	HANDLE	B54	GEAR BOX(LEFT)
B14A	HANDLE COCK	B56	GEAR BOX(RIGHT)
B15	WORM GEAR	B57	3/8-16NC×1' L SCREW
B16	NUT	B58	±5 SPRING PIN
B17	RACK	B59	5/16-18NC×1/2' L SCREW
B18	QUILL	B60	5/16" WASHER
B19	SPINDLE	B61	□7×17L KEY
B20	SPINDLE COVER	B62	3/16-24NC×3/8' L SCREW
B21	WASHER	B63	3/8-16NC×1/2' L SET SCREW
B22	BEARING LOCK NUT	B64	1/4-20NC×1/2' L SCREW
B23	SHAFT	B65	±30208 TAPER ROLLER
B24	SPACER	B66	±6206 BEARING
B25	GEAR	B67	±6204 BEARING
B26	SPACER	B68	□5×15L KEY
B27	SET RING	B69	±2D SNAP RING
B28	GEAR	B70	1/4" NUT
B29	SPACER	B71	3/8-16NC×3 1/2' L SCREW
B30	SET SPACER	B72	3/8-16NC×4 1/2' L SCREW
B32	SET SPACER	B73	1/4-20NC×1 1/4' L SCREW
B33	WORM	B74	3/16-24NC×7/8' L SCREW
B34	WORM SPACER	B75	±5203 BEARING
E35	SET SPACER	B76	±6203 BEARING
B36	SHAFT	B77	□5×50L KEY
B37	BEARING SPACER	B78	□4×28L KEY
B38	GEAR	B79	±6202ZZ BEARING
B38A	GEAR CLUTCH	B80	1/4" WASHER
B39A	BEARING COVER	B81	1/4-20NC×1/2' L SCREW
B39B	BEARING COVER	B82	3/16-24NC×1/2' L SCREW
B40	SPEED CHANGE CLUTCH	B83	□5×19L KEY
B41	GEAR	B84	1/4-20NC×1 1/4' L SCREW
		B85	1/4" SPRING PIN
		B86	±3/8" STEEL BALL

C01	WORM GEAR	C20A	SET PIVOT
C02	BRASS BUSH	C21	SET PIVOT
C03	CHANGE SPEED GEAR	C22	SET PIN
C04	BRASS BUSH	C23	SPRING
C05	SHAFT	C24	LIMIT SET BLOCK
C06	RACK	C25	LOCK SCREW
C07	SHAFT	C26	WORM BOX
C08	CHANGE SPEED PIVOT	C27	5×14L PIN
C09	KNOB	C28	1/4-20NC×1/2" L SCREW
C10	GEAR	C29	φ 1/4 WASHER
C13	SHAFT	C30	□5×50L KEY
C14	WORM SPACER	C31	#4 SPRING PIN
C15	WORM	C32	#51106 BEARING
C16	BUSH	C33	1/4-20NC 1/2" L SCREW
C17	BUSH	C34	3/16-24NC 5/8"
C18	SHAFT	C35	#10 SNAP RING
C19	SPRING PIVOT	C36	□7×17L KEY
C20	SPRING	C37	3/16-24NC 3/8" L SCREW

E01	COLUMN	E17	SET SCREW
E02	KNEE	E18	HANDLE CRANK
E03	TABLE	E19	WIRE GAUGE
E04	DIAL WITH 50 GRADUATIONS	E20	3/8-16NC×1 1/2" L SCREW
E05	SHAFT	E21	3/8" NUT
E06	SHAFT BRACKET	E22	1/2-12NC×1 1/4" L SCREW
E07	BEVEL PINION	E23	3/8-16NC×1 1/2" L SCREW
E08	BEVEL GEAR	E24	3/8" WASHER
E09	BEARING RETAINER RING	E25	1/4-20NC×1/2" L SCREW
E10	ELEVATING SCREW	E26	#6203Z BEARING
E11	ELEVATING SCREW NUT	E27	3/8-16NC×1 1/4" L SCREW
E12	ELEVATING SCREW HOUSING	E28	#51105 BEARING
E13	COLUMN	E29	5/16-18NC×1" L SCREW
E14	GIB	E30	□7×7 KEY
E15	SET BLOCK	E31	3/8-16NC×1" L SCREW
E16	HAND BAR		