D400 X 1000

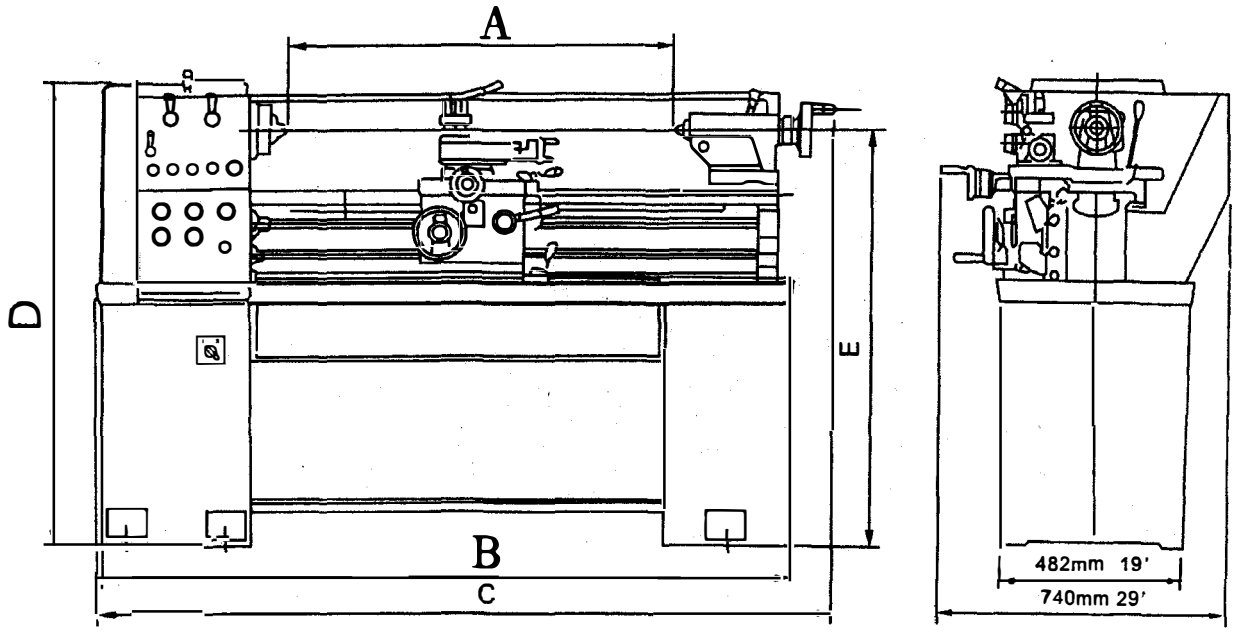
Turning machine

OPERATING INSTRUCTION

Notice： Please read the instruction carefully before operation

INDEX

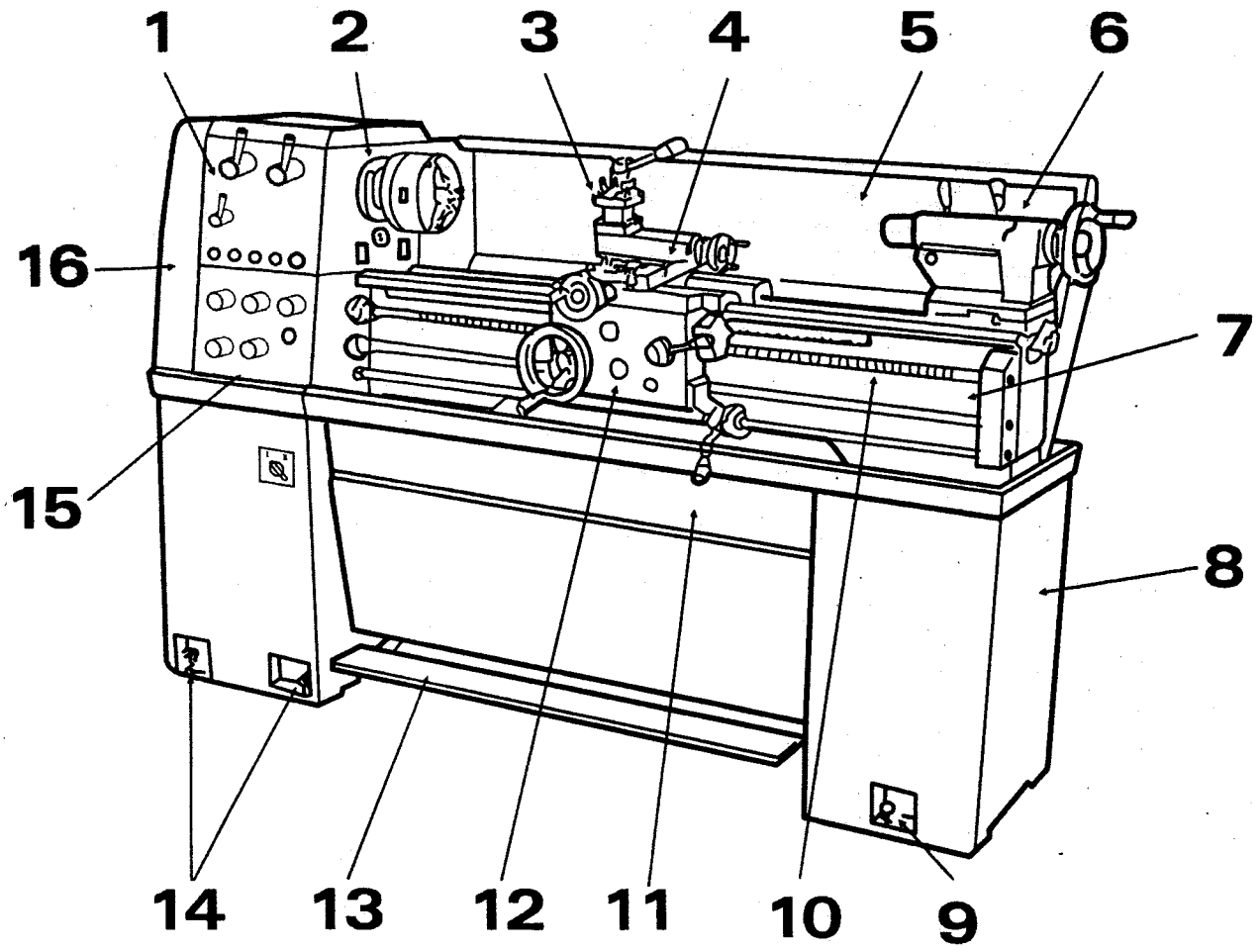
BRIEF SPECIFICATION



MODEL	A	B	C	D	E
D400×1000	1000m㎜	1800mm	1920mm	1214mm	1087mm

Model No.	D400×1000
Disatance between centres	1000mm
Swing over bed	400mm
Width of bed	210mm
Spindle nose fixture	DIN 55029 D1-5
Spindle bore	55mm
Range of spindle speed	45-2000rpm
Range of longitudinal feeds	0.06-1.39mm/r
Range of cross feeds	0.01-0.360mm/r
Range of inch threads	2-28tpi
Range of metric threads	0.8-14mm
Top slide travel	105mm
Cross slide travel	180mm
Tailstock quill travel	100mm
Tailstock quill taper	MT4
Net weight	810kg
Gross weight	860kg
Motor power	2.0/2.4KW
Voltage	440V
Diamesion of machine	1960x760x1560 mm

GENERAL LAYOUT OF LATHE



1.Headstock

2.Spindle

3.Top slide

4.Saddle & cross-slide

5.Splash guard

6.Tailstock

7.Bed

8.Mounting feet

9.Tail-end plinth

10.Lead screw

11.Chip pan

12.Apron

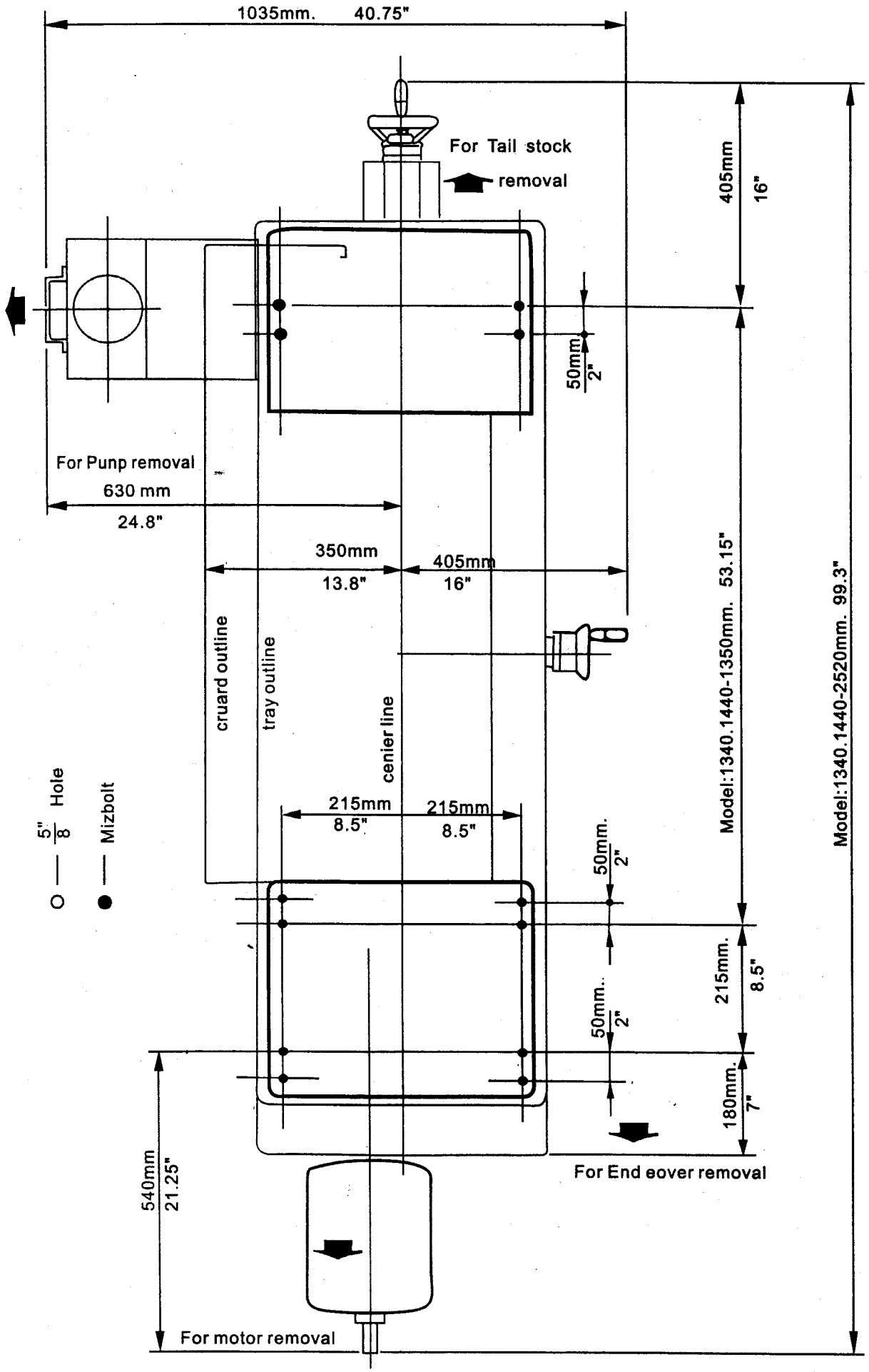
13.Foot brake

14.Head-end plinth

15.Gear box

16.End cover

FOUNDATION PLAN



LIFTING

Use the sling-chain to sling
Lathe showed as in fig 4 position
The saddle and tailstock along
The bed to obtain balance
IMPORTANT:DO NOT USE SLINGS AROUND BED AS LEADSCRW AND FEEDSHAFT MAY BE U BENT

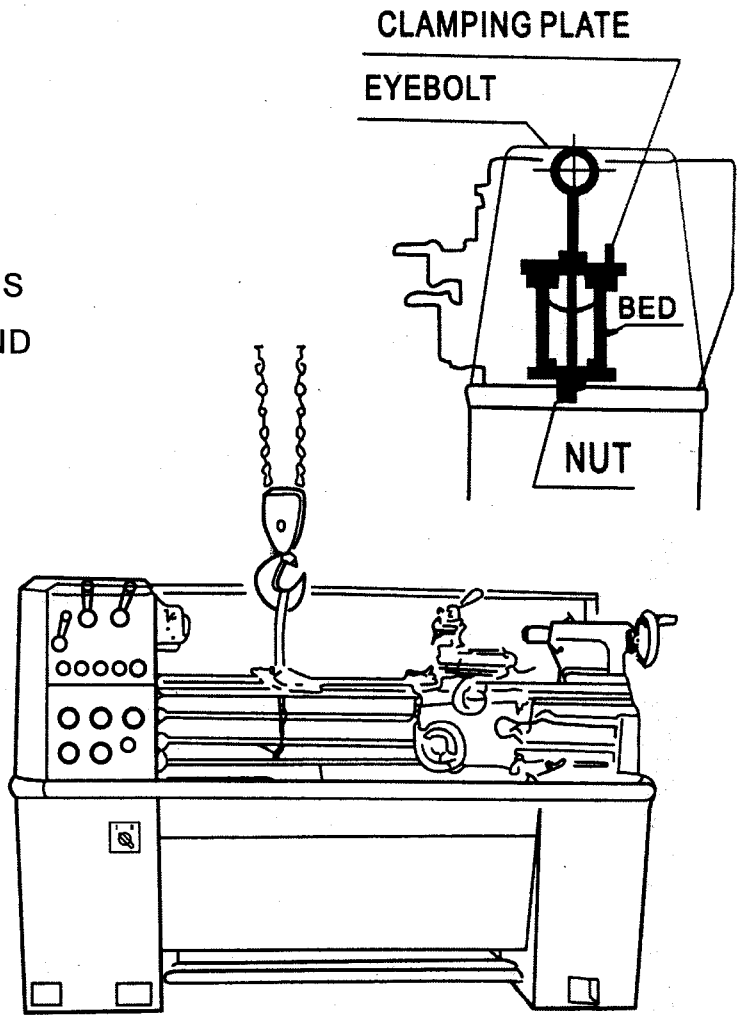


Fig.4

CLEANING

Before operating any controls,use white spirit or kerosene to Remove the anticorrosion coating from all slideways and the endgear train

DO NOT USE CELLULOSE SOLVENTS FOR WI CLEANING AS THEY WILL ADMAGE THE PAINT FINISH

Machine surface becomes bright immediately after cleaning Using machine oil or slideway lubricant.Use heavy oil or Grease on the end gears.

INSTALLING

Located the machine on a solid foundation, allowing sufficient area all round for easy working and maintenance (see Foundation Plan). The lathe may be used free-standing or bolted to the foundation.

Free-standing:position lathe on foundation and adjust each of the six mounting feet to take equal share of the load.then using an engineers precision level on the bedways (as in Fig 5)adjust the feet to level up machine. Periodically check bed level to ensure continued lathe accuracy.

Fixed installation:position lathe over six bolts (1/2 in.or 12mm.diam.) set into the foundation to correspond with holes in the mounting feet.Accurately level the machine as in Fig 5,then tighten hole-down bolts and rechecd bde level

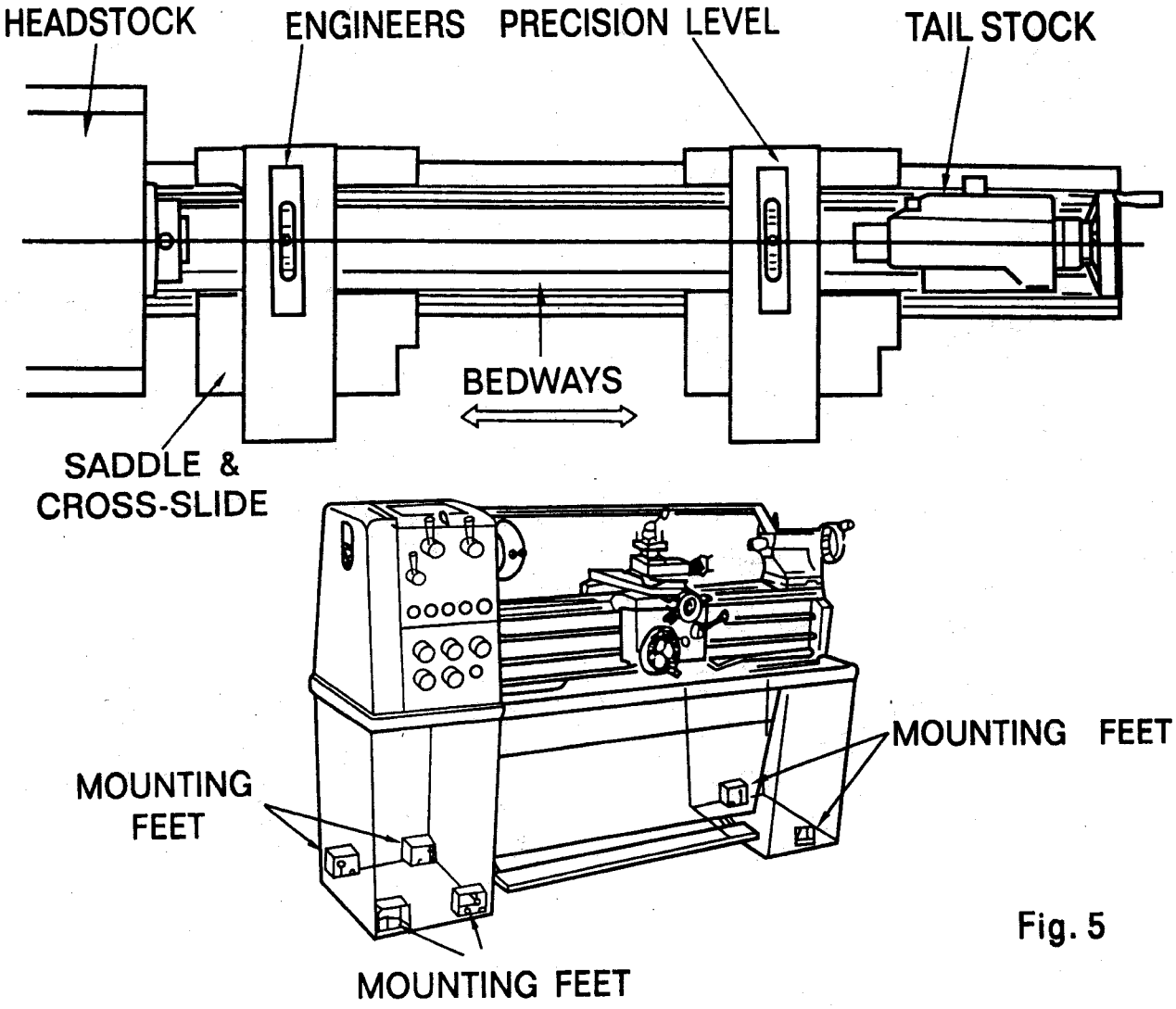


Fig. 5

LUBRICATION CHECKS

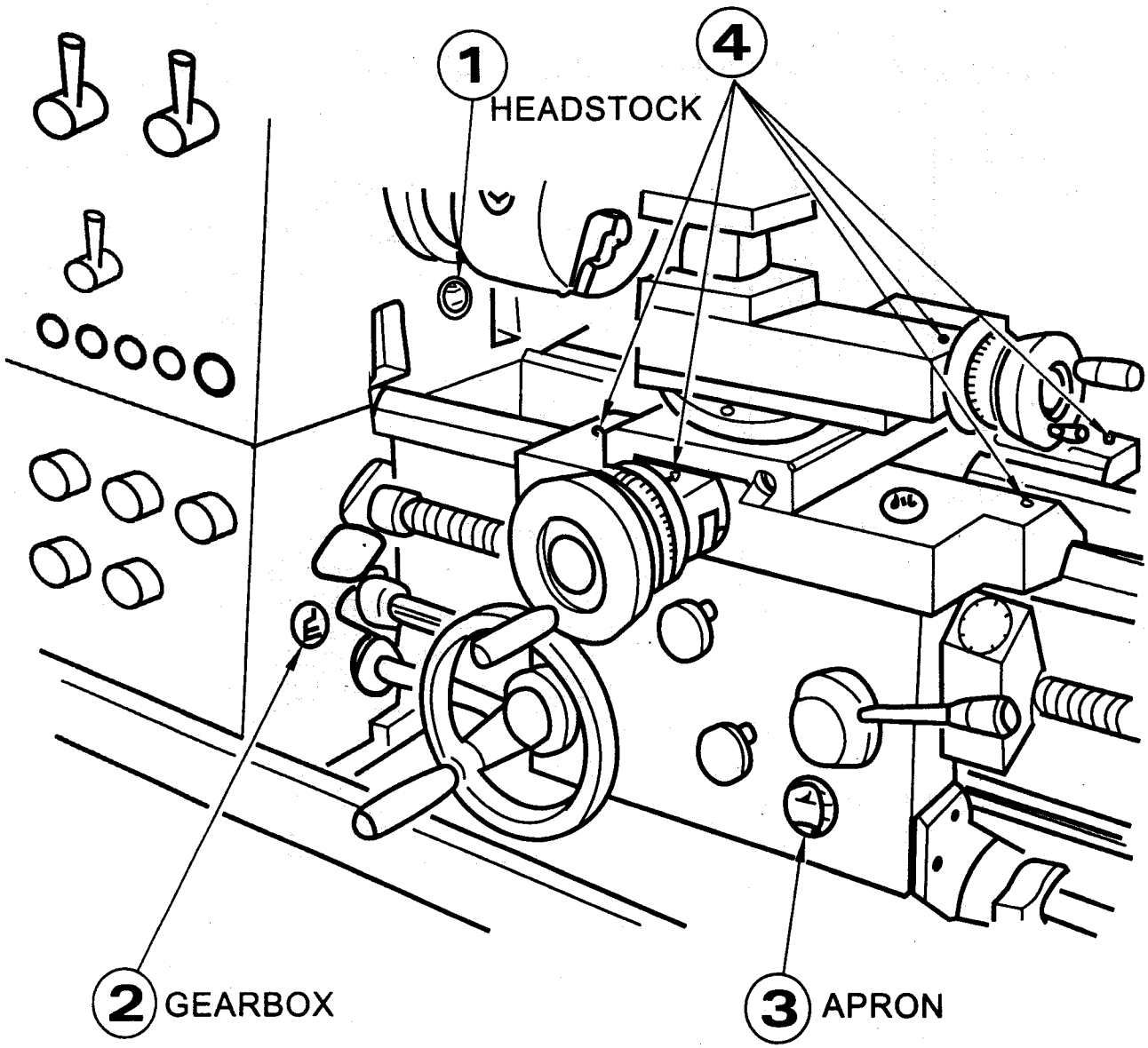
Before operating the machine, make the following important checks:

1.The headstock is filled to level marked on oil sight window with Shell Tellus Oil 27.

2.The gearbox is filled to level marked on oil sight window with Shell Tellus Oil 27.

3.Tcarriage apron is filled to level marked on oil sight window with Shell Tellus Oil 27.

4.In addition, apply light machine oil or way lubricant to the points shown on lubrication diagram which require daily oiling.



CHUCKS AND CHUCK MOUNTING

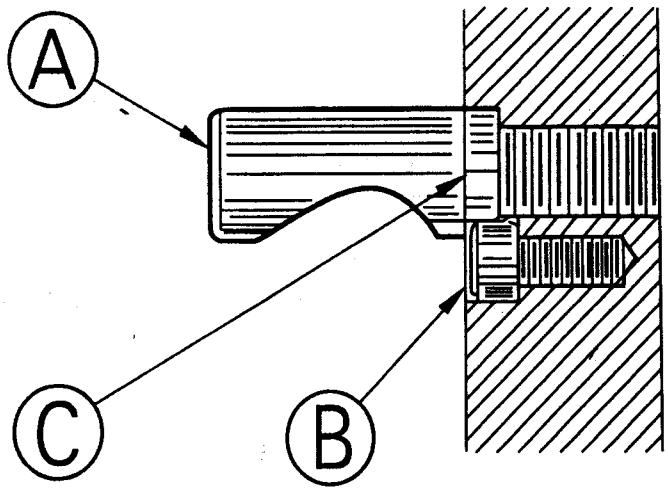
WARNING:GREY-IRON CHUCKS MUST NOT BE FITTED ON THIS HIGH-SPEED LATHE. USE ONLY DUCTILE IRON CHUCKS

When fitting chucks or faceplate, first ensure that spindle and chuck tapers are scrupulously clean and that all cams lock in the correct positions. See Fig 7, it may be necessary when mounting a new chuck to re-set the camlock studs(A) to do this ,Remove the cap-head locking screws(B)and set each stud so that the scribed ring(C)is flush with the rear face of the chuck-with the slit lining up with the locking screw hole(see Fig 7).

Now mount the chuck or faceplate on the spindle nose and tighten the three cams in turn. It must be fully tightened. If any of the cams do not tighten fully remove the chuck or faceplate and re-adjust the stud. Fit and tighten the locking screw(B) a each stud before remounting the chuck for work.

This will assist subsequent remounting. Do NOT INTERCHANGE CHUCKS OR FACE PLATES IF LATHE WITHOUT CHECKING UP CORRECT CAMLOCK-ING.

IMPORTANT: Take care note of speed limitations when using faceplate. 10 in. faceplates should not be ru



LATHE CONTROLS

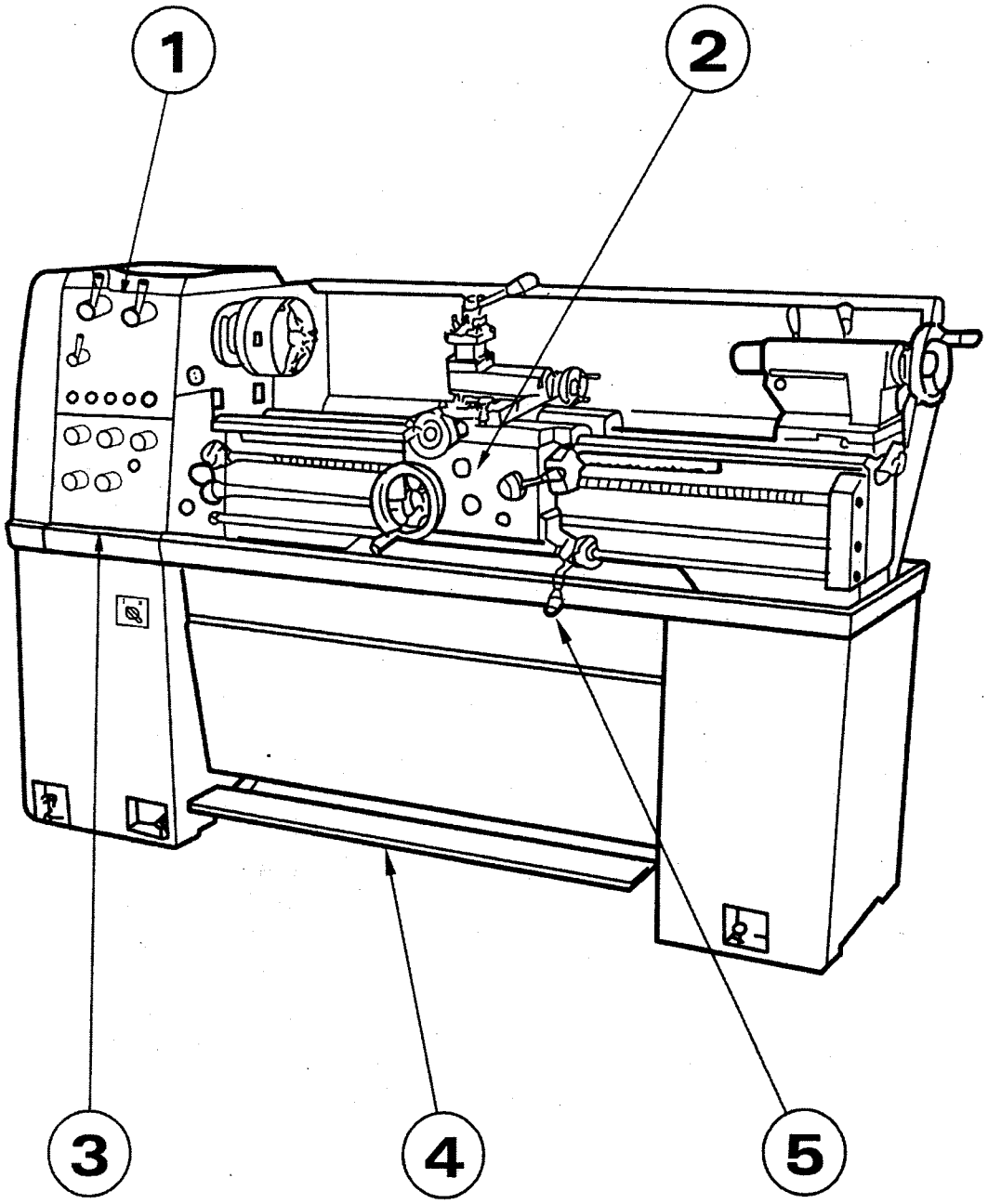
1.Spindle speed selector.

2.Apron, surfacing or sliding feeds

3.Gearbox, threads and feeds.

4.Footbrake.

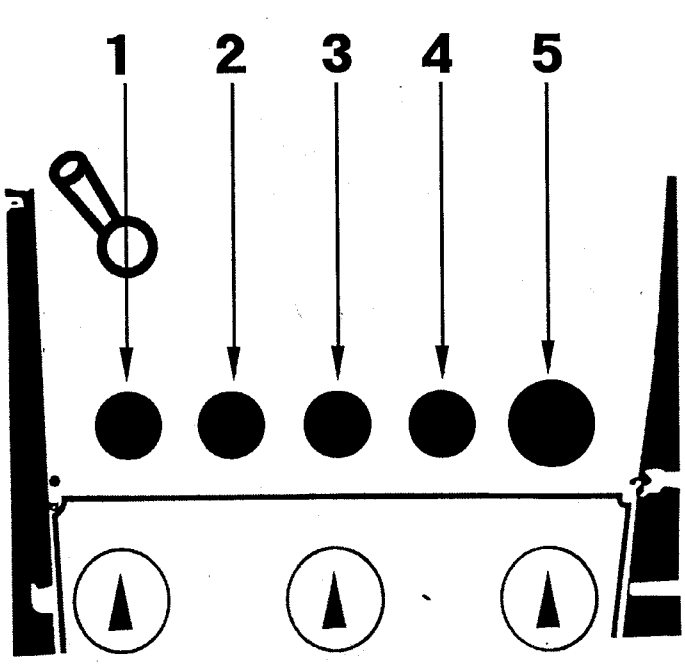
5.Main motor rotation (forward and revers).

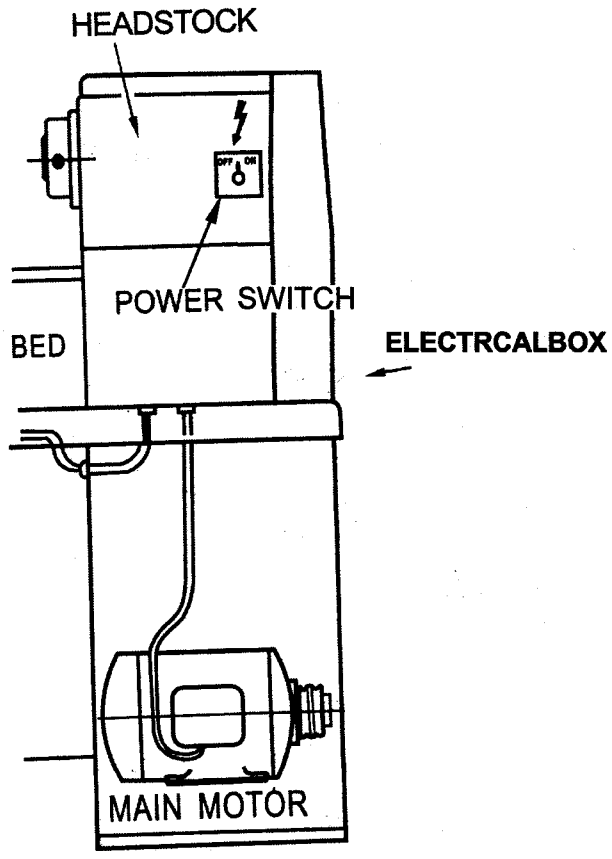


ELECTRICAL CONTROLS

The power switches are fitted on the side of electrical box in rear of the head-stock. Except the main switch, all electrical controls are fitted in the front of the headstock.

1. Move the power switch set at ON position then the indicator lamp glows.
2. Coolant pump ON/OFF push button.
3. Move the brake switch at ON position then the magnetic braking function is activated.
4. Press the BLACK button. The main drive motor can be running with a moment (While the main motor rotation lever is set in the neutral position.)
5. Press the RED button to stop the main motor and coolant pump.





1-INDICATOR LAMP

2-COOLANT PUMP SWITCH

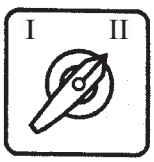
3-MAGNETIC BRAKE SWITCH

4-JOG BUTTON

5-EMERGENCY STOP SWITCH

SPEED CONTROLS（2 SPEED MOTOR）

Spindle speeds range 45-2000 rpm: selected by the two lever controls on headstock and an electrical switch on the left cabinet stand. The twelve available speeds are shown directly on the name plate of spindle stock. While the electrical switch is set at I position it provides lower speeds range 45-1000rpm. While the electrical switch is set at II position it provides higher speeds range 90-2000rpm.

SPINDLE SPEEDS ROTATION PER MINUTE	LOWER SPEEDS 		HIGHER SPEEDS 	
	H L 	H L 	H L 	H L 
	180	1000	365	2000
	65	350	135	715
	45	245	90	495

THREADS AND FEEDS

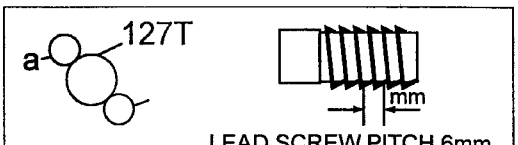
All of threads and feed rates are directly available from the change gears and gear box. The table is shown on data plate fitted on face of cover of change gear cover. See the table as below.

Metric threads range 0.8-14mm, 26 kinds are provided.

Inch threads range 2-28TPI, 29 kinds are provided.

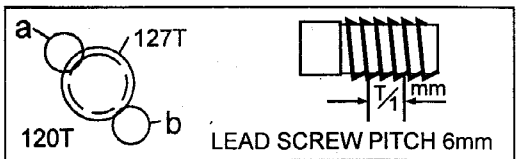
Longitudinal feed rates range 0.057-2.784 mm/rev., 64 kinds are provided.

Cross feed rates range 0.014-0.742 mm/rev., 64 kinds are provided.



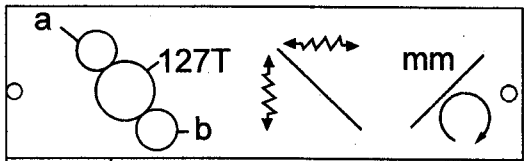
LEAD SCREW PITCH 6mm

a		56	60	60	46	60	60	40	60	60
b		60	60	60	80	60	60	80	60	60
LEVER		4	1	3	4	1	3	1	3	3
		R	R	S	T	V	R	T	V	V
A	D	14.0	12.0	11.2	10.0	9.6	9.0	8.0	7.2	6.4
B	D	7.0	6.0	5.6	5.0	4.8	4.5	4.0	3.6	3.2
A	C	3.5	3.0	2.8	3.5	2.4	2.25	2.0	1.8	1.6
B	C	1.75	1.5	1.4	1.75	1.2	1.12	1.0	0.9	0.8



LEAD SCREW PITCH 6mm

a		60	60	60	60	60	60	40	60
b		60	54	57	60	60	60	80	60
LEVER		4	1	1	1	1	2	1	3
		V	V	V	V	V	V	V	V
A	D	2	2¼		2½	2¾	3	3¼	7.2
B	D	4	4½		5	5½	6	6½	3.6
A	C	B	9	9½	10	11	12	13	1.8
B	C	16	18	19	20	22	24	26	0.9



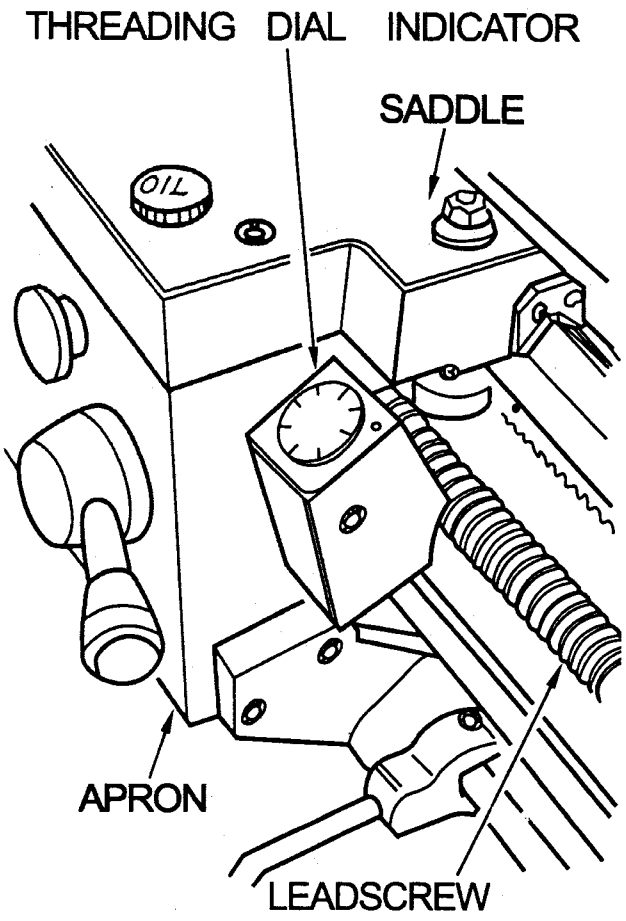
a			60T			
b			60T			
LEVER			T	S	R	V
I	A	D	1.39 / 0.38	1.30 / 0.33	1.04 / 0.27	0.44 / 0.22
	B	D	0.70 / 0.18	0.65 / 0.17	0.52 / 0.13	0.42 / 0.11
	A	C	0.35 / 0.09	0.33 / 0.08	0.26 / 0.07	0.21 / 0.06
	B	C	0.17 / 0.05	0.16 / 0.04	0.13 / 0.03	0.10 / 0.03
II	A	D	2.78 / 0.72	2.60 / 0.67	2.09 / 0.54	0.57 / 0.43
	B	D	1.39 / 0.36	1.30 / 0.33	1.04 / 0.27	0.84 / 0.22
	A	C	0.70 / 0.18	0.65 / 0.17	0.52 / 0.13	0.42 / 0.11
	B	C	0.35 / 0.09	0.32 / 0.08	0.26 / 0.07	0.21 / 0.05
a			40T			
b			80T			
LEVER			T	S	R	V
I	A	D	0.70 / 0.18	0.65 / 0.17	0.52 / 0.13	0.42 / 0.11
	B	D	0.35 / 0.09	0.33 / 0.08	0.28 / 0.07	0.21 / 0.05
	A	C	0.17 / 0.05	0.16 / 0.04	0.13 / 0.03	0.10 / 0.03
	B	C	0.09 / 0.02	0.08 / 0.02	0.07 / 0.02	0.06 / 0.01
II	A	D	1.39 / 0.38	0.30 / 0.33	1.00 / 0.27	0.84 / 0.22
	B	D	0.70 / 0.18	0.55 / 0.17	0.52 / 0.13	0.42 / 0.11
	A	C	0.35 / 0.09	0.32 / 0.08	0.26 / 0.07	0.21 / 0.05
	B	C	0.17 / 0.04	0.17 / 0.04	0.13 / 0.03	0.11 / 0.03

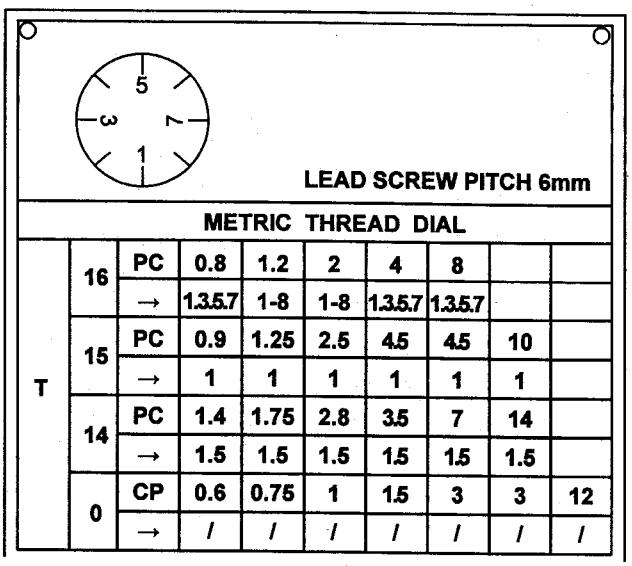
THREADING DIAL INDICATOR

Metric threads

The thread dial used for cutting metric screw threads on lathes equipped with metric leadscrew. To provide for the various pitches of metric threads, several gears having different numbers of teeth are mounted on the lower end of the shaft. The vertical position of the thread dial indicatior is changed as required so that the correct gear for the pitch of the thread to be cut will mesh with the leadscrew.

Each guaduation on the dial is marked with a letter which in dicates the points at which the halfnuts may be engaged for cer tain threads. A diagram is supplied with the thread dial to show which gear and which graduations must be used for each pitch of metric screw thread.





METRIC THREAD DIAL

T	16	PC	0.8	1.2	2	4	8		
		→	1.3.5.7	1-8	1-8	1.3.5.7	1.3.5.7		
	15	PC	0.9	1.25	2.5	4.5	4.5	10	
		→	1	1	1	1	1	1	
	14	PC	1.4	1.75	2.8	3.5	7	14	
		→	1.5	1.5	1.5	1.5	1.5	1.5	
	0	CP	0.6	0.75	1	1.5	3	3	12
		→	/	/	/	/	/	/	/

APRON CONTROLS

In addition to hand wheel traverse. The carriage can be power-operated through controls on the front of the apron, see Fig 16 knob (A). If move handle (A) upwards, carriage would do longitudinal-feed operation. If move handle (A) in middle position, it would do Operation. If move handle (A) downwards, it would do cross-feed operation.

Lever (B) is pressed downward to engage the leadscrew nut for screwcutting .To avoid-undue wear. Release the nut except when screwcutting.

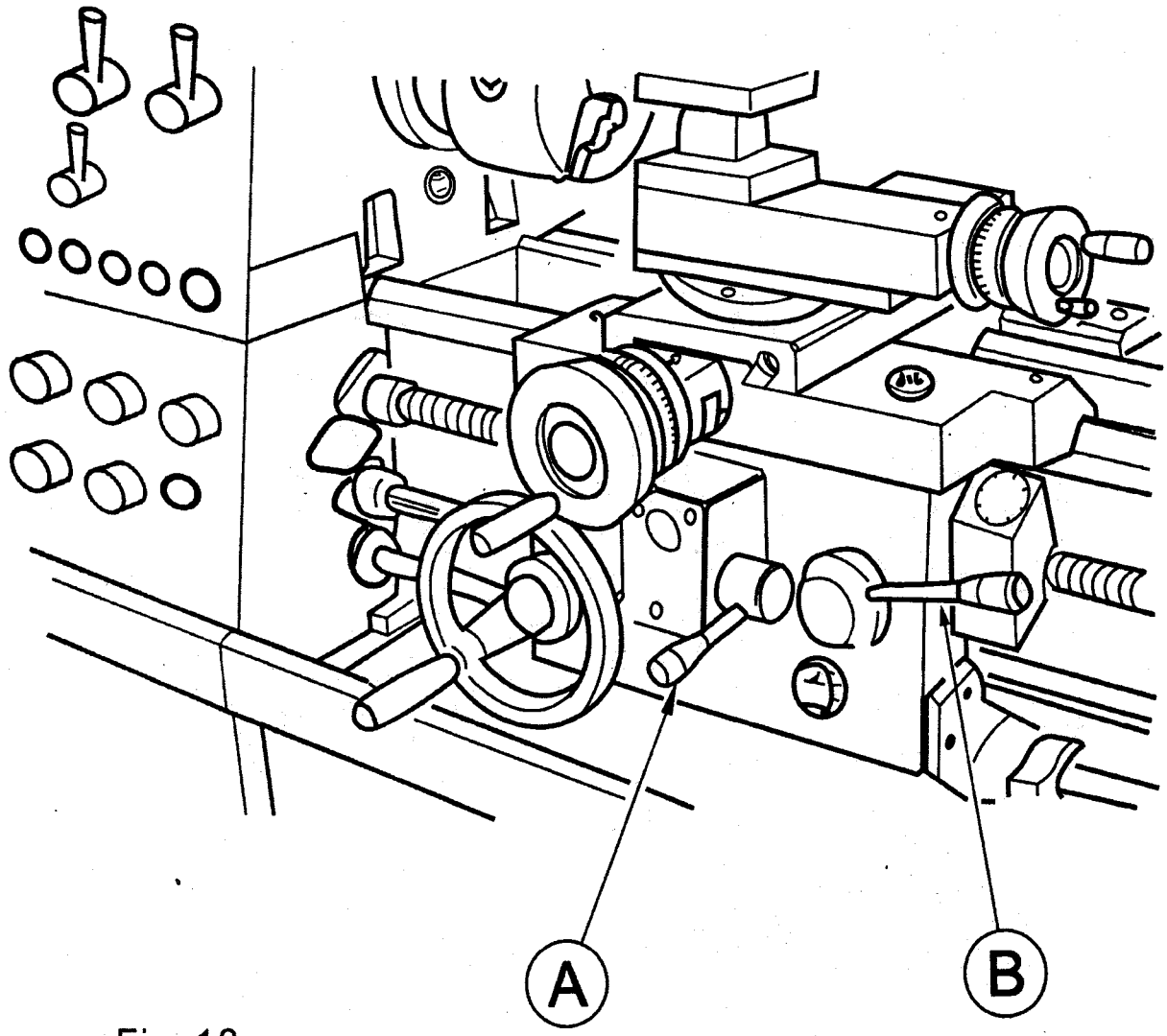


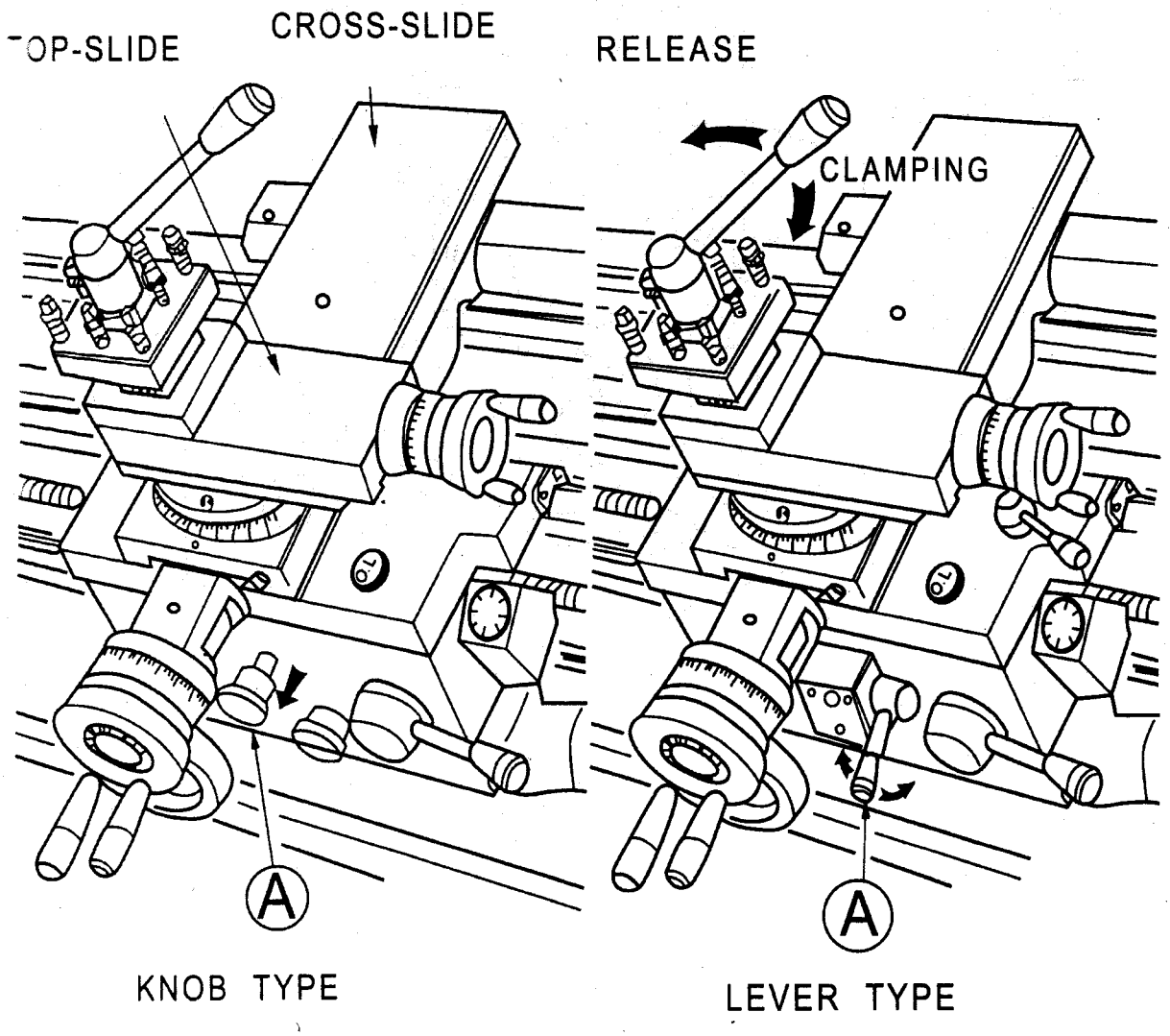
Fig. 16

CROSS-SLIDE AND TOP-SLIDE

A soid topslide is fitted standard to the cross-slide. Carried on a rotateble base, the cross-slide is marked 45-0-45 deg. For accurate inkexing.

Hand wheel dials are graduated in inch or metric divisions to suti the operating screw and nut fitted.

The cross-slide can be power operated by pulling out the hand knob (A), at one-third sliding feed per spindle revolution, or it can be hand-operated using the large-diameter dial graduated in either inch or metric division to suit the operating screw and nut fitted.



KNOB TYPE

LEVER TYPE

TAIL STOCK

Can be free movement along the bed by unlocking the clamp lever (A).

The tailstock barrel is locked by lever(B)

The tailstock can be set-over for production of shallow tapers or for realignhment. Release the clamping lever and adjust screws (S) at each side of the base to move tailstock laterally across the base. An indication of the setoveris given by the datum mark (C) at the tailstock end face, as shown in Fig 18. Apply clamp lever after adjustment of set-over.

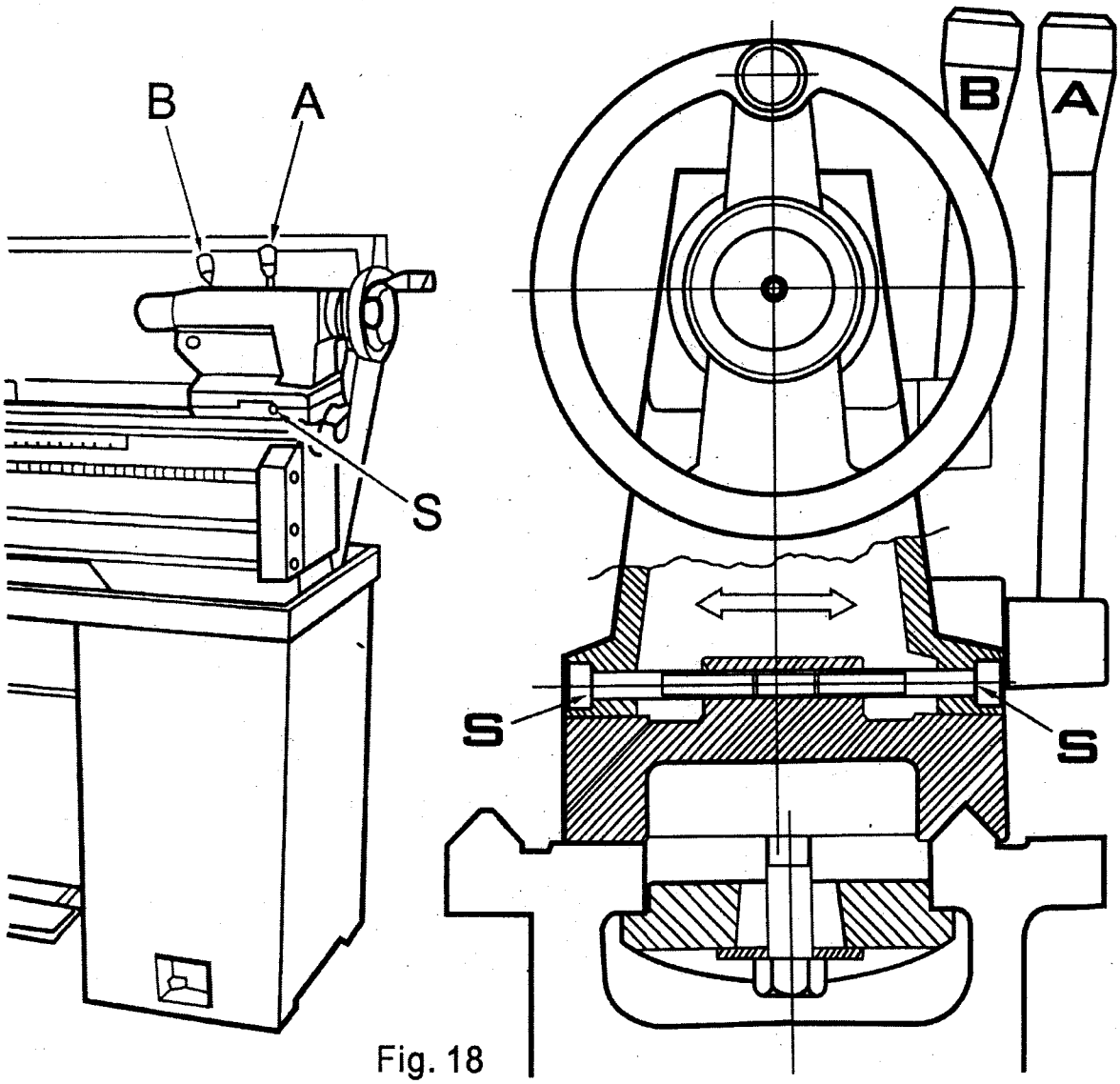


Fig. 18

LATHE ALIGNMENT（part 1）

With the lathe installed and running, we recommend a check on machine alignment before commemcing work. Check leveling and machine alignment at regular periods to ensure continued lathe accuracy.

Headstock check: Take a light cut-with a keen tool over a 6 in. (150mm) length of 2 in. dial. (50mm) steel bar gripped in the chuck but not supported at the free end .Micrometer readings at each end of the turned length (at A and B of Fig 19) should be the same.

To correct a difference in readings, slacken and release the four headstock hold-down screws (J) shown in Fig 19 and adjust the set-over pad (K) beneath the headstock. Then tighten all screws. After adjustment, repeat the test-cut/micrometer-reading until micrometer readings are identical so that machine cutting will be absolutely parallel.

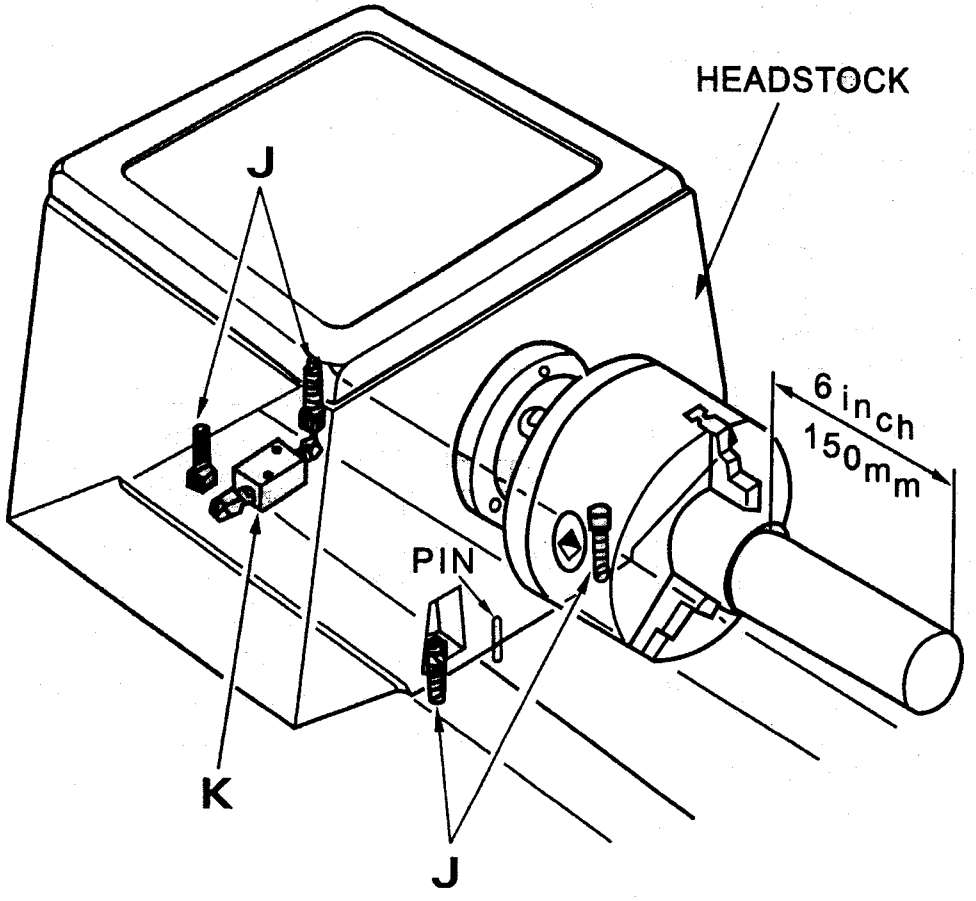


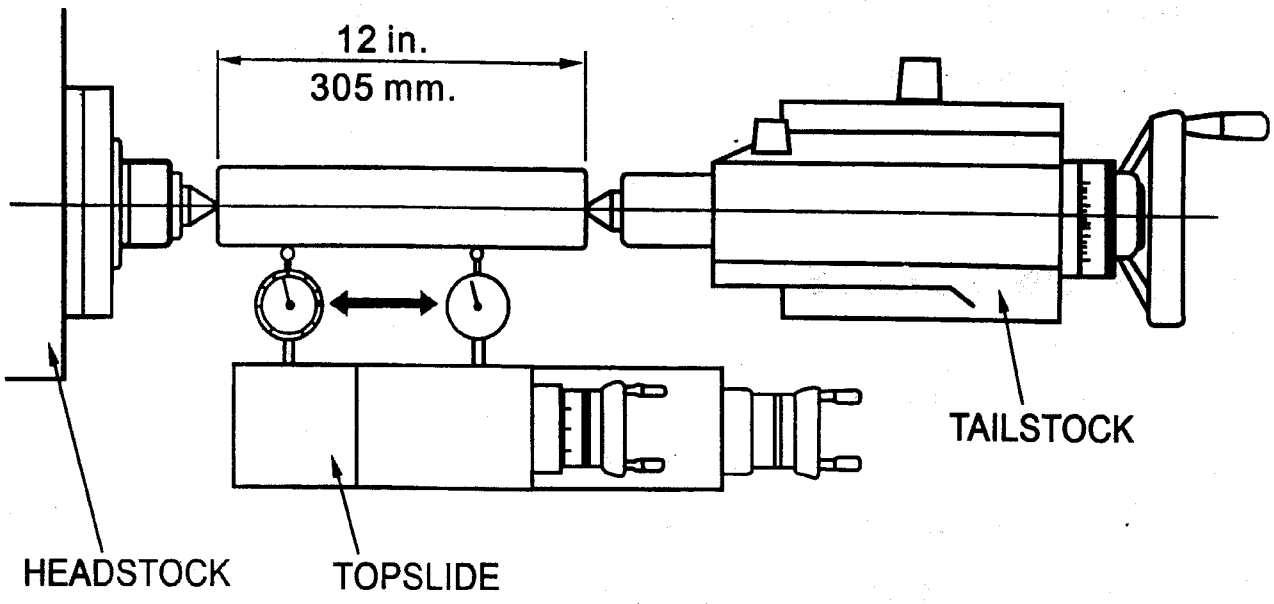
Fig.

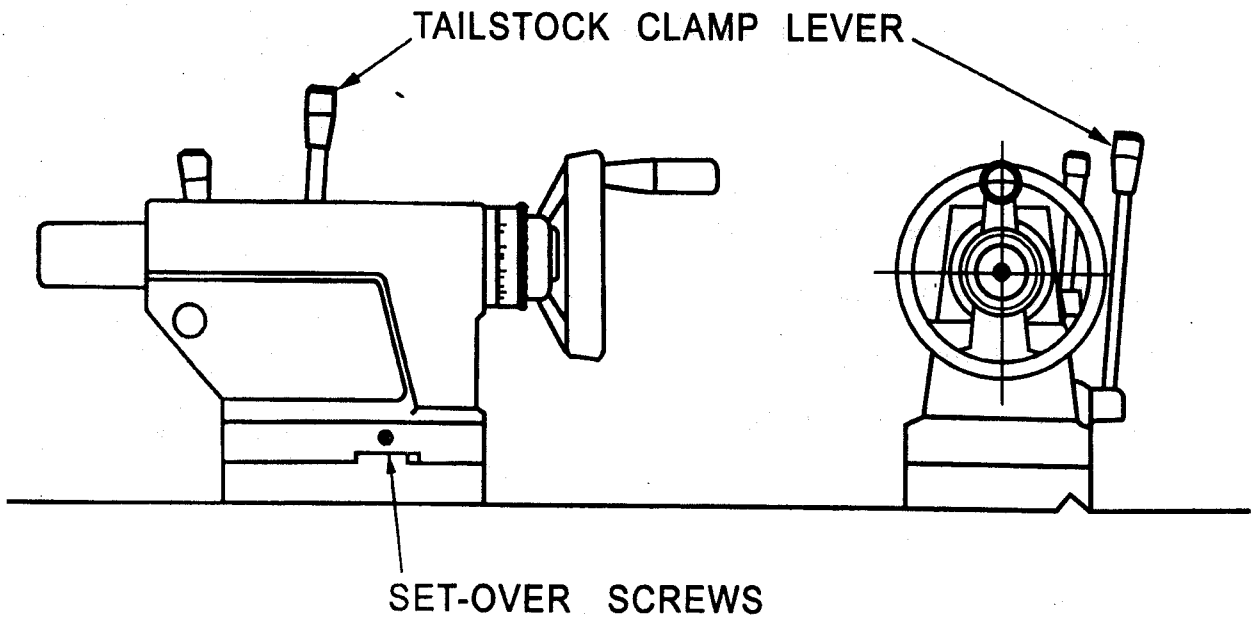
LATHE ALIGNMENT（part 2）

Can be free movement along the bed by unlocking the clamp lever (A).

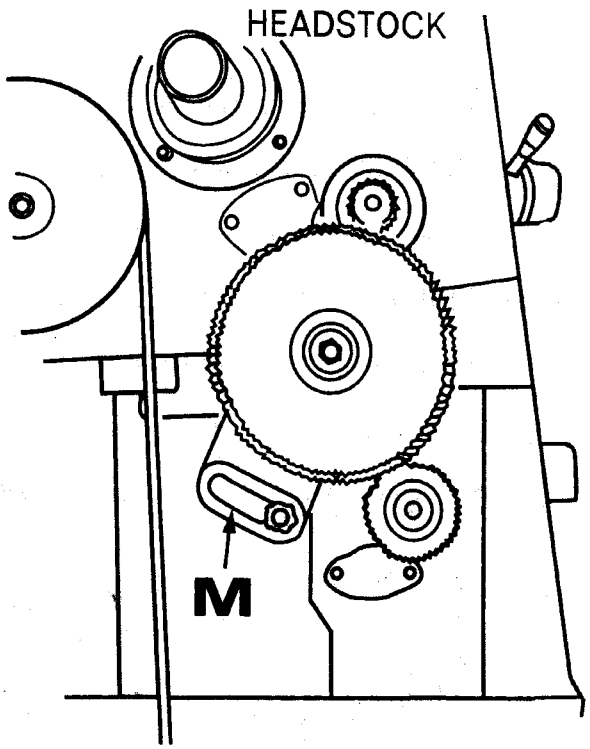
The tailstock barrel is locked by lever(B)

The tailstock can be set-over for production of shallow tapers or for realignhment. Release the clamping lever and adjust screws (S) at each side of the base to move tailstock laterally across the base. An indication of the setoveris given by the datum mark (C) at the tailstock end face, as shown in Fig 18. Apply clamp lever after adjustment of set-over.





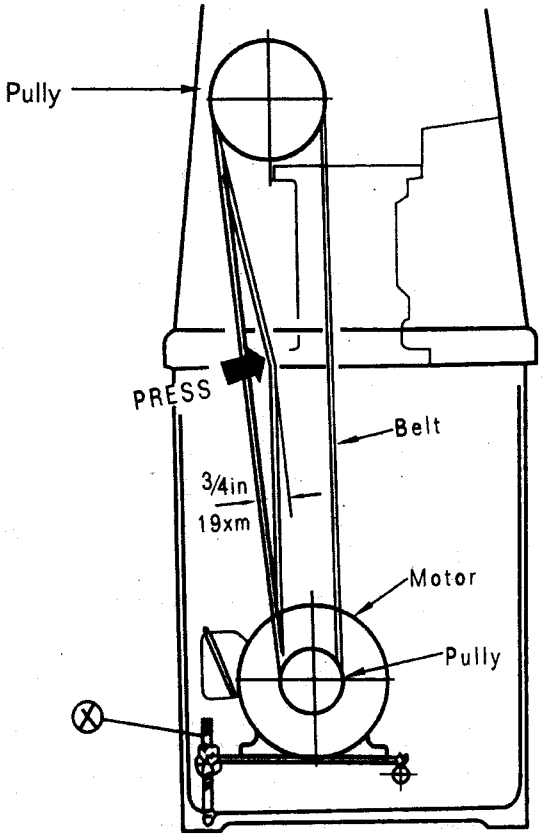
END GEAR TRAIN



Drive from headstock to gear-box is transmitted through a gear train enclosed by the head-stock end-guard. Intermediate gears are carried on an adjust able swing frame (m).

Gears must be thoroughly cleaned before fitting and backlash maintained at. 0.005 in. (0.127mm.) Lubricate gears regularly with thick oil or grease

DRIVING BELTS



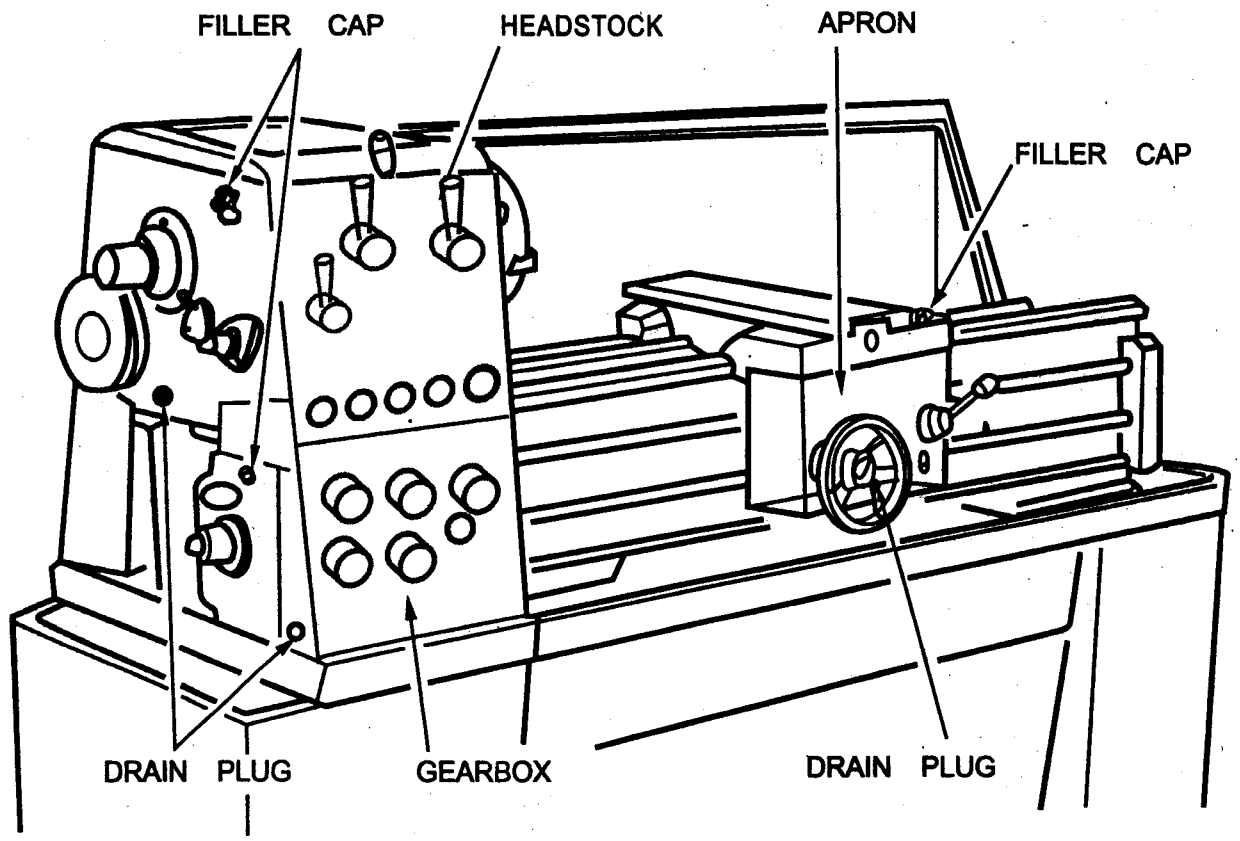
To alter belt tension, remove the coverplatein back of the headstock plinth and adjust the two screws (X) on the hinged motor platform. Ensure that the motor is scorrectly alighted with the lathe axis.

Light finger pressure at a point midway between motor and head-stock pulleys should produce about 3/4 in. (19mm.) movement of each belt when under correct tension.

LUBRICATION（part 1）

The headstock and gearbox are splash-lubricated from an internal reservoir of oil (Shell Tellus 27). Check the oil level constantly to the mark on the oil sight window in the front end face of the headstock and gearbox. A weekly check is recommended. The oil need be changed every year. Oil through a filler cap in the top of the headstock and gearbox is covered by the end-guard .Drain from a drain plug in the bottom of the headstock and gearbox.

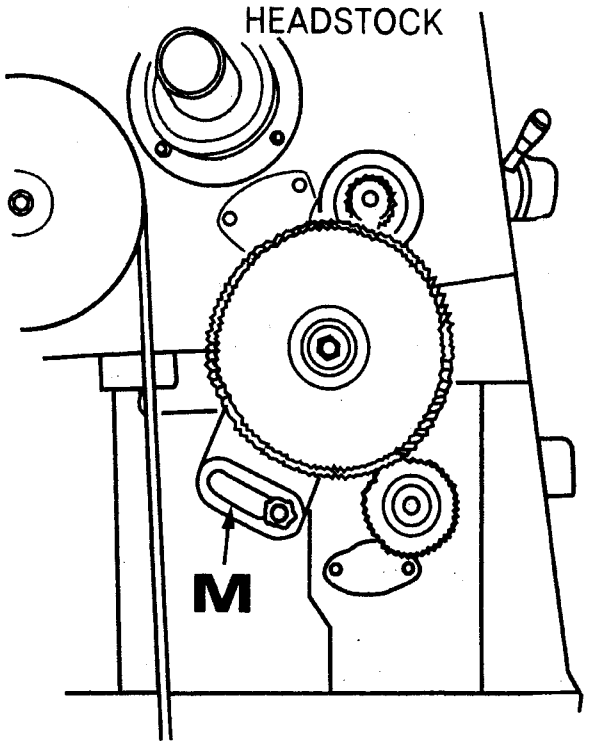
The apron is lubricated from an internal reservoir of oil. The oil sight window is in the front of the apron. A filler cap is in the top of the saddle. Refill the reservoir to the level of the oil sight with Shell Tonna oil 33.The apron can be drained by unscrewing a hexheaded drain plug in the bottom.



SLIDE WAYS ATTENTION

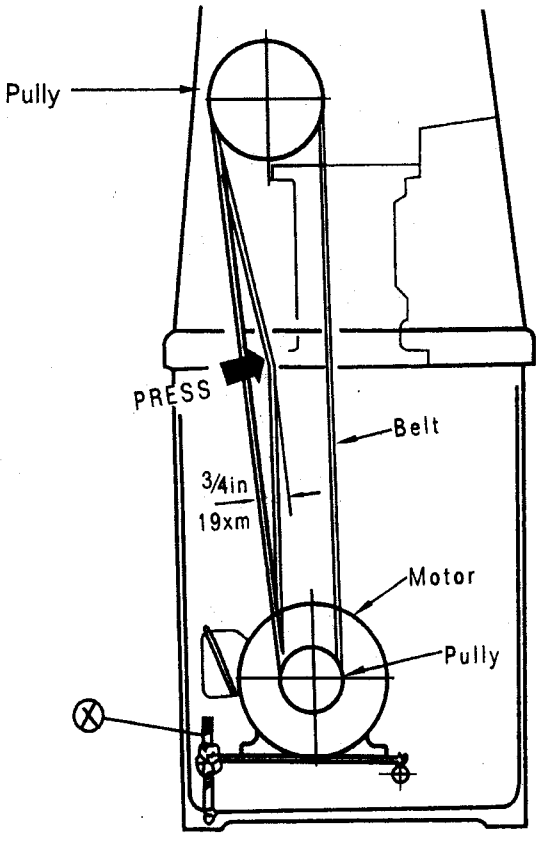
Tapered gib strips are fitted to slideways of saddle cross-slide and top (compound) slides so that any slackness which may develop can be rectified.

Ensure that slide ways are thoughly cleaned and lubricated before attempting adjustment. Then rear gibs by slackening the rear gib screw and tightening the front screw. Check constantly for smooth action throughout full slide travel. Avoid over-adjustment which can result in increased wear-rate and stiff or jerky action.



CROSS-SLIDE NUT

This is adjustable for elimination of slackness which may develop in service. Reduce back-lash by the cap-head screw in the rear of the nut. Then make only small adjustment by the cap-head screw, Before operating the cross-slide, check several times by hand to be sure of smooth operation throughout travel.



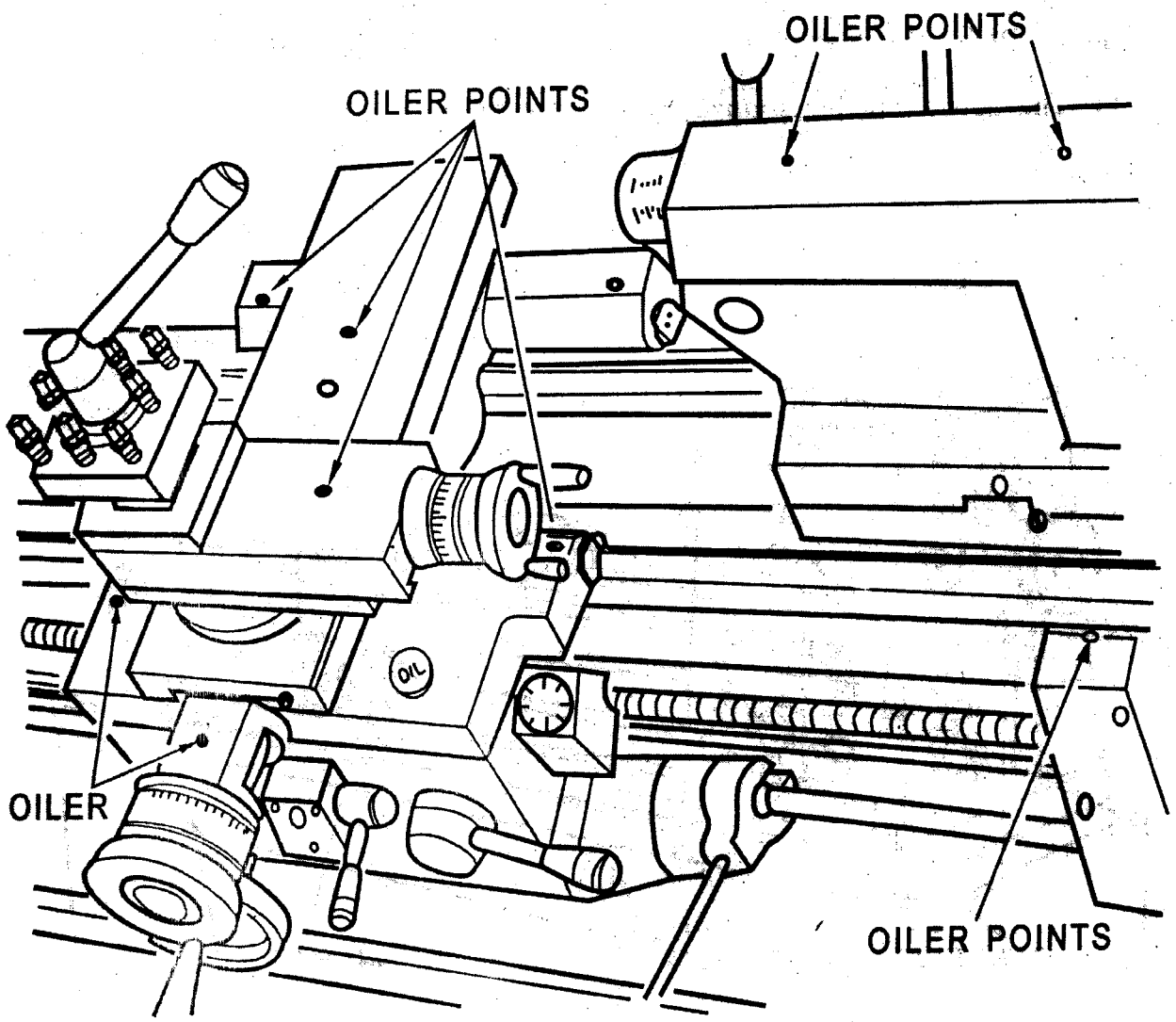
LUBRICATION（part 2）

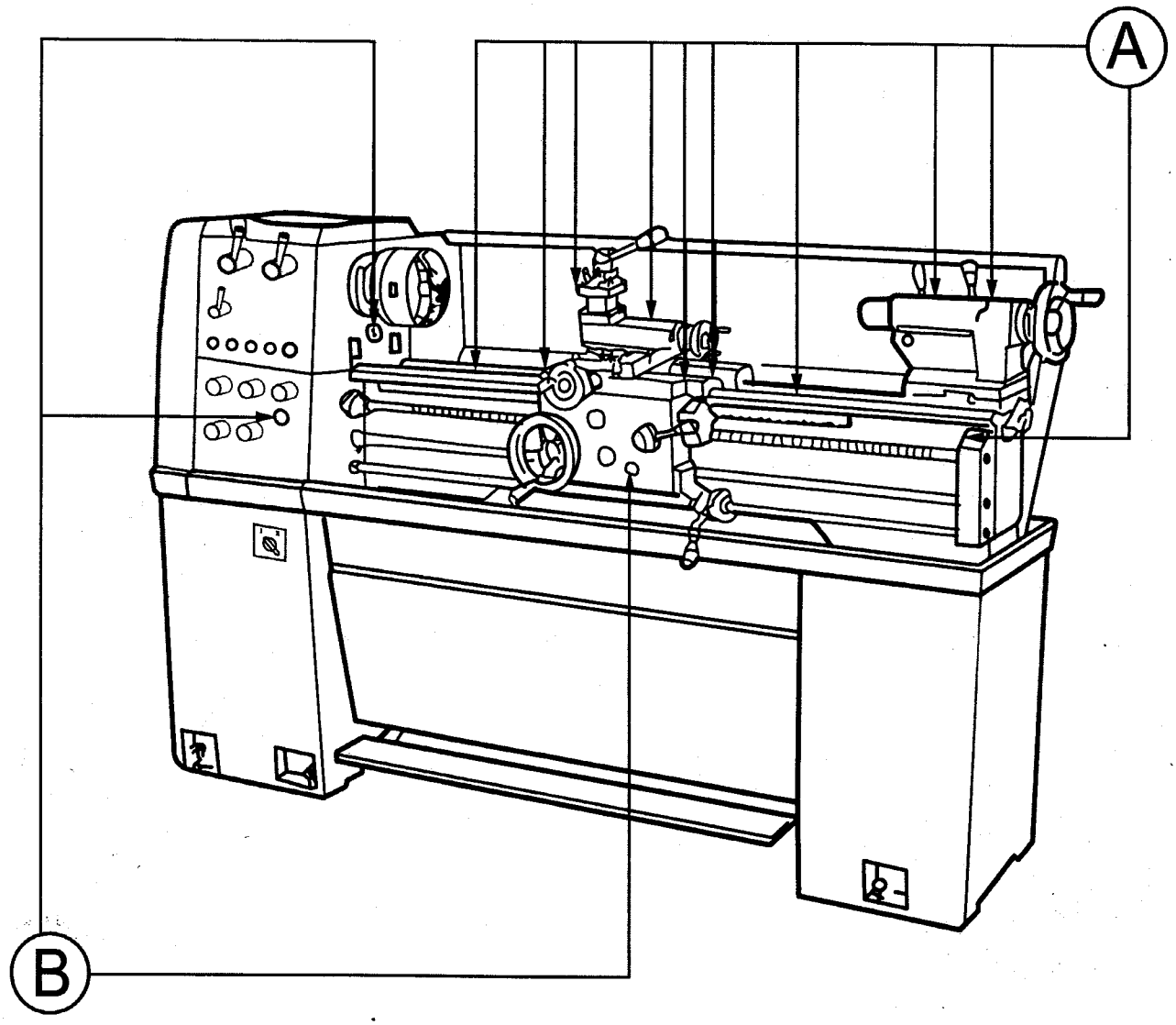
In addition, oil gun is provided for the saddle, cross-slide, crossslide nut and top-sliae (compound slide) to oil. Leadscrew using a oil gun can oil with light mahine oil or way lubricant.

On the tailstock, oil points are provided for daily attention from a standard oil can

It is recommended that all slideways, leadscrew and feed shaft are cleaned off (a bristle paint brush is useful for this) and lightly oiled after each period of work.

NOTE: Using incorrect grades of oil can cause damage.

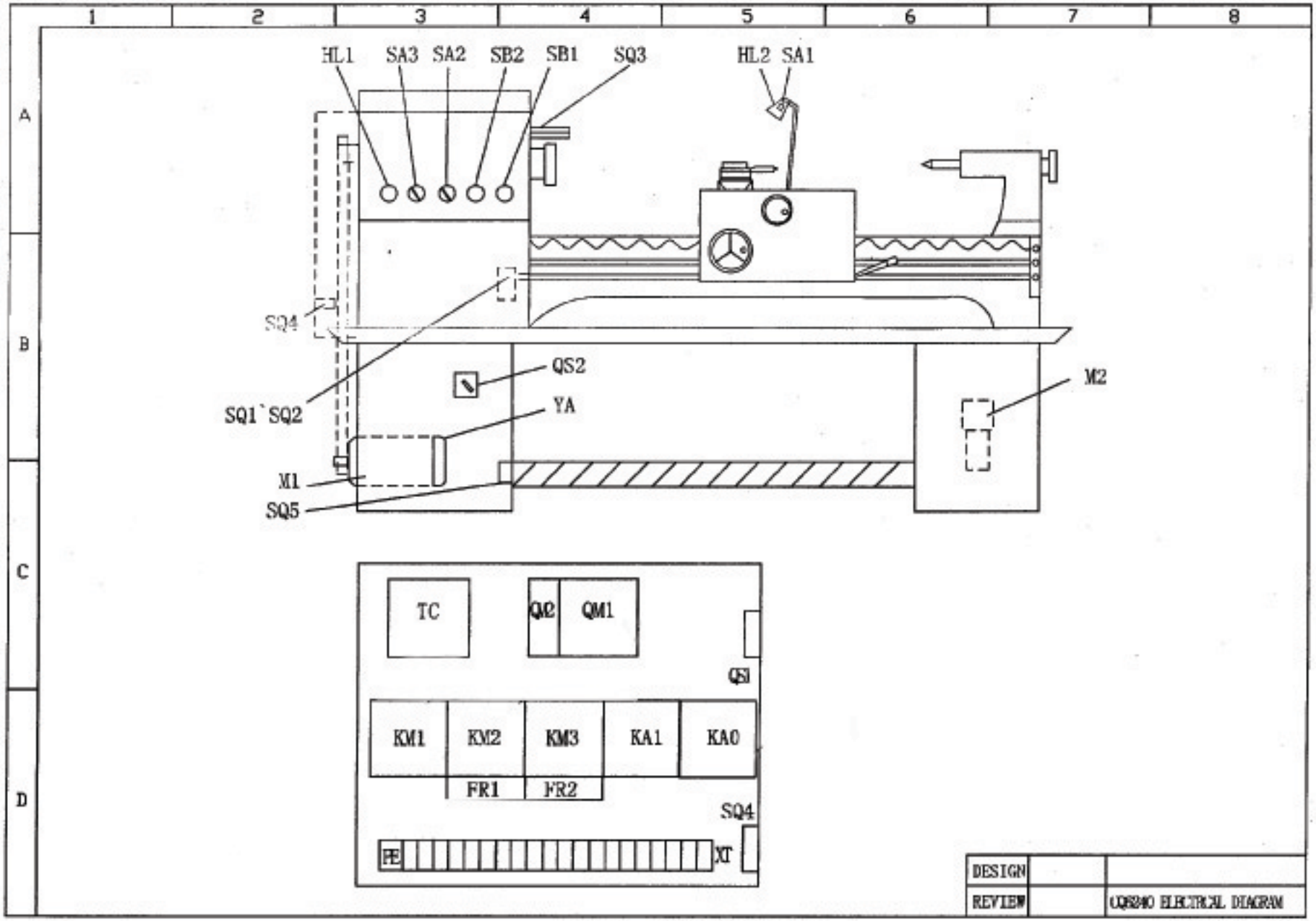




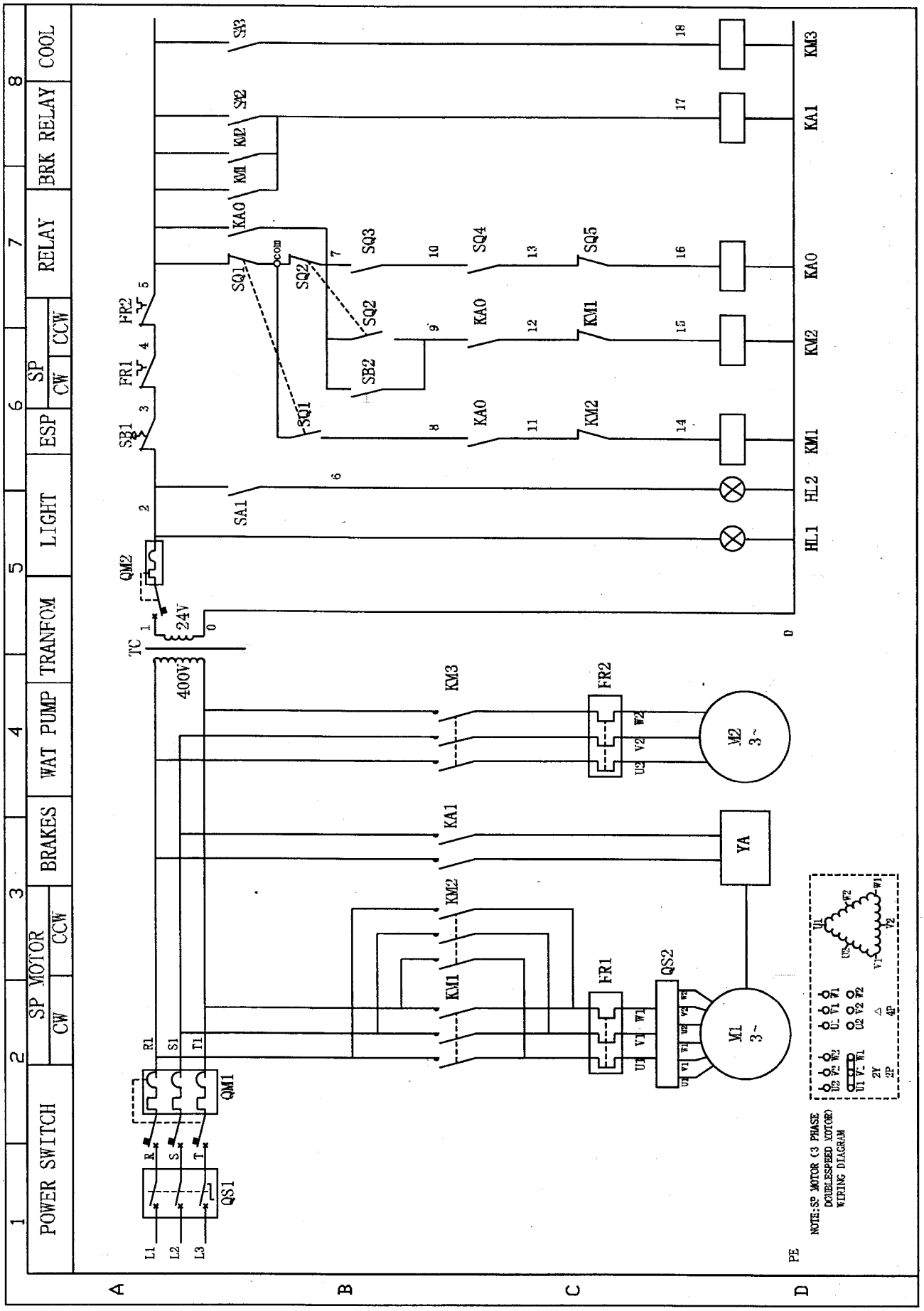
A — TOP-UP EVERY VEEK

B — OIL EVERY DAY

ELECTRICAL DIAGRAM



ELECTRICAL DIAGRAM



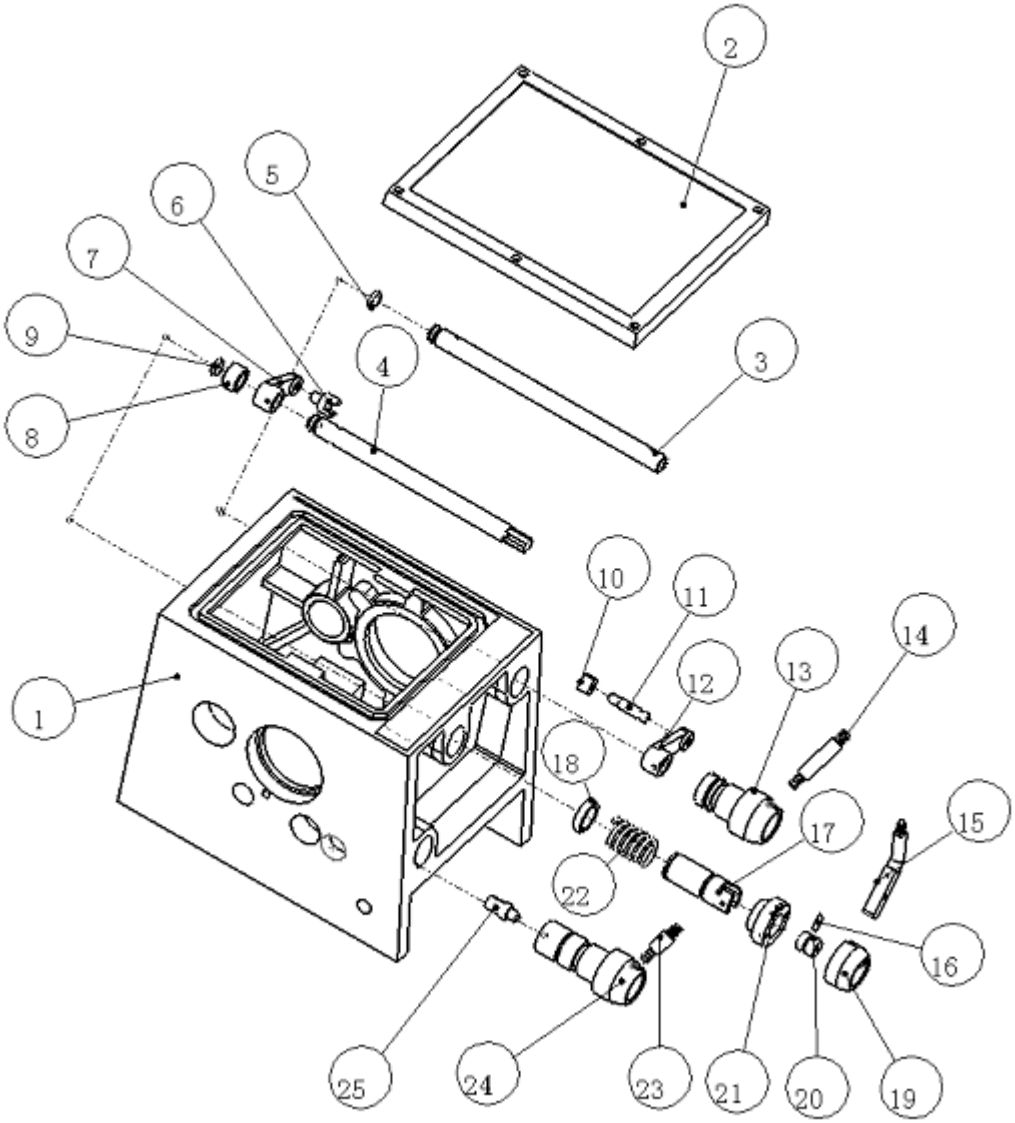
PACKING LIST

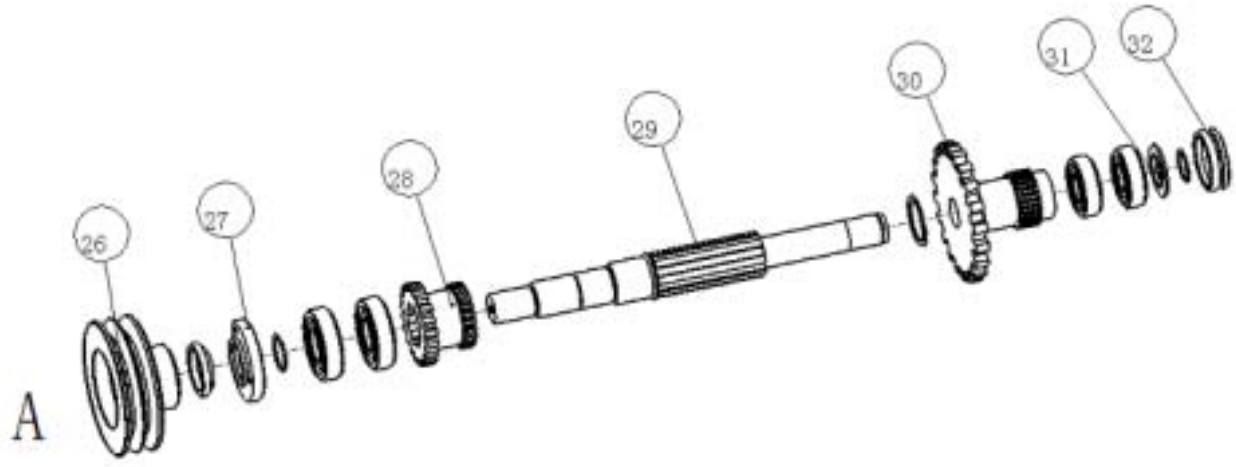
NO.	DESCRIPTION	SPECIFICATION	QTY
1	LATHE		1
2	PLASTIC COVER		1
3	3-JAW CHUCK Φ200mm MOUNTED		1
4	4-JAW CHUCK Φ200mm		1
5	FOLLOW REST		1
6	FACE PLATE Φ300mm		1
7	THREAD CHASING DIAL		1
8	TOOL BOX		1
	(1) INSTRUCTION MANUAL		1
	(2) FIXED CENTER	M.T.4	1
	(3) 4-WAY TOOL REST SPANNER	10	1
	(4) CAM SPANNER	10	1
	(5) HEXAGON SPANNER	2.5 3 4 5 6 8	6
	(6) SPANNER	12-14 17-29	2
	(7) "+"INITIATOR	6"	1
	(8) "—"INITIATOR	6"	1
	(9) OIL GUN		1
	(10) CENTER SLEEVE	M.T.6/4	1
	(11) CHANGE GEARS	M=1.25, Z=54, 56, 57, 60, 63, 66, 78,	7

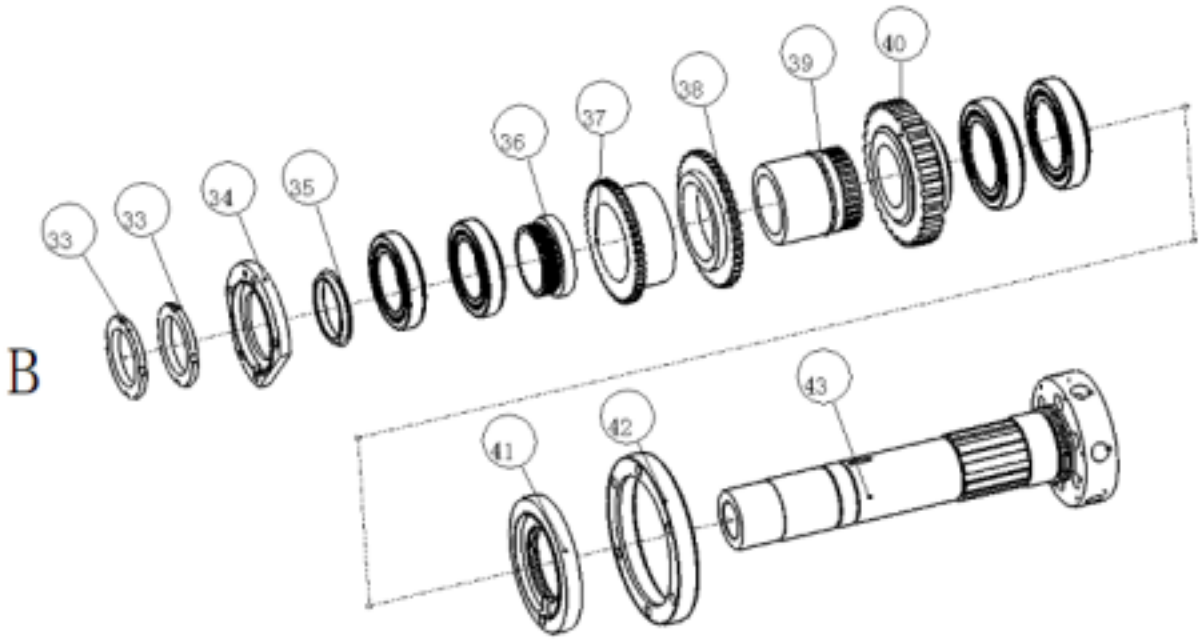
OPTIONAL ACCESSORIES

NO.	DESCRIPTION	SPECIFICATION	QTY
1	QUICK CHANGE TOOL POST PISTON TYPE	for tip height 20mm capacity tools	1
2	QUICK CHANGE TOOL POST PISTON TYPE	for tip height 25mm capacity tools	1
3	INDEXABLE CARBIDE TURNING TOOL SET-9PCS	tip height 20mm	1
4	INDEXABLE CARBIDE TURNING TOOL SET-9PCS	tip height 25mm	1
5	4-JAW SELF CENTERING CHUCK	Φ200mm with D5 adapter	1
6	4-JAW INDEPENDENT CHUCK	Φ250mm with D5 adapter	1
7	LIVE CENTER MT4#		1
8	DIGITAL READOUTS 3-AXIS SYSTEM		1

D400X1000 Head Assembly






B
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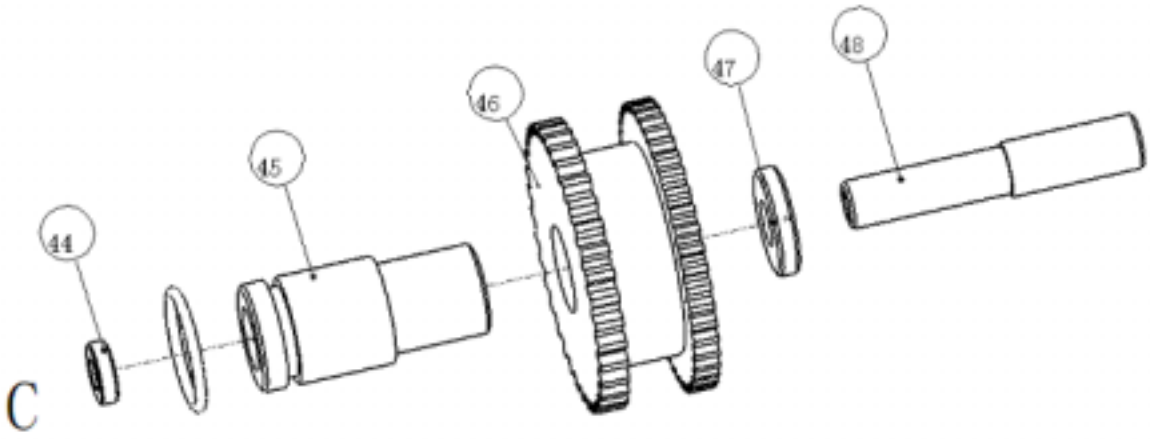
C
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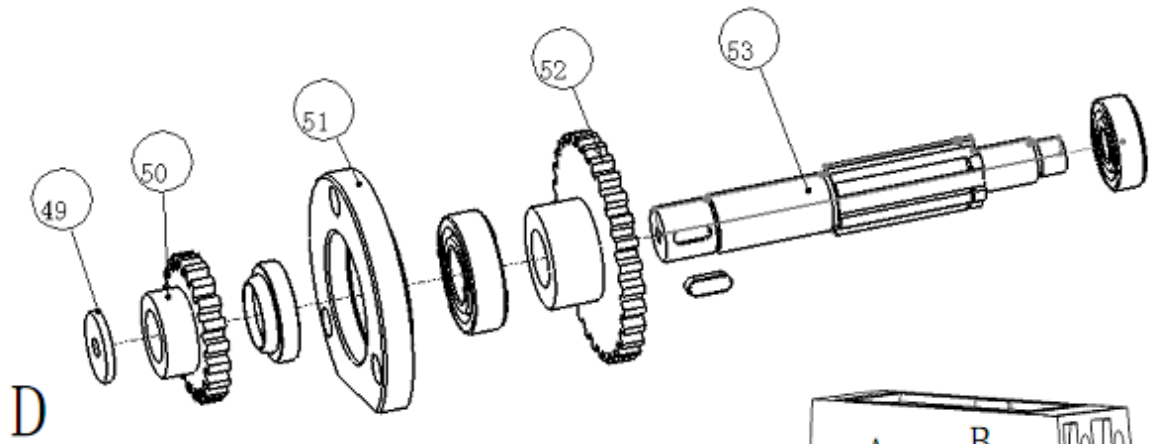
D
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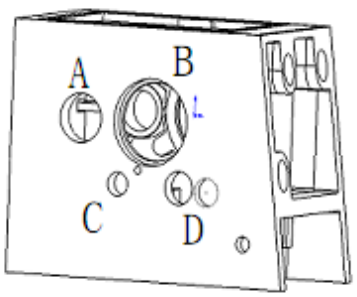
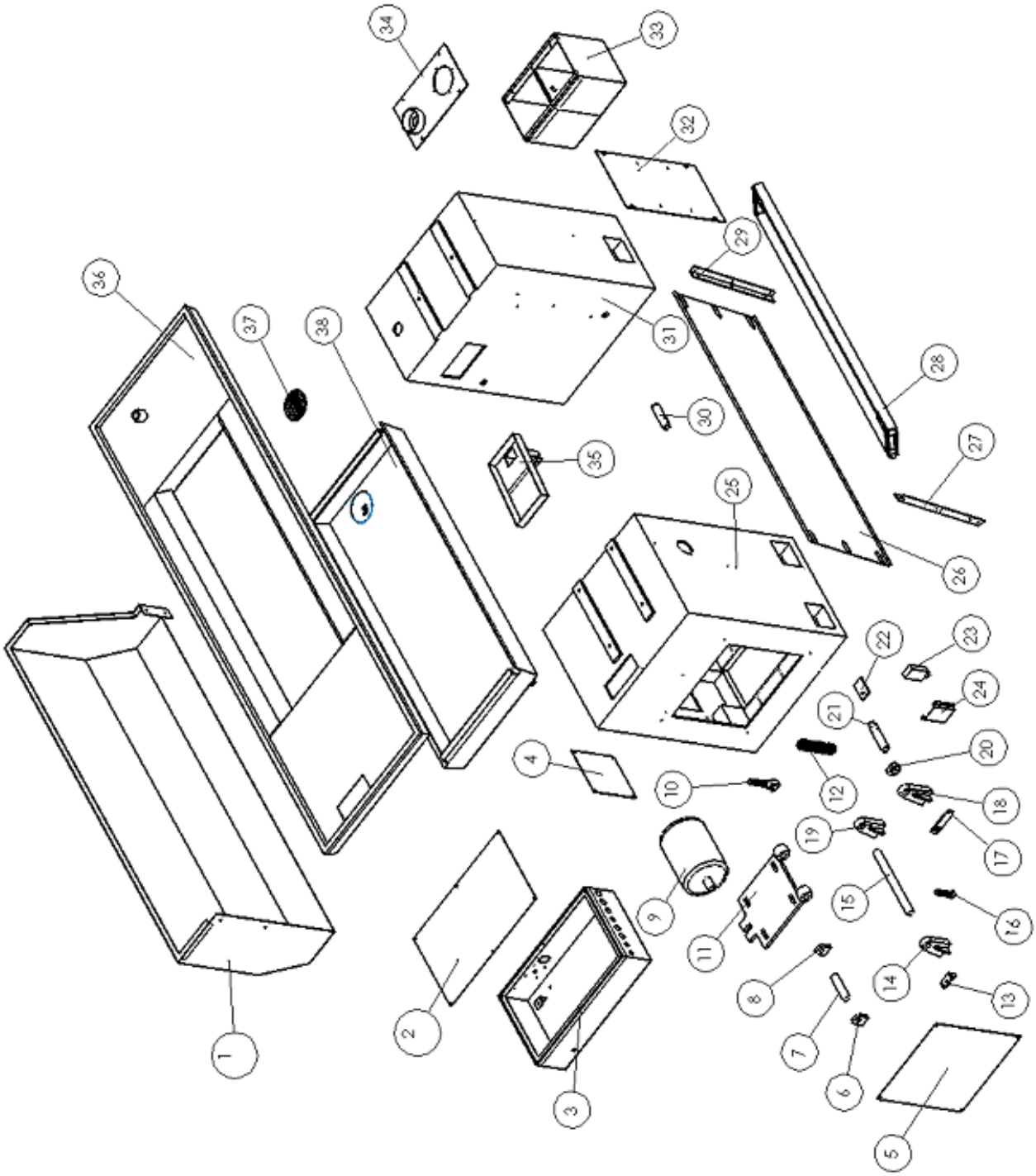

A
B
C
D

D400X1000 Head Assembly

Part no.	NAME	Specification	Qty.
1	headstock		1
2	casting cover		1
3	short shaft		1
4	length shaft		1
5	front plug		1
6	shift lever	1	1
7	Fork Arm		1
8	length shaft washer		1
9	front plug		1
10	shift fork	2	1
11	shaft		1
12	Fork Arm		1
13	big knob		1
14	bolt		1
15	handle		1
16	pin		1
17	shaft sheath		1
18	gasket		1
19	handle		1
20	oil plug		1
21	collar		1
22	spring		1
23	bolt		1
24	smallness knob		1
25	shift lever	IV	1
26	spindle pulley		1
27	flange		1
28	gear		1
29	shaft	I	1
30	gearset collar		1
31	ring	I	1
32	front plug	I	1
33	nut		1
34	gasket		1
35	seal pipe		1
36	gears		1
37	gear		1
38	gears		1
39	gearset		1
40	gear		1
41	flange		1
42	flange		1
43	splindle		1
44	shaft washer		1
45	shaft collar		1
46	gearset		1
47	shaft washer		1
48	shaft		1
49	washer		1
50	gear		1
51	flange		1
52	shaft gear		1
53	shaft		1

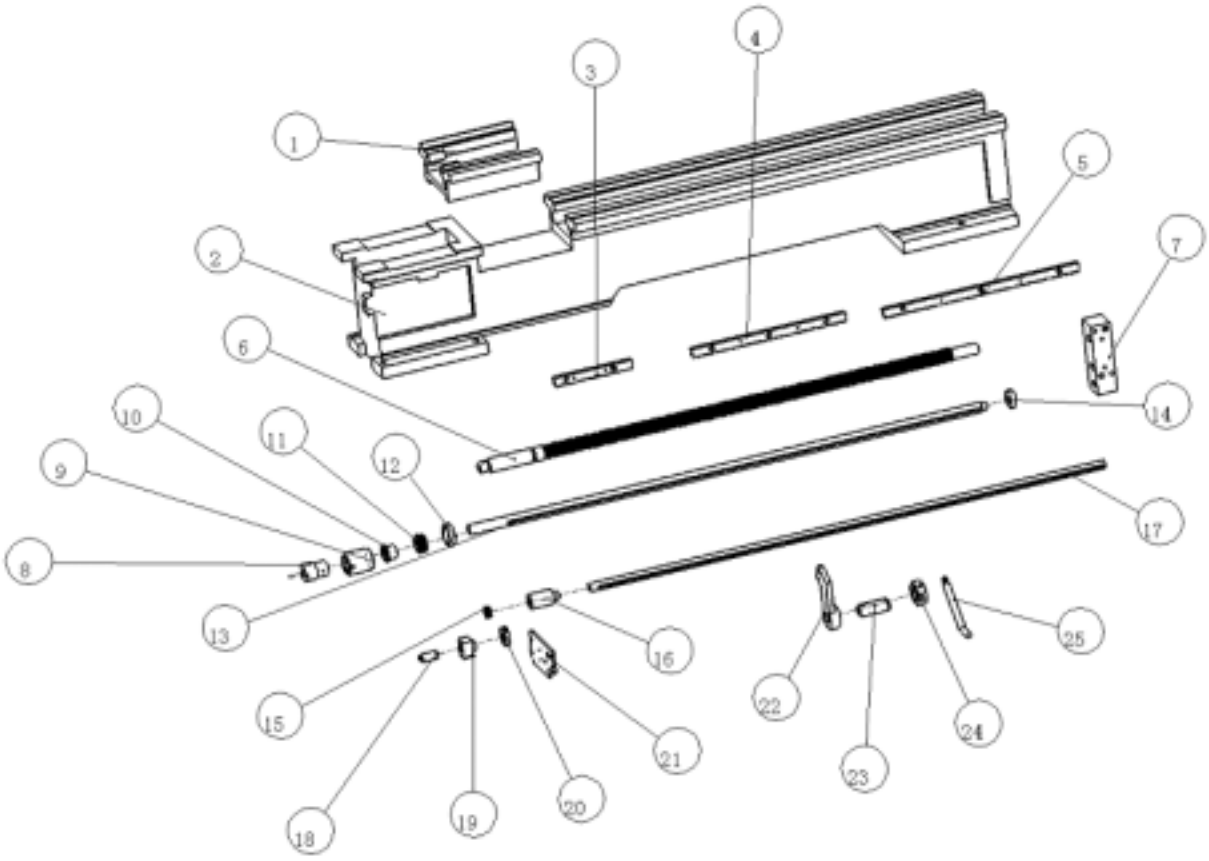
D400X1000 Cabinet Stand Assembl



D400X1000 Cabinet Stand Assembly

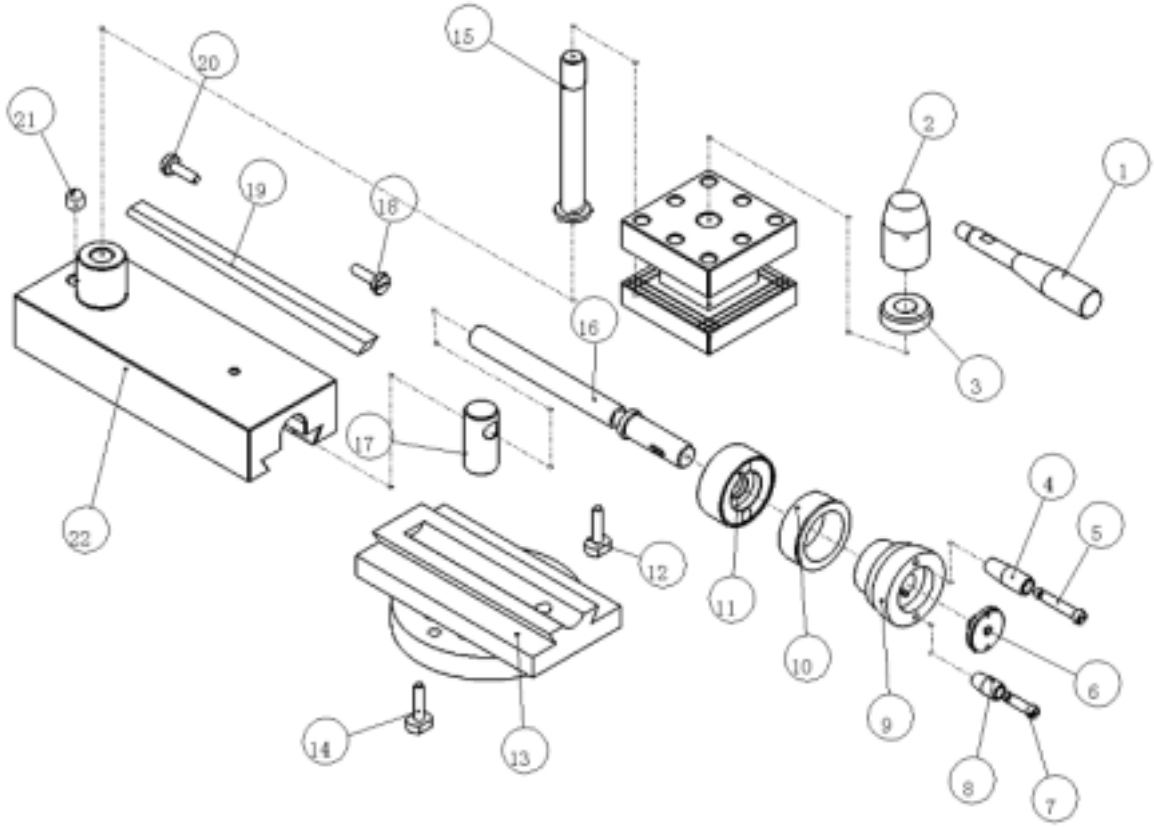
Part no.	NAME	Specification	Qty.
1	chip guard		1
2	cover		1
3	electrical box		1
4	cover		1
5	cover		1
6	gangway seatd		1
7	pin		1
8	gangway seat		1
9	motor		1
10	screw		1
11	motor trestle		1
12	spring		1
13	bump board		1
14	jointing kickstand		1
15	gemel shaft		1
16	bump post		1
17	drawbar		1
18	jointing kickstand		1
19	jointing kickstand		1
20	cam		1
21	left footplate shaft		1
22	calipers board		1
23	switch board		1
24	journey switch washer		1
25	front stand		1
26	back plate		1
27	left bracket		1
28	stand footplate		1
29	right bracket		1
30	right footplate shaft		1
31	back stand		1
32	back stand cover		1
33	water tank		1
34	water tank cover		1
35	funnel		1
36	oil pan		1
37	drawer strainer		1
38	drawer		1

D400X1000 bed way and rack Assembly



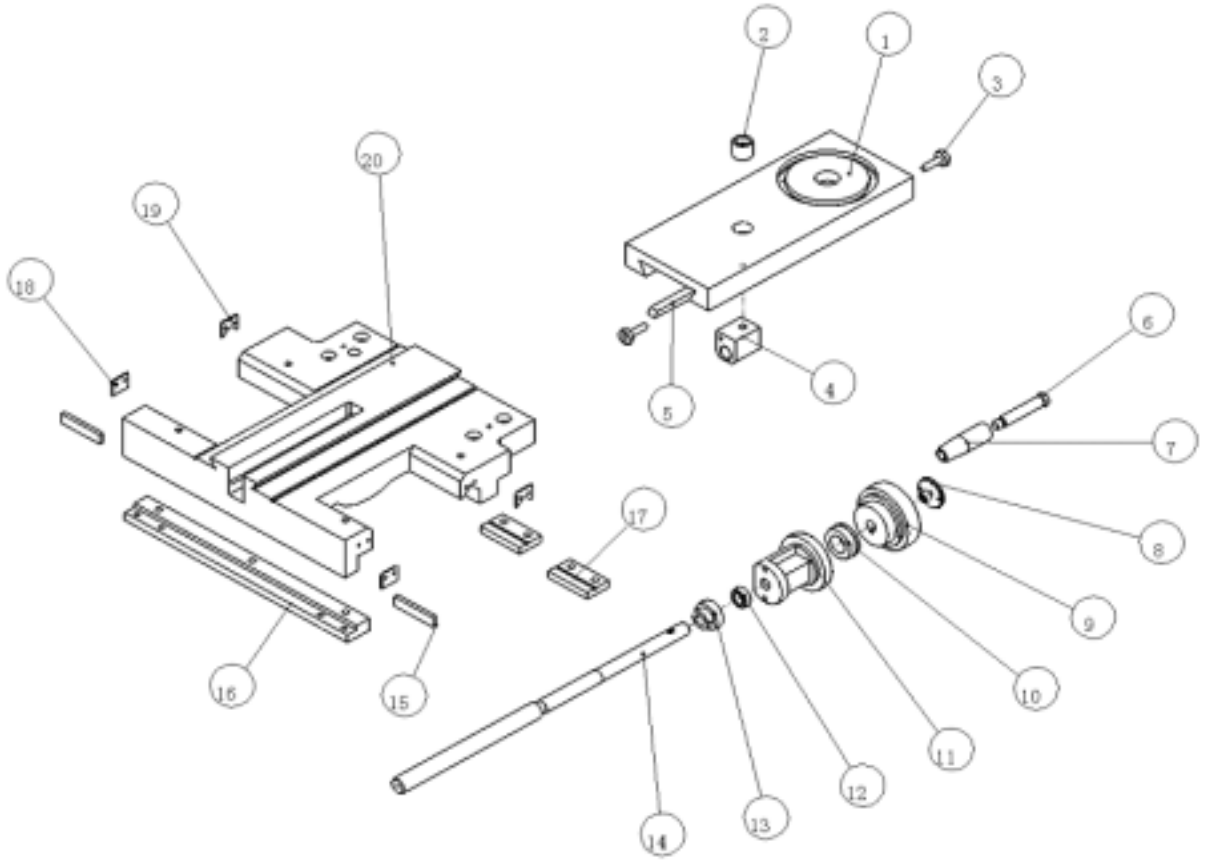
Part no.	NAME	Specification	Qty.
1	bed gap		1
2	bed		1
3	rack gear		1
4	rack gear		1
5	rack gear		1
6	guide screw		1
7	bracket		1
8	connect bushing		1
9	clutch cover		1
10	combine cover		1
11	spring		1
12	nut		1
13	rod		1
14	bushing		1
15	cam		1
16	connect bushing		1
17	feed rod		1
18	shaft		1
19	switch seatd		1
20	on-off		1
21	cover		1
22	bracket		1
23	steer bushing		1
24	steer loop		1
25	steer handle		1

D400X1000 tool post Assembly



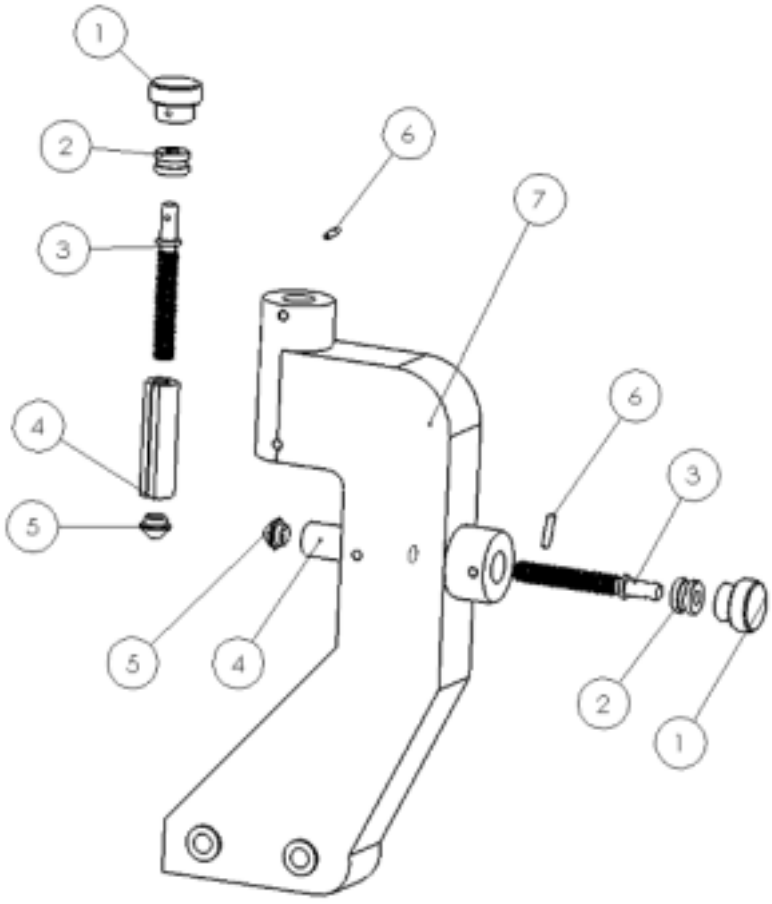
Part no.	NAME	Specification	Qty.
1	handle		1
2	handle base		1
3	collar		1
4	lever		1
5	handle		1
6	washer		1
7	handle		1
8	lever		1
9	hand wheel		1
10	index ring		1
11	bracket		1
12	screw		1
13	swivel base		1
14	screw		1
15	shaft		1
16	guide screw		1
17	nut		1
18	screw		1
19	gib		1
20	screw		1
21	ratch		1
22	top slide		1

D400X1000 Saddle Assembly



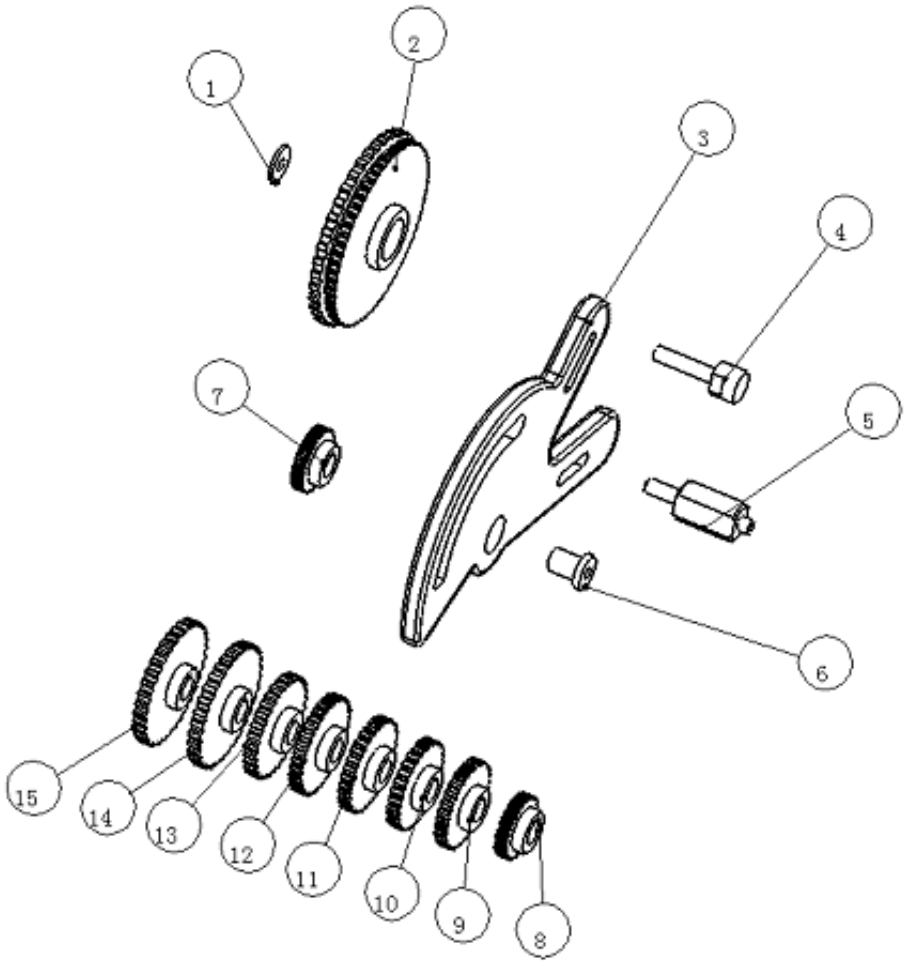
Part no.	NAME	Specification	Qty.
1	cross slide		1
2	bushing		1
3	screw		1
4	nut		1
5	gib		1
6	handle		1
7	handle knot		1
8	washer		1
9	hand wheel		1
10	index ring		1
11	bracket		1
12	washer		1
13	gears		1
14	guide screw		1
15	redressal plate		1
16	back press plate		1
17	front press plate		1
18	wiper		1
19	wiper		1
20	saddle		1

D400X1000 follow rest Assembly



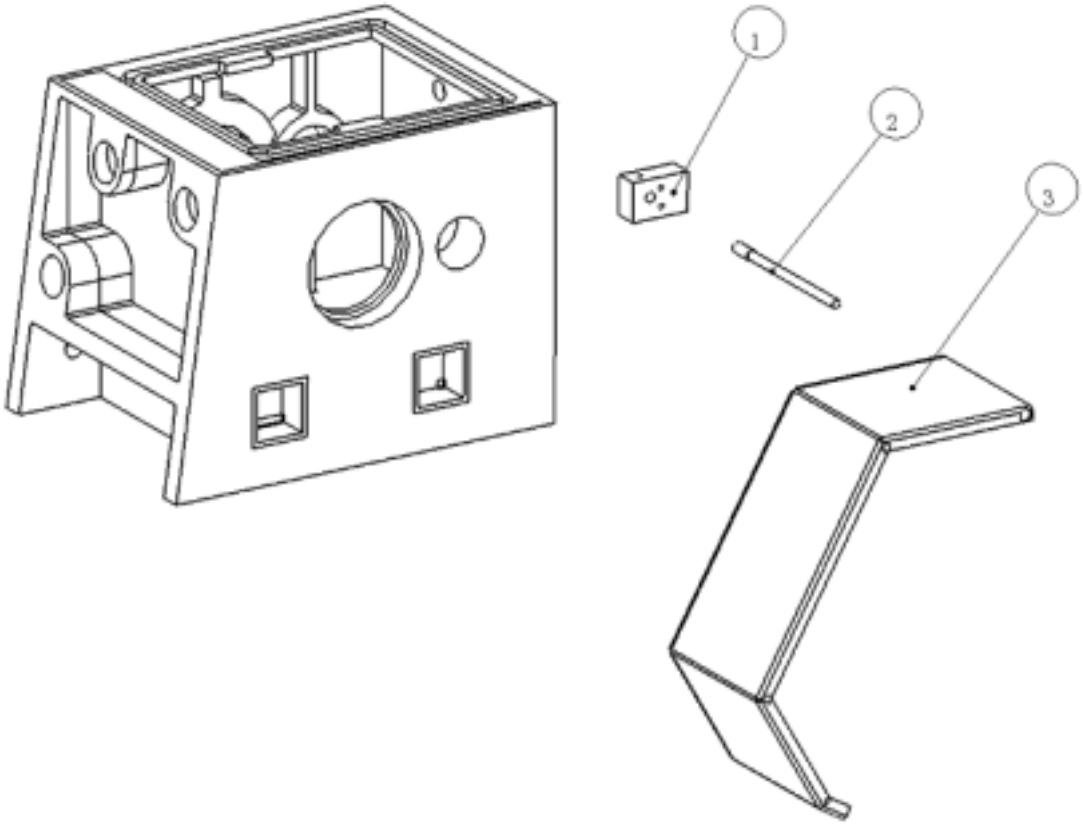
Part no.	NAME	Specification	Qty.
1	bakelite knob		1
2	collar		1
3	guide screw		1
4	pressing collar		1
5	pressing base		1
6	column pin		1
7	body		1

D400X1000 change gear Assembly



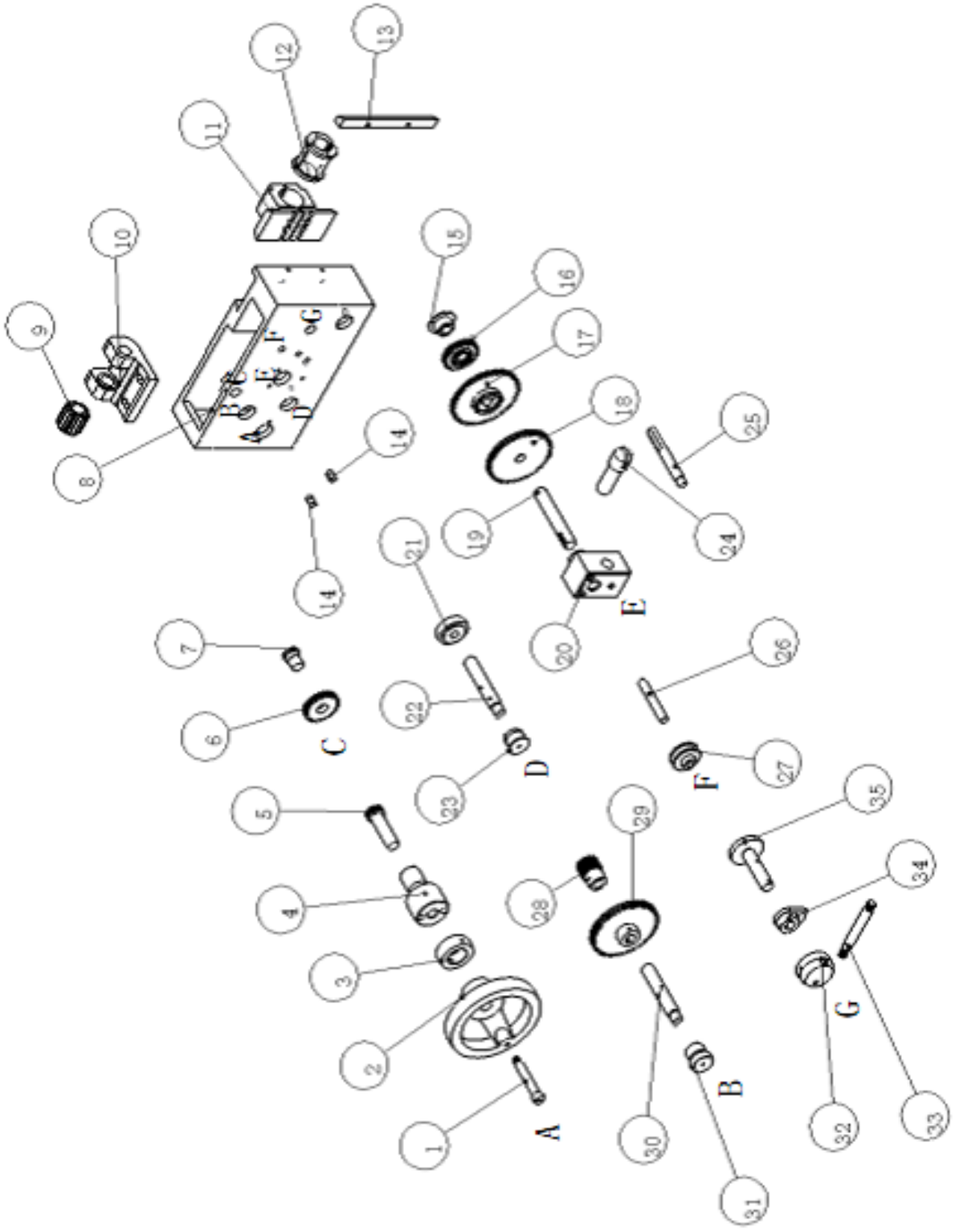
Part no.	NAME	Specification	Qty.
1	washer		1
2	gear	M1.25 Z120/Z127	1
3	bracket		1
4	shaft		1
5	screw		1
6	collar		1
7	change gear	Z40	1
8	change gear	Z54	1
9	change gear	Z56	1
10	change gear	Z57	1
11	change gear	Z60	1
12	change gear	Z63	1
13	change gear	Z66	1
14	change gear	Z78	1
15	change gear	Z80	1

D400X1000 Stead Assembly



Part no.	NAME	Specification	Qty.
1	chuck cover		1
2	shaft		1
3	switch box		1

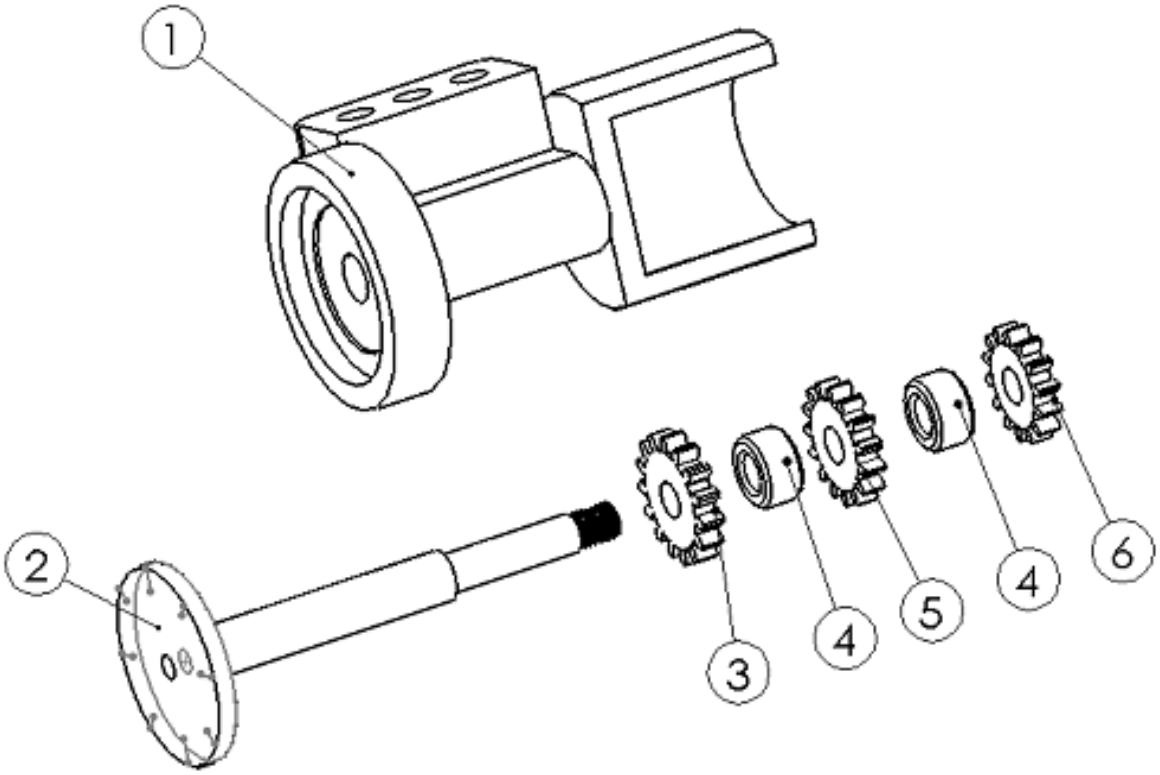
D400X1000 Apron Assembly



D400X1000 Apron Assembly

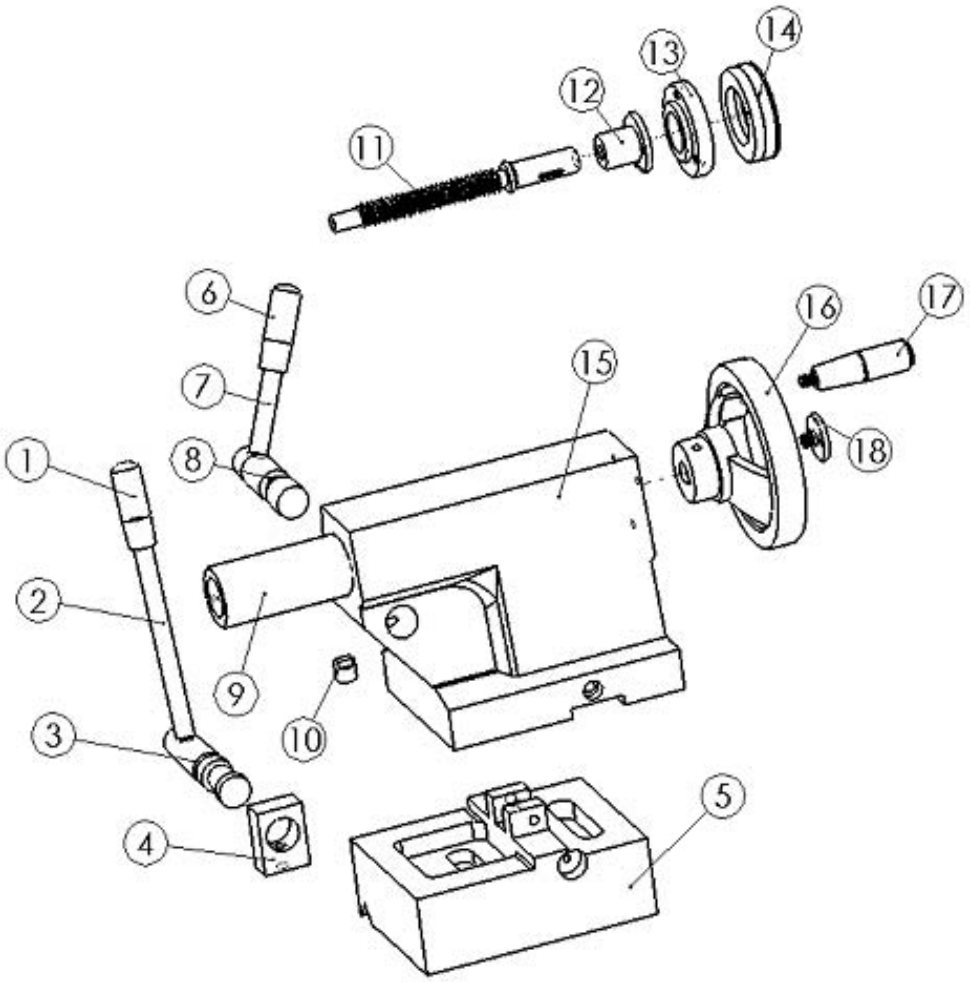
Part no.	NAME	Specification	Qty.
1	handle		1
2	hand wheel		1
3	index ring		1
4	bracket		1
5	gear shaft		1
6	gear	M2/Z25	1
7	shaft		1
8	apron case		1
9	worm		1
10	worm amelia		1
11	nut seat		1
12	half nut		1
13	gib		1
14	keep off		1
15	bushing		1
16	gear	M2/Z25	1
17	big gear	M2/Z52	1
18	gear	M2/Z48	1
19	shaft		1
20	boss		1
21	bushing		1
22	shaft	1	1
23	bushing		1
24	gear shift lever		1
25	handle		1
26	shaft	2	1
27	safety shifter		1
28	gear	M2／Z14	1
29	big gear	M2/Z50	1
30	shaft	3	1
31	bushing		1
32	handle wheel		1
33	handle		1
34	cam		1
35	wheel shaft		1

D400X1000 Chasing Dial



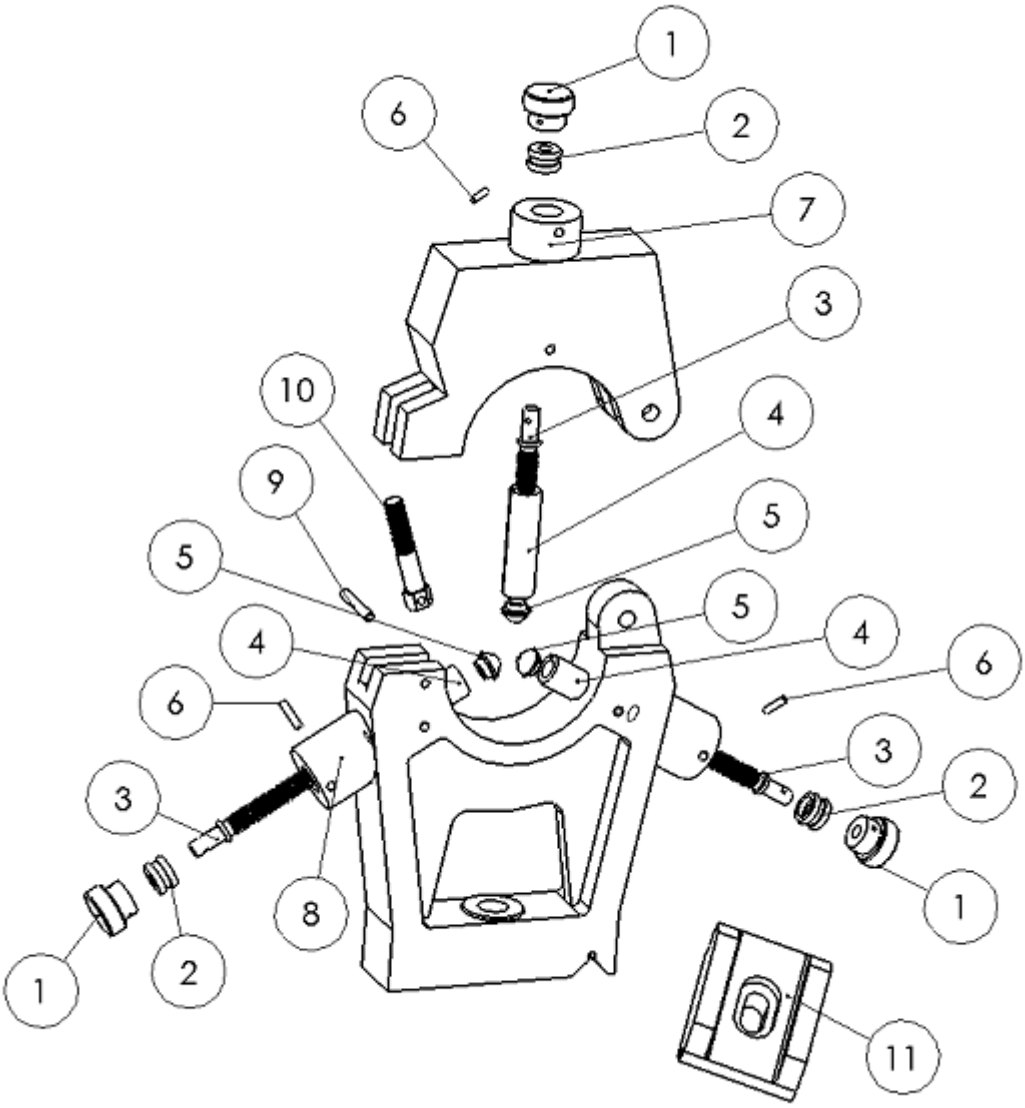
Part no.	NAME	Specification	Qty.
1	housing		1
2	thread dial		1
3	gear	Z16	1
4	washer		1
5	gear	Z15	1
6	gear	Z14	1

D400X1000 tail stock Assembly



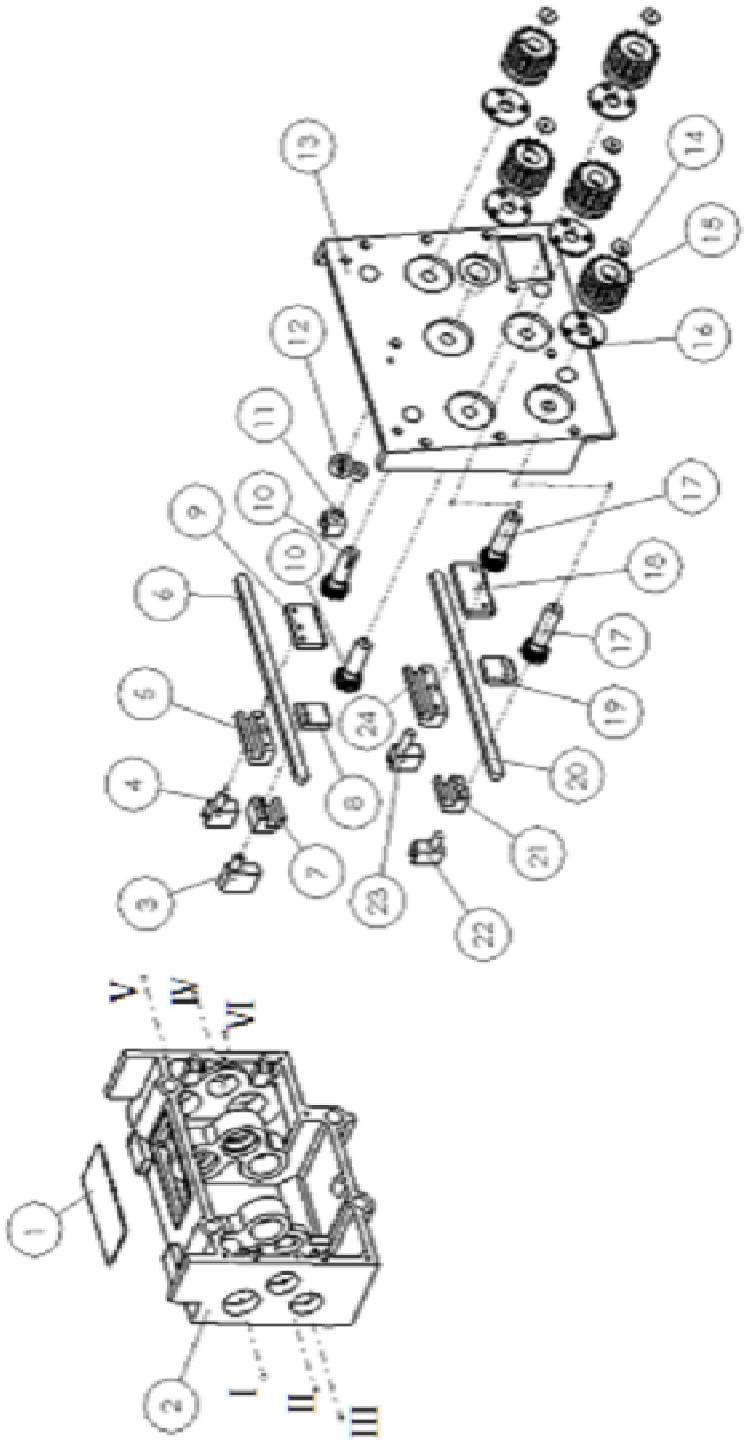
Part no.	NAME	Specification	Qty.
1	handle		1
2	screw		1
3	shaft		1
4	press ring plate		1
5	base		1
6	handle	2	1
7	screw	2	1
8	shaft	2	1
9	sleeve		1
10	guide pin		1
11	guide screw		1
12	pressing collar		1
13	flange		1
14	index ring		1
15	tall stock body		1
16	handwheel		1
17	handwheel knot		1
18	insurance screw		1

D400X1000 Steady rest Assembly



Part no.	NAME	Specification	Qty.
1	bakelite handle		1
2	collar		1
3	pressing lever		1
4	pressing collar		1
5	pressing base		1
6	pin		1
7	top body		1
8	base body		1
9	pin		1
10	locking screw		1
11	pressing plate		1

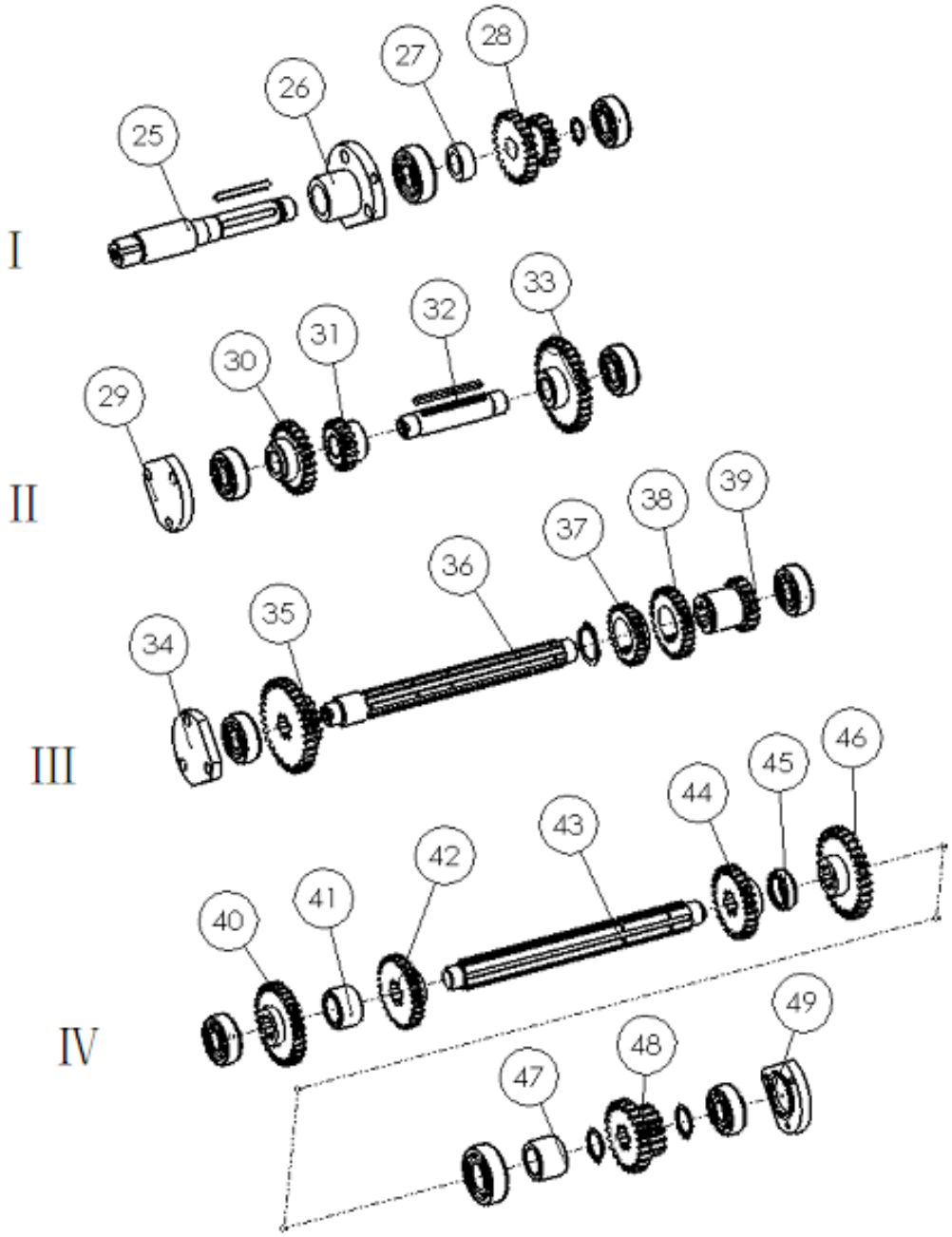
D400X1000 feed box Assembl



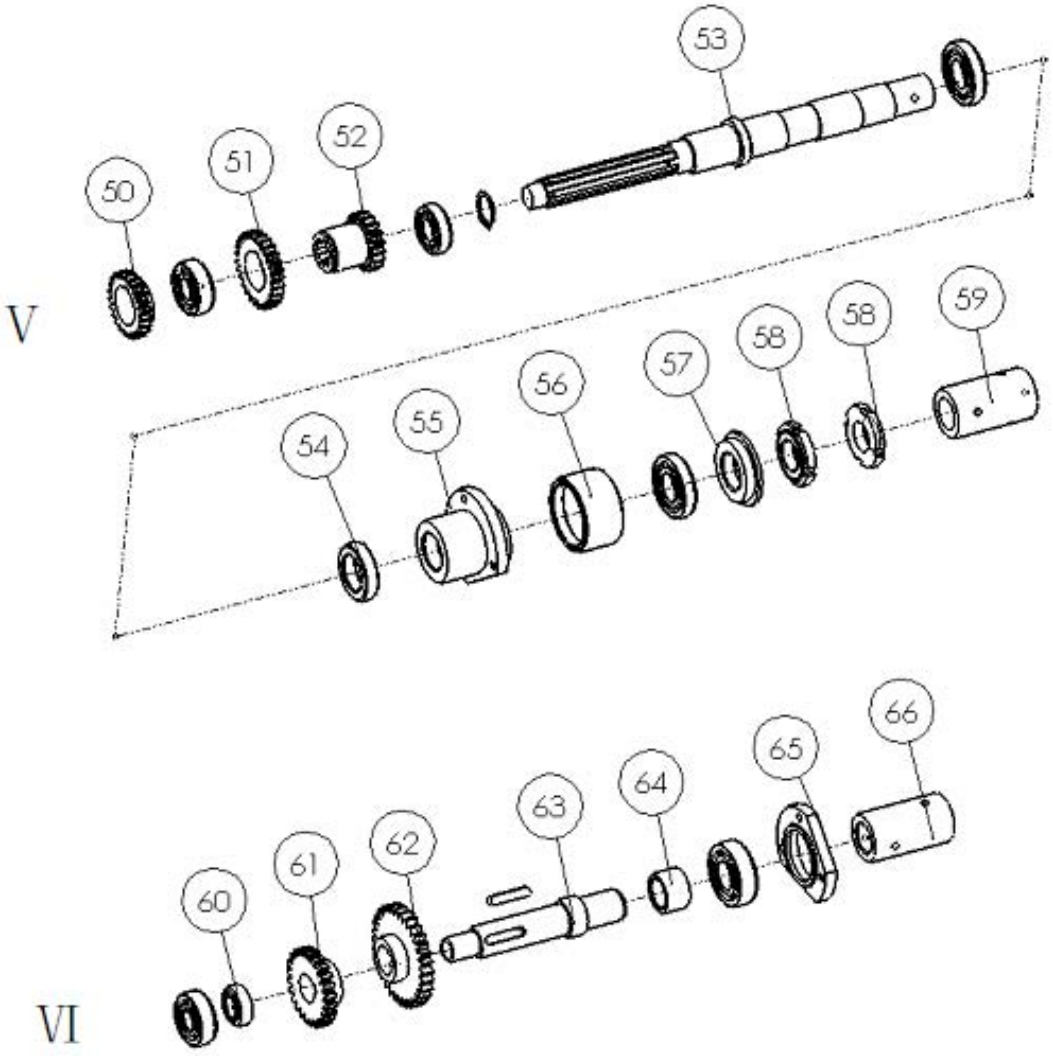
D400X1000 feed box Assembly

Part no.	NAME	Specification	Qty.
1	oil cover		1
2	gear box		1
3	shift fork	1#	1
4	shift fork	2#	1
5	slide dollop	2#	1
6	guide pole		1
7	slide dollop	1#	1
8	gear rack	1#	1
9	gear rack	2#	1
10	gear shaft		1
11	shift lever		1
12	fork arm		1
13	gear box cover		1
14	washer		1
15	knob		1
16	flange		1
17	gear shaft		11
18	gear rack	4#	1
19	gear rack	3#	1
20	guide pole		1
21	slide dollop	3#	1
22	shift fork	3#	1
23	shift fork	4#	1
24	slide dollop	4#	1

D400X1000 feed box Assembly



D400X1000 feed box Assembly



D400X1000 feed box Assembly

Part no.	NAME	Specification	Qty.
25	input shaft	I	
26	flange	I	
27	collapsible	I	
28	gear	I	
29	bearing cover		
30	gear	II 1	
31	gear	II 2	
32	shaft	II	
33	gear	II 3	
34	bearing cover		
35	gear	III 1	
36	shaft	III	
37	gear	III 4	
38	gear	III 3	
39	gear	III 2	
40	gear	IV 1	
41	washer	IV 2	
42	gear	IV 3	
43	shaft	IV	
44	gear	IV 4	
45	washer	2	
46	gear	IV 5	
47	washer	3	
48	gearset	IV 8	
49	bearing cover		
50	gear	III 4	
51	gear	III 3	
52	gear	III 2	
53	shaft	V	
54	washer	V 1	
55	separator	V	
56	dustproof loop	V 2	
57	washer	V 3	
58	round nut	V 4	
59	collar	V 5	
60	washer	VI 1	
61	gear	VI 2	
62	gearset	VI 3	
63	shaft	VI	
64	spacing loop	VI 4	
65	bearing cover		
66	collar	VI	