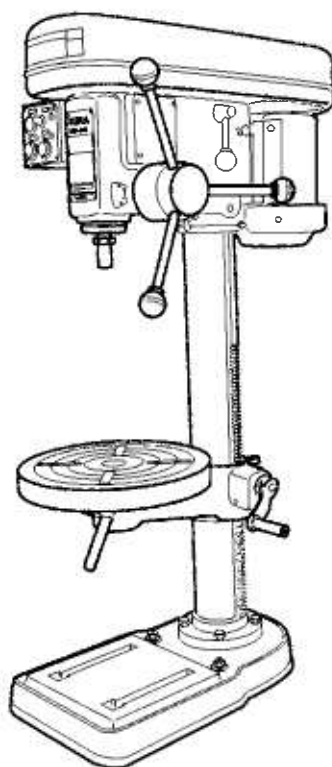


KIRA

Tapping & Drilling Machine KRT-340 INSTRUCTION MANUAL



▲ CAUTION



- ◆ *This instruction manual includes important information for using the KRT-340 properly and safely.
Be sure to read and understand this document before using the Tapping & Drilling machine.*

KIRA CORPORATION




DOC1-3C-EOM10-4

PREFACE

Thank you for purchasing the Model KRT-340 KIRA Tapping & Drilling Machine. This instruction manual uses a number of illustrations to help your understanding. Be sure to read and understand the instruction manual before starting the KRT-340 operations. Place the manual in a location where it can be accessed whenever necessary.

SIGNAL WORDS

The signal words as used in this instruction manual and on the KRT-340 represent the following three levels of hazards:







 DANGER	<p>◆ Indicates an imminently hazardous situation which, if not a voided, will result in death or serious injury.</p>
 WARNING	<p>◆ Indicates a potentially hazardous situation which, if not avoided, could result in death or serious Injury.</p>
 CAUTION	<p>◆ Indicates a potentially hazardous situation which, if not avoided, many result in minor or moderate injury, or property damage to the equipment.</p>







NOTE

Indicates something that must be considered in handling the equipment.

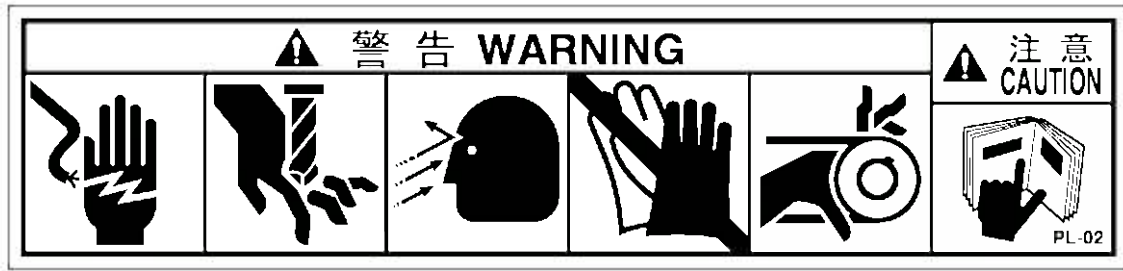
ICONS

This instruction manual uses the following icons to raise your attention:

Caution (including Danger and Warning)		Electric shock
		Injured by spindle or tool
		Flied out
		Caught in rotating part
		Fire
		Get caught in belt

Caution		Other general cautions
		Do not contact or access
Prohibition		Do not disassemble
		Do not wear gloves
Compulsion		Refer to instruction manual
		Ground

DESCRIPTION OF SIGNAL-WORD LABELS



[Risk of electrical shock]

High voltage runs in the electric control cabinet. Getting an electric shock may result in death.

Therefore, before opening the door on the electric control cabinet, be sure to shut off the main power.



[Warning of electrical shock label]

There might be had an electric shock because high voltage runs in the electric control cabinet if the control panel is opened carelessly or is attached with a wet hand.

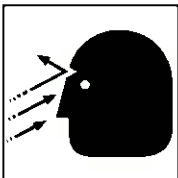
Don't open or remove the portion which is attached this label.



[Risk of injured by spindle]

The spindle has a sharp cutter that rotates at a high speed. Touching the spindle during its rotation results in serious injury like severing. Therefore, do not put your hand or foot close to the rotating spindle.

Even if the spindle stops, do not touch it with a bare hand.



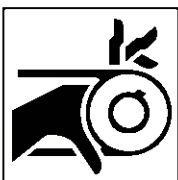
[Risk of eye injury]

"Chips / cutting oil / broken tools" are scattered during processing. There is a chance to injuring eyes or face. The protection glasses must be worn while operating machine.



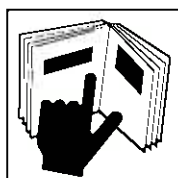
[Must not wear gloves while operating machine]

There is a chance to be injured by the rotating objects of machine pulls or rolls up the glove.



[Must not operating machine without covers]

There is a chance the rotating belt catches fingers or hands, if operate machine with opening cover etc. If the fingers or the hands are stuck in the belt, stop the machine immediately and turn off the main power. Then rotate the belt by hand in order to release the stuck fingers or hands. Turn off main power when open cover etc.



[Be sure to read and understand the contents of this manual before operating]

Improper operations may cause unexpected accidents or machine malfunctions. If the Instruction Manual is lost, please contact your dealer for purchasing new one.

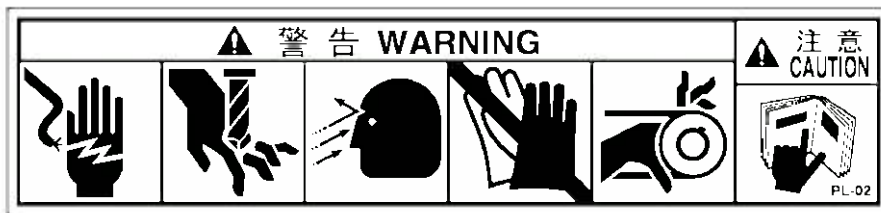
LOCATIONS FOR STICKING SIGNAL-WORD LABELS

⚠ DANGER

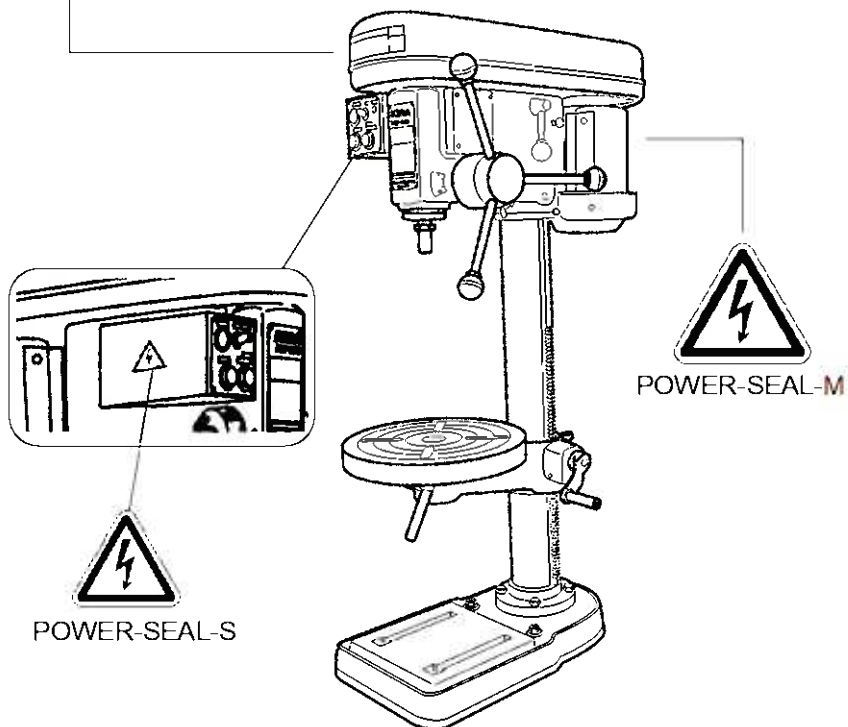
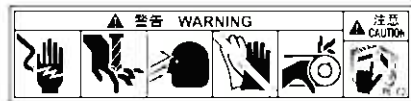
◆ Do not use the equipment when any of its signal-word labels is partially or totally broken, peeled off, or has a faded color. This may result in serious damage.

- * Two different kinds of warning label is stuck on the equipment.
- * If the warning label is broken, peeled, or discolored, contact your dealer with its label number.

LABEL No. : PL-02



【Model】 KRT-340



SAFETY PRECAUTIONS

⚠ DANGER



- ◆ The main power must be shut down, before opening the door on the electric control cabinet.
- ◆ Do not operate switches by a wet hands.

⚠ WARNING



- ◆ Do not touch the spindle or chips during the operation. Especially the cutter is very sharp. Do not touch it, even if the spindle is not rotating.



- ◆ Do not approach all fours to belt while rotating, may be caught in the belt.
- ◆ Do not operate machine with opening cover etc.
- ◆ Be careful not to punch hand between pulley and belt while belt changing operation.
- ◆ Turn off main power when open cover etc.



- ◆ Do not wear the gloves during operation. Your gloves and hands may get stuck in the rotating part of the machine.



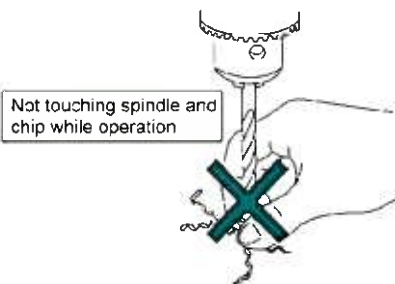
- ◆ The KRT-340 may suddenly start moving after it temporarily stops during the operation. Therefore, do not access the equipment without verifying its present state.



- ◆ If cutting oil attaches to your working wear, clean it off because it may catch fire.
- ◆ Exercise care in handling cutting oil. For example, in order to prevent fire occurring with cutting oil, do not use water-insoluble cutting oil when carrying out operation. If the floor is made of wood, use sufficient care for fire because it is liable to catch fire. And please confirm the location of fire extinguisher before operation start.

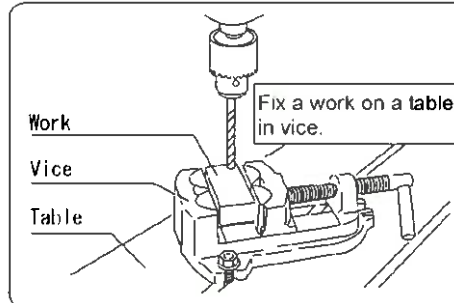


- ◆ To remove chip stuck on a tool, stop the spindle; checking that its rotation has completely stopped; and then brush off the chip while wearing protective glasses, and please do not touch cutting chips barehanded.



▲ WARNING

- ◆ Be sure to fix the workpiece to the table using a vise, etc.
If machining is carried out without fixing the workpiece, it would be rotated or lifted up to cause very dangerous situation.



- ◆ Please be careful to the handling of a work. Letting it fall on your foot will result in a bone fracture or a similar injury.



- ◆ Be sure to ground the equipment.
But, do not connect the grounding to the gas pipe and steel frame which have insufficient grounding.



- ◆ Be sure to connect the wire of power to the power supply in which a leakage breaker is set.
- ◆ Do not install the drilling machine outdoors, in the location where is much moisture, where is splashed by water, or where is exposed to direct sunlight.
- ◆ Do not use the machine in the location where is flammable liquid or gas.



- ◆ Confirm the position of button to stop spindle rotation immediately.
- ◆ Stop the machine and shut off the power before "Maintenance & inspection" or "Changing tool, cutter or fixture".
If any hazardous situation may be predicted, also shut off the power.
- ◆ Set up the caution plate in a conspicuous place around the service panel and the control box while working in order to prevent somebody turns on the power suddenly.



- ◆ Install the tooling and the cutter firmly to the normal position by appropriate procedures. Loosely or too much tighten is dangerous. Follow the procedures mentioned in manual.



- ◆ Before turning ON the power, check that the maintenance tools such as chuck handle, wrench, center drift etc. have been removed.

▲ CAUTION



- ◆ Be sure to follow the instructions given in this document, including the operation guidelines.
- ◆ Do not use the KRT-340 for any purpose other than specified in manuals.
- ◆ Do not use the machine over cutting capacity.
- ◆ This model is vertical type, and install to strong working table etc to prevent overturning.



- ◆ Do not carry out disassembling or modifying by yourself.
- ◆ Use the KRT-340 at the specified frequency and voltage.



- ◆ Check no damage on covers and other parts before operation.
- ◆ Clean up the machine and wipe up the cutting oil around the machine after operations. Then add the lubrication oil to the designated points.
- ◆ Perform maintenance / inspection regularly.



- ◆ Making operations with wearing appropriate clothes, safety shoes, safety glasses and other protective equipment.

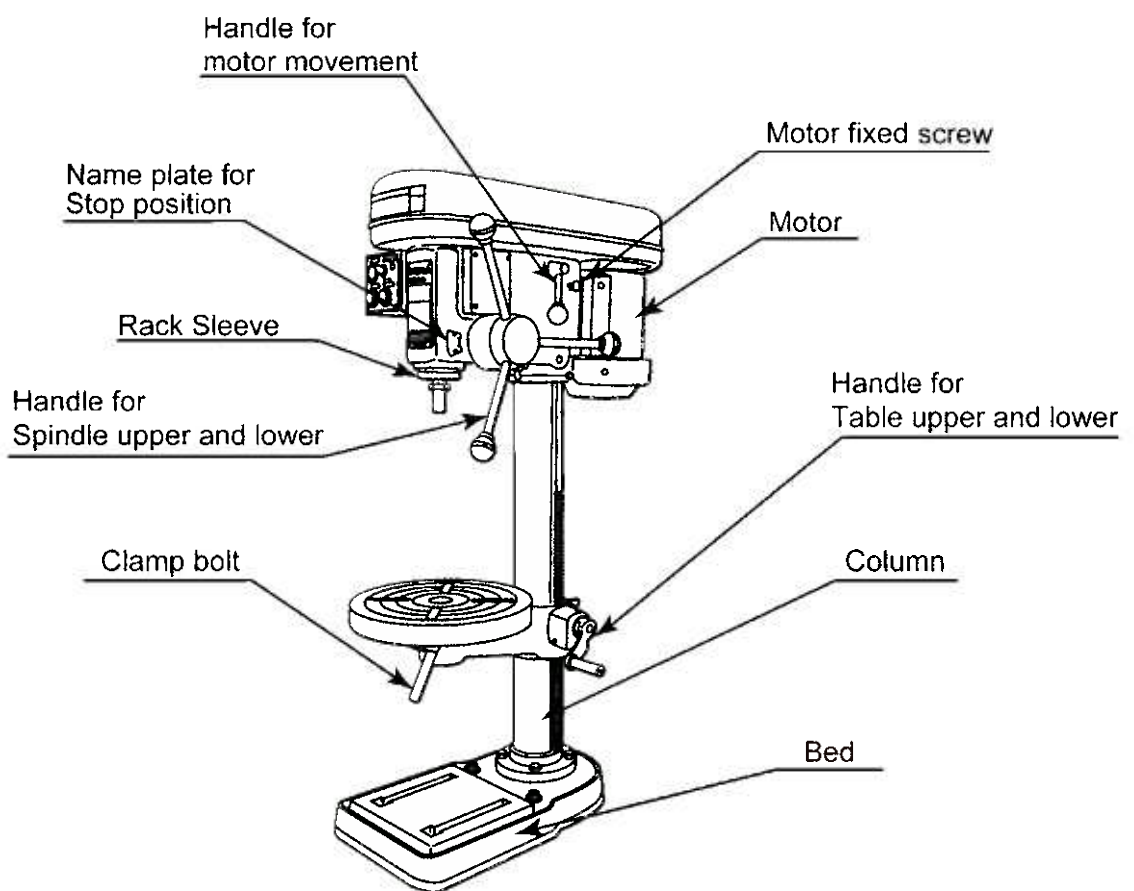
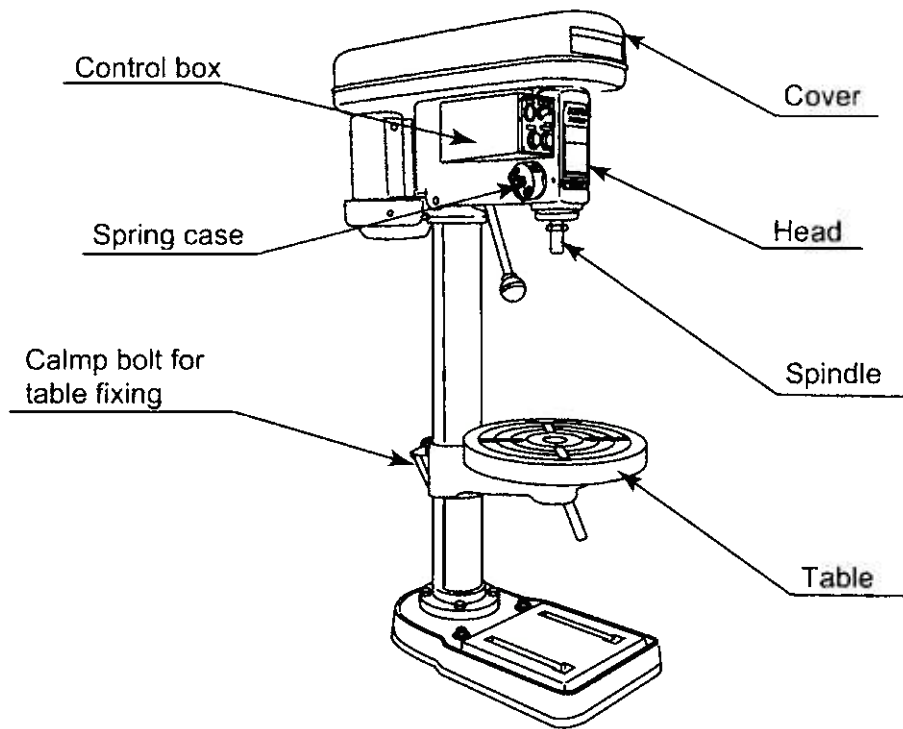


- ◆ Do not operate the machine other than the person in charge of operation.
- ◆ Do not make uncertain operation or procedure.
- ◆ Do not place something not related to operations on the machine or around it.
- ◆ Shut off the power in case of power failure.
- ◆ Shut off the power while the machine is out of use.
- ◆ If the spindle crashes on the workpiece, stop the operation immediately. Then contact your dealer or KIRA Corporation for asking recovery procedures.
- ◆ If you found any abnormal condition on the machine, stop the operation immediately. Then contact your dealer or KIRA Corporation.

- CONTENTS -

PREFACE	1
SIGNAL WORDS	1
ICONS	1
DESCRIPTION OF SIGNAL-WORD LABELS	2
LOCATIONS FOR STICKING	
SIGNAL-WORD LABELS	3
SAFETY PRECAUTIONS	4
CONTENTS	7
1. NAMES OF VARIOUS PARTS	8
2. SPECIFICATIONS	9
3. USE APPLICATION	9
4. PREPARATIONS FOR OPERATION	9
5. CHECKS BEFORE OPERATION	10
6. MACHINE OPERATION PROCEDURE	10
7. TAPPING OPERATION	13
8. DRILLING OPERATION	14
9. CAUTION FOR MULTI SPINDLE	
ATTACHMENT INSTRUCTION	14
10. ELECTRICAL CIRCUIT DIAGRAM	16
11. DIMENSION	17
12. CUTTING DATA	19
13. PARTS LIST	20
14. DISPOSAL AND RESELLING	24
15. WARRANTY	25

1. NAMES OF VARIOUS PARTS



※A number of a name of each part please refer to parts list.

2. SPECIFICATIONS

Unit : mm

Model		KRT-340	
Swing		330	
Tapping capacity	S45C	M4~10	
	FC200	M4~12	
Drilling capacity	S45C	3~11	
	FC200	3~13	
Max. distance spindle to Table		Round table	468
		Square table	498
Max. distance spindle to base		628	
Up-and-down motion of spindle	Drilling	80	
	Tapping	75	
Spindle taper		JT6	
Size of a table		Round table φ285	Square table □234
Spindle Speed(min ⁻¹)	50Hz	280,380,580,1200,1400,2100	
	60Hz	320,450,700,1400,1700,2500	
Power supply		Three phase 200V 50/60Hz	
Drive motor		0.4kW 4P (Totally enclosed type)	
Power code		4 cores cab tire code 2m/1pce(with an earth wire)	
Type of V-Belt		A-27,A-24	
Machine total height		1030	
Net weight(kg)		80	
Dimension of base		268×464	
Accessories		φ5 Round bar 2	

3. USE APPLICATION

Drilling and Tapping of various materials, S45C(steel),FC200(Cast iron), etc.

4. PREPARATIONS FOR OPERATION

(1) Installation

Install the machine on the smooth top working table which is reserved enough space for making inspection and maintenance.

(2) Power supply

Power supply voltage is the three phase 200V. Confirm the capacity and the voltage on the specification plate of motor.

(3) Wiping off rust prevention paint.

Wiping off the rust prevention paint of bed, table and column.

(4) Refilling of lubrication oil

Refill the lubricating oil to the following points.

Lubrication point	Method	Quantity of oil	Brand name	Cycle
Rack sleeve (Fig.-2)	Manually	3~4drops	Shell Tonna Oil S68	once / 1day
Other sliding and rotating part	Manually	2~3drops	Shell Tonna Oil S68	sometimes

*Application oil is listed Shell brand. If you use other brand oil, please use equivalent oil as the above table.

5. CHECK BEFORE OPERATION

(1) Confirmation of a power supply

Three phase / 200V is the specification of this machine.

Please check your power supply, again.

(2) Connection of a power supply

Connect the power supply to the four-core cap tire cord with 2m length to the control box. Please note that the green wire is the grounding (earth, E) wire. The power indicator lamp lights up when the power is turned on.

Set the DRILL/TAP select switch to the DRILL position and push the SPINDLE start push button switch to rotate the spindle.

The connection is correct if the spindle rotates in the drilling direction (forward rotation). If it rotates in the opposite direction, replace the connection of two of the three power wires and ensure that it is rotation in the forward direction.

⚠ CAUTION

- ◆ Make sure turn off the power supply breaker before connecting the power cable.
- ◆ 2m length 4 cores cap tire code is prepared.
Please connect the power cable to the breaker.
- ◆ Please connect an earthed line (green) to ground by all means.
- ◆ Please connect power cable to the place where the earth leakage breaker is prepared.

6. MACHINE OPERATION PROCEDURE

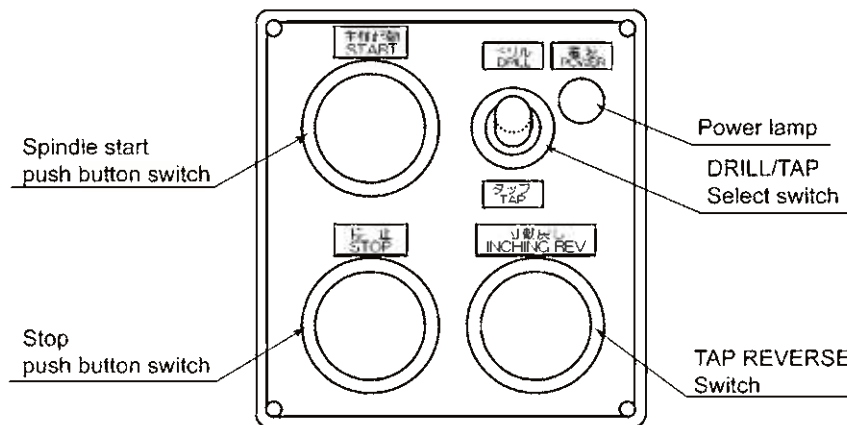


Fig.-1 Switch panel

(1) Running

The machine can run or stop by the operation switch panel, Fig-1, located on the left side of the machine. When the DRILL/TAP switch is selected to the DRILL position and the START pushbutton switch is pressed, the spindle rotates clockwise direction with view from top of the machine, and drilling can be started. When the DRILL/TAP switch is selected to the TAP position and the START pushbutton switch is pressed, the spindle also rotates clockwise direction same as DRILL position. From this condition, pushing in the INCHING pushbutton switch changes the rotation to reverse direction, and releasing it returns the rotation to the forward direction. Press the STOP pushbutton switch to stop the spindle rotation.

(2) Spindle speed shifting

The spindle speed can be changed by changing belt position as indicated on the name plate on the front of the machine. Changing the belt position is easy: loosen the motor fixed screw (One each on the left and right) shown in Fig.-2 and move the motor handle for motor movement toward the left to loosen the belt.

After changing the belt position, please move the handle toward the right to tighten, and tighten the motor fixed screw (each side).

This model uses middle pulley to shift 6 different spindle speeds as the name plate. If you need other spindle speed, please arrange belt and pulley without center pulley as the following "Table-1"

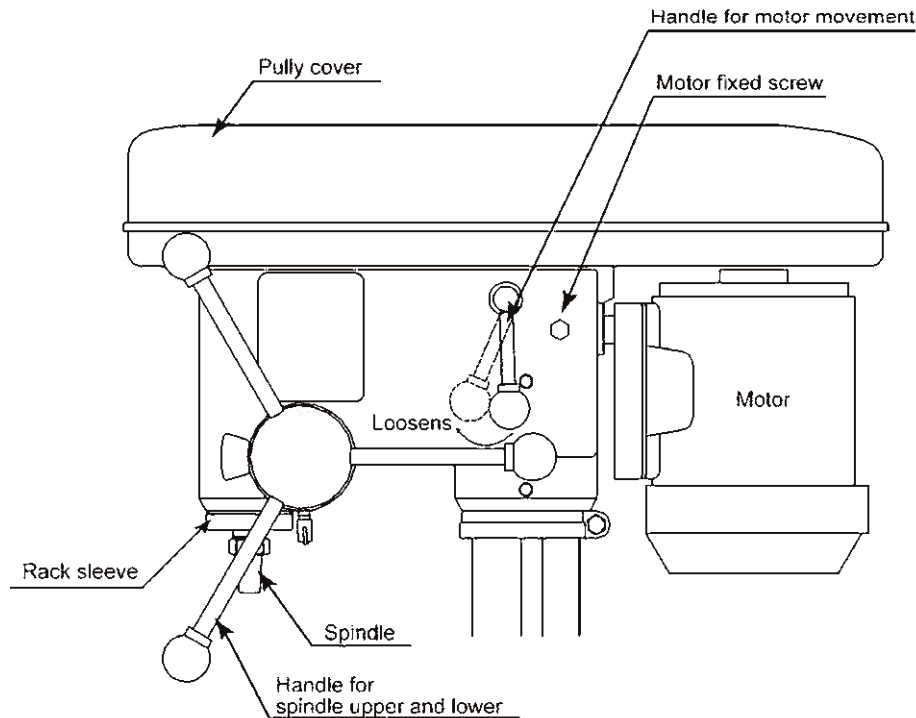
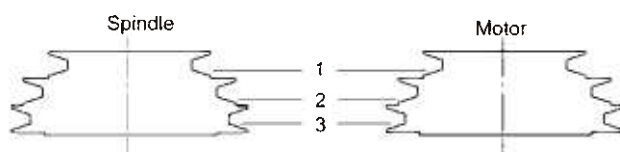


Fig.-2 Machine right side view

Table-1



	50Hz	60Hz	V belt
1	700	840	A-37
2	850	1020	A-41
3	910	1090	A-42

(3) Spindle feed depth adjustment

The spindle depth can adjust by the scale of dial as shown Fig-4. One division of the scale is 1mm feed. Feeding depth can adjust by scale dial. If fastening bolt is loosened, the dial can rotate easily.

① Drilling

In case of drilling, please move the dial to required feed amount at drill depth line of Fig-4, and tighten the dial fastening bolt. When spindle moves "0" of scale dial to drill depth line, spindle movement stops.

② Tapping

In case of tapping, please move the dial to required feed amount at tap depth line of Fig-4, and tighten the dial fastening bolt. When spindle moves "0" of scale dial to tap depth line, spindle rotates reverse direction.

- ③ Depth setting
Please move spindle down by the handle to touch cutter to workpiece, and set the scale dial for required cutting depth.
- (4) Tapping safety mechanism adjustment
Inside of spindle pulley incorporated taper clutch, and spindle torque can be adjusted by pushing force of coil spring. If you open belt cover and tighten spring lock nut (Fig-3) by 5mm rod of accessory, torque increases. If you loosen the spring lock nut, torque decreases. Please tighten both of spring lock nut and securing nut firmly after torque adjustment. If the securing nut loosens, it may fly away.

⚠ DANGER

◆The spring lock nut and securing nut should be tightened firmly.
If both nuts are loosened, securing nut may fly away, it cause injury and dangerous.

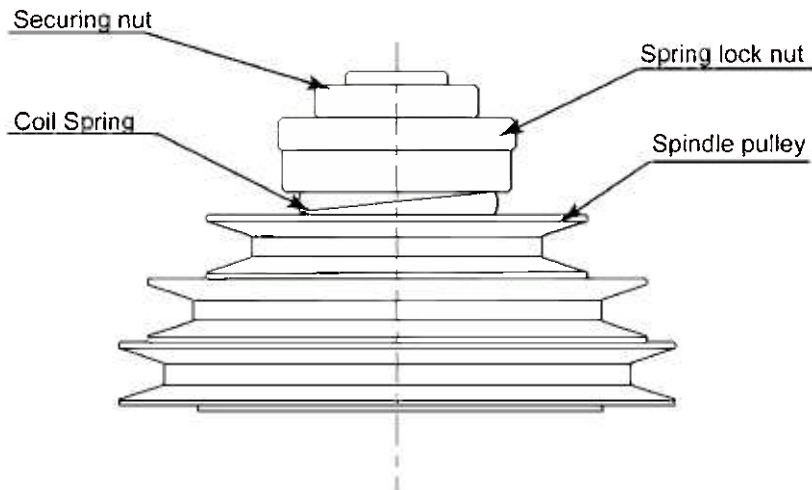


Fig-3 Tapping safety mechanism

7. TAPPING OPERATION

(1) Installation of Chuck and Tap

The machine doesn't include a chuck. Please prepare the chuck with Jacobs Taper No.6. Clean up and wipe oil off the spindle and the chuck taper, and set in firmly. As the chuck taper is slippery in tapping operation, please handle it with care.

In case of installation of the tap, fit it firmly.

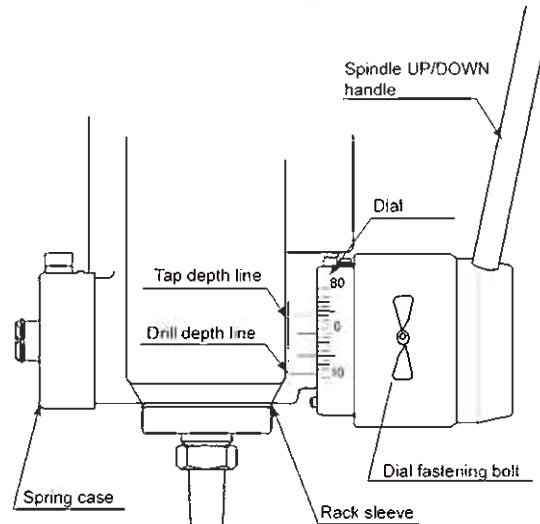


Fig.-4 Spindle Up/Down unit

(2) Installation of Workpiece

During tapping operation, turning force and lifting force act on the workpiece. Please consider to prevent the workpiece from being turned and being lifted when you install workpiece. And move the table to the suitable position and fix it.

(3) Preparation for running

Follow the below steps by referring to Chapter 6 "Machine Operation procedure".

- ① Set the spindle speed.
- ② Set the tapping depth.
- ③ Adjust the tapping safety mechanism. If the tap is small, first set the safety mechanism as loose as possible, and adjust to the proper force during tapping operation.

(4) Running

Set the DRILL/TAP switch shown in Fig.-1 to the TAP position and press the SPINDLE START pushbutton switch to the spindle start forward rotation. Move the handle lower to engage the tap properly with the hole. Once the tap is engaged, the thread will be cut automatically under the lead of the tap. When the initially-set depth(set size), the set size dog pushes the set size micro switch, so the spindle starts reverse rotation and tap retracts from the workpiece and returns to the reference position. At this time, the reference position micro switch is activated to change the spindle rotation direction to forward. In case a specific tapping works requires inversion of rotation direction in the middle, push in the INCHING pushbutton switch. The rotation is reversed while the switch is pushed in, and forward rotation resumes when the switch is released. If the rotation is reversed after the initially-set depth been cut, forward rotation cannot be resumed until the spindle has been returned to the reference position. (the INCHING switch is invalid while the DRILL/TAP switch is in the DRILL position.)

8. DRILLING OPERATION

Tighten Securing nut and Spring lock nut shown in Fig-3 securely using the rod as tapping safety mechanism is not used during drilling operation. Set the DRILL/TAP switch to the DRILL position, and set spindle rotation speed and drilling depth referring to chapter 6 "Machine Operation Procedure". It is possible to make drilling operation by the spindle up/down handle.

9. CAUTION FOR MULTI SPINDLE ATTACHMENT INSTRUCTION

Use following caution in tapping by installing a multi spindle attachment on the machine.

To install a multi spindle attachment on the spindle sleeve, the spindle sleeve shall be mounted by 20 to 25mm lower than usual. Otherwise, the reference position dog may be separated from the reference position of micro switch, making switch between forward/reverse rotation impossible(see Fig.-3). To prevent this, re-install the reference position dog so that the reference position dog pushes the reference position micro switch when the multi spindle attachment is in position.

- ① Make sure to shut off the primary source of electricity.
- ② Loosen cross recessed head machine screws (M4-4pcs) on the cover (78x98x17h) located above the dial (cf. Fig.-4) on the right side of the machine and remove the cover.
- ③ Loosen the hexagon bolts (M4-2pcs) fixing the plate on the inside of the machine through the cast hole, and take out the plate. (cf. Fig.-5)
- ④ Make a mounting hole to move the micro switch in the direction of the arrow (Fig.-5) by an increment of the decline of the spindle sleeve when the multi spindle attachment is installed.

Change the position without changing the wiring and the orientation of the micro switch.

Please note that the plate has the mounting holes that are 25mm below and 35mm below the original holes. If the holes can be used, you don't have to make additional mounting holes. (cf. Fig.-5)

- ⑤ Bring back the plate to the inside of the machine, and fix it by the hexagon bolts temporarily. Then move the spindle handle (cf. Fig.-4) up and down to check movement of the micro switch. (The micro switch ticks during movement.)

Check the clearance of the micro switch lever, and fix the plate with the hexagon bolts. (If the clearance of the macro switch lever is too much, the micro switch could be broken.)

- ⑥ Install the cover that was removed at ②.

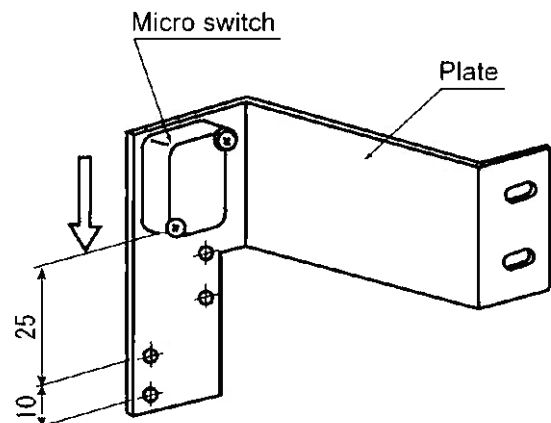
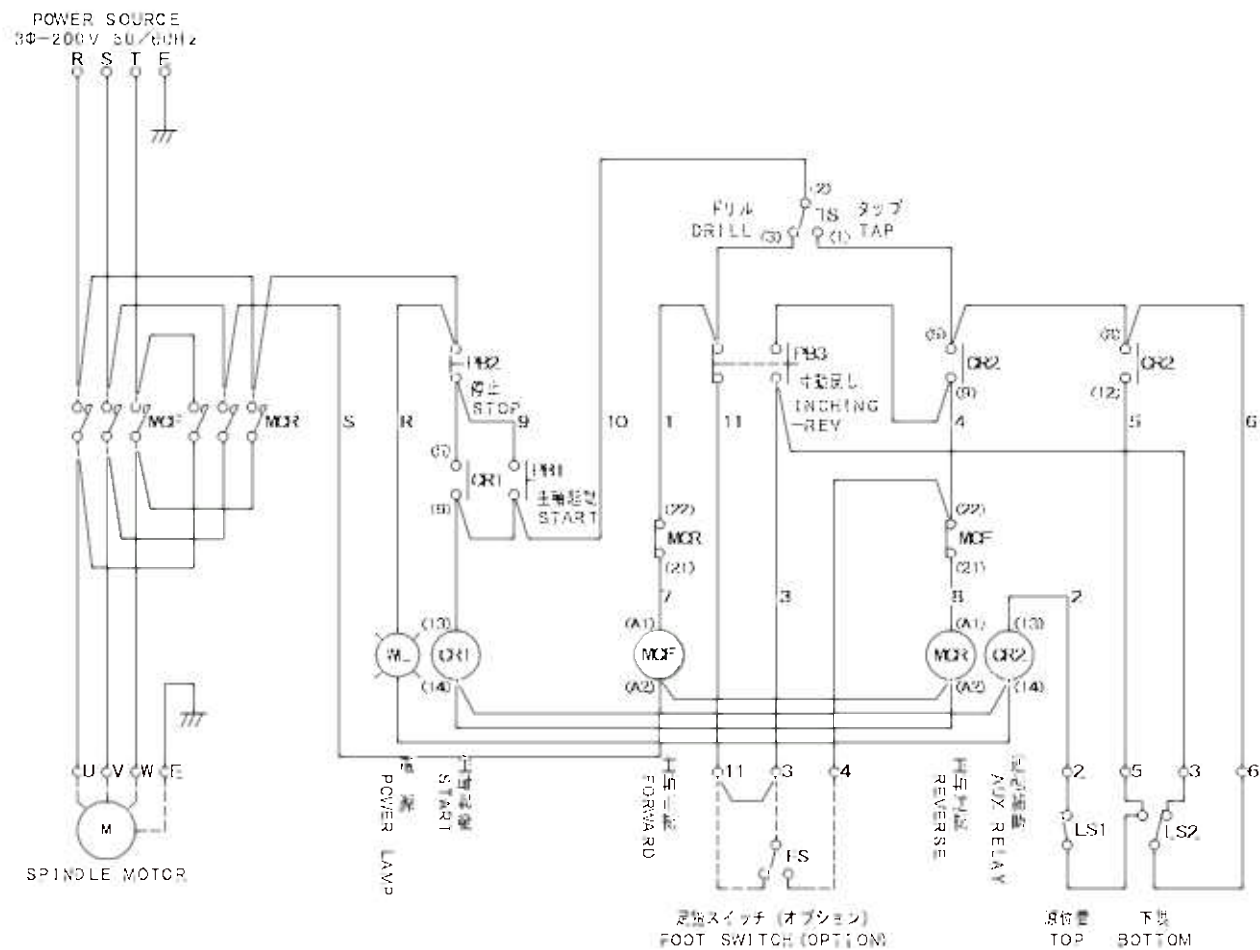


Fig.-5

▲ CAUTION

- ◆ *Do not run the machine with the cover open.*
- ◆ *Do not use the machine while the operator wears gloves.*
- ◆ *Be sure to fix the work piece.*
- ◆ *Always turn power off before touching any electrical wiring.*
- ◆ *Do not use inferior lubricants other than those specified to be applicable.*
- ◆ *After the job of every day, clean the machine thoroughly, apply oil as required.*

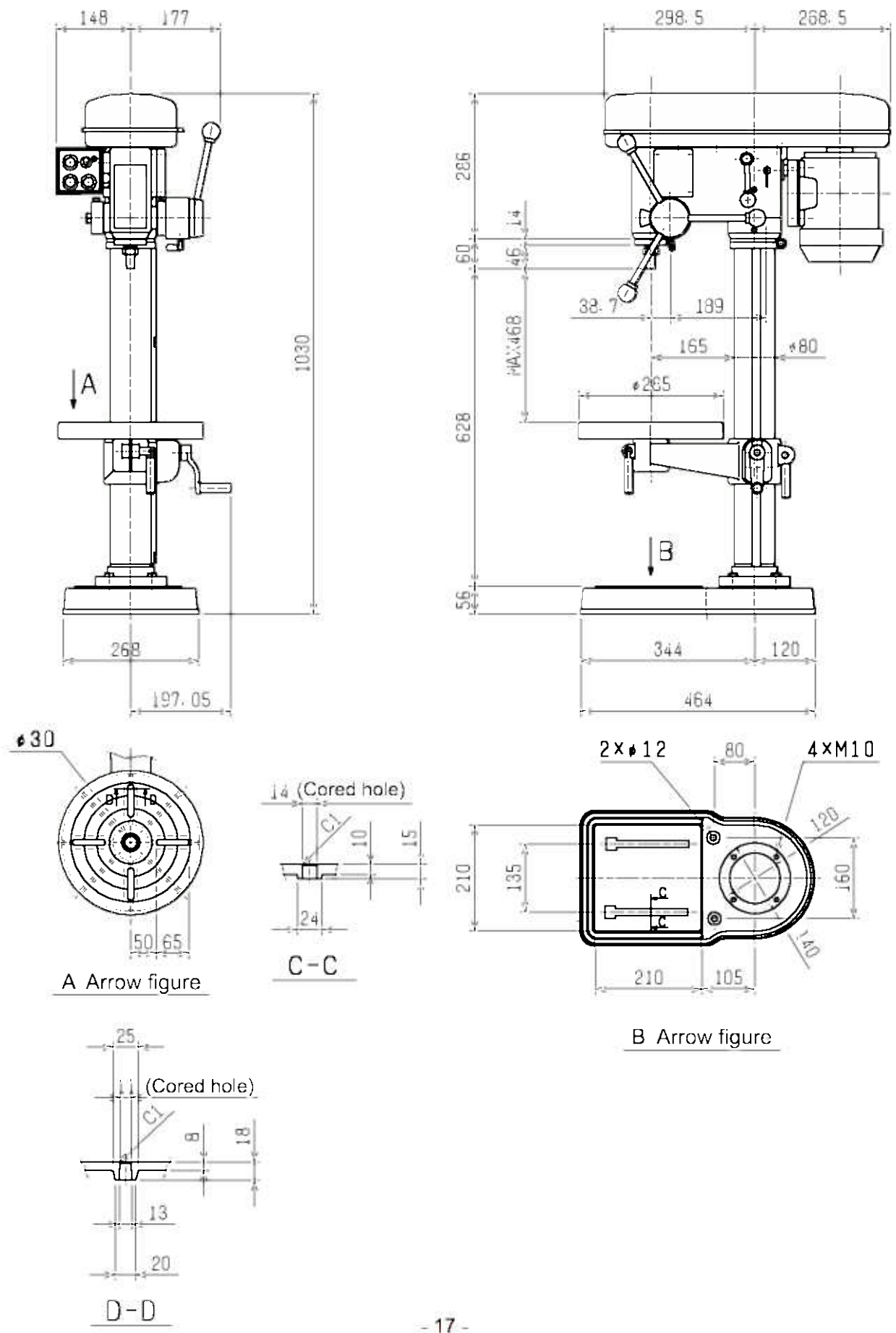
10. ELECTRIC CIRCUIT DIAGRAM



Parts list

Symbol	Parts name	Type	Detail	Maker	Q' ty
MCF, R	Reversing electromagnetic contactor	SK09AR-201W	200V 1b×2	FUJI	1
CR1,2	Auxiliary relay	RU2S-C-A200	200V	IDEC	2
	Socket	SM2S-05D		IDEC	2
	Fitting	SFA502PN20		IDEC	2
WL	Pilot lamp	BN-0855 220V W	220V	SEIKO	1
TS	Snap switch	WD1121F	DRILL/TAP	Panasonic	1
	Cap(Water proof)	WD1811B		Panasonic	1
PB1	Pushbutton switch	AR22F0R-10B	Spindle Stat	FUJI	1
PB2	Pushbutton switch	AR22E0R-11R	Stop	FUJI	1
PB3	Pushbutton switch	AR22E0R-11Y	Inching	FUJI	1
LS1,2	Micro switch	V-10-1A5	Zero, Depth point	OMRON	2
FS(Optional)	Foot switch	SF-1K	With terminal	KOKUSAI DENGYO	1

11. DIMENSION (Round table)

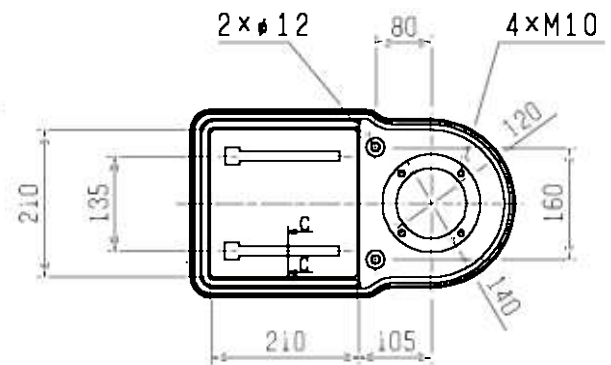
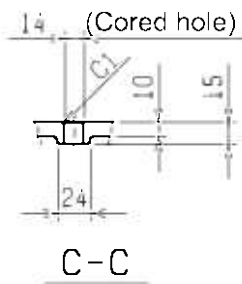
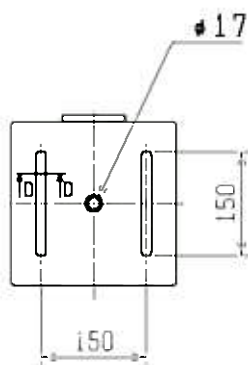
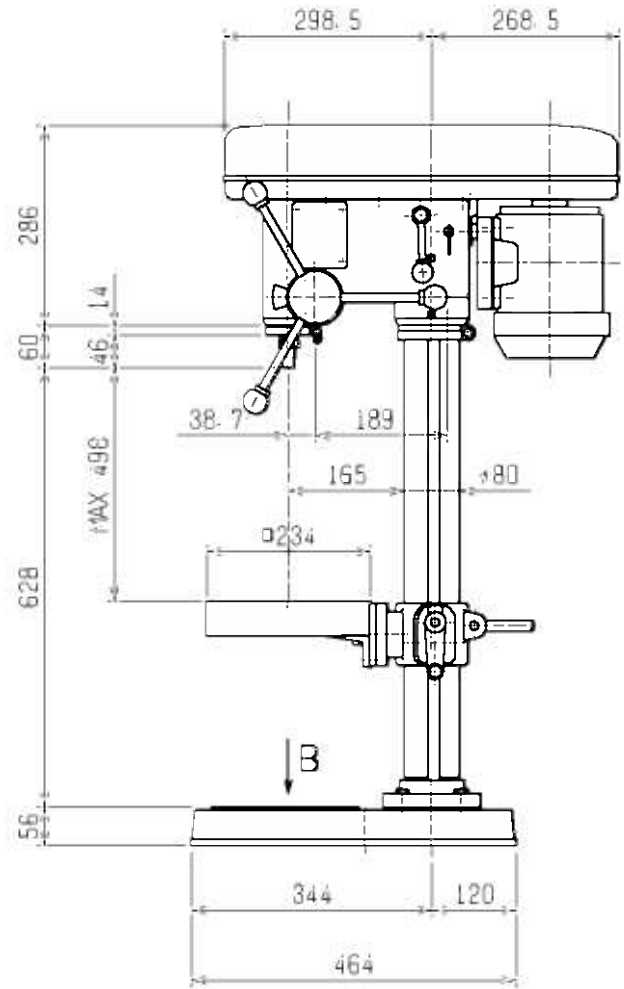
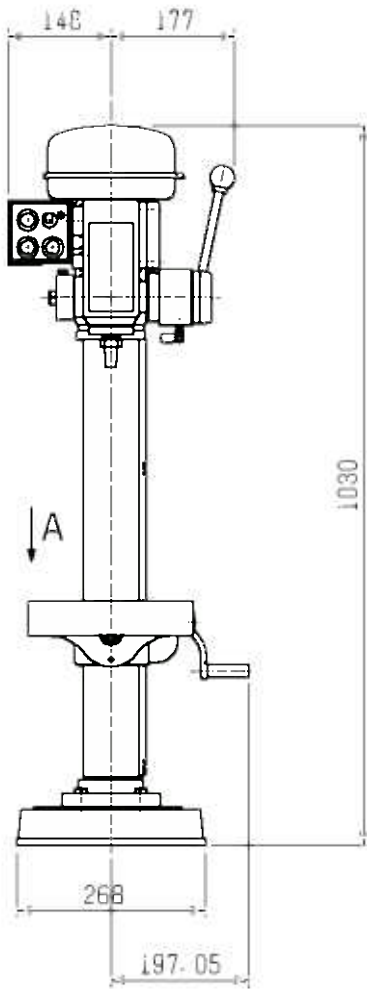


A Arrow figure

B Arrow figure

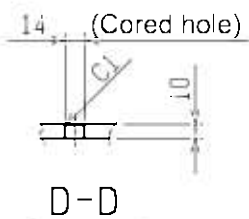
D-D

DIMENSION (Square table)



A Arrow figure

B Arrow figure



D-D

12. CUTTING DATA

(1) Screw Prepared hole chart(Reference value)

Unit: mm

Metric (screw) thread		Priming path of screw	Screw Prepared hole diameter	Priming path of screw	Screw Prepared hole diameter
Priming path of screw	Screw Prepared hole diameter	M16	14.1	W 7/16	9.3
M3	2.6	M18	15.6	W 1/2	10.5
M4	3.4	M20	17.6	W 9/16	12.0
M5	4.3	M22	19.6	W 5/8	13.5
M6	5.1	M24	21.0	W 3/4	16.5
M8	6.8	Whitworth screw thread		W 7/8	19.3
M10	8.6	W 1/4	5.0	W1	22.0
M12	10.3	W 5/16	6.5		
M14	12.1	W 3/8	7.9		

(2) Tapping standard rotation chart(Reference value)

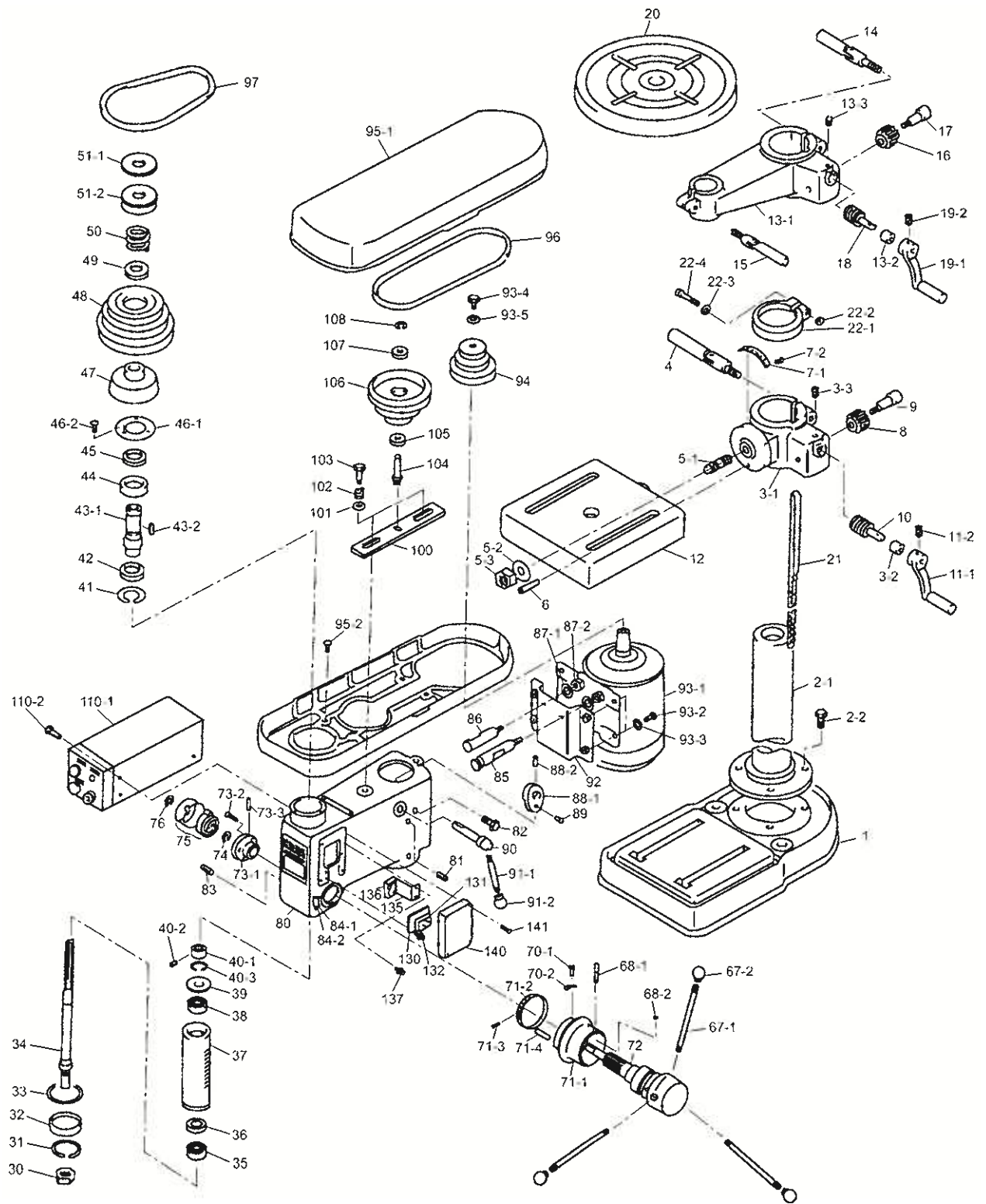
(Manual)

Metric (screw) thread	Tap	Work material								
		Aluminum system	Bakelite	Nylon	Brass	Bronze	Mild steel	Half-hard steel	Hard steel	Common cast iron
		25 m/min	25 m/min	20 m/min	15 m/min	12 m/min	10 m/min	8 m/min	5 m/min	12 m/min
M4	P0.7	1000	1000	1000	1000	1000	800	640	400	1000
M5	P0.8	1000	1000	1000	950	830	650	510	320	830
M6	P1	1000	1000	1000	800	650	530	420	270	650
M8	P1.25	1000	1000	800	600	480	400	320	200	480
M10	P1.5	800	800	640	480	380	310	250	160	380
M12	P1.75	660	660	530	400	320	260	210	130	320
M14	P2	560	560	450	340	250	230	180	115	250
M16	P2	500	500	400	300	220	200	160	100	220
M18	P2.5	420	420	350	250	180	170	140	90	180
M20	P2.5	360	360	300	220	160	150	130	80	160
M22	P2.5	300	300	250	190	145	140	115	70	145

CAUTION

- ◆ The low speed is better until it gets used to be attached to a manual feed.
- ◆ There are some which cannot be cut unless nylon material is also a chasing speed like steel.
- ◆ The above is a reference value.
Please select a near value from among the number of rotations of this machine.

13. PARTS LIST



NO	Spec	Parts number	Part name	Remark	Q'ty
1		R-1-C	Bed		1
2-1	C	R-1002-B	Column		1
2-2		BT1-M10*030	Hex. bolt	M10*30	4
3-1	S3	NS-4-E	Bracket		1
3-2	S3	KI-79-A	Bush		1
3-3	S3	BTA-M06*015-K	Hex. socket head stop screw	M6*15 (Cup point)	1
4	S3	AS1-R-5	Clamp bolt with handle		1
5-1	S3	S-8-A	Bolt		1
5-2	S3	ZG1-M16-U	Plain washer	M16	1
5-3	S3	NT1-M16	Hex. nut	M16	1
6	S3	PN2-06*030	Taper pin	6*30	1
7-1	S3	KS-4-2B	Name plate (Scale)		1
7-2	S3	BTD-#2*5	Tack	#2*48	2
8	S3	KI-76-A	Gear(16T)		1
9	S3	KI-77-B	Shaft		1
10	S3	KI-78-1	Shaft (Worm)		1
11-1	S3	NR-87-C	Handle		1
11-2	S3	BTA-M08*010-K	Hex. socket head stop screw	M8*10 (Cup point)	1
12	S3	S-7-E	Table		1
13-1	R3	NR-4-E	Bracket		1
13-2	R3	KI-79-A	Bush		1
13-3	R3	BTA-M06*015-K	Hex. socket head stop screw	M6*15 (Cup point)	1
14	R3	AS1-R-5	Clamp bolt with handle		1
15	R3	AS1-R-8	Clamp bolt with handle		1
16	R3	KI-76-A	Gear(16T)		1
17	R3	KI-77-B	Shaft		1
18	R3	KI-78-1	Shaft (Worm)		1
19-1	R3	NR-87-C	Handle		1
19-2	R3	BTA-M08*010-K	Hex. socket head stop screw	M8*10 (Cup point)	1
20	R3	R-7-C	Table		1
21	C	NR-85-A	Rack	(□10*15*635)	1
22-1		3B-2003-A	Stop ring		1
22-2		NT1-M08	Hex. nut	M8	1
22-3		ZG1-M08-U	Plain washer	M8	1
22-4		BT1-M08*050	Hex bolt (Continuous thread)	Black	1
30	JT6	NR-17-A	Nut		1
31		NR-15-3B	Stop ring		1
32		NR-15-2A	Collar		1
33		3C-2114-A	Packing		1
34	JT6	NR-20-I	Spindle(JT6)	(φ25*329)	1
35	JT6	BE1-6203ZZ	Ball bearing	6203ZZ	1
36	JT6	BE6-51103	Thrust ball bearing	51103	1
37	JT6	NR-15-H	Rack sleeve		1
38	JT6	BE1-6202ZZ	Ball bearing	6202ZZ	1
39	JT6	R-25C-A	Collar		1
40-1	JT6	R-25-A	Collar		1
40-2	JT6	BTA-M06*006-K	Hex. socket head stop screw	M6*6 (Cup point)	1
40-3	JT6	R-25B-A	Stop ring		1
41		RG1-R052	Stop ring	R52	1

13. PARTS LIST

NO	Spec	Parts number	Part name	Remark	Q'ty
42		BE1-6205ZZ	Ball bearing	6205ZZ	1
43-1		3C-2301-F	Shaft		1
43-2		KY1-05*05*016RR	Parallel key	5*5*16RR	1
44		R-30-B	Collar		1
45		BE1-6205ZZ	Ball bearing	6205ZZ	1
46-1		NR-30-1	Cover		1
46-2		BT6-M06*010	Cross recesses head machine screw	M6*10	3
47		3C-2307-B	Clutch		1
48		3C-2309-B	Pulley		1
49		BE6-51107	Thrust ball bearing	51107	1
50		3C-2311-A	Coil spring		1
51-1		3C-2312-A	Nut		1
51-2		3C-2313-A	Nut		1
67-1		4B-2227-A	Handle		3
67-2		R-45-B	Knob		3
68-1		BT3-M08*015A-2	Butterfly bolt		1
68-2		KI-53-1A	Clamp piece		1
70-1		BTJ-M03*008-P3-M	Cross recessed head semi screw	M3*8	1
70-2		3C-2212-A	Dog		1
71-1		3C-2207-3B	Sleeve		1
71-2		NR-50-B	Name plate		1
71-3		BTD-#2*5	Tack	#2*4.8	2
71-4		PN3-04.5*016	Spring pin	4.5*16	1
72		ASO-3C2201-3	Pinion shaft (Ass'y)		1
73-1		3C-2240-1D	Bush		1
73-2		BT7-M04*015	Countersunk head screw	M4*15	3
73-3		PN3-03*012	Spring pin	3*12	1
74		RG1-S018	Stop ring	S18	1
75		3C-2244-1A	Spring case		1
75		12B-2243-D	Spring		1
75		3C-2244A	Spring case set		1
76		RG1-S018	Stop ring	S18	1
80		3C-2001-H	Head		1
81		BTA-M10*010-K	Hex. socket head stop screw	M10*10 (Cup point)	2
82		BT1-M10*025	Hex. bolt	M10*25	2
83		2C-2115-A	Key	BTG-M10*020	1
84-1		3C-2804-2B	Name plate		1
84-2		BTD-#2*5	Tack	#2*4.8	2
85		3B-2365-2A	Guide		1
86		3C-2366-2B	Guide		1
87-1		ZG2-M12	Spring washer	M12	2
87-2		NT1-M12	Hex. nut	M12	2
88-1		3B-2374-A	Shifter		1
88-2		BTA-M10*012-K	Hex. socket head stop screw	M10*12 (Cup point)	1
89		3B-2376-A	Pin		1
90		3C-2368-2C	Shifter		1
91-1		2C-2341-A	Handle		1
91-2		KN-41-A	Knob		1
92		3C-2364-B	Base (Motor)		1

NO	Spec	Parts number	Part name	Remark	Q'ty
93-1	44U	MO1-0.4KW*4*200U	Motor	FEU-80LHTS(9)	1
93-2		BT1-M08*020	Hex. bolt	M8*20	4
93-3		ZG1-M08-U	Plain washer	M8	4
94	44U	3C-2360-A	Pulley (Motor)		1
95-1		3B-2601-A	Cover (Ass'y)		1
95-2		BT6-M06*010	Cross recessed head machine screw	M6*10	4
96		BL1-A-24	V Belt	A-24	1
97		BL1-A-27	V Belt	A-27	1
100		3C-2321-A	Holder		1
101		OTZ-M14-t3.2	Plain washer	M14(t=3.2)	2
102		3C-2330-B	Coil spring		2
103		3C-2323-A	Pin		2
104		3C-2324-B	Shaft		1
105		BE1-620ZZZ	Ball bearing	620ZZZ	1
106		3C-2325-A	Middle pulley		1
107		BE1-620ZZZ	Ball bearing	620ZZZ	1
108		RG1-S015	Stop ring	S15	1
110-1		3C-2751-200V	Control box	KAWAMOTO	1
110-2		BTJ-M05*010-P2-M	Cross recessed head semi screw	M5*10	3
130		4C-2722-A	Plate		1
131		EP5-V-10-1A5	Micro switch		1
132		BTH-M04*010-P3-M	Cross recessed head upset bolt	M4*10-P3-M	2
135		3C-2723-3A	Bracket		1
136		EP5-V-10-1A5	Micro switch		1
137		BTH-M04*010-P3-M	Cross recessed head upset bolt	M4*10-P3-M	2
140		4C-2727-B	Cover		1
141		BT6-M04*022	Cross recessed head machine screw	M4*22	4

14. DISPOSAL AND RESELLING

14.1. Disposal

Please handle the following items as industrial wastes in accordance with regulation of your country.

(1) Cutting oil and lubrication oil

(2) Chip

(3) Tools

(4) Main unit

For disposing of them, contact us.

14.2 Reselling

CAUTION

- ◆ *To resell the KRT-340 to any other party, strictly observe the following instructions:
Be sure to hand the Instruction Manual to that new user.
See the chapter indicating the locations of signal-word labels and make sure that all the labels are in place.
If the Instruction Manual or any of the signal-word labels is missing, be sure to contact us to obtain it.
Before reselling the KRT-340, contact us without fail.*

- ◆ *You, as purchaser of this machine, agree to follow the procedures for the export or transfer of the machine, under the Foreign Exchange and Foreign Trade Law, when you export or transfer the machine abroad.
This machine was produced to meet the law and specifications in your country (or area).
You, as purchaser of the machine, are not allowed to re-sell, re-export, or re-transfer the machine to any party in the country (or area) which has different law and specifications from those in your country.*

15. WARRANTY

15.1. Free Repairs

- 1) If a malfunction or a failure occurs during the normal use strictly based on the operation guidelines (given in the Instruction Manual), the Instruction Manual, the signal-word labels, and other instructions, then it is repaired free of charge within the warranty period.
- 2) Our warranty only covers the delivered main unit and does not apply to any loss and/or damage, direct or indirect, resulting from such malfunction or failure.
- 3) The warranty remains valid for one year after the delivery with your acceptance.

15.2 Charged repairs

- The repairs after the warranty period and those in the following cases within the warranty period are charged to you:
- 1) A malfunction, failure, or damage has resulted from the misuse of the KRT-340 or from the modification or repair made without obtaining our consent.
 - 2) A malfunction, failure, or damage has resulted from fire, acts of God, lightning, abnormal voltage, or any other unpredictable situation.
 - 3) A malfunction, failure, or damage has resulted from your improper handling such as falling during the transportation or transfer by you.
 - 4) A malfunction, failure, or damage has occurred because you have failed to follow the operation guidelines.
 - 5) Consumable items have been used up, worn out, or otherwise have deteriorated after the normal use.

15.3. Locations for contact

Sales Department of Main Office :

TOMIYOSHI SHINDEN, KIRA-CHO NISHIO-CITY, AICHI PREF.,
444-0592, JAPAN

TEL 81-563-32-0100 FAX 81-563-32-3241

E-Mail :<info@kiracorp.co.jp>

KIRA CORPORATION





Revision history
4th edition : September 16, 2016

KIRA