

532403

DRILL PRESS FLOOR 12 SPEED 5/8" CHUCK NO3

TOOLEX[®]
Industrial



INSTRUCTION MANUAL

CONSUMER SERVICE CENTRE
PO BOX 1012
HAMILTON NSW 2303 AUSTRALIA
Made in P.R.C.



N3570

NOTE:

It is advisable for user to read this Instruction Manual in order to avoid accident. If the operating method used in this drilling machine is the same as the method used in ordinary machine, possible hazard may occur during the process. Therefore, it is imperative that user should pay extra caution and make sure that his operating method is correct. Slight negligence to any of the safety measures will certainly cause accident to the user.

The manufacturer designed this machine especially focusing on its scheduled using scope. Therefore, it is advisable that the user should pay attention not to exceed the said using scopes. Also, do not make any modification to the spare parts and structure of the machine.

If you have any question regarding and operating method of this machine and cannot find the solution in the Instruction Manual, please contact your vendor directly.

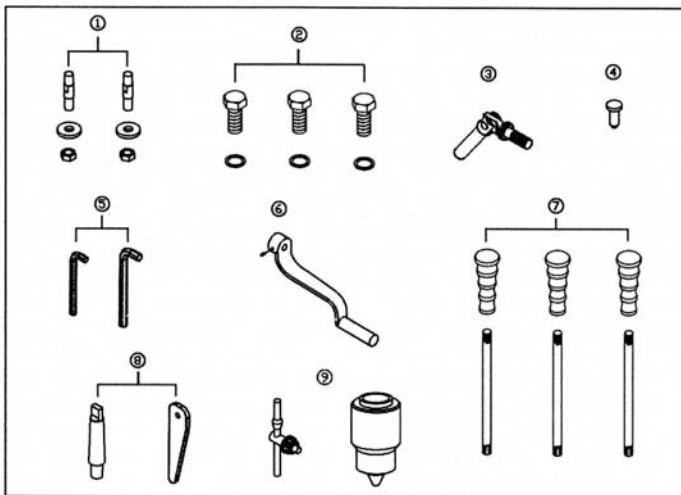
Correct Operation Instruction of This Machine

1. For your own safety, do not start the said machine before reading the Instruction Manual carefully. One of the necessary safety measures is to understand its operation principle and operation method first.
2. Do not alter any of the protective pieces in order to maintain its completeness.
3. Plug the fan plug for power supply into the socket with earth wire. If your socket does not have an earth wire, then connect the earth terminal of this machine.
4. Before starting this machine, it is imperative to take away all wrenches and latch handle not connected to the machine. Also, you should make it a habit to check the surrounding of the said machine every time before using, to see if there is any small spare part around that may cause running fault (breakdown).
5. Before installing the machine, clean your working ground in order to prevent any accident occurring.
6. Do not use this machine in a highly dangerous place. Also, do not install the machine in a humid or water leaking place. During the process of work, the user should make sure to keep its working ground clean anytime.
7. Do not let any unauthorized or ignorant person or children near the said machine, and should be sure to keep a proper distance from the machine anytime.
8. Put a safety lock on the door of your working ground in order to prevent children from starting the machine.
9. Avoid overloading the machine. Also, for your own safety, be sure to abide to its using scopes.
10. Do not use the machine outside its using scope.

11. Wear proper clothes while working. Do not wear any clothes that can easily be ripped by the machine while operating, such as clothes that flutter, ordinary gloves, scarf, ring, and small chain. You should also wear anti-skid shoes and hat (cap) that can fully hold in long hairs.
12. When operating this machine, you should wear a goggle and dust-proof mask anytime. Besides, make sure to abide to the related safety measures specified by the government's Bureau of Works.
13. Use a hand vice or other fixing device to fix all the spare parts for processing. Do not use your hands to fix them in order to avoid serious accident and unable to operate the said machine.
14. Stand firmly in front of this machine while working (both feet's position, body equilibrium, etc.)
15. Keep the machine and its pointed edges clean at all time in order to get the best working efficiency. Also, should follow the instructions in the Instruction Manual carefully in changing the tools, coating grease, and cleaning.
16. Before cleaning this machine or changing the tools (such as saw blade, drill), pull off the power plug first to avoid electrocution.
17. Use the tools suggested by the manufacturer of this machine while working and abide to the related instruction in the Instruction Manual, because using spare parts not related to this machine is an unsafe behavior.
18. avoid touching the machine unintentionally. Also, Before plugging in the plug into the socket, check if switch button is at [OFF] position or not.
19. Do not stand on the machine in order to avoid slipping down carelessly or hitting the blade and cause injury.
20. Remember to check adnormal part in the running process of the machine carefully. It is advisable that you should change the said part or protective piece before continuing the work.
21. Do not leave the working ground while the machine is running. It is was necessary for your to leave, turn off the power and wait for the machine to stop completely before leaving.
22. Do not use this machine if you had taken any alcohol (liquor or wine), medicine, or drugs.

Package Content

1. Screw washer nut (2)
2. Screw (3)
3. Fix screw
4. Cover handle
5. Hexagon socket wrench (2)
6. Desk crank
7. Operating rod for main shaft (3)
8. Adapter and conical iron tire
9. Chuck , Chuck key



Follow the safety measures in operating this machine.

Assembly

1. Assembly the Column

- Place column assembly on base and align Holes in column support with holes in base.
- Secure the column with four or three bolts And washers provided.

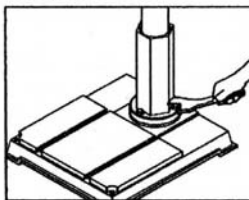


fig.1

2. Install table bracket

- 2-1 Take of collar and rack
- 2-2 Install table bracket together with rack. Fig.

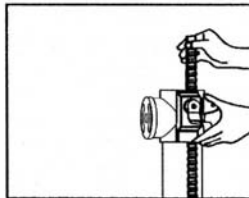


fig.2

- 2-3 Install collar and fix it firmly. Fig. 3

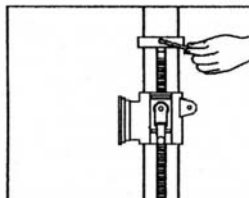


fig.3

3. Install bracket handle and clamp bolt. Fig. 4, 5.

Fix handle with attached set screw.

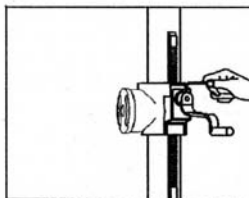


fig.4

Install clamp bolt to fix table bracket.

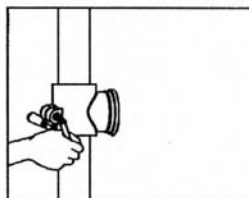


fig.5

4. **Install table and clamp with bolt, Fig. 6.**

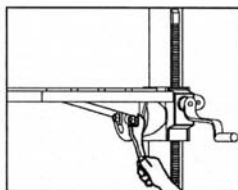


fig.6

5. **Attach the head Assembly**

Carefully put the head assembly over column and slide it onto column into position. Align head frame with table and base.

Fix set screw in right side of head to lock Head into position then tighten with allen Wrench. Fig. 7.

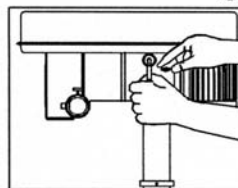


fig.7

6. **Install the Feeding Handles**

* Screw knob on each feeding handle, install Then into hub of pinion shaft. Fig. 8.

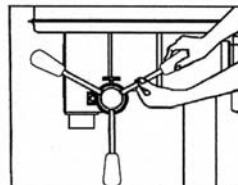


fig.8

7. **Attach the Arbor and Chuck**

7-1 Insert arbor into spindle first. Pull feeding Handle down to press arbor inward. Fig. 9

7-2 Open chuck jaws completely by turning attached Chuck key counter-clockwise to the end.

* Put a piece of scrap wood on the table to protect chuck nose.

7-3 Install chuck to the arbor tightly. Fig. 10.

8. **Install knob and screw of upper pulley cover.**
Fig. 11.

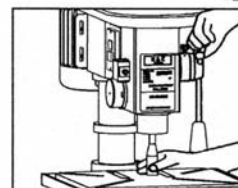


fig.9

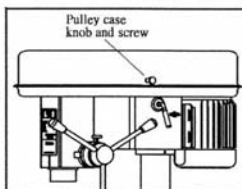


fig.11

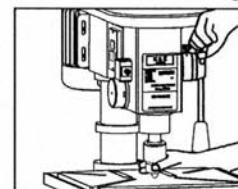


fig.10

ADJUSTMENT

1. Table adjustment

A. Height Adjustment

To adjust up or down, loosen the clamp bolt
Then adjust the table to your desired position
By swinging the table bracket handle. Fig. 12.

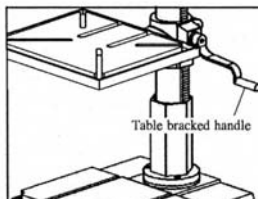


fig.12

B. Tilting Adjustment:

Loosen the table bevel lock bolt with adjustable
Wrench.

Tilt table to desired angle and retighten the
bolt. Fig. 13

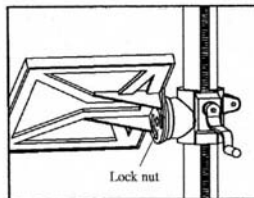


fig.13

C. Swing 360°

Loosen clamp bolt then swing table to appropriate
position and retighten clamp bolt. Fig. 14

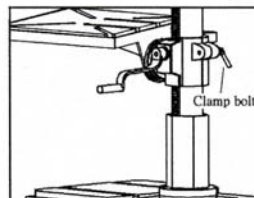
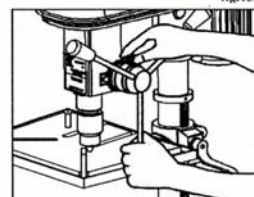
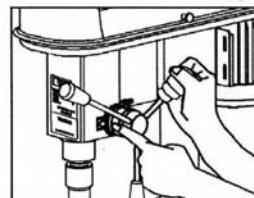


fig.14

2. Feed Depth Adjustment

2-1 Depth control scale sleeve type

Loose the clamp bolt and move to the desired
Depth then retighten the clamp bolt. Fig. 15-1, 15-2.

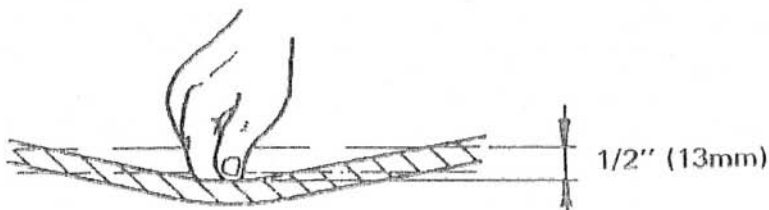


The proper drill speed for a given drill bit size is as on following table:

Size Diameter		Cast steel		Tool steel		Cast iron		Mild steel		Alum.& copper	
		Cutting speed									
		m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min
		12	40	18	60	24	80	30	100	60	200
mm	inch	Cutting speed revolution par minute									
2	1/16	1910	2445	2865	3665	3820	4890	4775	6110	9550	12225
3	1/8	1275	1220	1910	1835	2545	2445	3185	3055	6365	6110
5	3/16	765	815	1145	1220	1530	1630	1910	2035	3820	4075
6	1/4	610	610	955	915	1275	1220	1590	1530	3180	3055
8	5/16	480	490	715	735	955	980	1195	1220	2390	2445
10	3/8	380	405	570	610	765	815	955	1020	1910	2035
11	/16	350	350	520	525	700	700	870	875	1740	1745
13	1/2	300	305	440	460	590	615	735	765	1470	1530
16	5/8	240	245	360	365	480	490	600	610	1200	1220
19	3/4	190	205	285	305	380	405	480	510	955	1020

Belt Tension Adjustment

For proper belt tension: Use 10 lbs pressure or hand pressure on the belt as shown below. The distance is 1/2" (13mm) + 10%



Special Safety Rules For Drill Press:

1. Caution : This drill press is intended for use only with drill bits. This use of other accessories may be hazardous.
2. Correct drilling speeds : Factors which determine the best speed to use in any drill press operation are : Kind of material being worked, size of hold, type of drill or other cutter, and quality of cut desired.
The smaller the drill, the greater the required RPM. In soft materials, the speed should be higher than for hard metals.
3. Drilling in metal: Use clamps to hold the work when frilling in metal. The work should never be held in there bare hand, the flutes of the drill may seize the work at any time, especially when breaking through the stock. If the piece is whirled out of the operator's hand, he may be injured, in any case, the drill will be broken when the work strikes the column.
4. The work must be clamped firmly while drilling : Any tilting, twisting, or shifting results not only in a rough hole, but also increases drill breakage. For flat work, lay the piece on a wooden base and clamp it firmly down against the table to prevent it from turning. If the piece is of irregular shape and cannot be laid flat in the table, it should be securely blocked and clamped.
5. The chuck shall be securely fastened to the spindle and so that it can't separate from spindle.
6. Remove Key from chuck after adjustment.
7. The tool is to be disconnected from the power supply while the motor is being mounted, connected or reconnected.
8. Secure the tool to the supporting structure if, during normal operation, there is any tendency for the tool to tip over, slide, or walk on the supporting surface.
9. The set screws of head frame should be screwed tightly before suing this machine.
10. Connect to a supply circuit protected by a circuit breaker or time delay fuse.
11. Fasten base to floor or worktable before using the drill press.

VII Electric

ELECTRICAL CONNECTION/DISCONNECTION & OPERATION

For three phase :

1. Electrical connection:

1. A cable with four wires is equipped to connect your machine into the 3 phase power supply.
Please connect your machine into the power supply with hand-operated disconnecting device, which is in compliance with subclause 5.3 of EN 60204-1, such as on fuse breaker or plug/socket combination.
2. For the protection of control device, we recommend the operation to supply ***a fuse with 6 A current rating of fuse***, and the total length between fuse and connection terminal shall not exceed 1.5m.
3. The ***exact power source voltage, frequency, and number of phase*** shall be checked according to the installation diagram and circuit diagram.
4. ***The correct direction of drilling press should be checked after connecting.***

2. Electrical disconnection:

1. The disconnection is carried out by hand-operated disconnection device.
2. Be sure to disconnect this machining from power source, when you want to stop the job, Maintenance, and adjustment.

3. Grounding

The grounding of the drilling press is carried out ***by connecting the Yellow/Green terminal of supply cable*** to the grounding terminal of power source. Be sure to ground your machine before connecting machine to power source in any situation.

WARNING !

Do not disconnect grounding terminal before disconnecting power source.

For single phase :

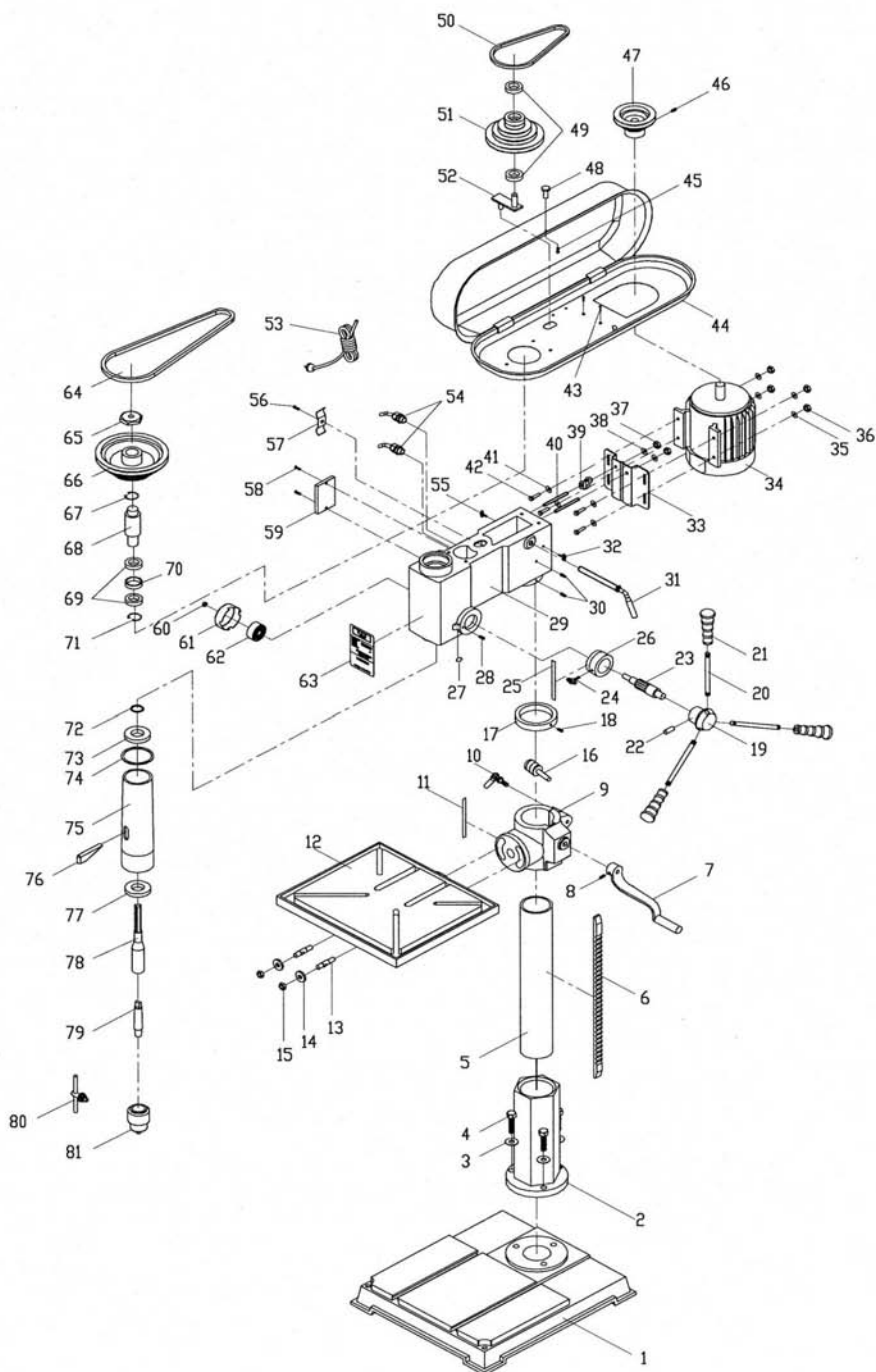
1. The connect, disconnection, and grounding is carried out ***through the plug***, equipped on the drilling press. For the safety reason, ***Do not change this plug into any the other type in any situation.***
2. For the protection of control device, we recommend the operated to supply ***a fuse with 6 A current rating of fuse***, and the total length between buse and connection terminal shall not exceed 1.5m.
3. The ***exact power source voltage, frequency, and number of phase*** shall be checked according to the installation diagram and circuit diagram.

Operation:

1. ***"START"***: Push the button marked with " I ".
2. ***"STOP"***: Push the button marked with " O ".
3. ***"Interlock Switch"***: Limit switch in the pulley cover.

WARNING !

Do not stop machine with interlock switch in normal operation.



Parts No.	Description	Parts N No.	Description
1.	Base	51.	Middle Pulley
2.	Flange	52.	Pivot Bracket
3.	Washer	53.	Power Cord
4.	Screw	54.	Cable Portection
5.	Column	55.	Thumb Screw
6.	Rack	56.	Screw
7.	Shafting Rod	57.	Wire fixed buckle
8.	Set Screw	58.	Screw
9.	Table Bracket	59.	Switch
10.	Clamp Bolt	60.	Nylon Nut
11.	Table Tilting Label	61.	Spring Cover
12.	Work Table	62.	
13.	Screw	63.	Name Plate
14.	Washer	64.	V-Blet
15.	Nut	65.	Nut
16.	Worm and Worm Gear	66.	Sprindle Pulley
17.	Rack Collar	67.	Retaining Ring
18.	Set Screw	68.	Drive Taper
19.	Handle Body	69.	Ball Bearing
20.	Handle	70.	Ball Spacer
21.	Knob	71.	Retaining Ring
22.	Stop Pin	72.	Retaining Ring
23.	Feed Pinion	73.	Ball Bearing
24.	Thumb Screw	74.	Rubber Washer
25.	Scale	75.	Quill
26.	Scale Sleeve	76.	Wedge
27.	Zero Mark	77.	Ball Bearing
28.	Spring Pin	78.	Spindle
29.	Head	79.	Morse Taper Arbor
30.	Set Screw	80.	Chuck key
31.	Adjusting Bolt C	81.	Chuck
32.	Thumb Screw		
33.	Mounting Plate		
34.	Motor		
35.	Washer		
36.	Nut		
37.	Nut		
38.	Washer		
39.	Shaft Lever		
40.	Adjusting Bolt B		
41.	Washer		
42.	Screw		
43.	Screw		
44.	Pulley Cover		
45.	Screw		
46.	Set Screw		
47.	Motor Pulley		
48.	Knob		
49.	Ball Bearing		
50.	V-Belt		