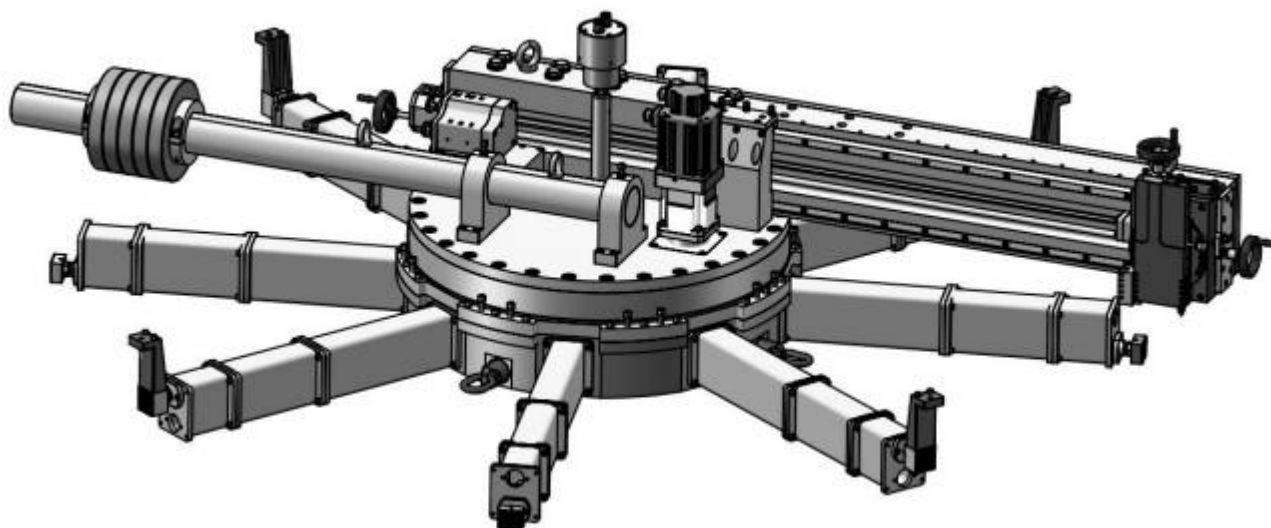




Portable Flange Facing Machine

WF-3000 Model Operation Manual

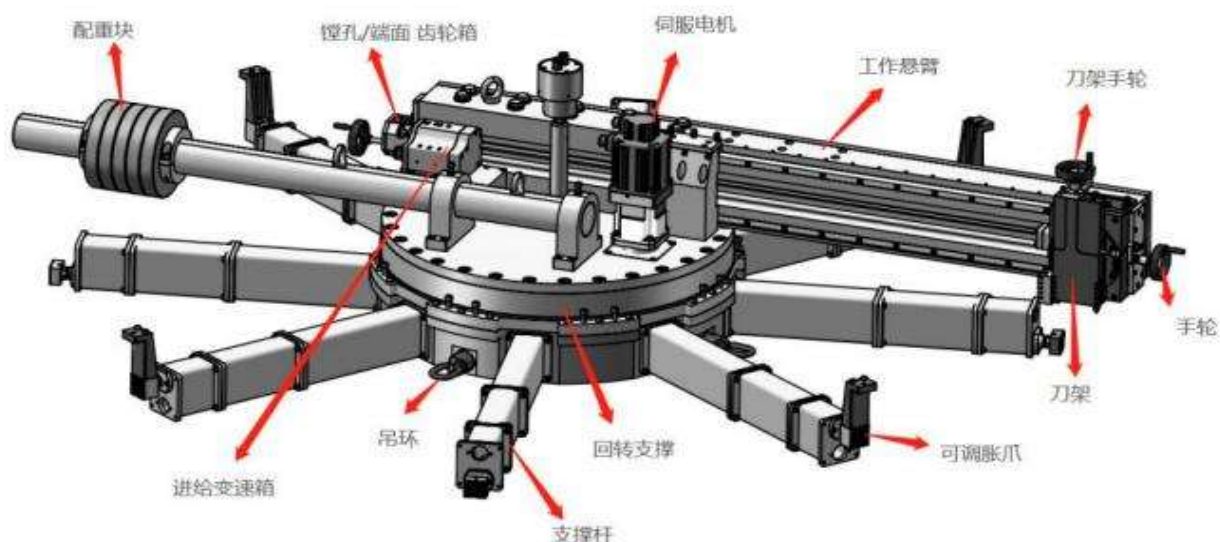


SHENZHEN KEDES MACHERY &EQUIPMENT CO.,LTD.

Part 1 Technical Parameters

WF 3000 Flange Facing Machine

Minimum Facing diameter	Ø1150mm	Maximum Facing diameter	Ø3000mm
Minimum Clamping diameter	Ø1120mm	Maximum Clamping diameter	Ø2800mm
Rotating speed	0-15r/min	Tool Post Travel	100mm
Tool holder rotation angle	+ / - 360°	Machine drive mode	Pneumatic/Electric/Hydraulic
Air pressure (pneumatic)	0.6-0.8Mpa	Sevor Electric	3PH 380V 50Hz
Air pressure (flow)	2.798 m ³ /min	Sevor Power	5KW
Feed speed (horizontal)	0.13mm/r/0.2mm/r 0.4mm/r 0.16mm/r/0.25mm/r 0.5mm/r	Feed speed (vertical)	Automatic feeding



Part II Installation and Operation Procedures

2.1 Base selection and installation

Measure the mounting inner hole of the flange to be machined and ensure it is within the working parameters of the machine. Select and install the appropriate extension bar

Support bar 404mm (8 Pcs); Support bar 264mm (8 Pcs)

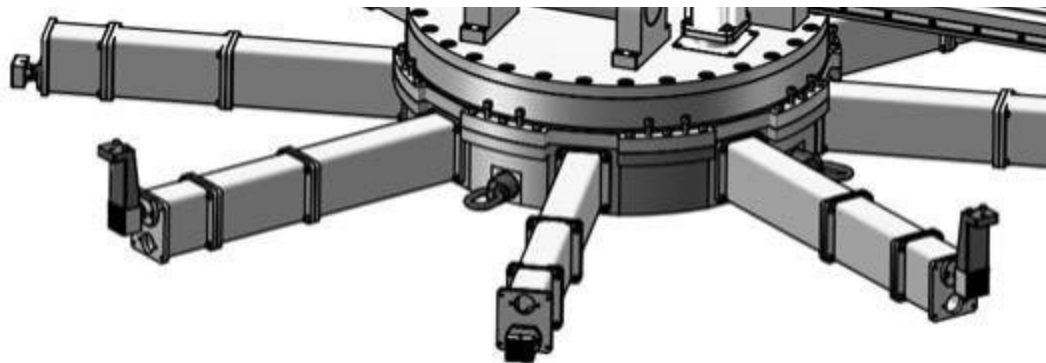
Support bar 144mm (8 Pcs);

Note: Extension bars can be stacked

Fine adjustment block bolts (4); Fastening block bolts (4)

Note: Use staggered (as shown)

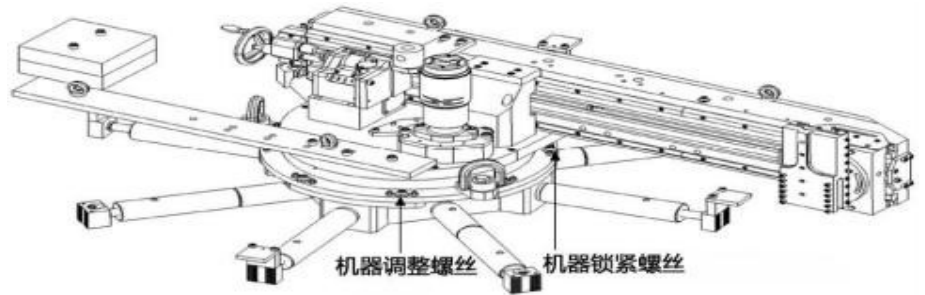
Screw the base assembly into the base until they measure below the inner hole mounting size (approximately 6mm)



2.2 Body installation adjustment

Body installation
(installed before
leaving the factory)

1. The center locating bolt is used for precise positioning of the machine and is fixed in the center of the machine base.



2. Make sure the knife holder is fully retracted and the knife has been removed.

3. Carefully lift the machine over the bushing and align the bolt holes to avoid rotating the machine any great distance.

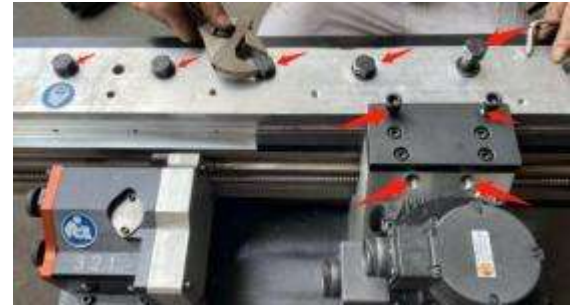
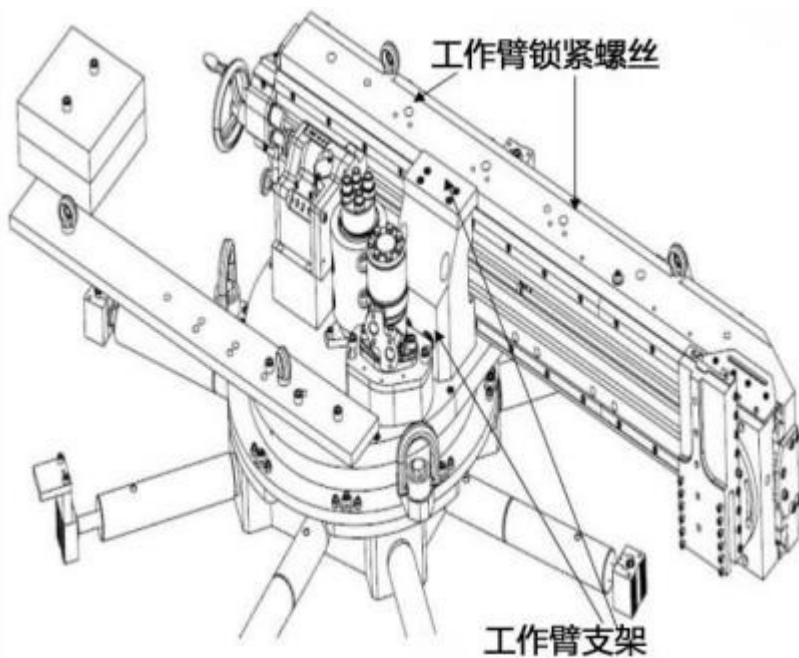
4. Lock the machine in place.

Body Adjustment

Adjust the working arm according to work needs

Adjust the gear to "N"; Turn the handwheel to adjust the tool holder position





1. Loosen 9 screws to move the working arm horizontally
 2. Loosen the arm screws in the arm bracket and the arm can slide. Slide the arm to the desired position.
 3. After accurately positioning the mechanical arm, fully tighten the drive arm locking bolt.
 4. Make sure the arm is correctly positioned and perpendicular to the rotary drive.
- Note: When the movement reaches the stroke, stop moving the working arm to prevent damage to the machine.**



2.3 Counterweight balance block

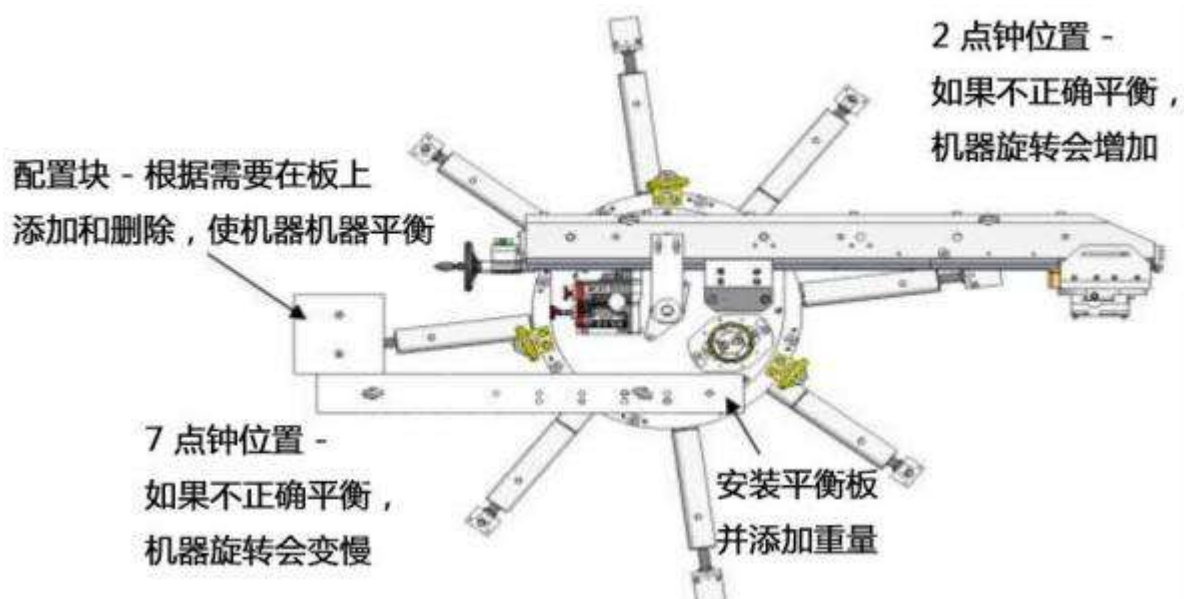
Adjust the position of the counterweight block according to work needs



1. There is no limit to the installation position of the machine, but the machine must be in a balanced state before operation
2. To obtain balanced rotation, configuration blocks should be added or removed, and their positions on the plate should be moved to obtain smooth rotation. The rotation speed should not increase or decrease.
3. Run the machine and observe whether the machine speed is consistent at each position. If one end is difficult to rotate, it is necessary to fine-tune the position of the balancing disk and fix the nut
4. For more precise balancing, it is recommended to remove the motor and rotate the machine manually until the machine rotates at a constant speed

(Pay special attention to the 7 o'clock and 2 o'clock positions (assuming the highest point is 12 o'clock) as this will be where the weight transfer is greatest.)

CAUTION: Operating the machine out of balance will increase loads on drive components and shorten the life of the machine.



2.4 Install the machine driver

Install the machine drive (pneumatic or servo motor)

If you choose pneumatic drive

Please equip an air compressor with an air tank to ensure air supply, otherwise the machine will stop working.

Please equip the air filter (because the air contains moisture, it is easy to cause the gear air motor to rust))

Note: Before and after each use, please add professional air tool oil to maintain the air motor.

**If servo motor drive is selected Note:
According to the different processed
materials, adjust the feed amount**

appropriately.

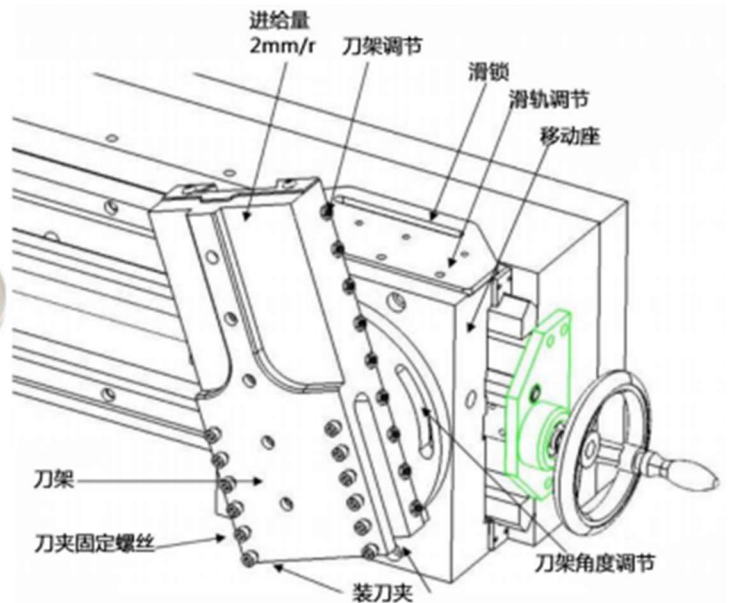
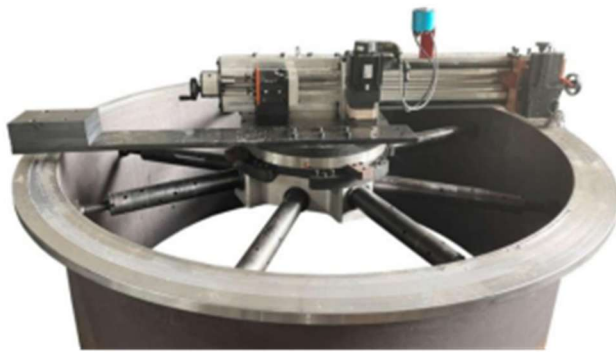
2.5 Machine Installation

Install hooks on the machine to facilitate machine movement and installation



Install the 7-shaped hook on the fine-tuning block and then install the machine on the flange
Use the meter to calibrate the center, level, and vertical (adjust the fine adjustment knob)





2.6 Tool holder settings

1. Install the supplied tool in any tool slot and tighten - over-tightening the screw may cause damage to the threads or tool shank.

2. The angle of the knife holder can be changed - loosen the 2 screws for adjusting the angle of the knife holder, and the knife holder can be rotated. After adjusting the angle, tighten the screws.

3. The toolholder feeds approximately 2mm per full revolution. Precise depth of cut setting is done by placing the magnetic clock on the toolholder, zeroing the dial on the flange face, and then adding the depth of cut. Adjust the feed rate according to the material being processed. Turn the hand wheel to adjust the feed speed (2mm/r)

Note: Before the machine runs, the feed rate needs to be preset.





Note: If the blade becomes dull, please replace it immediately.

2.7 Tool holder symbol description and feed direction setting

"B" Indicates boring processing

gear "N" Indicates neutral gear, no-load rotation



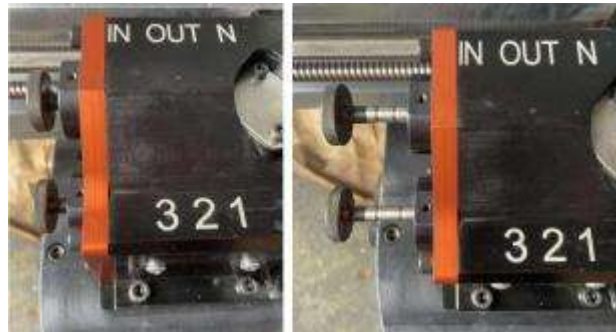
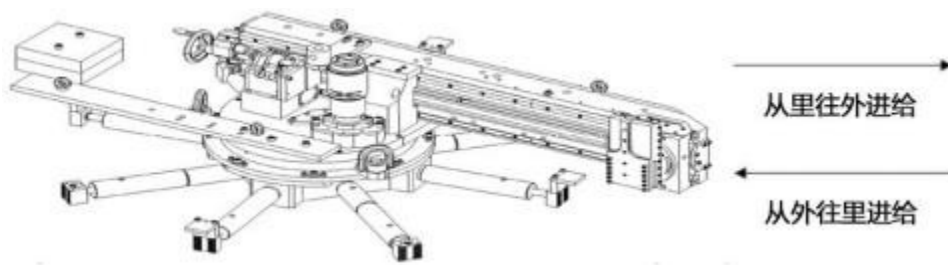
"F" indicates plane processing gear

Note: When gear shifting is abnormal, please operate the gear and handwheel at the same time to make the gears mesh tightly.

The pull and press hand wheel adjusts the feed direction of the tool holder; the symbols are explained as follows:

"IN" indicates forward gear, which means feeding from inside to outside "OUT" indicates reverse gear, which means feeding from outside to inside "N" indicates neutral gear, which means no-load rotation

["3" " 2" " 1"] Adjust the feed speed. ("1" means the smoothest; "3" means the roughest)

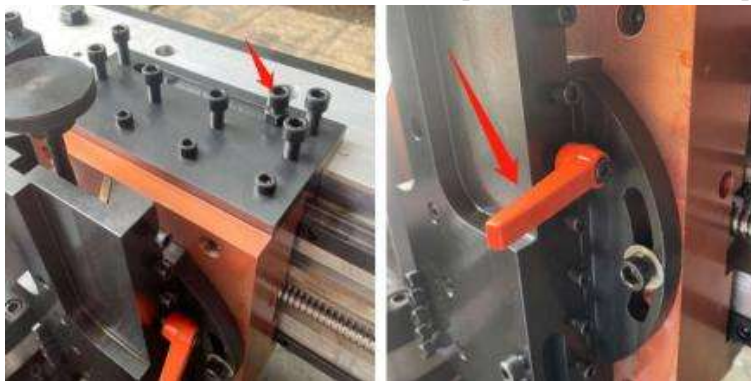


[Plane processing]

Step 1:

[“B” “N” “F”], switch to “N” gear; [“IN” “OUT” “N”], switch to “N” gear

Step 2:
Remove the “sliding locking bolt” and turn the handwheel to move the tool holder to the position to be processed.



Note: When performing flat machining, remove the "sliding locking bolt" and lock the "orange tool holder lock handle"

Step 4:

[“B” “N” “F”], switch to “F” gear

Note: When shifting gear, turn the handwheel to ensure that the gear is in place.

Step 5:

Lock the “orange tool holder lock handle” .

Step 6:

Adjust the feed direction according to processing requirements. [“IN” or “OUT”]

Step 7:

Adjust the feed speed according to processing requirements. [“3” or “2” or “1”]

Note: When performing flat machining, remove the "sliding locking bolt" to lock the "orange tool holder locking handle"

Feed direction position	Gear	Feed speed (mm/r)
IN	1	0.128 mm/r
IN	2	0.191mm/r
IN	3	0.383mm/r
OUT	1	0.164 mm/r
OUT	2	0.246mm/r
OUT	3	0.492mm/r

Step 8:

Turn on the power (pneumatic or servo motor), the machine will work automatically. Note: If the drive mode is servo motor (electric), the speed can be adjusted.

[Boring]

Step 1:

[“B” “N” “F”], switch to “N” gear; [“IN” “OUT” “N”], switch to “N” gear

Step 2:
Loosen the “slide plate locking bolt” , turn the hand wheel to move the tool holder to the position to be processed, and then install and lock the “slide plate locking bolt”



Note: When boring, install and lock the "slide plate locking bolt" and loosen the "orange tool holder locking handle".

Step 4:

[“B” “N” “F”], switch to “B” gear

Note: When shifting gear, turn the handwheel to ensure the gear is in place.

Step 5:

Release the “orange tool holder lock handle” .

Step 6:

Adjust the feed direction according to processing requirements. [“IN” or “OUT”]

Step 7:

Adjust the feed speed according to the processing requirements. [“3” or “2” or “1”]

Boring feed speed		
Feed direction position	Gear	Feed speed (mm/r)
IN	1	0.09 mm/r
IN	2	0.138mm/r
IN	3	0.277mm/r
OUT	1	0.119 mm/r
OUT	2	0.178mm/r
OUT	3	0.356mm/r

Step 8:

Turn on the power (pneumatic or servo motor), the machine will work automatically **Note: If the drive mode is servo motor (electric), the speed can be adjusted.**

Part 3 Maintenance, Faults and Solutions

Mainten ance time	operate
After each use	Clean all parts and lightly oil them
	Check that all components are present and stored correctly
	Check the tool (if the tool is blunt, please replace it in time)
	Add professional air tool oil to maintain the air motor before and after use (if it is pneumatically driven)
weekly	Lubricate the tool holder
	Lubricate the guide screw
Quarterly	Remove the motor, screws, grease the main gear, check the drive gear and grease it

The following information is provided to help operators identify possible causes of failures during equipment operation. If the failure is not within the scope of the following description, please contact us.

Fault symptoms	POSSIBLE REASON	ACTION TO TAKE
MACHINE WILL NOT ROTATE WHEN AIR SUPPLY IS ON	1.Air supply not available	Check air supply
	2.Faulty drive motor	Check drive motor-contact technical staff
	3.Faulty air valve	Check operation
	4, Incorrect air source connection	Check air volume
The equipment tool holder does not move	1.The tool selection handle does not move to the correct position.	Check gear mesh, refer to gear selection section in this manual
	2.Directiona! rotation handle is in neutral or not properly engaged	
	3.Face machining/boring handle not engaging properly	
POOR SURFACE FINISH ON FLANGE	1.Blade wear	Replacement blade
	2.The device is not properly mounted on the flange	Check and tighten all mounting bolts and adjustment legs.

	3.Cutting depth is too large	Reduce cutting depth
	4.The tool is loose	Lock the tool
	5. The tool holder is loose in rotation	Check whether the rotating fastening screw is tight
	6.The crossbeam is loose	Tighten the crossbeam
	7.The tool holder or slide clearance is incorrectly adjusted	Readjust the clearance between the tool holder and the slide
	8.The equipment fixing bolts are loose	Tighten the locking bolt
	9.The guide rail is worn	Check and contact the technician
	10.The counterweight is unbalanced	Check the equipment weight

Part 4: Packing List

No.	Name and specifications	Quality	unit
1	Machine body	1	set
2	Base	1	set
3	Special tool	1	set
4	Support device	1	set
5	Counterweight	1	piece
6	Motor	1	set
7	Packing box	1	piece
8	Random special tool	1	set
9	Blade	10	piece
10	Instruction manual	1	piece
11	Product certificate	1	piece

Part FIVE: Warranty Card



WARRANTY CARD

Company name			
Address			
Contact person		Phone number	
Model No.			
Series No.		Production date	
Warranty period	12 months		

Inspector:

Company seal:

Warranty Rules:

1. Warranty period start from the date shipped on board, 12 month free warranty.
2. Over warranty period, spare parts charge at cost price.
3. Within warranty period, the following conditions are not included in guarantee:
 - a) Improper operations not following the operation manual
 - b) Damage by self-maintain
 - c) Damage by force majeure or transport
 - d) Can not present this certificate