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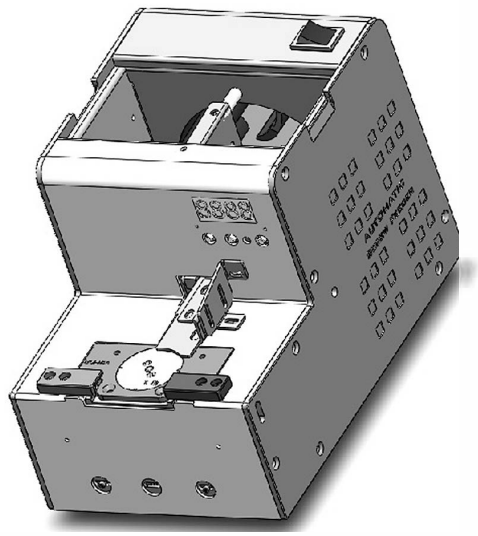
the torque tool specialists®

MSP Automation Screw Presenters (Digital Display) Operation Manual



Thanks for purchasing this product.
The product is electrical automation equipment.
Please strictly abide by the use of norms.
Please read the manual before using the machine, and keep it safely. In case of any insurmountable problems, pleas contact the dealer.

WARNING

CONTENTS

Characteristics

1. Adjustable for a wide range.

The rail can be adjusted freely to suit many kinds of screws, like M1.0–M5.0 standard screw(1.0 1.2 1.4 1.7 2.0 2.3 2.6 3.0 3.5 4.0 5.0), special screw, 1:1 short screw, filling piece screw and so on

2. Working smoothly.

The screws movement and fall down inside the bucker all the screws will be cleared if not enter the rail and enter the next circle, screws will never be blocked, the check point will not vibrate.

3. Working speed adjustable

Feeding system and drive system independent control, set the time delay freely to adjust the feed speed, suits many kinds of works.

4. Simple operation

Whether metric specifications or british specifications, all easily to understand, even novices can operate freely.

5. Can increase productivity

significantly

It is unnecessary to target the screw cap, compared to screw plate, each screw can save 1.4 seconds, productivity increased by 4 times!

6. Statistical function(partial models)

When the settings achieved, the machine will automatic alarm and cycle, it is very clear to see with digital display panel.

7. Automatic alarm function

When non-normal condition occurs, the machine can automatic alarm.

8. The volume is exquisite, does not occupy the space.

Read these instructions thoroughlyfor the proper use of this machine. After having read these ins tructions, keep them in a safe place so that you or the o perator can refer to them whenever necessary.

一、Fittings

Instruction manual, 1copyScrew stopper plate, 1 piece1.2mm trim areas 3 piece of, 0.2 mm trim area 5 pieces (used for adj - - usting the holding plate)Hexagonal key, 1 piece

二、FOR SAFE USE

Read the following Cautions thoroughly for the safe use of this machine. Keep them in mind during the operation of the machine in order to prevent injuries and damage to property.

Installation Caution:

Install the machine on a level, stable location that can endure it's weight and running conditions. If the machine falls down or turns over due to improper installation, Injuries or property damage may result.

Operating Enviroment
Caution:Do not operate this machine where flammable or corrosive gas is present. It is extremely dangerous to use this machine

u nder such circumstances. Do not operate this machine in environments of high humidity.

AC adapter
Caution: Do not use any other AC adapter other than the recommended accessory.

Rail
Caution:Do not damage nor oil the rail. Suitability of screws
Caution:Do not use oily screws, dirty screws or any screw other than those prescribed.

Screw removal
Caution:Do not exert excessive or impactive force when removing the screws.

When the machine doesn't work Caution:Be sure to unplug the AC adapter from the wall outlet during closing hours and if the machine will be left unused for any extended period of time.

Emergency
Caution:Stop operation and unplug immediately whenever you sense abnormalities or anom -alies during the operation of this machine.such as a pungent oder. Turn off the power switch and disconnect the AC adapter from the receptacle. Continued operation may cause fire ,electric shock, malfunction or injury. Immediately contact the dealer from which you purchased the machine.

Servicing
Caution:Do not attempt to repair,disassemble or modify this machine except where specified by this manual. Consult your dealer for service and repair of this machine.

ADJUSTMENT AND CHECKS BEFORE USE

Before use ,check if components suited to the screws are fixed to the body. The rail is r:, 1.0 to r:, 5.0 depending on the nominal diameter. It is determined by a discriminating seal affixed on a rail front cover. There are two kinds of passage plates, namely one for rt,1.0 tort,1.7and one for r:,2.0 to¢3.0. It isdetermined by a discriminating seal affixedon a passage window. The size of the different screws adjustable guide replace the turntable and the upper pla-te .the upper plate andthe turntable can be bought from our company

1.Attaching a rail to a main body

First, loosen the fixing screw and thrust the rail until it stuck at end as shown in the picture. Then, tighten the fixing sere was before.

2.Quantity of screws thrown in

If too many screw are thrown in, orient

–ation and transfer of the screw will be seriously affected.

3.Check/adjustment of the brush

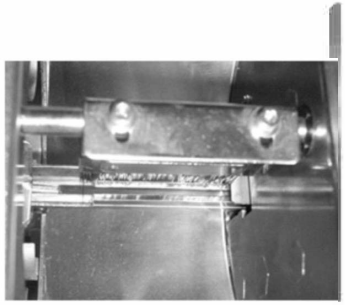
Check the height of the brush.

As in the picture on the right, set the brush to an approximately level position. Ensure that the edge of the brush is grazing the screw's head. If the height of the brush is either too low or too high, orientation and transferal !hes crews will be seriously affected. If adjustment is necessary, adjust it by loosening the brush height adjusting screw.

Note: Always unplug the AC adapter from the wall outlet before making any adjustments to avoid injury.

4.Check/adjustment of the plate Check the position of the plate. Ensure that the gap between the head of the used screw in the rail groove and the plate is approximately 0.2mm to 1 mm If there is no gap , the screw gets caught.

If the gap is too large, the screw overlaps or juts out. If adjustment is necessary, adjust it up or down by loosening the bit guide bracket attaching screw.



5.Easily adjust it by using the 0.35 mm gauge plate. Loosen the bit guide bracket attaching screw. Insert the gauge from the top between screws on the rail and the holding plate. Tighten the bit guide bracket attaching screw when the holding plate is touching the front and the back of the gauge equally.

Caution: Matchine the center of the holding plate out let and the rail center may be necessary . If not, adjust it by loosening the attaching screw.

6.Check/adjustment of the rail

Check the physical relationship of the stopper and sensor. Ensure that the rail is fixed so that "A" portion of the stopper is O mm to 0.5 mm ahead of the sensor optical axis. If adjustment is necessary, adjust it back and forth by loosening the rail attaching screw.

7.Check/adjustment of the turntable

First : To choose the correct aperture and top plate for the screw , ,and adjust the aperture and the top plate to center align

Second :Adjust the rail for the screw slipping smoothly.

Third : To check the aperture and rail center align when the machine Is working ,and then tighten the screw if they were center align .There is 0.3MM gap between the aperture and the rail .And then adjust the gap between the rail and plate untll the screw can be slipped smoothly .

Fourth :The secondarv alarm caught with the hand wheel,wheelidling will can the police ten times in the boot when using this product if the circumstance that does not have toreport to the pol ices, please restart exoect a clear indicator

8. Check/adjustment of rail vibration

Transfer speed of screws differ according to screw type. This machine can change rail amplitude and adjust the transfer speed. To adjust amplitude, loosen an amplitude fixing screw at the rear of this machine and turn the amplitu de adjusting screw at the bottom of the machine. Viewing it from the bottom, if turned clockwise, the amplitude become slarger, and it turned counterc lock wise, the amplitude becomes smaller.

If you make the amplitude too large in order to speed up the transfer, it may become difficult to pull up screws. So, adjust it to appropriate amplitude for the type of screw being used. After adjust -ment, be sure to tighten the amplitude fixing screw on the rear of the machine.

Parameters 螺丝机参数

Screw head:Suits each tape of screw(Lmax=1.0m m) Output speed: 1screw / s±0.3/s

Input voltag e:AC220V-240V SOHz Product

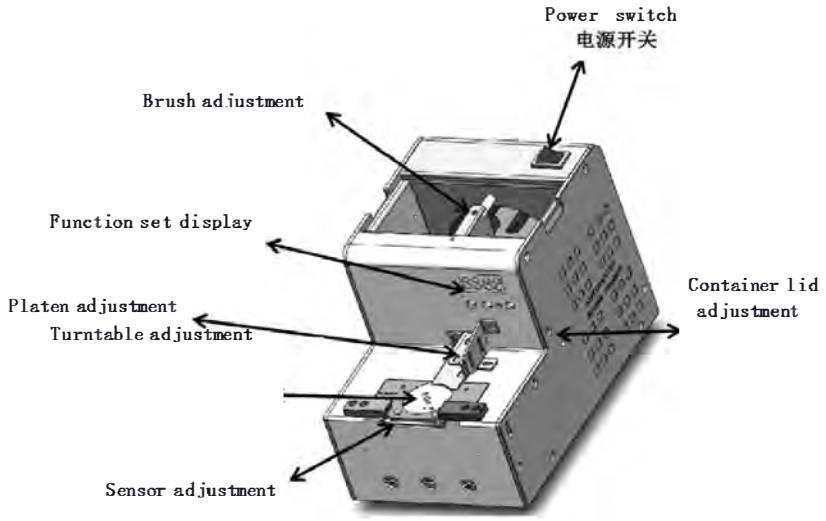
size: 202.5mm x 126mm x 149mm (L*W*H)

Net weig ht:About 3.0 kg

Accessories Operat ion al Gu idelines:

DC power supply (input 220V-240 V, output DC 15 V /1200 m A)
inward hexagonal key

Description of parts and funtions



常见故障处理方法 Fault solution

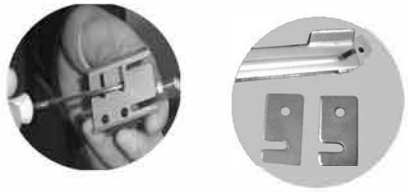
Fault	Reasons	Solution
No power	1.Power supply is damaged 2.Switch damage 3.DC socket is problem	Check for update
Indicator lit but the macnihe does not work	Sensor located in wrong position or is blocked The motor power cord cable is broken Working parts are blocked	1.Check or adjust 2.Re-welding 3.Remove them form the machine
Screw was blocked in rail gap plate or brush position is wrong Screw leak out from material conta iner Signal light has been lit	The apron of material container located in wrong location 1. To shoot the bad 2. Sensor breaket sinking	Check and adjust Adjust the apron dosition I.Check for update 2.Check and adjust
Keep vibrating and no stop	1.Feeding delay is too long 2.Sensor located in wrong location 3.Screw is not in the right position	Check and adjust Sersor is not in the right position
Screw transportation is too slow	1. Feeding speed is slow 2 delay time is too short 3.The gap of the rail is not suitable 4.The rail touches the board 5.No gap between rail and front board 6.There *are* draped Screws between vibrery motor and bottom board	1.Adjust the *motor* speed 2.Increase the feeding delay 3.Adjust 4.Adjust the gap 0.5-1 mm 5.Adjust the gap 0.5-1 mm 6.Remove the draped screws

methods will be told next).

1. Adjust parameter needed
2. Open lid, pour screws
3. Turn On power button, approach screwdriver into screw head on guide slot. Pull out screw from presenter.

Adjustment methods

Release the screw on cover with hexagon wrench, pullout rail .



One end by adjusting the location of the two screws to adjust the track width. the other side by increas or reduce the number of small pices to adjust the gap, in order to adapt to different sizes of screws. After adjustment locking screw.

Adjust the brush position according to the screw size. Under normal circumstances, after the former high-low

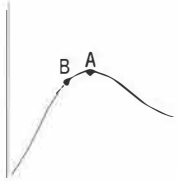
Speed adjustm -ent buttons

Adjustment tools

2. Speed adjustment

(1)Characteristics of motor speed:

The graph for motors peed and rail speed.



(2)Roller delay adjustment:
when the screw is large or not conducive to access to rail, increase the roller delay, in contrast reduce it.

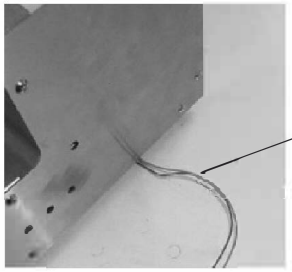
(3)Guide vibration delay adjustment: The same, when the screw is targe or not conducive to access to rail, increase the roller delay in contrast reduce it.

In order to check screw more easier,you need to pay attention to the following

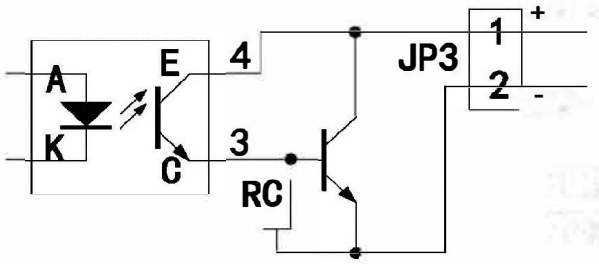
1. The turn table and the rail must be a central line, and the guide slot must suppress the screw cap.
2. Suggested that keep the electric screw driver revolving to take the bolt, like this will more labor-saving.

3. Every two months, moving parts should be added the appropriate lubricants, in order to maintain the normal operation.

4. When troubles appeared, such as screw struck, abnormal alarm, un -pleasant smell emanated, you should stop using and turn off the power immediately. Check the problems and adjust it. If you are unable to resolve the problem, please contact Mountz Service Department



Circuit diagram of the signal lines



The appended drawings:
Wheel and upper corresponding specifications

model	screw	turn table	rail	upper plate
Automatic screw feeder for robot	M1.0	M1.0	1.1	M1.0~M1.4
	M1.2	M1.2	1.3	
	M1.4	M1.4	1.5	
	M1.6	M1.6	1.7	M1.6~M2.0
	M1.8	M1.8	1.9	
	M2.0	M2.0	2.1	
	M2.3	M2.3	2.4	M2.5~M4.0
	M2.5	M2.5	2.7	
	M2.6	M2.6	2.8	
	M2.7	M2.7	2.9	
	M3.0	M3.0	3.2	
	M3.5	M3.5	3.7	
	M4.0	M4.0	4.2	

Maintenance of screw machine		
number	Maintain parts or components	Maintain parts or components
1	Screw Rail	1. Clean (wipe) inner side of guide rail with alcohol every 15 days 2. It is recommended to demagnetize the guide rail with demagnetizer every two months
2	Contact sensor	It is recommended to wipe the sensor with alcohol every half a month
3	Gear assembly	Grease should be added to the gear transmission assembly every three months
4	Transmission rod sliding assembly	Lubricating grease should be added to the sliding part of transmission rod every three months
5	Feeder	Check all screws of the linear conveyor every six months for loosening and fastening

function adjustment

The electric control part is composed of digital tubeco unters and circuit board, circuit board setting method is as follows: press the function key (the SET key), and keep 3 seconds, digital tube digital flicker, into the normal work modesetting inferface, Press"bring" can switch cycle different patterens.

nn- 10: suitable for M0.7 ~ M1.0 screw.

nn - 12: suitable for M1.1 ~ M1.2 screw.

nn - 14: suitable for M1.3 ~ M1.4 screw.

nn - 17: suitable for M1.5 ~ M1.7 screw.

nn - 20: suitable for M1.8 ~ M2.0 screw.

nn - 26: applicable to M2.1 ~ M2.6 screw.

nn - 30: suitable for M2.7 ~ M3.0 screw.

nn to 40: suitable for M3.1 ~ M4.0 screw.

nn - 50: suitable for M4.1 ~ M5.0 screw.

Press "SET" key again and return to work. At this point, the machine in accordance with the way of binding parameters in advance.

advanced work mode setting

1. Press "▼" key for 3 seconds, walk into the feeding speed regulation (1-20), the panel shows the numerical "A - * *", press "▼" at this time, "bring" button can adjust the value.

2. Press "SET" key again, enter "vibration motor delay stop time" Settings. (0.0-6.0 S shown as "b - 00-60"), press "▼" and "bring" key to adjust the time numerical size, every 0.5 seconds to jump for the unit, continue to hold down the "▼" and "bring" key can quickly adjust the value.

3. Press "SET" key again, enter "time delay stop feeding motor" Settings, (0.0-8.0 S shown as "C - 00-80"), press "▼" and "bring" adjust numerical jump in every 0.5 seconds, continue to hold down the "▼" and "bring" key can quickly adjust the value.

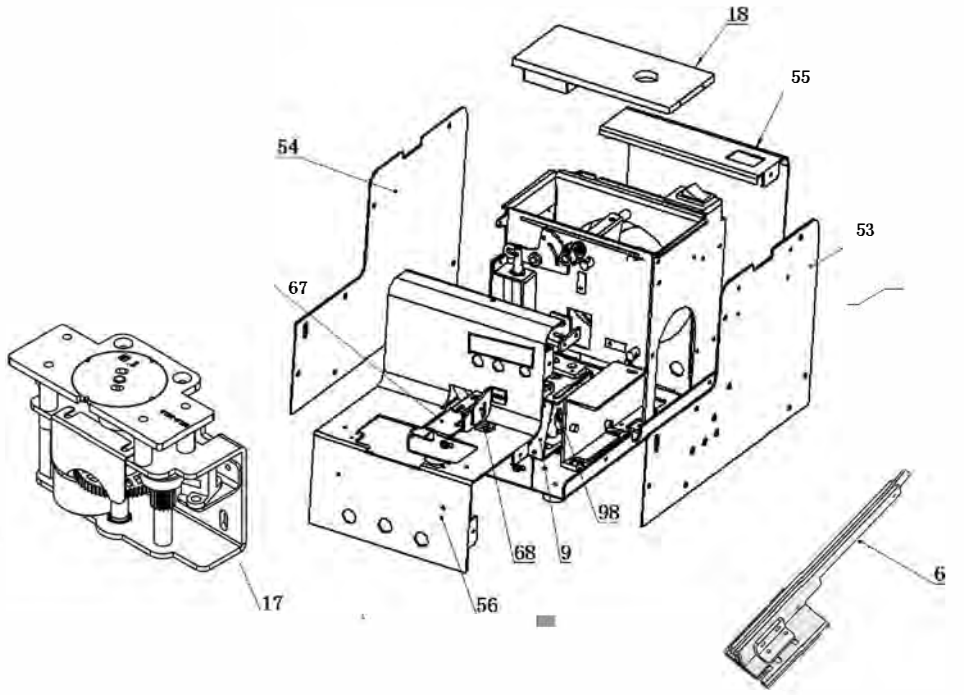
4. Press the "SET" button, enter the working mode choice.
Panel displays "- * d," according to "bring" button can switch

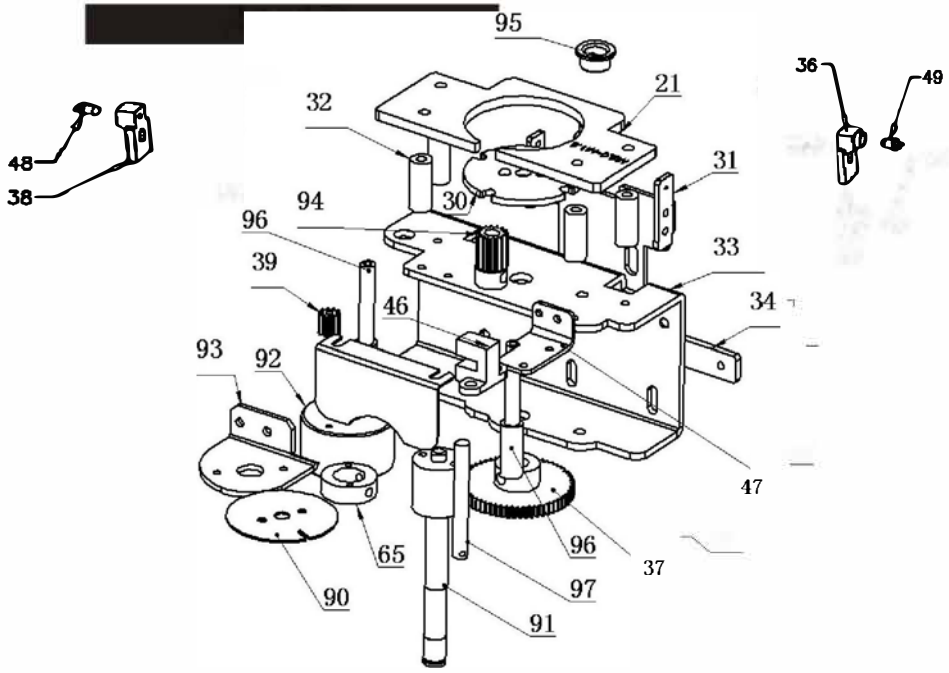
different patterns.

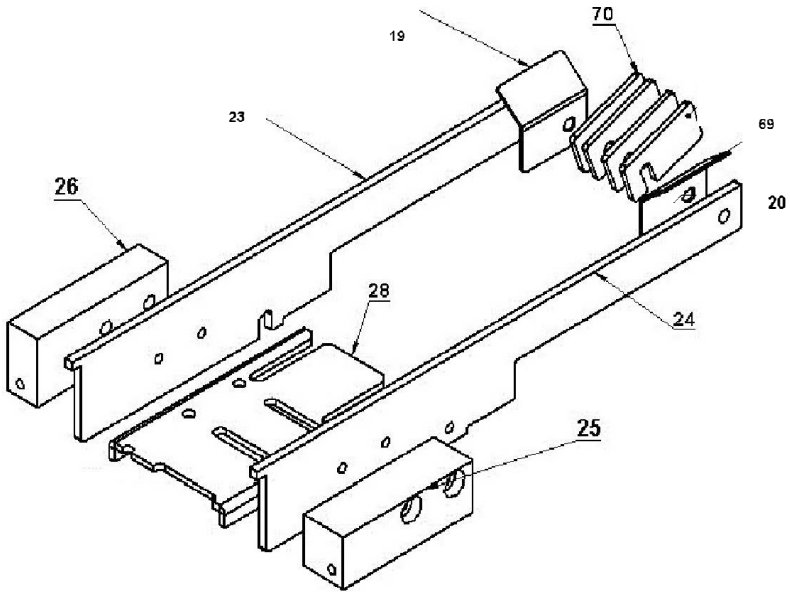
d - 0: said mode 0 (not counting mode)

d - 1: choose model 1 (counting mode)

5. Press "SET" key again and return to the work mode.



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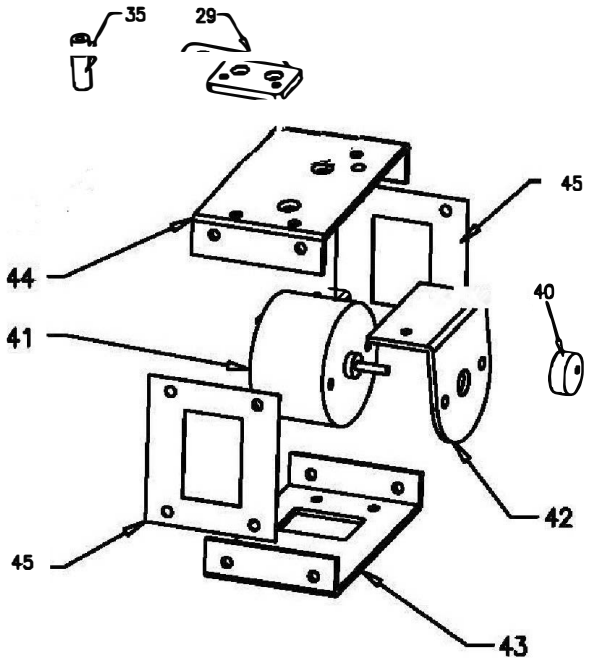
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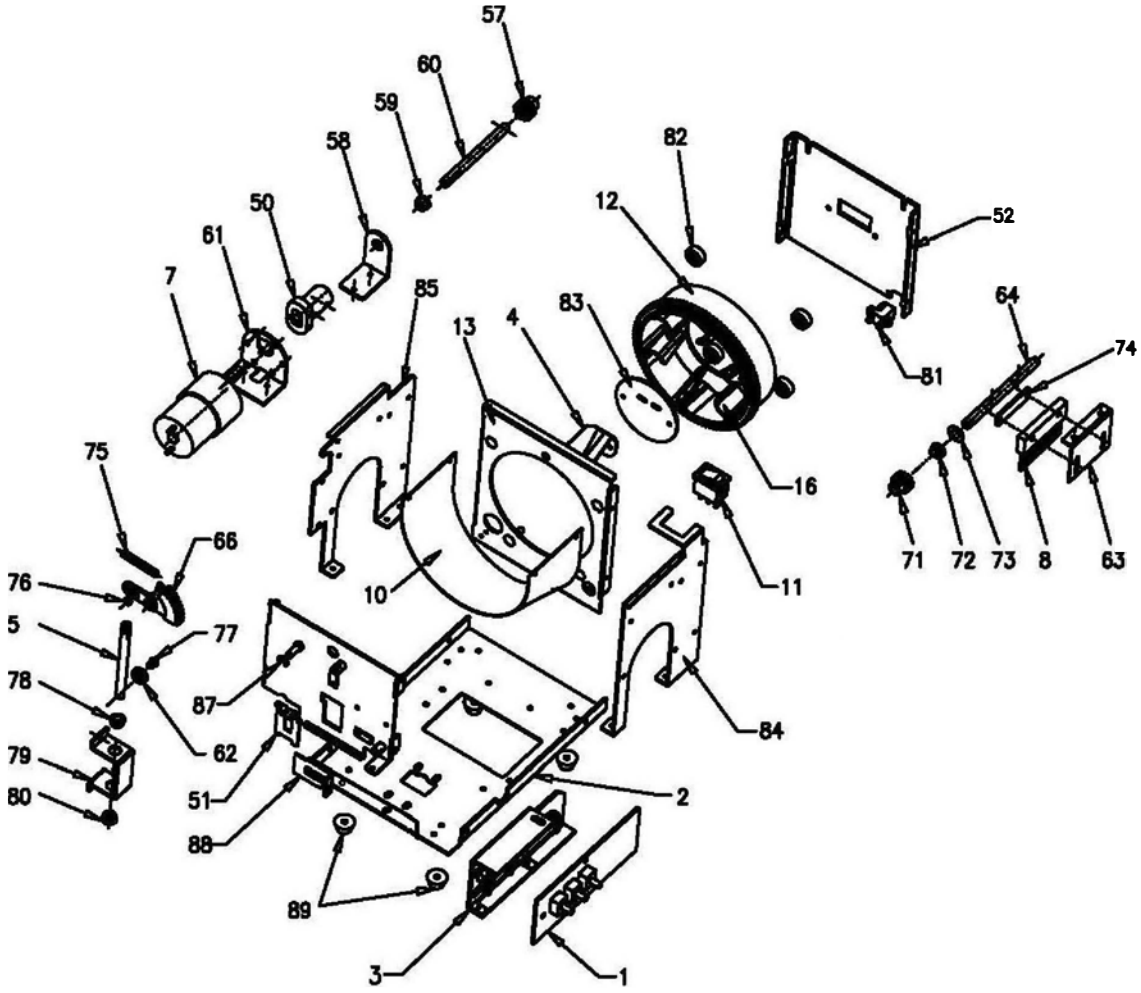
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