



mountz®

MSP Screw Presenters Models MSP-616 and MSP-1070

Operating Instructions

Rev 2.2 (09.01.2020)



Read the operation manual carefully before using the machine.

CONTENTS

1. Features	3
2. Parameters	3
3. Usage & Adjustment	4
4. Description of parts and functions	8
5. Part list	14
6. Trouble Shooting	16

Features

1. Adjustable Screw Size Capacity

Fully adjustable models, as the screw presenters can be adjusted to match different screw sizes.

2. Operates Smoothly

Screws are placed into the hopper of the screw presenter and automatically lined up for dispensing.

3. Adjustable Speed

Control the deeding system and drive system independently. Adjust the screw feed speed.

4. Simple Operation

This simple mechanism allows trouble-free operation, eliminating jammed or stuck screws.

5. Increase Productivity Significantly

Screw presenters are small, tabletop devices used to organize and automate work areas and production cells. Screw presenters make assemblers and the assembly process more efficient by mechanically presenting a screw to a fixed pick up point. Conventional assembly methods cause assemblers to inefficiently fumble with screws that are stored in bins or shaker trays. The enhancement of productivity is estimated to improve assembly time by nearly fifty percent.

Model	Item Name / Number	Screw Max Head Diameter "D"	Screw Dia	Screw Max	Screw	Tool	Tool Width (IN)	Tool Height (IN)	Tool Weight	Tool Weight Unit - American
MSP-616 DETAILS	144778	11	update					6	5.5	lbs.
MSP-616 DETAILS	144779	11	update					6	5.5	lbs.
MSP-1070 DETAILS	144781	13	M3.0 - M6.5	10	24	9.5	6.5	7	11	lbs.

Parameters

Screw head: Suits each tape of screws (L max=19mm)

Output speed: 2 screws / s

Input voltage: DC15v /1200mA

Accessories: Screw stopper plate , 1 pieces; DC Adapter , 1 piece; 2 kinds of adjustment sheet, 4 piece 1.2mm, 5 piece 0.2mm; Hexagonal key, 1 piece

BEFORE USE

Read these instructions thoroughly for the proper use of this machine. Keep the manual in a safe place so that you or the operator can refer to it whenever necessary.

1. Accessories Included:

- * Screw stopper plate , 1 pcs (1pcs is already attached to the main body)
- * DC Adapter , 1 pcs
- * 2 metal adjustment laminates, 4 pcs 1.2mm, 5 pcs 0.2mm (used to adjust the holding plate)
- * Hexagonal key, 1 pcs



2. For safe use

Operate the screw presenter properly in order to prevent injuries and damage

Installation

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

Operating Environment

Caution: Do not operate this machine where flammable or corrosive gas is present. It is extremely dangerous to use this machine under 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 use excessive or unwarranted force when removing screws.

When machine is not in use

Caution: Be sure to unplug the AC adapter from the wall outlet when not in use for extended hours.

Emergency

Caution: Stop operation and unplug immediately whenever you sense abnormalities or anomalies during the operation of this machine. Turn off the power switch and disconnect the AC adapter from the receptacle. Continued operation may cause fire, electric shock, malfunction or injury.

Servicing

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

Rail removal from main body

1)



2)



3)



- 1) Loosen upper screw to open rail access window.
- 2) Loosen side screw to open side rail access window.
- 3) Loosen screw pick up fixture and remove rail.



Adjust rail width by loosening the screws indicated on the picture.



Loosen screws as indicated. Use the metal laminates provided as accessories to increase width on the rail.

Try one screw and make sure it runs smoothly throughout the rail. Then re tight all screws on the rail.

◆ **Quantity of screws thrown in**

If too many screws are thrown in, orientation and transfer of the screw might be affected.

◆ **Check/adjustment of the brush**

Check the height of the brush.



*As in the picture above, set the brush to an approximately level position.

*Make sure the edge of the brush touches the screw's head.

*If the height of the brush is either too low or too high, orientation and transfer of the screws might get jammed or it won't feed any screws.

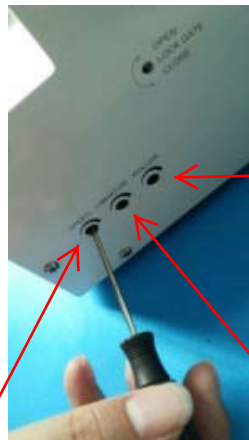
*If adjustment is necessary, adjust it by loosening the brush height adjusting screw.

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

Speed adjustment

(1) Characteristics of motor speed:

The connection between motor speed and vibration speed.

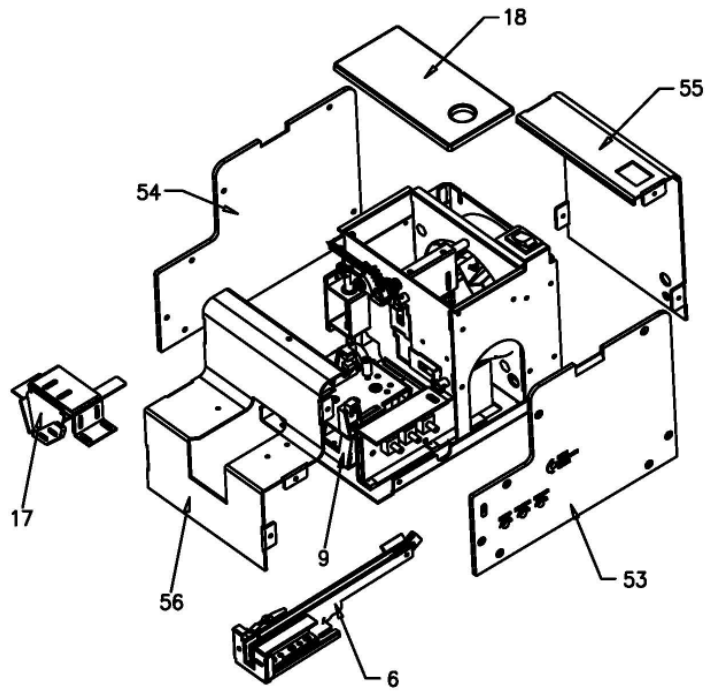


Rail filling timer. How many screws left on the rail before it starts vibrating again.

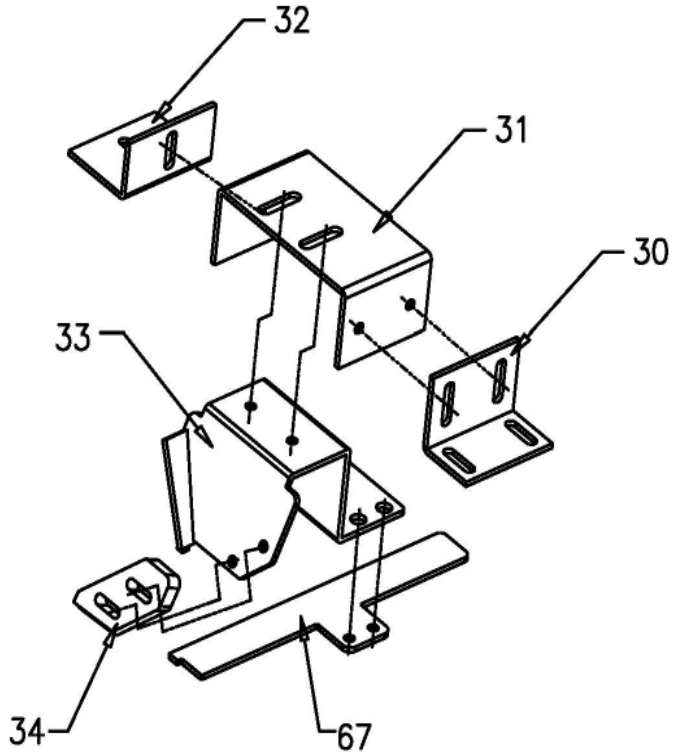
To adjust screw feeding speed.
(For quicker rail fill up).

To adjust vibration. Quicker
screw alignment.

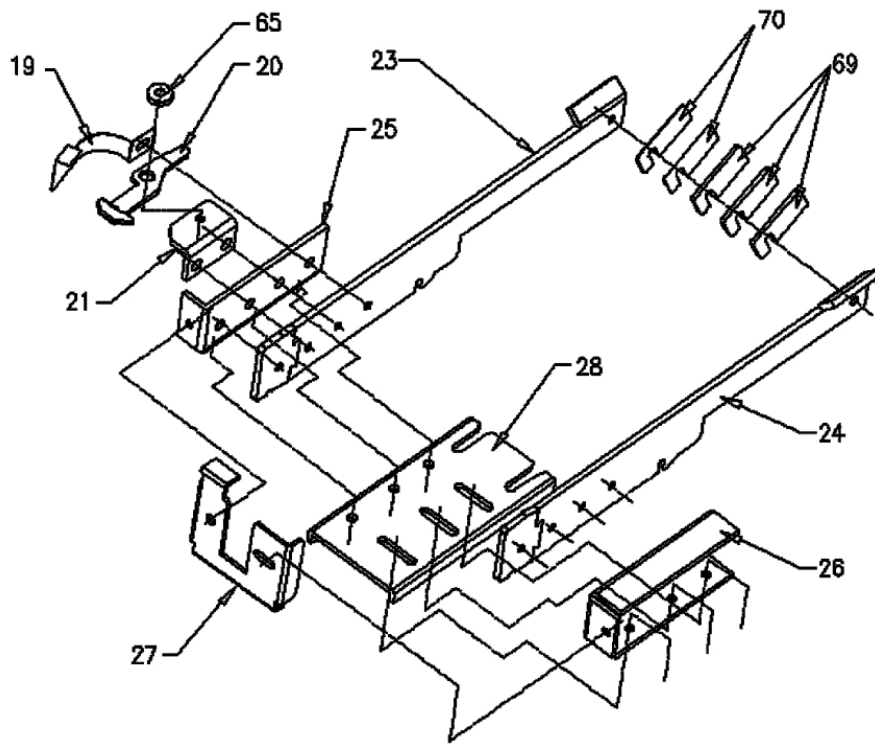
Basic Frame



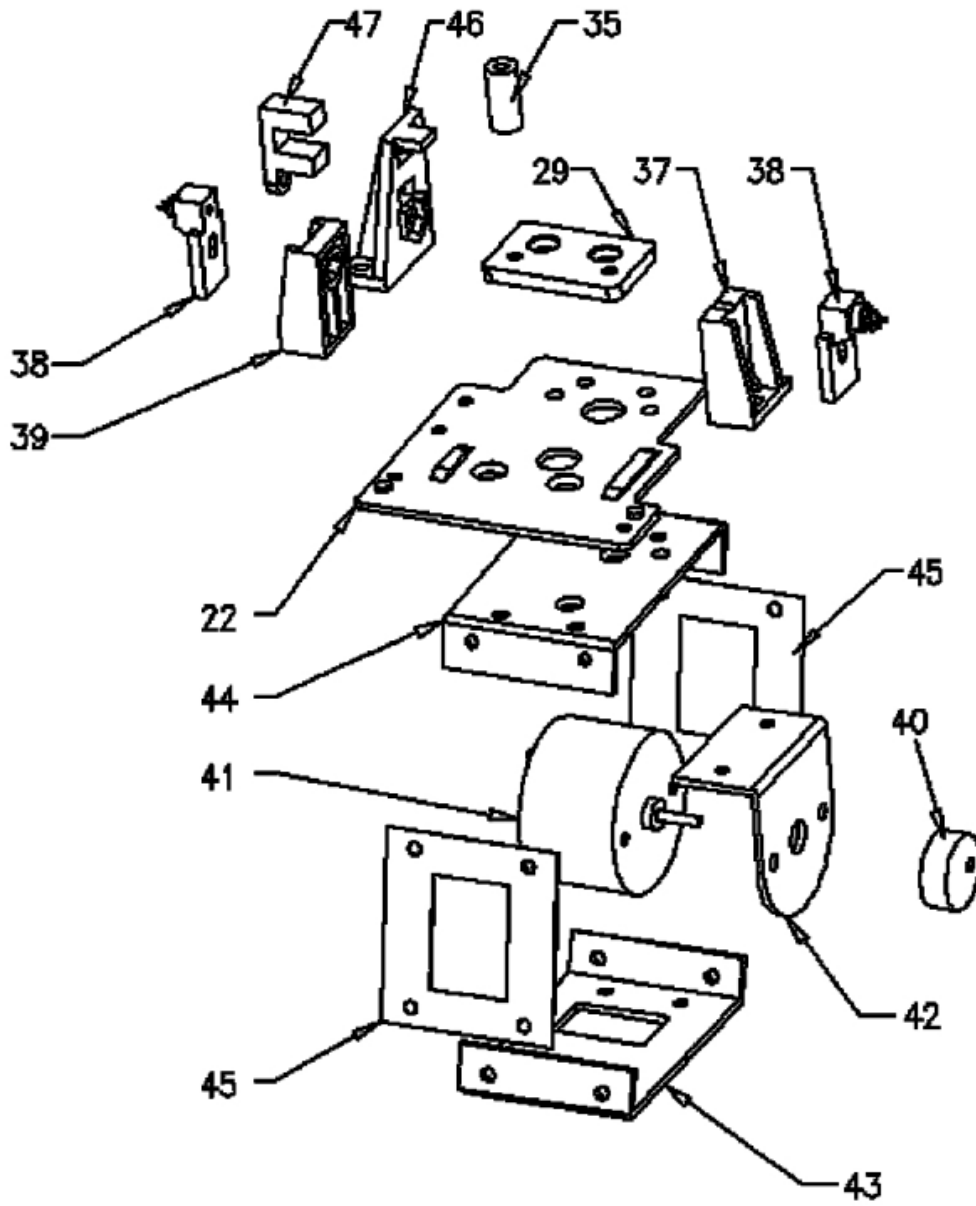
Guide Part



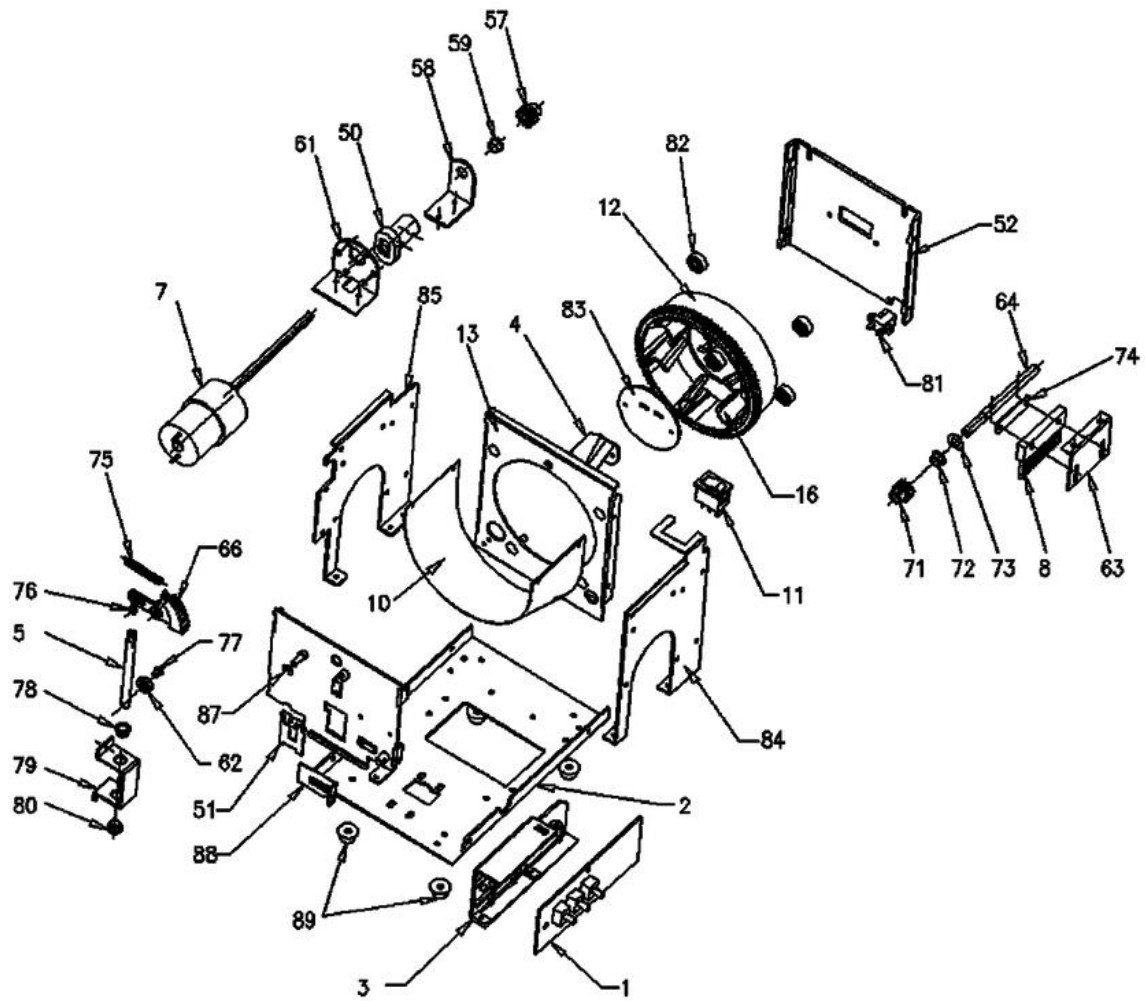
Screw rail



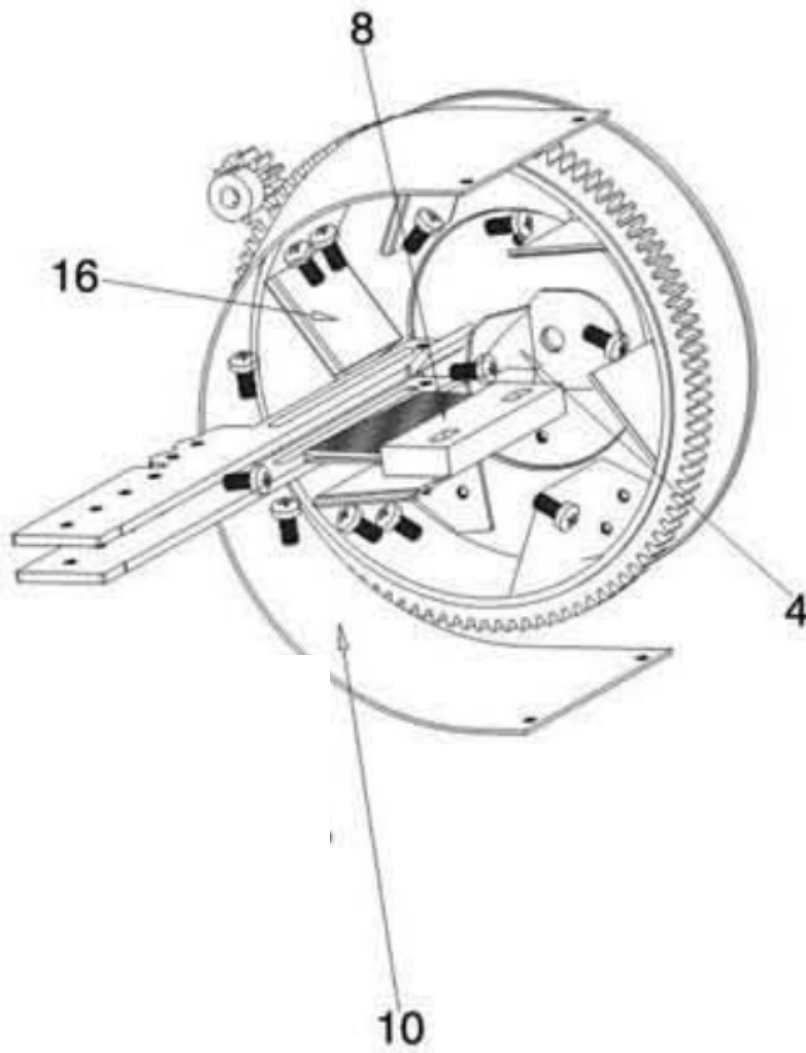
Vibrating Part



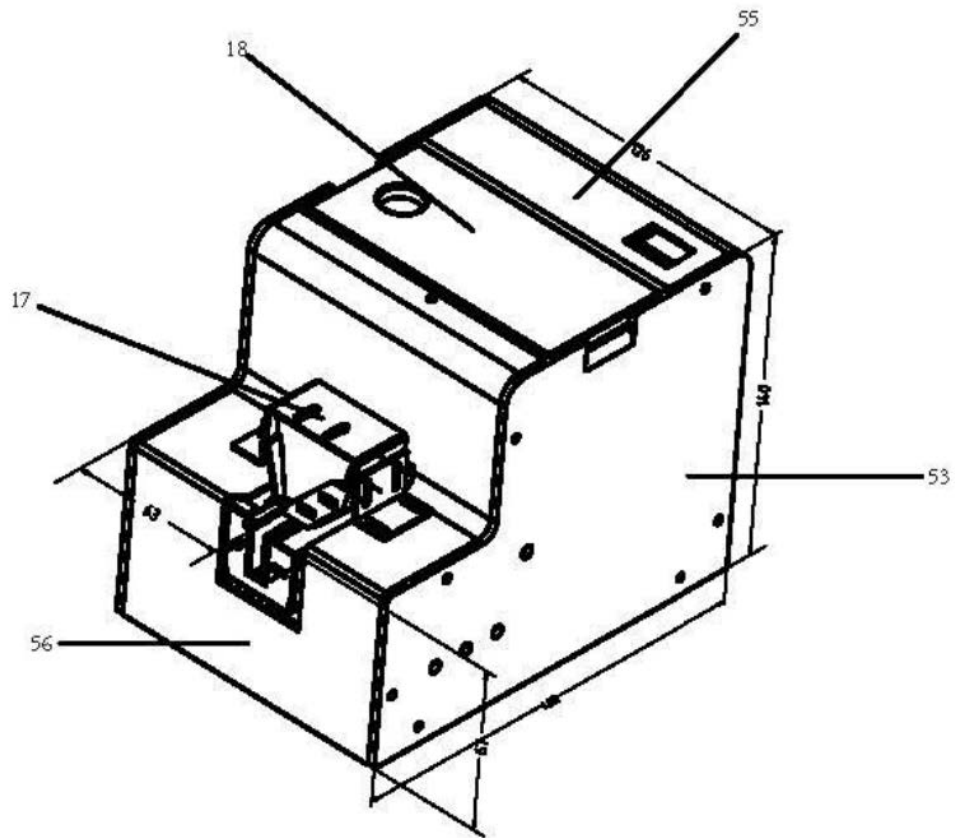
Internal structure



Feeding Part



Outside View



No.	English name	Quantity	MSP-616 / 144778	MSP-1070 / 144781	MSP-812A
1	Circuit board	1	MKS-0701	MKS-0801	MKS-0601
2	Bottom board	1	MKS-0702	MKS-0802	MKS-0602
3	Circuit board frame	1	MKS-0703	MKS-0803	MKS-0603
4	Transition plate	1	MKS-0704	MKS-0804	MKS-0604
5	Brush lifter	1	MKS-0705	MKS-0805	MKS-0605
6	Screw rail	1	MKS-0706	MKS-0806	MKS-0606
7	Motor	1	MKS-0797	MKS-0807	MKS-0607
8	Brush	1	MKS-0708	MKS-0808	MKS-0608
9	Feeder	1	MKS-0709	MKS-0809	MKS-0609
10	Container	1	MKS-0710	MKS-0810	MKS-0610
11	Power switch	1	MKS-0711	MKS-0811	MKS-0611
12	Gear wheel	1	MKS-0712	MKS-0812	MKS-0612
13	Middle board	1	MKS-0713	MKS-0813	MKS-0613
14					
15					
16	Screw lifter	1	MKS-0718	MKS-0816	MKS-0616
17	Bit guide	1	MKS-0719	MKS-0817	MKS-0617
18	Container cover	1	MKS-0720	MKS-0818	MKS-0618
19	Stopper spring leaf	1	MKS-0721	MKS-0819	MKS-0619
20	Stopper	1	MKS-0722	MKS-0820	MKS-0620
21	Stopper holder	1	MKS-0723	MKS-0821	MKS-0621
22	Screw rail holder	1	MKS-0724	MKS-0822	MKS-0622
23	left screw rail	1	MKS-0725	MKS-0823	MKS-0623
24	Right screw rail	1	MKS-0726	MKS-0824	MKS-0624
25	Left fixing plate	2	MKS-0727	MKS-0825	MKS-0625
26	Right fixing plate	1	MKS-0728	MKS-0826	MKS-0626
27	Rail board	1	MKS-0729	MKS-0827	MKS-0627
28	Guide rail frame	1	MKS-0730	MKS-0828	MKS-0628
29	Guide plack	1	MKS-0731	MKS-0829	MKS-0629
30	Right bit guide holder	1	MKS-0732	MKS-0830	MKS-0630
31	Bit guide upper holding plate	1	MKS-0733	MKS-0831	MKS-0631
32	Left bit guide holder	1	MKS-0734	MKS-0832	MKS-0632
33	Bit guide	1	MKS-0735	MKS-0833	MKS-0633
34	Rhombus plate	1	MKS-0736	MKS-0834	MKS-0634
35	Locking screw	1	MKS-0737	MKS-0835	MKS-0635
36	Right sensor frame holder	1	MKS-0738	MKS-0836	MKS-0636
37	Right sensor frame	1	MKS-0739	MKS-0837	MKS-0637
38	Left sensor frame holder	1	MKS-0740	MKS-0838	MKS-0638
39	Left sensor frame	1	MKS-0741	MKS-0839	MKS-0639
40	Eccentric wheel	1	MKS-0742	MKS-0840	MKS-0640
41	Motor	1	MKS-0743	MKS-0841	MKS-0641
42	Motor holder	1	MKS-0744	MKS-0842	MKS-0642
43	Upper connector of feeder	1	MKS-0745	MKS-0843	MKS-0643
44	Bottom connector of feeder	1	MKS-0746	MKS-0844	MKS-0644

45	Spring leaf of feeder	1	MKS-0747	MKS-0845	MKS-0645
46	Trigger	1	MKS-0748	MKS-0846	MKS-0646
47	Trigger frame	1	MKS-0749	MKS-0847	MKS-0647
48	Left sensor	1	MKS-0750	MKS-0848	MKS-0648
49	Right sensor	1	MKS-0751	MKS-0849	MKS-0649
50	Can	1	MKS-0752	MKS-0850	MKS-0650
51	Screw block plate	1	MKS-0753	MKS-0851	MKS-0651
52	Rear board	1	MKS-0754	MKS-0852	MKS-0652
53	Right cover	1	MKS-0755	MKS-0853	MKS-0653
54	Left cover	1	MKS-0756	MKS-0854	MKS-0654
55	Rear cover	1	MKS-0757	MKS-0855	MKS-0655
56	Front cover	1	MKS-0758	MKS-0856	MKS-0656
57	Gear	1	MKS-0759	MKS-0857	MKS-0657
58	Axis holder	1	MKS-0760	MKS-0858	MKS-0658
59	Nylon tube	1	MKS-0761	MKS-0859	MKS-0659
60	Axis	1	MKS-0762	MKS-0860	MKS-0660
61	Motor holder	1	MKS-0763	MKS-0861	MKS-0661
62	Bearing	1	MKS-0764	MKS-0862	MKS-0662
63	Brush holder	1	MKS-0765	MKS-0863	MKS-0663
64	Brush pole	1	MKS-0766	MKS-0864	MKS-0664
65	Bush	1	MKS-0773	MKS-0865	MKS-0665
66	Sector gear	1	MKS-0778	MKS-0866	MKS-0666
67	Rail plate	1	MKS-0780	MKS-0867	MKS-0667
68	Rail fixed plate	1	MKS-0781	MKS-0868	MKS-0668
69	Tabs 1.2mm	1	MKS-0783	MKS-0869	MKS-0669
70	Tabs 0.2mm	4	MKS-0714	MKS-0870	MKS-0670
71	Gear	5	MKS-0797	MKS-0871	MKS-0671
72	Nylon tube	1	MKS-0784	MKS-0872	MKS-0672
73	Washer	1	MKS-0785	MKS-0873	MKS-0673
74	Brush Connecting piece	1	MKS-0786	MKS-0874	MKS-0674
75	Extension Spring	1	MKS-0787	MKS-0875	MKS-0675
76	Sector gear tube	1	MKS-0776	MKS-0876	MKS-0676
77	Brush lifter tube	1	MKS-0788	MKS-0877	MKS-0677
78	Upper nylon tube	1	MKS-0789	MKS-0878	MKS-0678
79	Brush lifter holder	1	MKS-0790	MKS-0879	MKS-0679
80	Bottom nylon tube	1	MKS-0791	MKS-0880	MKS-0680
81	DC socket	1	MKS-0767	MKS-0881	MKS-0681
82	Bearing	4	MKS-0792	MKS-0882	MKS-0682
83	Wheel location plate	1	MKS-0793	MKS-0883	MKS-0683
84	Right board	1	MKS-0794	MKS-0884	MKS-0684
85	Left board	1	MKS-0777	MKS-0885	MKS-0685
86	Front board	1		MKS-0886	MKS-0686
87	Circlip	1	MKS-0795	MKS-0887	MKS-0687
88	Screw block plate	1	MKS-0768	MKS-0888	MKS-0688
89	Rubber foot	4	MKS-0770	MKS-0889	MKS-0689
90	Motor	1	MKS-0771	MKS-0890	MKS-0690

Trouble Shooting

Problem	Reasons	solution
No power	<ol style="list-style-type: none"> 1. power supply is damaged 2. switch damage 	Check for updates
Indicator lit but the machine does not work	<ol style="list-style-type: none"> 1. Sensor in wrong location or blocked 2. The power cord outlet is broken 3. Working part of the machine is blocked 	<ol style="list-style-type: none"> 1. Check or adjust 2. Re-welding 3. Remove them from the machine
Screw is stuck in Screw Chamber	Screw Windows open or brush position is wrong	Check and adjust
Screw leak out from the container	Screw Windows open or brush position is wrong	Check and adjust
Vibration, no stop	<ol style="list-style-type: none"> 1. Feeding delay is too long 2. sensor located in wrong location 3. sensor is not in the right position 	Check and adjust Sensor is not in the right position
Screw on rail speed is too slow	<ol style="list-style-type: none"> 1. Feeding speed is slow and delay 2. 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 dropped Screws between vibration motor and bottom board 	<ol style="list-style-type: none"> 1. adjust the motor speed 2. Increase the feeding delay

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