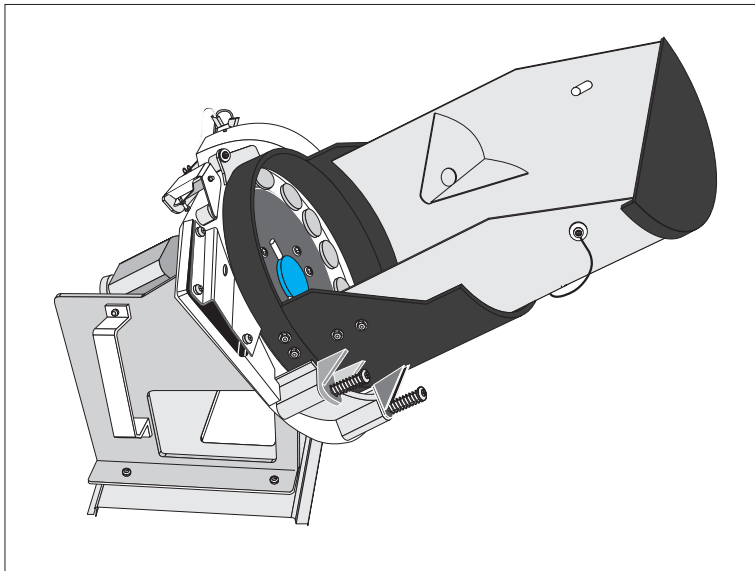


## ASAHI SEIKO Hopper



### Hopper removal (replacement)

For service or repair, remove the Hopper from the machine.

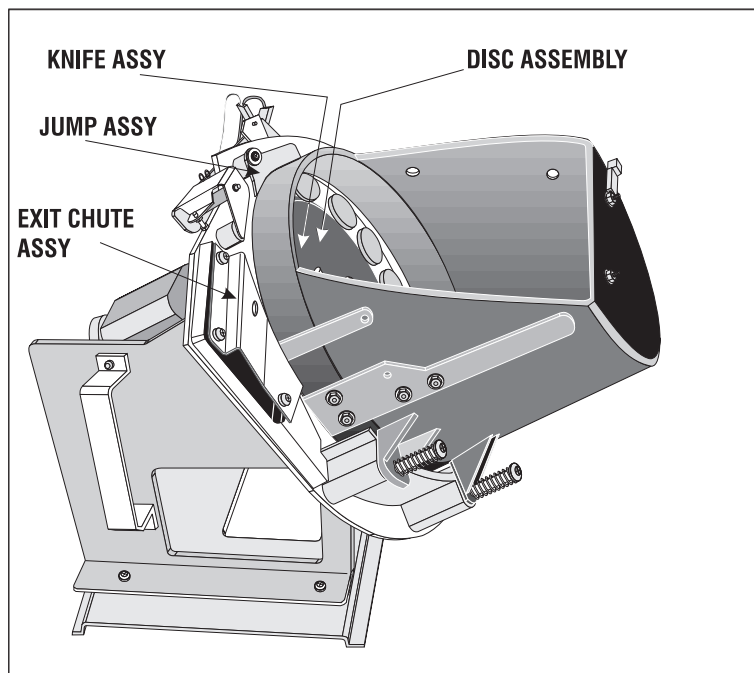


**After service or repair to the Hopper it should be thoroughly checked in the Hopper Out test routine of the machine.**

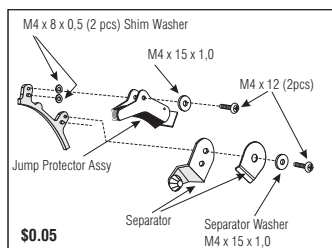
- Open the Main Door.
- Remove the Coin Bowl Assy.
- Grip the hopper handle with the left hand and with the thumb pointing downwards, press the Hopper securing clip and slide the Hopper outwards.

## Hopper conversion

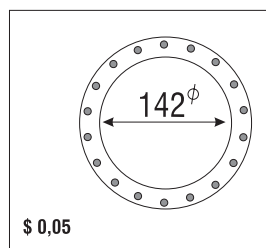
In this manual we explain how the hopper can be converted to a different coin size.



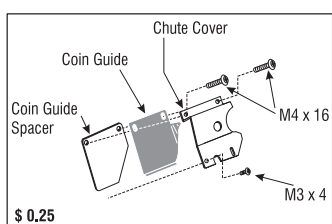
A conversion Kit consists of the following parts:



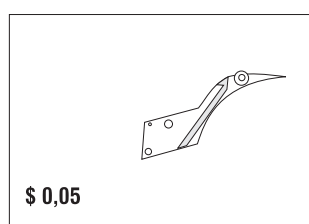
Jump Assembly



Disc Assembly



Exit Chute Assembly

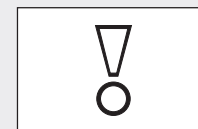


Knife Assembly

Conversion kits consists of four principle components:

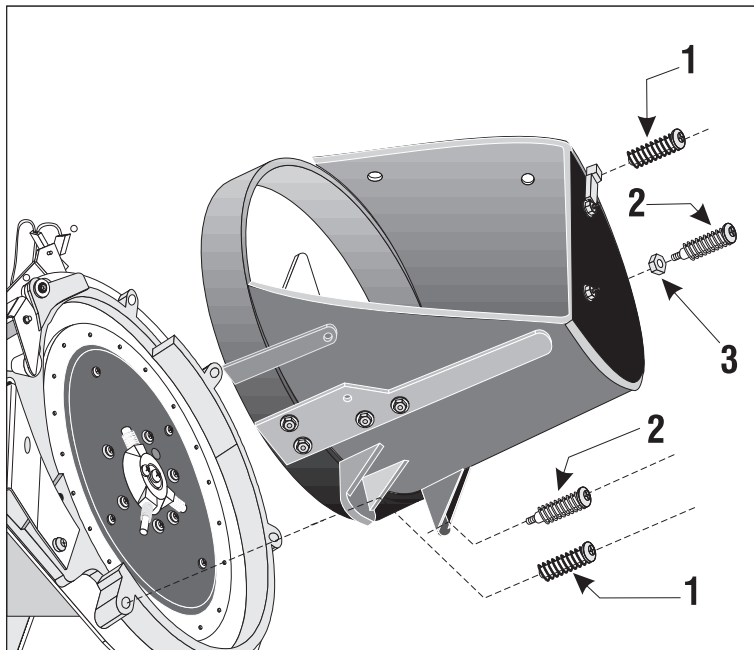
Disc Assy  
Knife Assy  
Jump Assy  
Exit Chute Assy

- Choose appropriate conversion kit
- For first time conversions, be careful.
- Take care handling washers for Jump and Knife Assys.



*We suggest you keep all old parts in case a future re-conversion becomes necessary.*

## Step 1: Remove Coin bowl



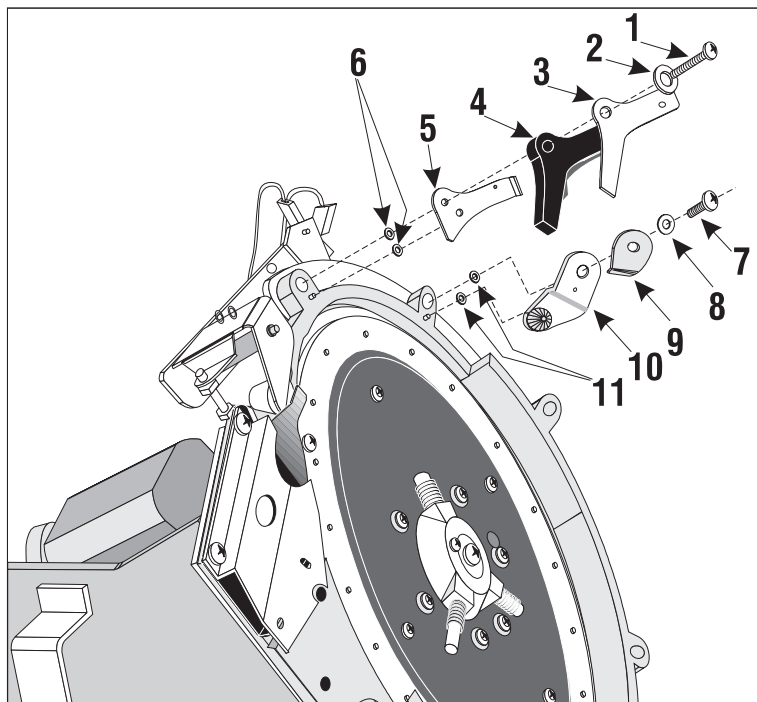
Remove coin bowl

- Remove 4 coin bowl retaining bolts.
- The hardened springs are black (pos. 1).
- The soft springs are light coloured (pos. 2).
- Caution with hex-nut screw (pos. 3), spring and hex-nut must be in the position shown.

### **Note:**

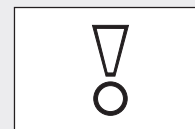
*The combination of the correct screw and correct spring is critical.*

## Step 2: Remove Jump protector



Remove Jump protector and coin separator.

- Loosen screw (pos. 1) and remove parts 1-6 one after another
- Loosen screw (pos. 7) and remove parts 7 - 11.



### **Caution:**

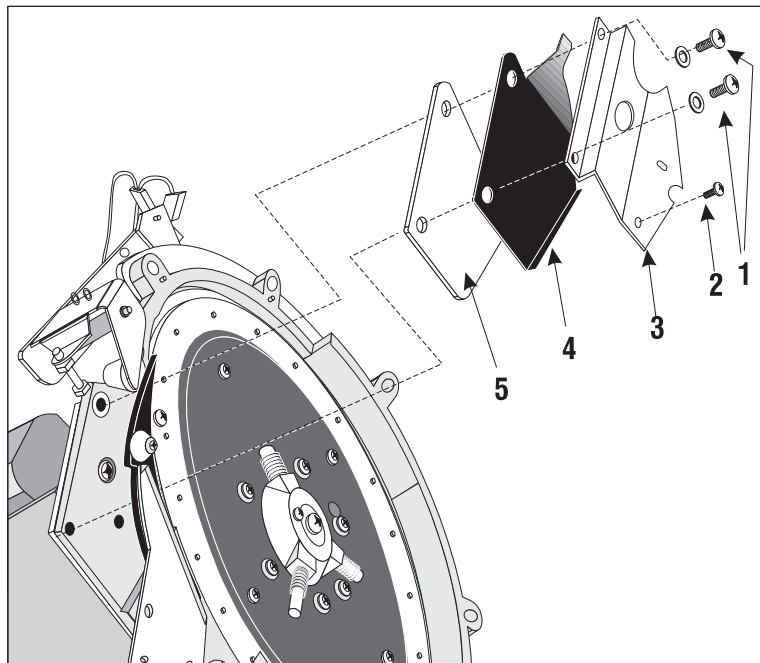
*The two shim washers (pos. 6) have different dimensions dependant on coin size.*

\$ 1,00 = M4 x 8 x 1,2

\$ 0,25 = M4 x 8 x 0,3

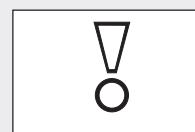
\$ 0,05 = M4 x 8 x 0,5

### Step 3: Remove Chute Assy



#### Remove Chute Assy

- Remove screws (pos. 1 + 2)
- Remove complete chute Assy

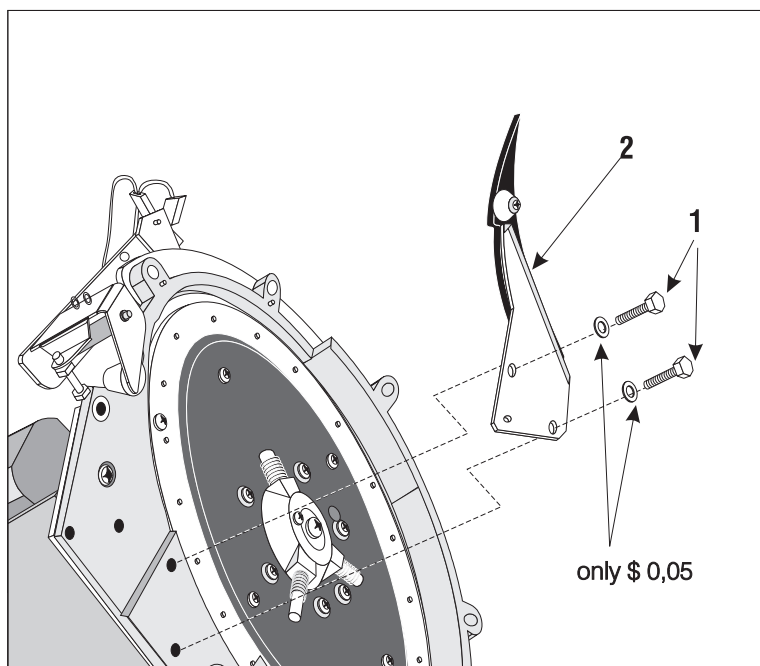


**Note:**

The coin spaces (pos 5) are not used on \$1,00 models.

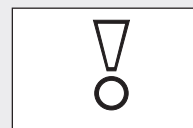
On \$0,05 models there is a shim washer between chute cover and housing.

### Step 4: Remove Knife



#### Remove knife.

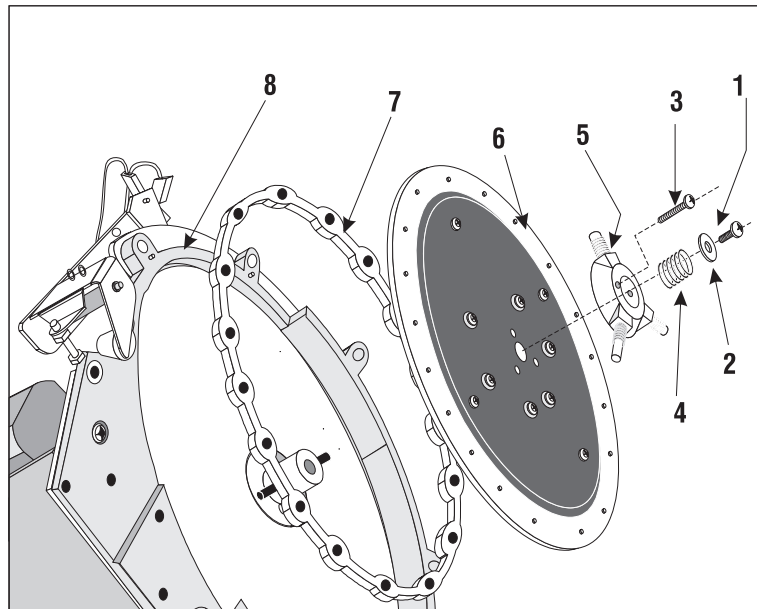
- Remove 2 screws (pos. 1).



**Note:**

Caution when lifting knife. There may be shim washers between knife and housing.

## Step 5: Remove Disc



## Step 6: Re-assembly

Preparation is complete to re-assemble to denomination of your choice.

### Remove Disc

- Remove screws (pos. 1 + 3)
- Remove parts (pos. 2 to 5) one after the other and lay to one side.
- Before removing (pos. 6 + 7) invert entire disc body and bearing will drop out with the disc.



### **Caution:**

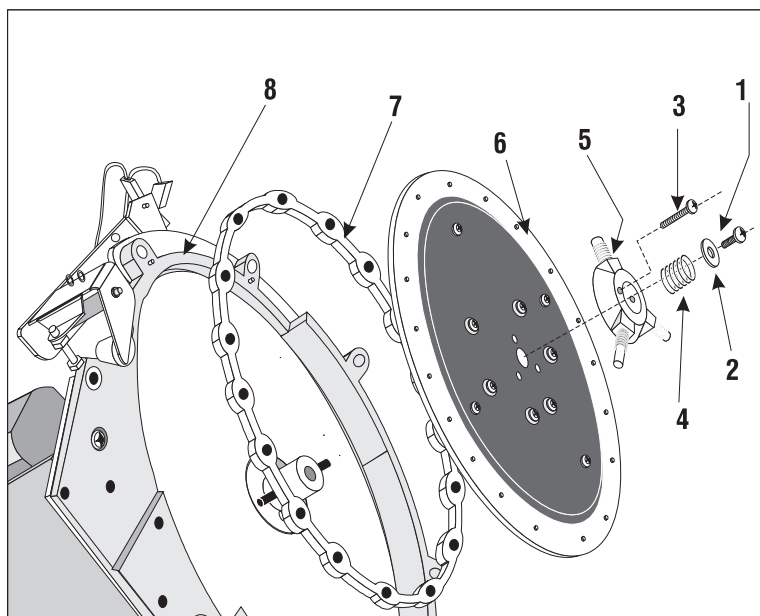
*Before you re-assemble the hopper it is recommended that all dust and grime is removed from the housing and components using a soft cloth.*

## Step 7: Installing Disc

- Choose spring cover according to pictogram
- Take the spring cover with the rear uppermost and lay the bearings in the disc groove invert body and slide upward until it is in place.
- **Turn body until in operational position and test by turning. Motor will not rotate if bearings are seated incorrectly.**

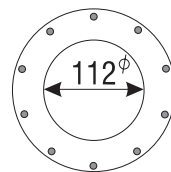
## Step 8: Installing Spring Cover

- Set spring cover and springs onto motorshaft. Fasten with M4 x 8 screws (pos. 1)
- Turn disc clockwise until it stops.
- Install rotary stopping screw (pos. 3) M4 x 25.

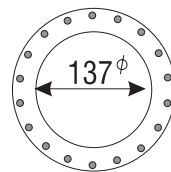


August 99

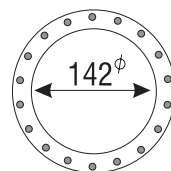
\$1



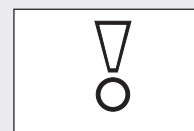
\$ 0,25



\$ 0,05



Dimension of the Disc

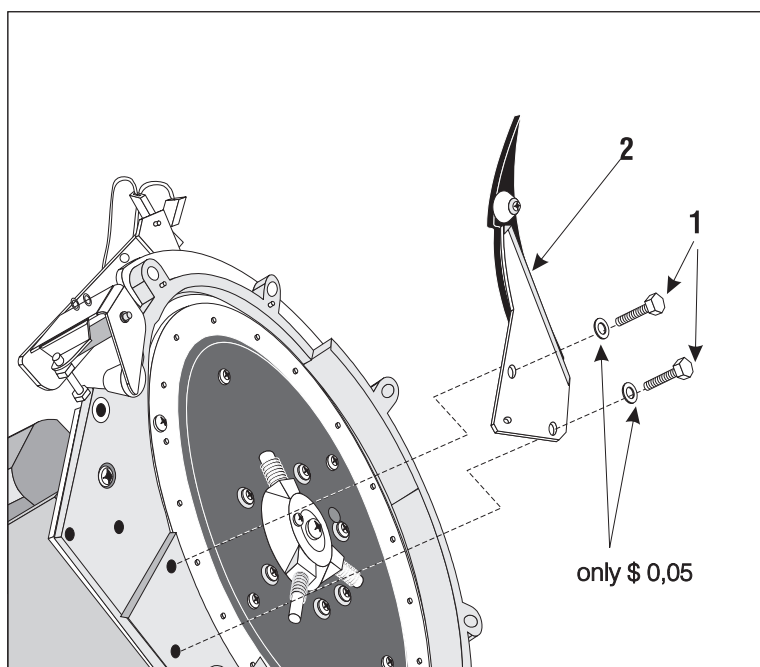


### **Note:**

*Before screw (pos. 3) can be tightened the disc must be rotated clockwise up to stop.*

## Step 9: Installing Knife

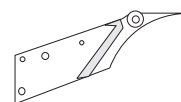
- Choose appropriate knife for denomination required (see pictogram).
- Install knife and screws M4 x 25 (pos. 1) by hand.
- Adjust knife to within 0,2mm of disc (see pictogram).
- Tighten screws.



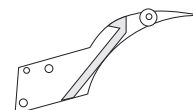
### **Note: \$0,05 knife**

When using this knife use the M4 x 10 x 1,0 flat washer with mounting bolt.

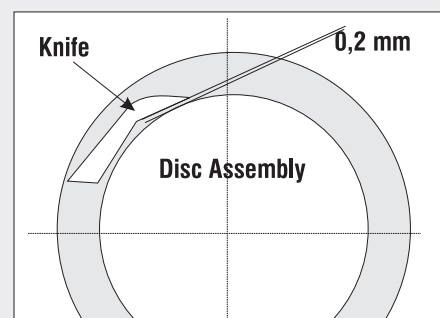
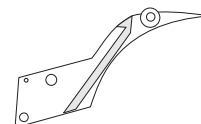
\$1



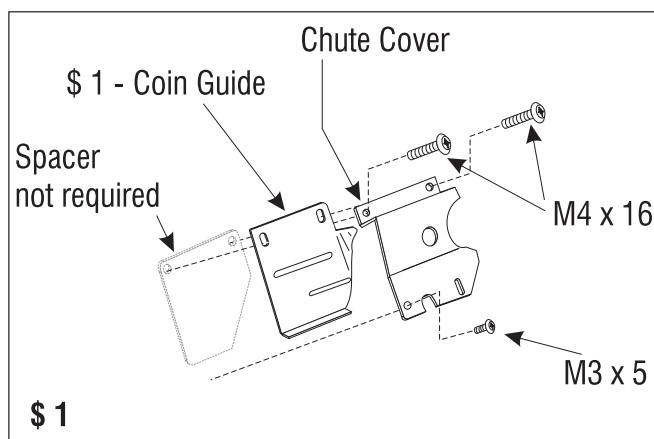
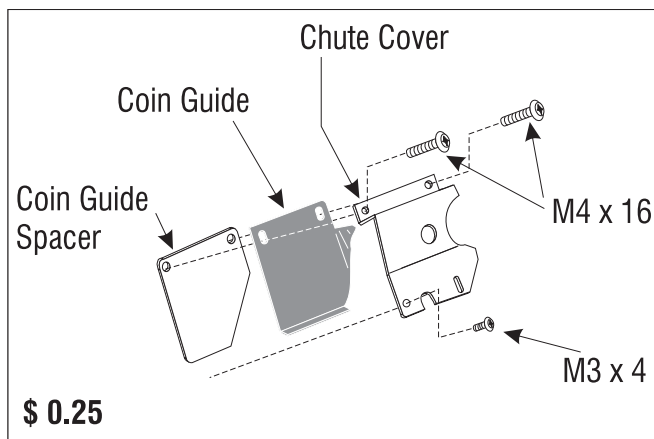
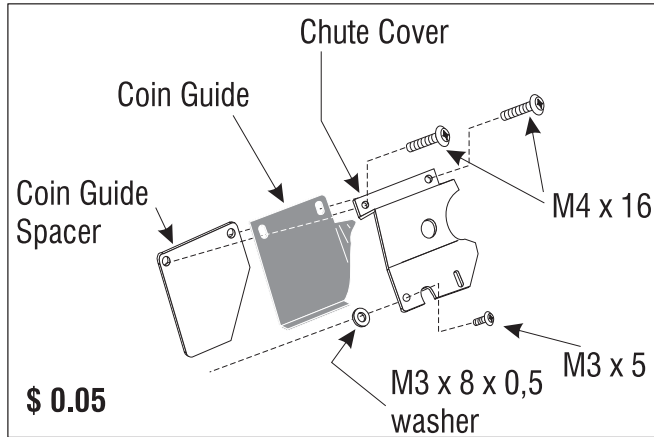
\$ 0,25



\$ 0,05



## Step 10: Installing Chute cover

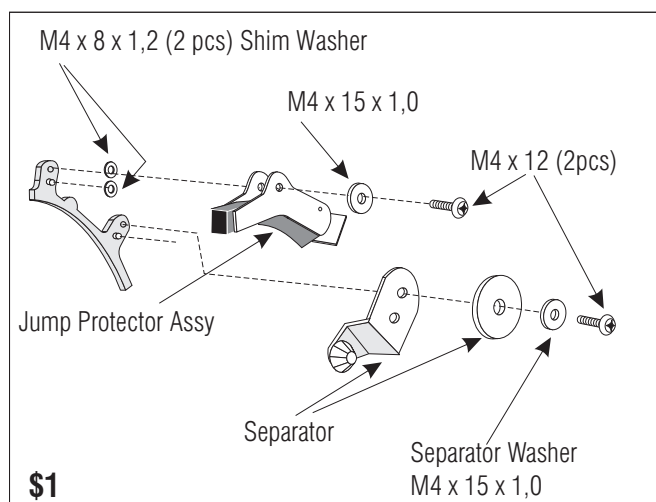
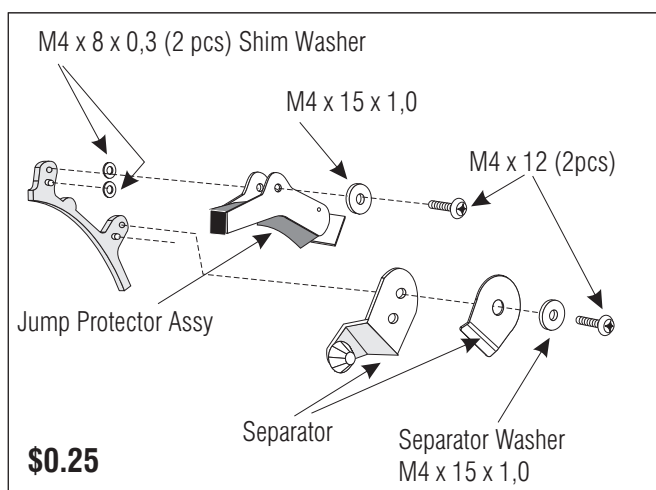
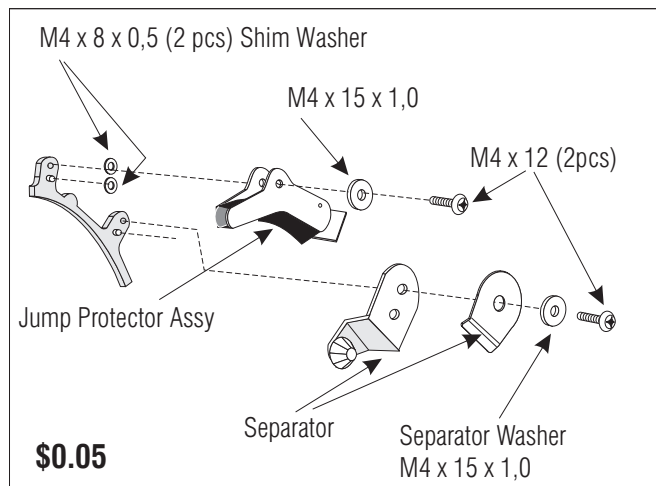


## Installing Chute Cover

- Install parts according to pictogram.
- Parts and assemblies are different depending on denomination.



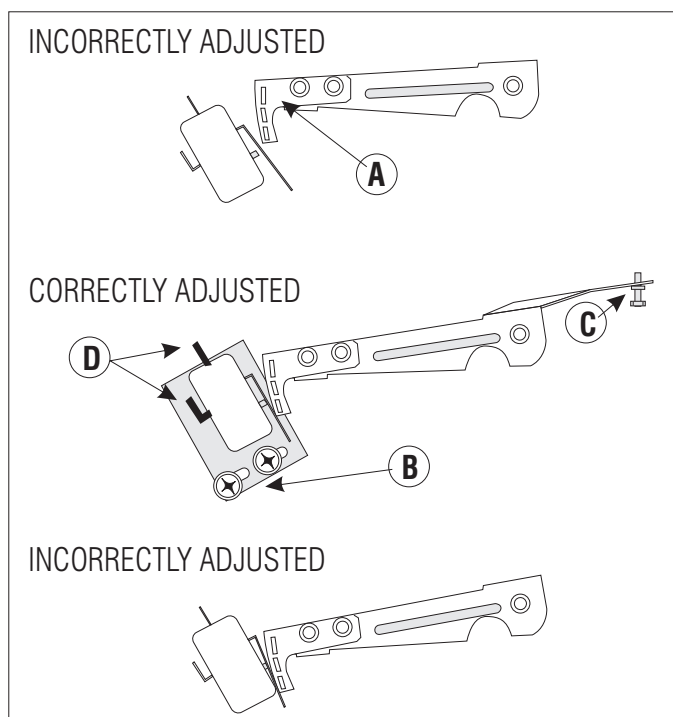
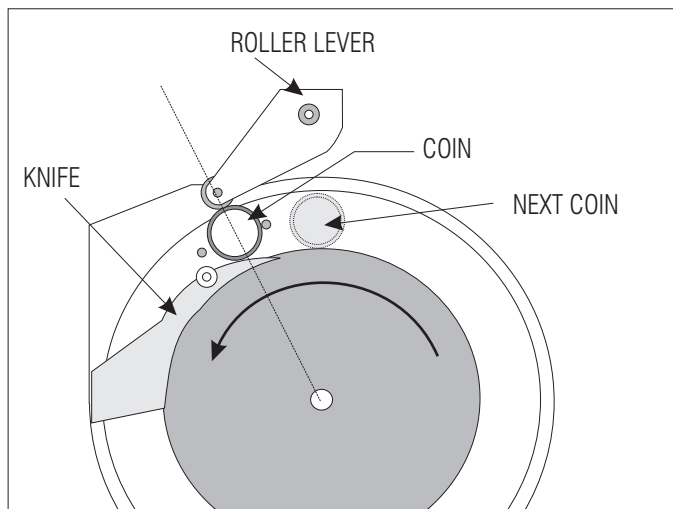
## Step 11: Install Jump Assy



## Installing Jump Assy

- Install appropriate parts according to picture.
- The parts are different depending upon denomination required.

## Step 12: Adjustment of Roller lever



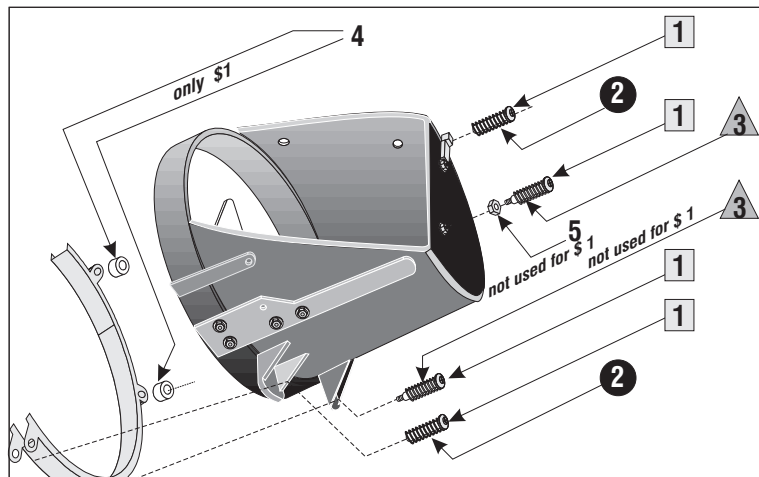
- Insert coin (see picture).
- Turn motor shaft anti clock-wise pushing motor brake.
- The coins push up roller lever to max. height.
- The roller lever plastic tipped end (pos. A) should depress the middle of the actuator.
- Clearance between microswitch housing and roller lever should be approx 3mm.
- If point of contact is too far forward or backward loosen microswitch mounting bracket and adjust housing accordingly (pos. B).
- To avoid lever returning too far adjust (pos. C).

As last test Check the function of the microswitch using an Ohmmeter (pos. D).

### **Note:**

No coin under lever, switch open: max. resistance,  
with coin under lever, switch closed: 0 resistance.

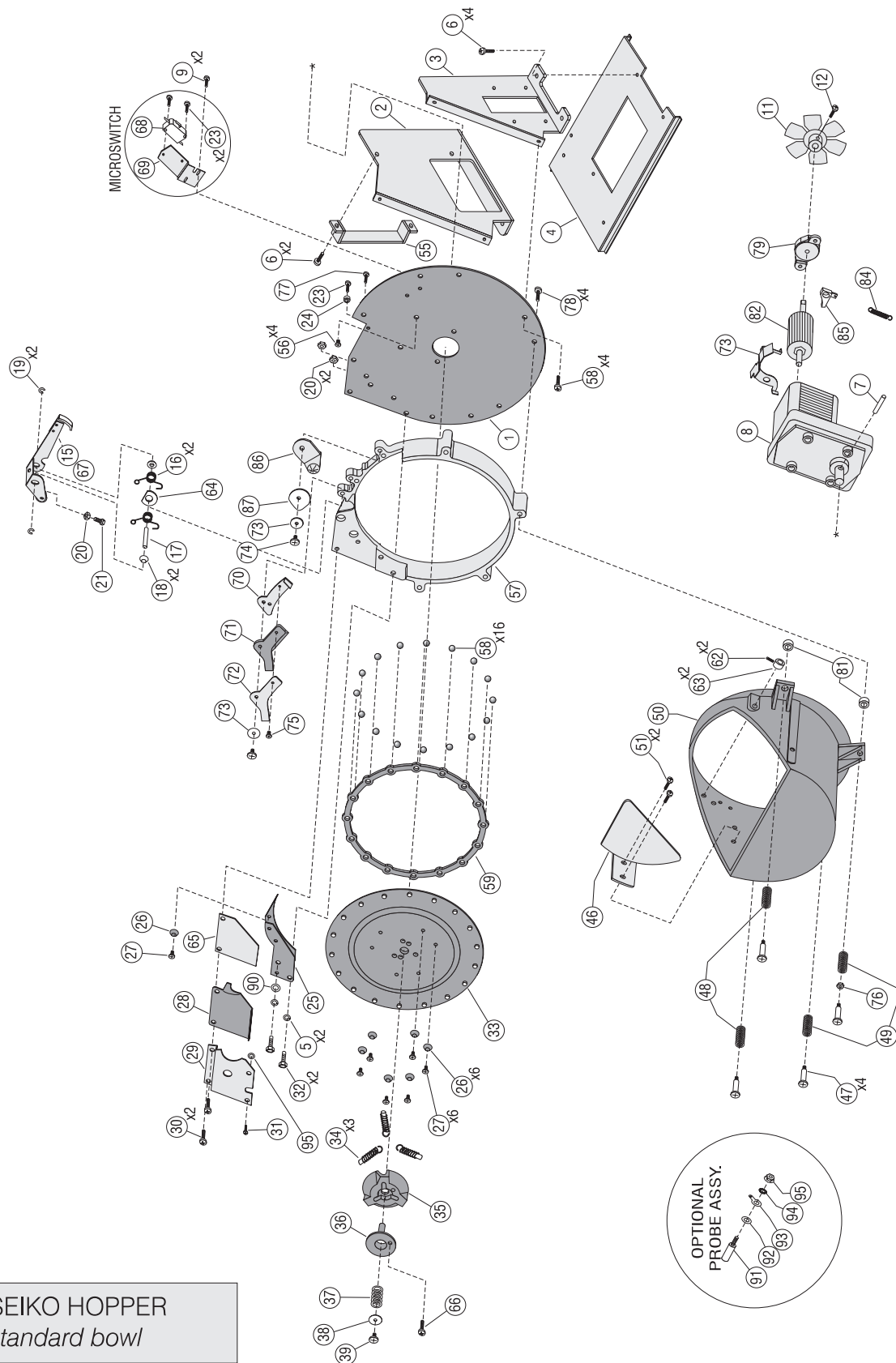
### Step 13: Install Coin Bowl



Pos.	PART	\$1	\$0.05& \$0.25
<b>1</b>	Hopper Head mtg. screw	4	4
<b>2</b>	Hard Spring	2	2
<b>3</b>	Soft Spring	1	2
<b>4</b>	Collar	2	0
<b>5</b>	Adjusting Nut	0	1

Install coin bowl

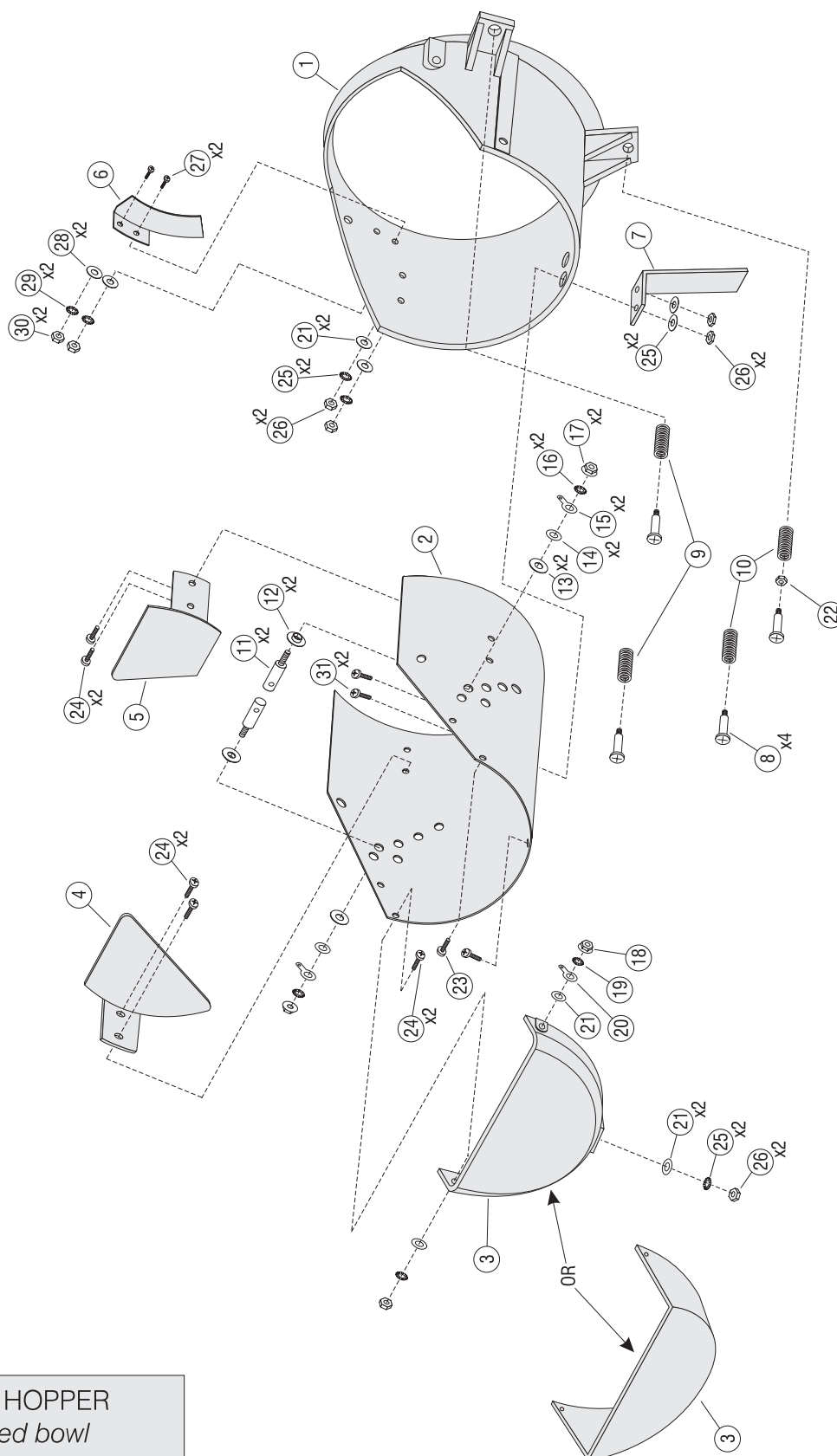
- Install parts according to diagram.
- Parts are different according to denomination.



SEIKO HOPPER  
standard bowl

POS	Part-No	Nomenclature
	6500 1907	Hopper compl.
1	DH7001M025001	Plate, Chassis
2	DH7001M025002	Frame, Right Side
3	DH7001M025003	Frame, Left Side
4	DH7001M025004	Plate, Base
6	S4006RHSW	Screw, M4 x 6 With Spring Washer
7	DH7001M025007	Pin, Motor Drive
8	DH7001M025008	Motor With Gearbox, 115VAC
	DH7002M025008	Motor With Gearbox, 220VAC
9	S2605RHSF	Screw, M2.6 x 5 W/Spring & Flat
10	S2612RH99	Screw, M2.6 x 12 Round Head
11	DH7001M025011	Fan, Motor
12	S4008RH99	Screw, M4 x 8 Round Head
13	DH7001P025013	Proximity Sensor
14	DH7001P025014	Guide, Roller Lever
15	DH7001M025015	Roller Lever, Steel Microswitch
	DH7001P025015	Roller Lever, Steel Prox. Sensor
16	DH7001M025016	Spring, Roller Lever
17	DH7001M025017	Pin, Roller Lever
18	DH7001M025018	Bearing, Roller Lever
19	W3000ERSS	o3 E-Ring
21	B4012HX99	Bolt, M4 x 12
22	DH7001P025022	Plate, Prox. Sensor Mounting
25	DH7001M10T025	Knife, \$1 Token
26	DH7001M025026	Boss, Plastic
27	DH7001M025027	Screw, Bevel-Headed
28	DH7001M10T028	Coin Guide \$1 Token
29	DH7001M10T029	Coin Cover \$1 Token
30	S4014RHSW	Screw, M4 x 14 With Spring Washer
31	S3004RHSW	Screw, M3 x 4 With Spring Washer
32	B4025HXSS	Bolt, M4 x 25 SS
33	DH7001M10T033	Disc, \$1 Token
34	DH7001M025034	Spring, Stirring
35	DH7001M025035	Cover, Spring Mounting
36	DH7001M025036	Holder, Spring
37	DH7001M025037	Spring, Disc
38	W4015FW10	Washer, 4 x 15 x 1,0
39	S4008LH99	Screw, M4 x 8 Large Head
46	DH7001M025046	Plate, Regulator
47	DH7001M025047	Screw, Hopper Bowl Mounting
48	DH7001M025048	Spring, Upper Bowl Mounting
49	DH7001M025049	Spring, Lower Bowl Mounting
50	DH7011M10T403	Bowl Assembly 1L \$1 W/PROBES
51	S4012LH99	Screw, M4 x 12 Large Head
55	DH7001M025055	Handle
56	S4008RHSW	Screw, M4 x 8 With Spring Washer

POS	Part-No	Nomenclature
57	DH7001M025057	Cast Frame
58	DH7001M025058	o6 Ball Bearing
59	DH7001M025059	Plastic Bearing Retainer
62	S4004SS99	Screw, M4 x 4 Set
63	DH7001M025063	Collar, Shaft Locking
64	DH7001M025064	Washer, Roller Lever
65	DH7001M025065	Spacer, Coin Guide (N/R ON \$1)
66	S4025LHSS	Screw, M4 x 25 SS Large Head
67	DH7001M025067	Roller Lever, Plastic Microswitch
	DH7001P025067	Roller Lever, Plastic Prox Sensor
68	DH7001M025068	Microswitch, Count
69	DH7001M025069	Bracket, Microswitch Mounting
70	DH7001M025070	Plate, Jump Rubber Adjusting
71	DH7001M10T071	Rubber, Jump \$1
72	DH7001M025072	Cover, Jump Rubber 25 ct, \$1 Token
73	W4015FW10	Washer, 4 x 15 x 1,0
74	S4012LH99	Screw, M4 x 12 Large Head
75	S3008RHSF	Screw, M3 x 8 With Spring & Flat
76	N4006HX99	Nut, M4 Small
77	S4010RHSW	Screw, M4 x 10 With Spring Washer
78	S4014RHSW	Screw, M4 x 14 With Spring Washer
79	DH7001M025079	Motor Bracket
80	S2605RHFV	Screw, M2,6 x 5 With Flat Washer
81	DH7001M10T081	Collar, Spacing (\$1 ONLY)
82	DH7001M025082	Armature With Stop
83	DH7001M025083	Lever, Motor Brake
84	DH7001M025084	Spring, Brake
85	DH7001M025085	Stop, Brake
86	DH7001M025073	Separator, Rubber Coin
87	DH7001M10T074	Retainer, Separator \$1 Token
89	W3008FW05	Washer, 3 x 8 x 0,5 (5 ct ONLY)
90	W4010FW10	Washer, 4 x 10 x 1,0 (5 ct ONLY)
91	DH7011M025153	Probe Pin
92	W6511FW08	Washer, 6 x 11,5 x 0,8
93	DH7011M025093	Terminal, o5 Wire
94	W5095SR99	Washer, M5 Star
95	N5000SN99	Nut, M5 Probe Shoulder
96	W4010FW16	Washer, 4 x 10 x 1,6 (5 ct ONLY)



SEIKO HOPPER  
*extended bowl*

POS	Part-No	Nomenclature
	6500 2514	Hopper compl. DH-750 1L 1\$ 110V EXT.
1	DH7011M025322	Scoop, Bowl
2	DH7011M025340	Liner, 1L Bowl
	DH7021M025340	Liner, 2L Bowl
3	DH7011M025331	End Cap, STD
	DH7011M025303	End Cap, 90 (Opt)
4	DH7001M025046	Regulator Plate, Front
5	DH7011M10T302	Coin Baffle, Rear, \$1
6	DH7001M025052	Insulator
7	DH7011M025323	Support Bracket, Bowl
8	DH7001M025047	Screw, Bowl Mounting
9	DH7001M025048	Spring, Upper Bowl Mounting
10	DH7001M025049	Spring, Lower Bowl Mounting
11	DH7011M025153	Probe Pin
12	DH7011M025152	Washer, Nylon Inner
13	DH7011M025150	Washer, Nylon Outer
14	W6511FW08	Washer, 6,5 x 11 x .8 SS
15	DH7011M025093	Terminal, M5 Wire
16	W5095SR99	Washer, Star M5 x 9,5
17	N5000SN99	Nut, Probe M5 Shoulder
18	N4000SN99	Nut, M4 Shoulder
19	W4085SR99	Washer, Star M4 x
20	DH7011M025307	Terminal, M4 Wire
21	W4010FW16	Washer, 4 x 10 x 1,6 (Blue)
22	N4006HX99	Nut, M4 Small
23	S4015LHSS	Screw, M4 x 15 SS Large Head
24	S4015LH99	Screw, M4 x 15 Large Head
25	W4000SW99	Washer, M4 Spring
26	N4000HX99	Nut, M4 STD
27	S3010LH99	Screw, M3 x 10 Large Head
28	W3008FW05	Washer, M3 x 8 x .5 Flat
29	W3000SW99	Washer, M3 Spring
30	N3000HX99	Nut, M3 STD
31	S4012CS99	Screw, M4 x 12 Countersunk
32	DH7001M025061	Shaft, Overflow
33	S4004SS99	Screw, M4 x 4 Set
34	DH7001M025063	Collar, Shaft Locking
35	DH7001M025043	Spring, Overflow
36	DH7001M025042	Adjuster, Spring
37	S3008RHSW	Screw, M3 x 8 With SW
38	DH7001M025045	Plate, Overflow - STD
	DH7021M025045	Plate, Overflow - 2L
39	DH7001M025040	Rubber, Spring Adj. Retainer
40	DH7011M025044	MTG. Plate, M/S Overflow - 1L
	DH7021M025044	MTG. Plate, M/S Overflow - 2L
41	DH7001M025041	Microswitch, Overflow - STD 1L
	DH7021M025041	Microswitch, Overflow - STD 2L
42	S3014RH99	Screw, M3 x 14
43	DH7011M025301	Collar, Spacer