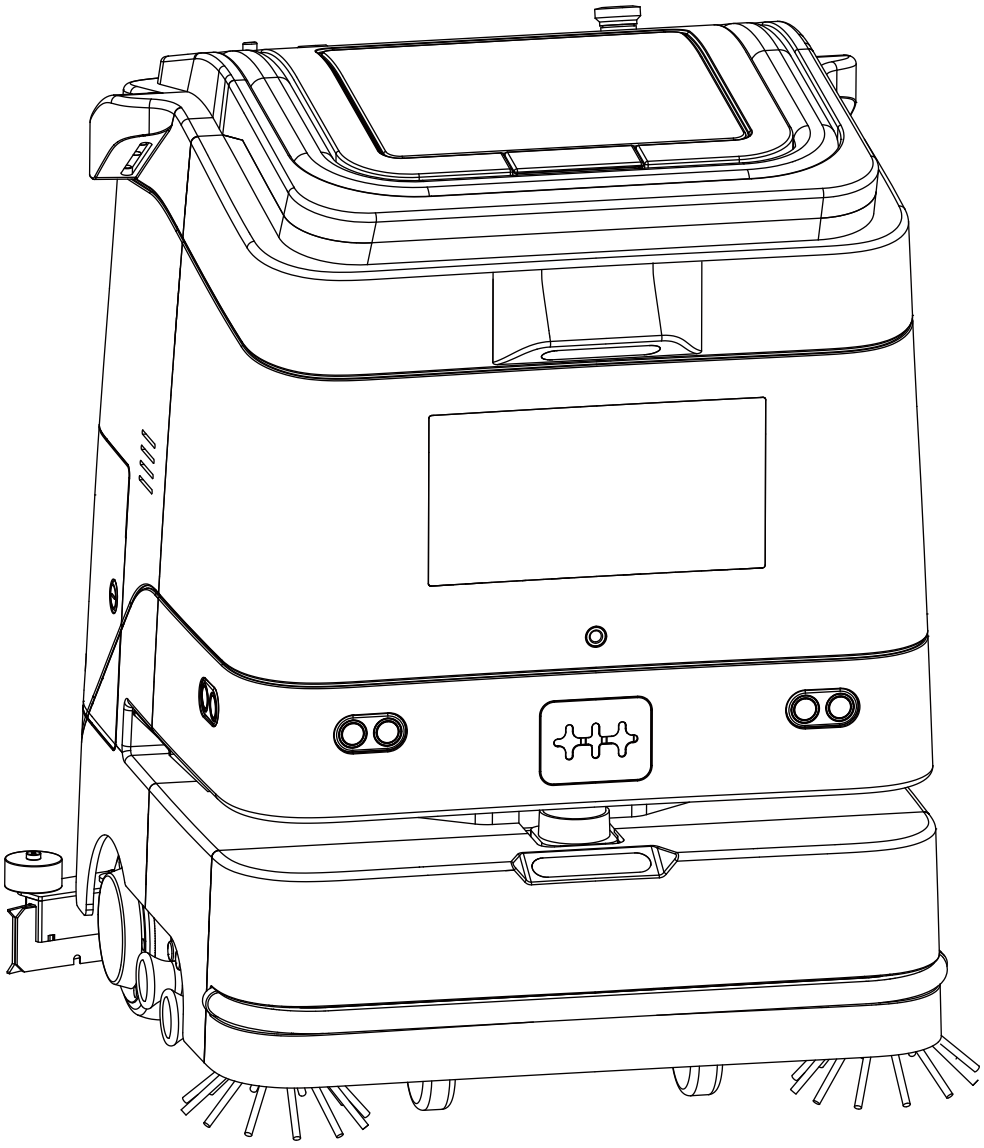
META-SCRUB 45

智能清洁机器人

Automated Cleaning Robots

METABOTS



零件清单明细
Spare Parts List

V 1.0

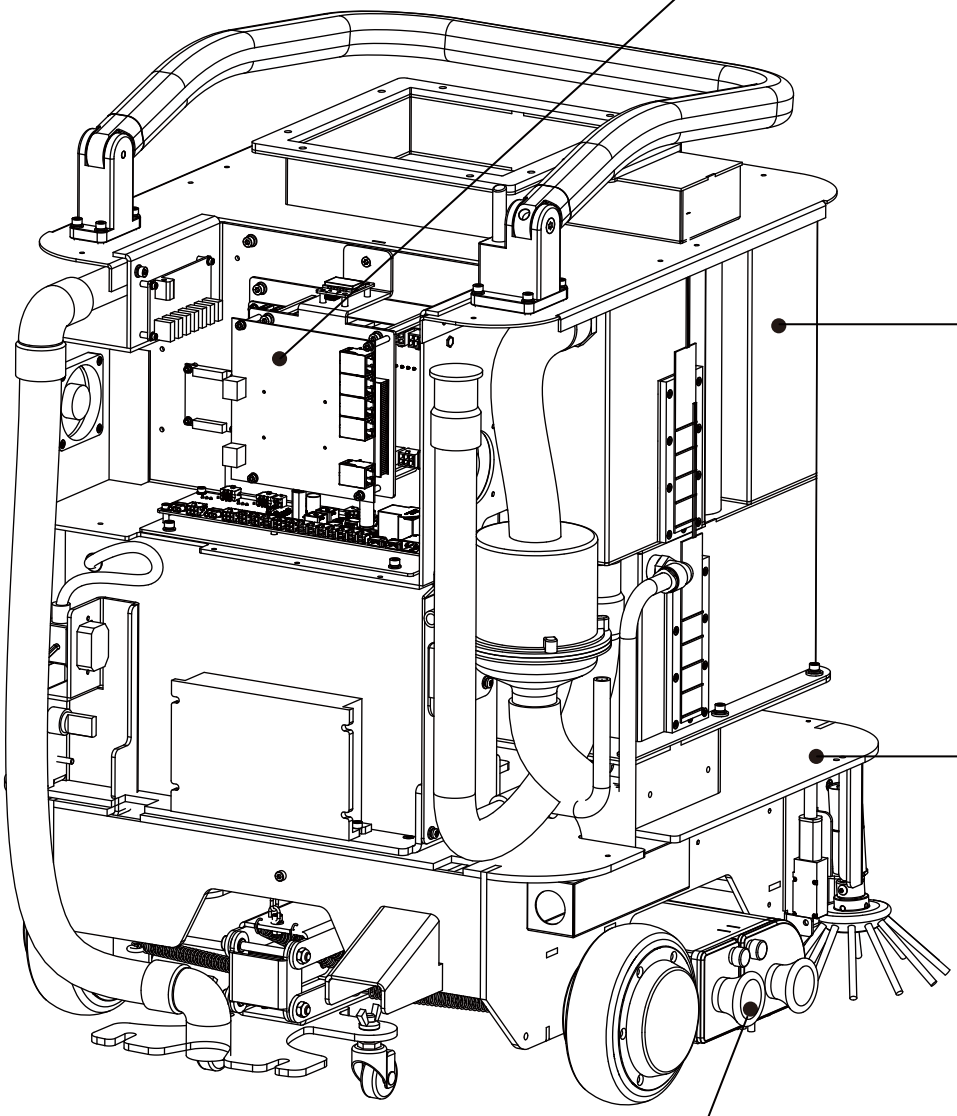
2025.01

备用零件采购、售后。
Spare Parts Recommendation For Start Up.

45-1	主车架总成 Mainframe Assembly	4-9
45-2	刷盘总成 Brush Assembly	10-13
45-3	水箱总成 Water Tank Assembly	14-18
45-4	外壳总成 Robotic Housing Assembly	19-24
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45-6	吸水扒总成 Squeegee Assembly	30-32
45-7	充电桩总成 Charging Dock Assembly	33-36

45-5 控制总成 Control Assembly

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45-3 水箱总成
Water Tank Assembly

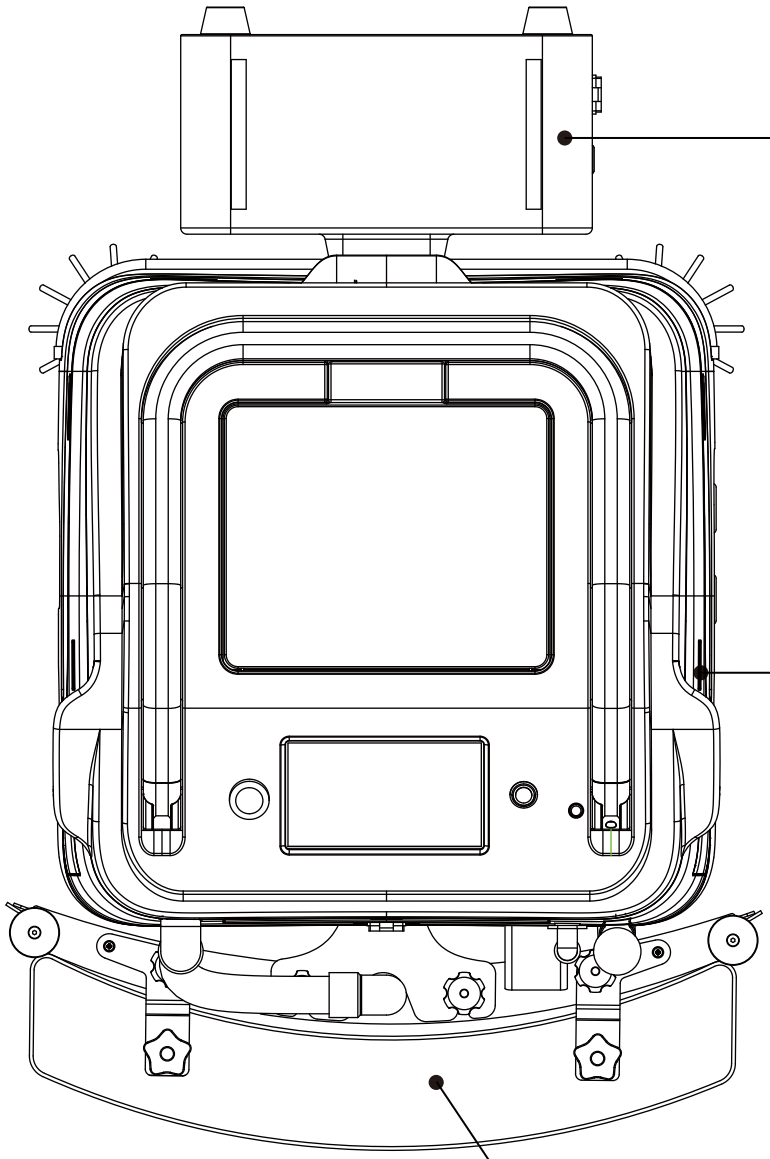
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45-1 主车架总成
Mainframe Assembly

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45-2 刷盘总成 Brush Assembly

第10-13页 Page 10-13



45-7 充电桩总成
Charging Dock Assembly

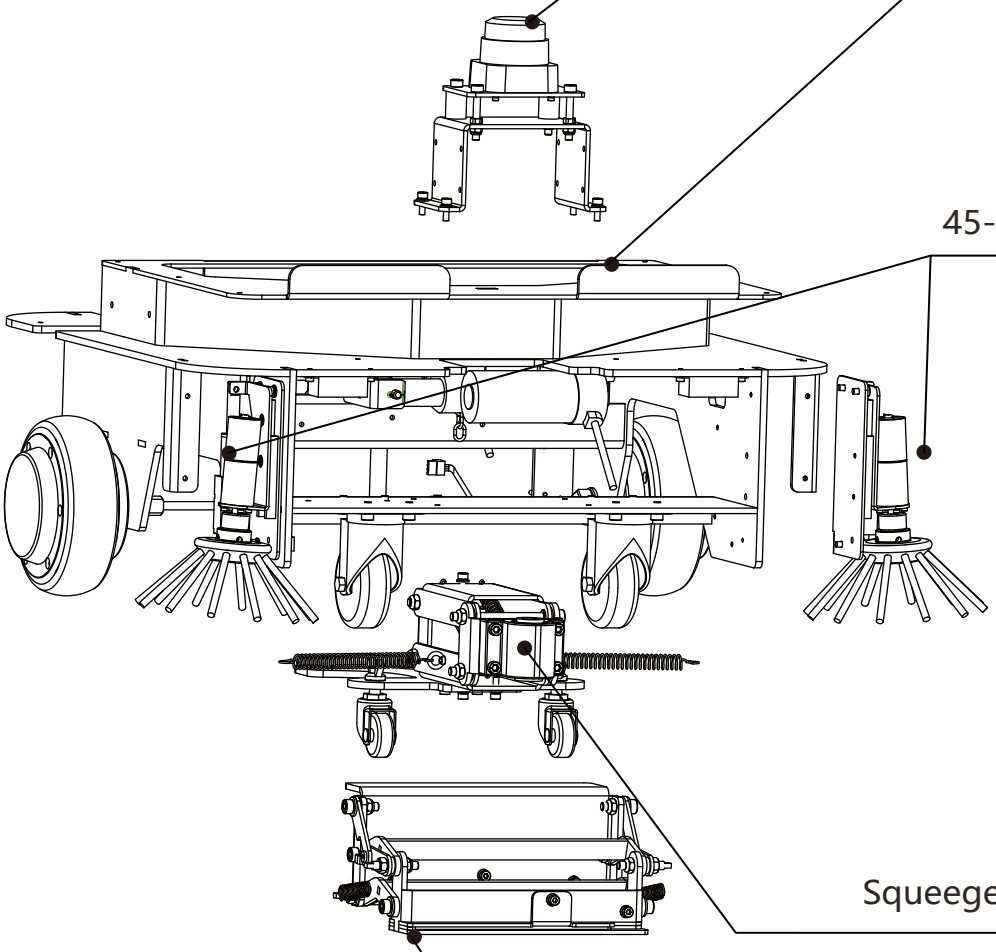
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45-4 外壳总成
Robotic Housing Assembly

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45-6 吸水扒总成
Squeegee Assembly

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45-1-05 雷达 Lidar

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45-1-01 车架 Main frame

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45-1-04 边刷 Side Brush

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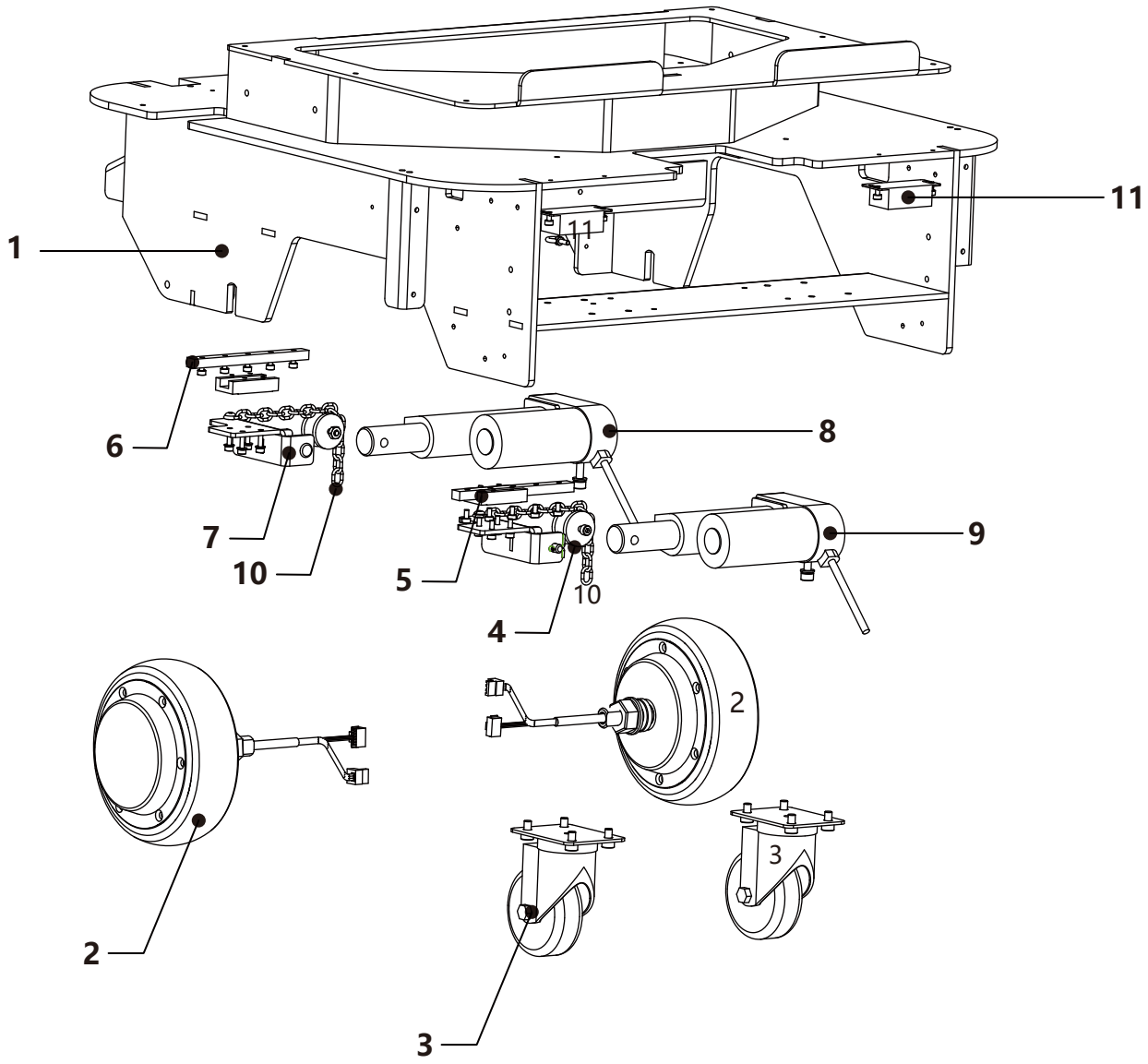
45-1-02 吸水扒升降
Squeegee Lifting Mechanism

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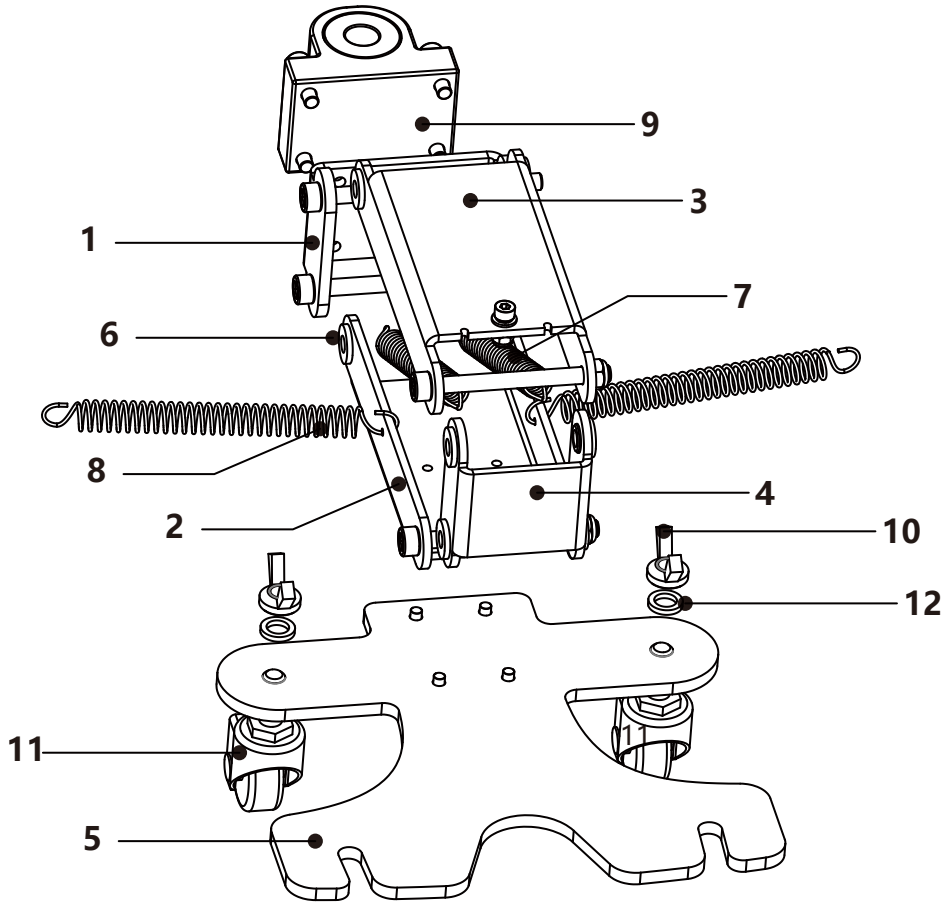
45-1-03 刷盘升降
Brush Lifting Mechanism

第7页 Page 7

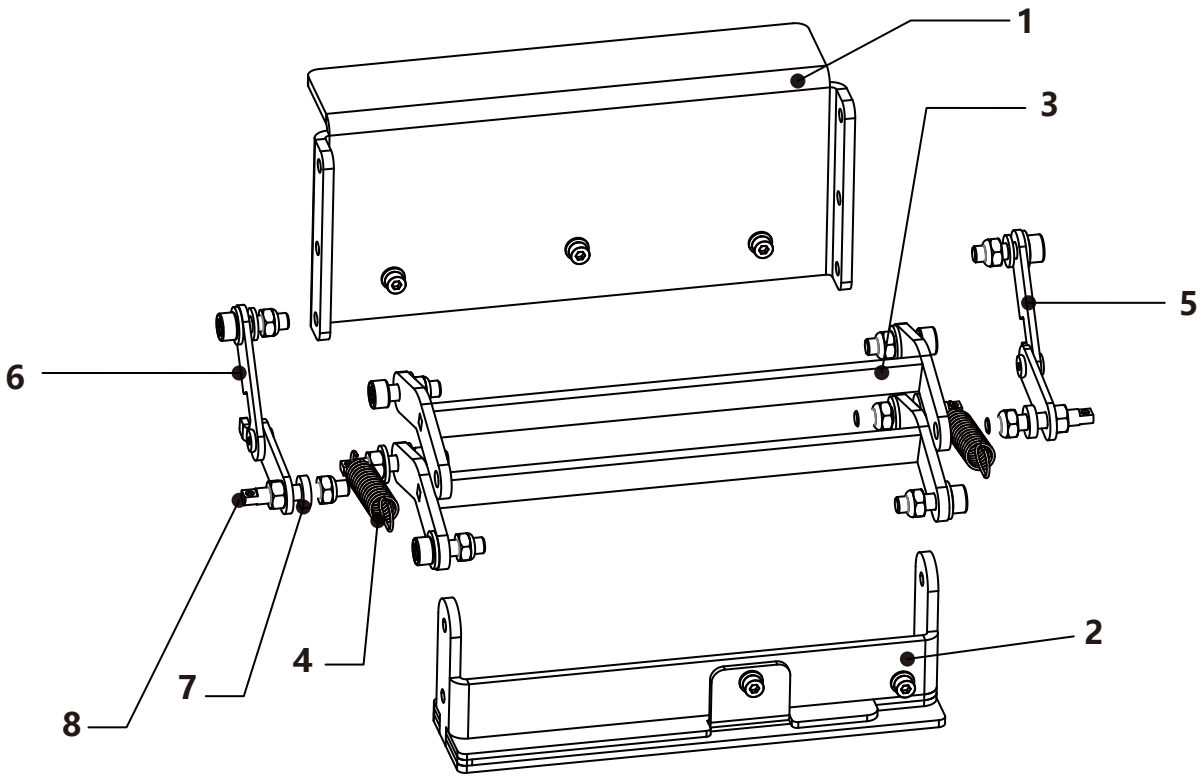
NO.	CODE	DESCRIPTION	商品名称
1	451000021	Main Chassis	底盘
2	453000090	Traction wheel	驱动轮（定制）
3	454000003	2.5-inch caster wheel	2.5寸万向轮
4	454000014	Rubber-coated bearing pulley	包胶轴承滑轮
5	454000057	Small slider	小型滑块
6	454000058	Small slider guide rail	小型滑块导轨
7	451000023	Actuator bracket	升降推杆支架
8	453000003	Squeegee actuator	水刮-推杆
9	453000004	Brush actuator	滚刷-推杆
10	454000037	Drive chains	链条
11	454000041	Magnet A	磁吸A



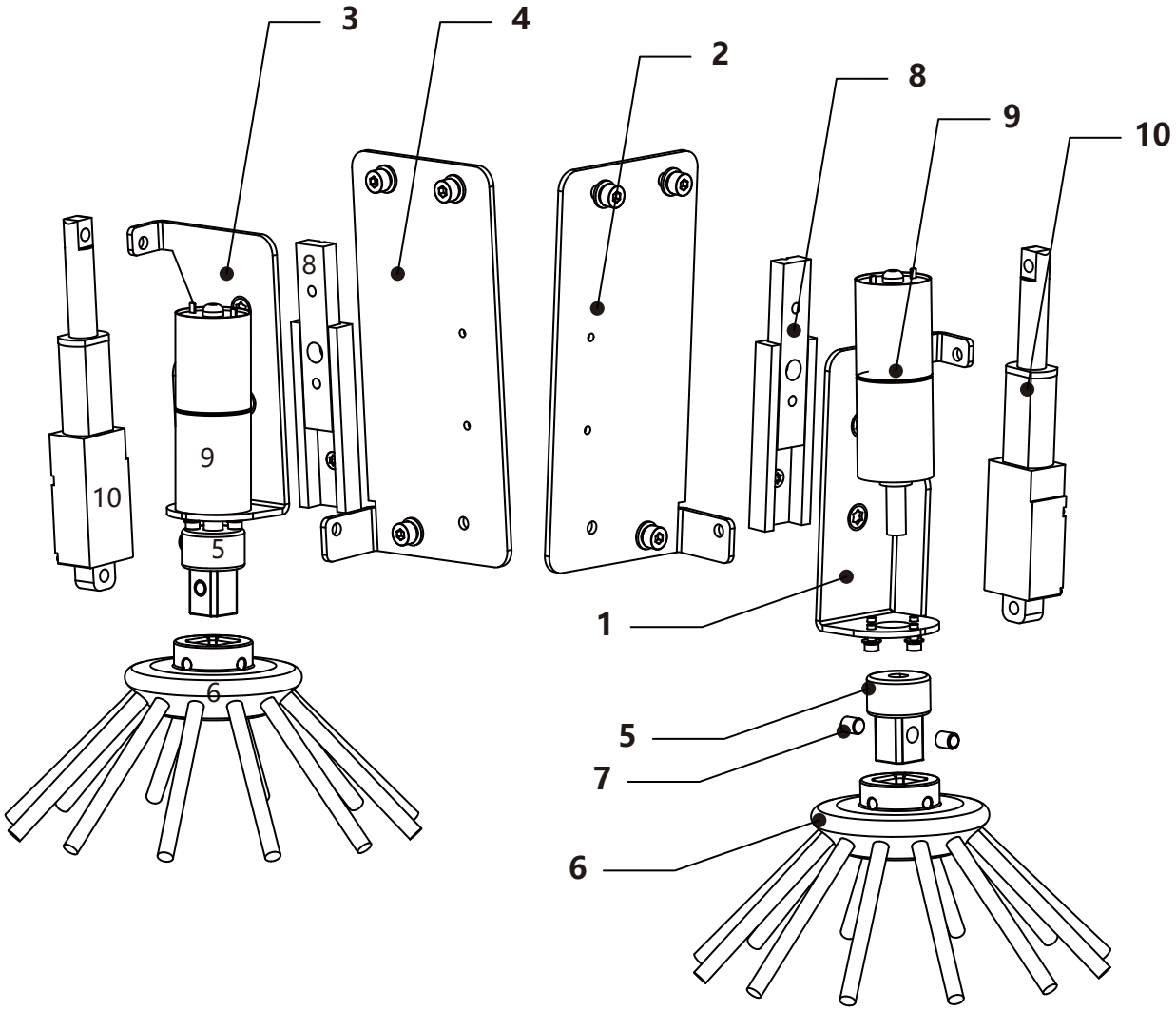
NO.	CODE	DESCRIPTION	商品名称
1	451000003	Squeegee steering bracket	水刮转向支架
2	451000004	Squeegee lifting lower plate	水刮升降下板
3	451000005	Squeegee lifting upper plate	水刮升降上板
4	451000006	Upper & lower plate fixing bracket	上下板固定支架
5	451000007	Squeegee Assembly fixing plate	水刮组件固定板
6	454000026	Flange copper sleeve	法兰铜套
7	454000124	Lift tension spring	水刮升降拉簧
8	454000122	Steering tension spring	转向拉簧
9	454000012	T-type dual bearing block	T型双轴承座
10	454000156	Butterfly nuts	蝶形螺母
11	454000157	Small caster	小脚轮
12	454000127	Spring washer	弹簧垫圈



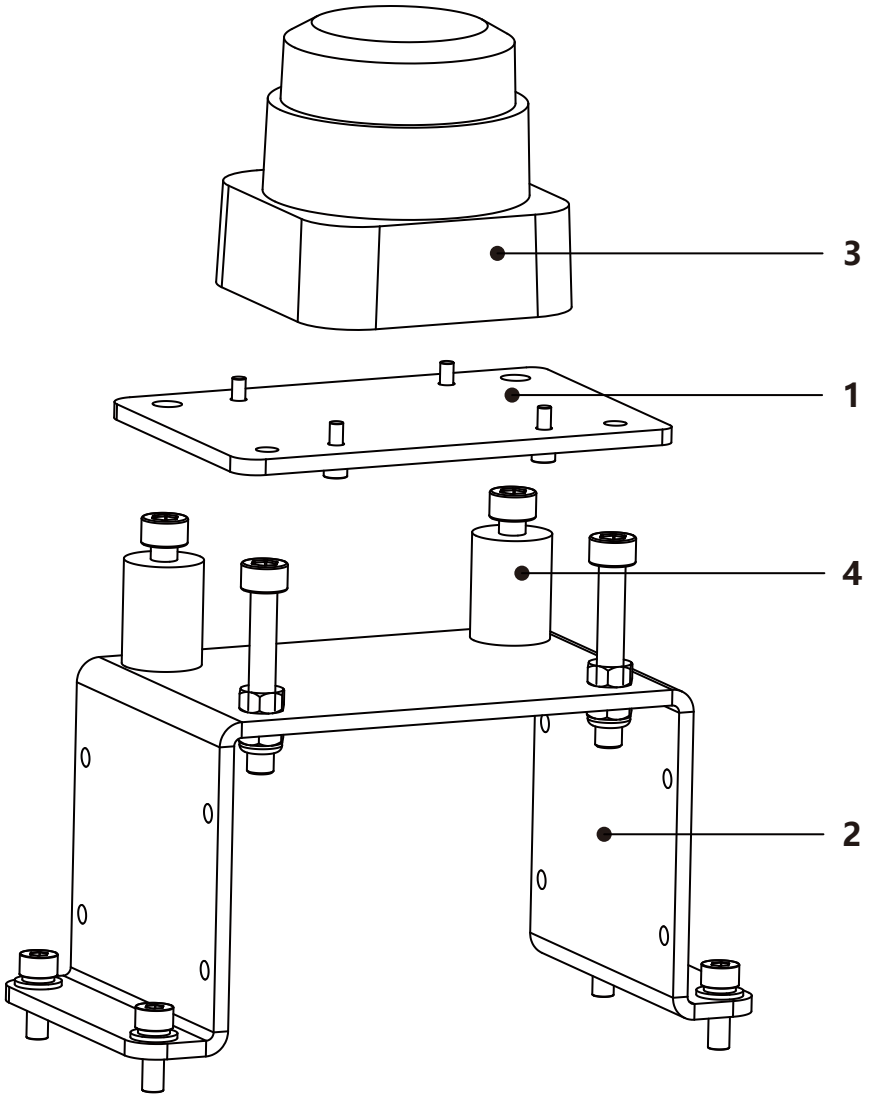
NO.	CODE	DESCRIPTION	商品名称
1	451000022	brush lifting mechanism bracket	刷盘升降支架
2	451000001	brush lifting mechanism fixing plate	刷盘升降固定板
3	451000002	brush lifting mechanism connecting bracket	刷盘升降连接支架
4	454000123	brush lifting mechanism tension spring	刷盘升降拉簧
5	451000072	Two-fold support (left)	二折支撑件左
6	451000073	Two-fold support (right)	二折支撑件右
7	454000139	Nylon gasket	尼龙垫片
8	454000140	Stainless steel tension spring strut	不锈钢拉簧支柱



NO.	CODE	DESCRIPTION	商品名称
1	451000010	Left side brush motor mounting plate	左边刷电机安装板
2	451000011	Left side brush push rod fixture	左边刷推杆固定件
3	451000013	Right side brush motor mounting plate	右边刷电机安装板
4	451000014	Right side brush push rod fixture	右边刷推杆固定件
5	451000012	Side brush motor connecting flange	边刷电机连接法兰
6	452000002	Side brush (bristled)	边刷(植毛)
7	454000023	Locating bead	定位珠
8	454000040	Aluminum alloy slide rail	铝合金滑轨
9	453000005	Side brush motor	边刷电机
10	453000006	Electric push rod	电动推杆

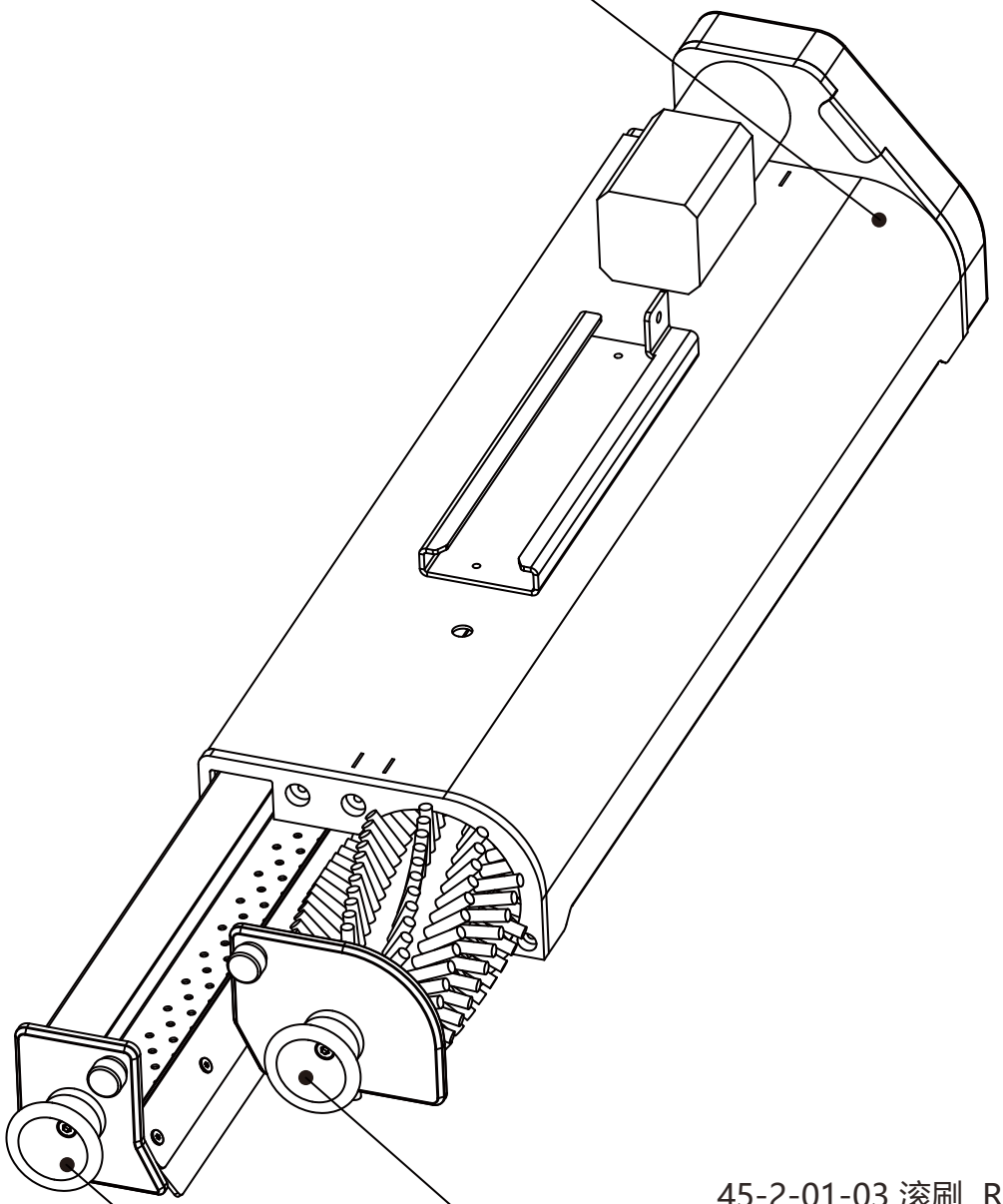


NO.	CODE	DESCRIPTION	商品名称
1	451000018	LiDAR fixing plate	激光雷达固定板
2	451000019	LiDAR fixing bracket	激光雷达固定支架
3	453000007	LiDAR (Light Detection and Ranging)	激光雷达
4	454000013	VD-type male-female thread shock absorber	VD型内外丝减震柱



45-2-01 刷盘 Scrub Brushes

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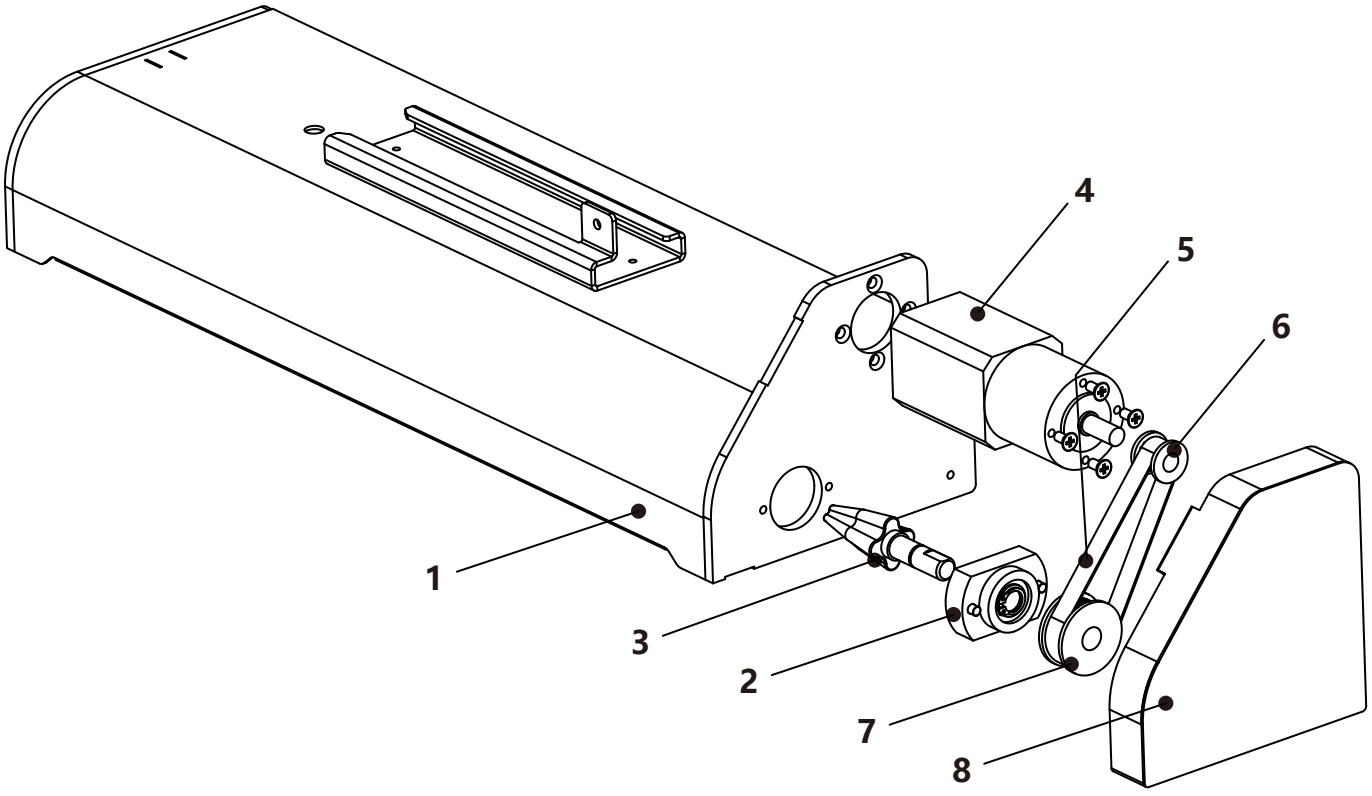
45-2-01-03 滚刷 Roller Brush

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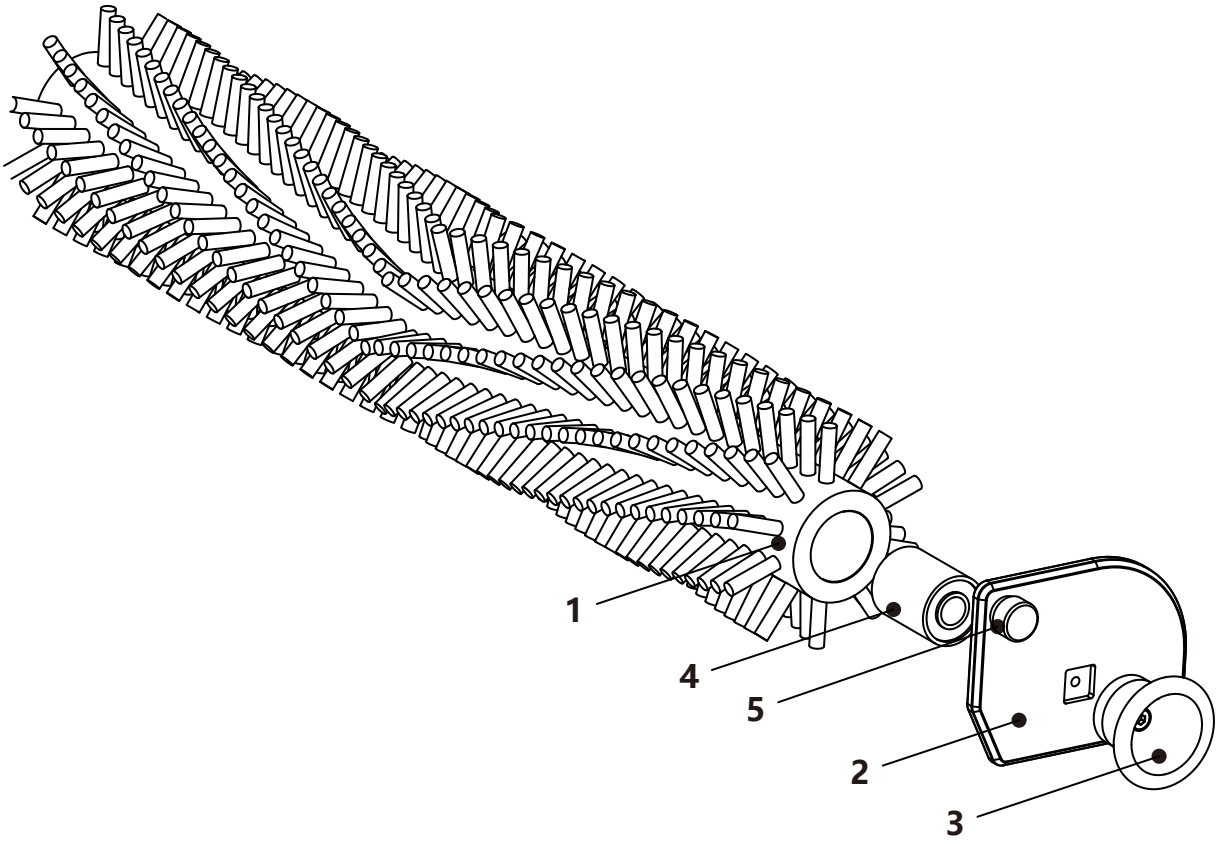
45-2-02 垃圾收集盒 Garbage Collection Box

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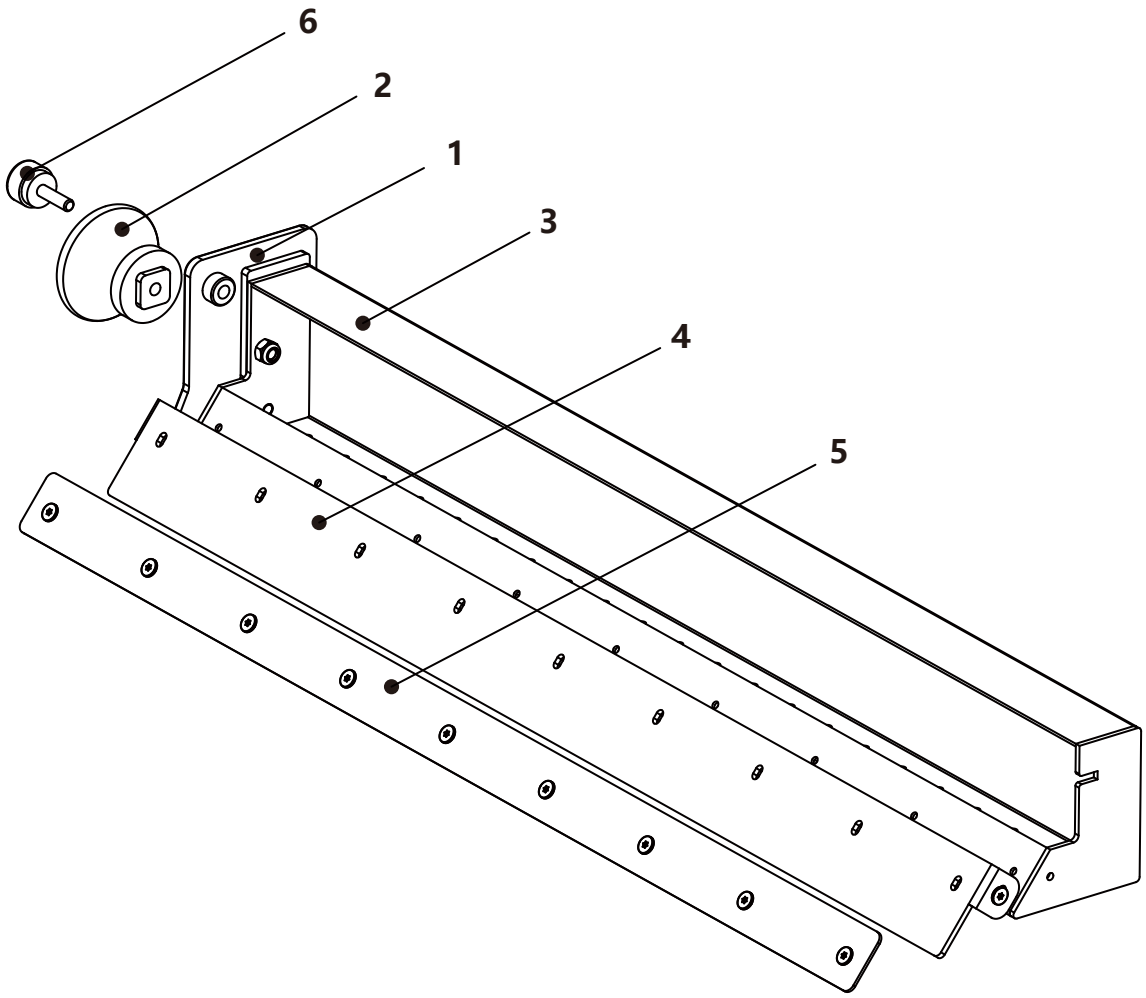
NO.	CODE	DESCRIPTION	商品名称
1	451000028	Brush bracket support	刷盘支架
2	454000024	Short-type double bearing block	短型双轴承座
3	451000024	Splined shaft	花键轴
4	453000008	Roller brush motor (with gearbox)	滚刷电机（带减速箱）
5	454000049	Timing belt	同步带
6	454000050	Timing pulley 15	同步轮15
7	454000051	Timing pulley 30	同步轮30
8	451000029	Timing pulley cover	同步轮罩



NO.	CODE	DESCRIPTION	商品名称
1	452000004	Roller brush (bristled)	滚刷（植毛）
2	451000025	Roller brush compartment door	滚刷仓门
3	451000027	compartment handle	仓门把手
4	454000047	Double bearing idler pulley	双轴承惰轮
5	454000106	Round-head hand screw	圆头手拧螺丝



NO.	CODE	DESCRIPTION	商品名称
1	451000026	Garbage box door	垃圾盒门
2	451000027	compartment handle	仓门把手
3	451000030	Garbage collection box	垃圾收集盒
4	452000005	Garbage box rubber strip	垃圾盒胶条
5	451000074	Rubber strip pressing plate	胶条压片
6	454000106	Round-head hand screw	圆头手拧螺丝

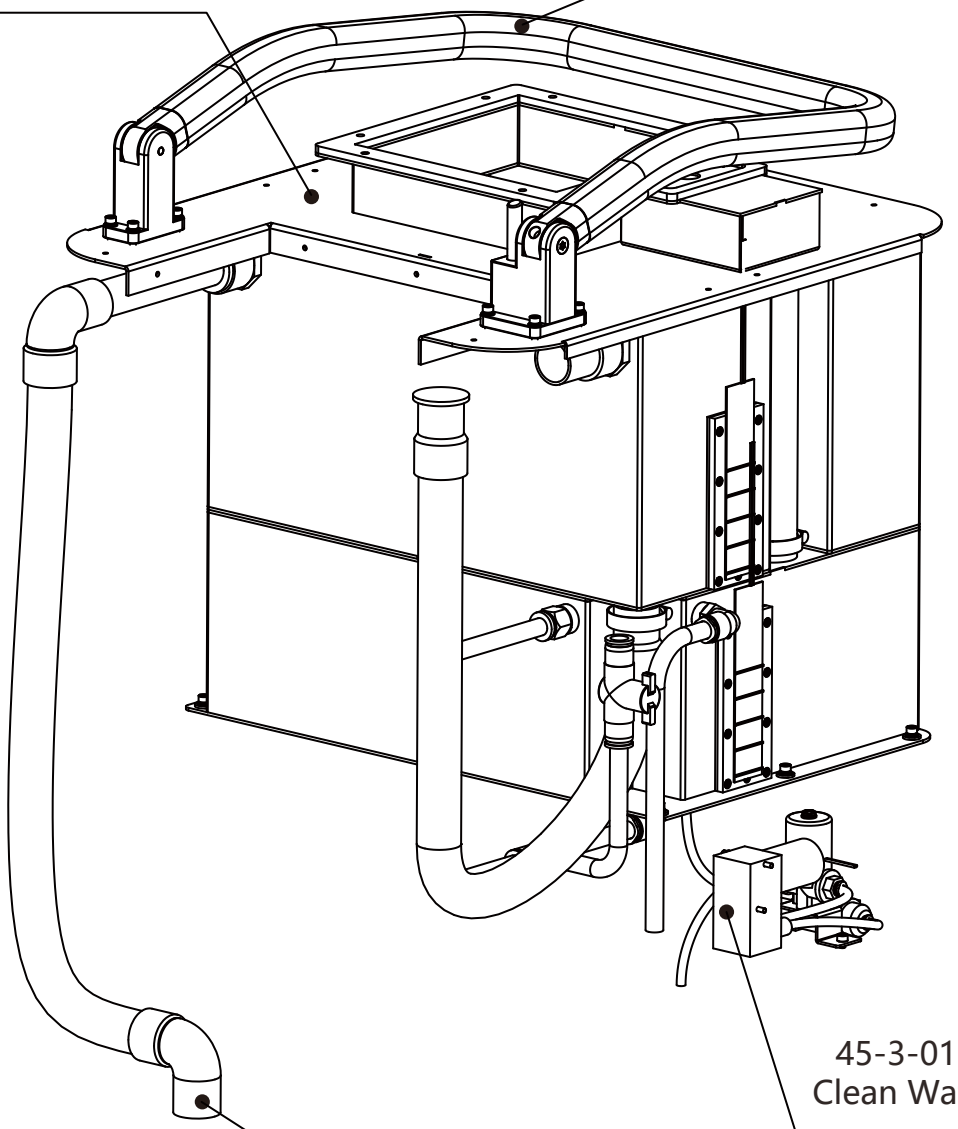


45-3-02 扶手 Handrail

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45-3-01 水箱 Water Tank

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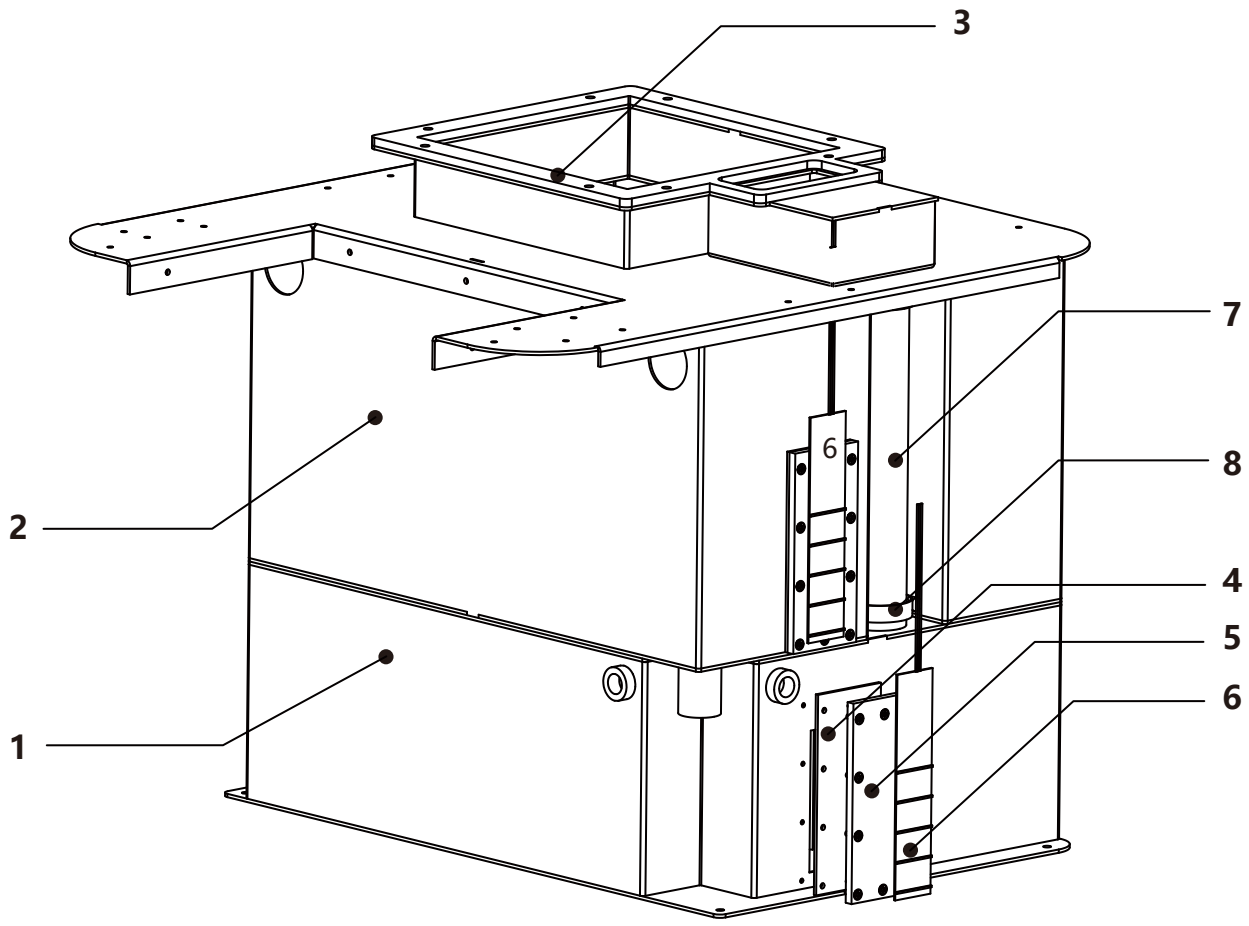
45-3-01-01 清水系统
Clean Water Assembly

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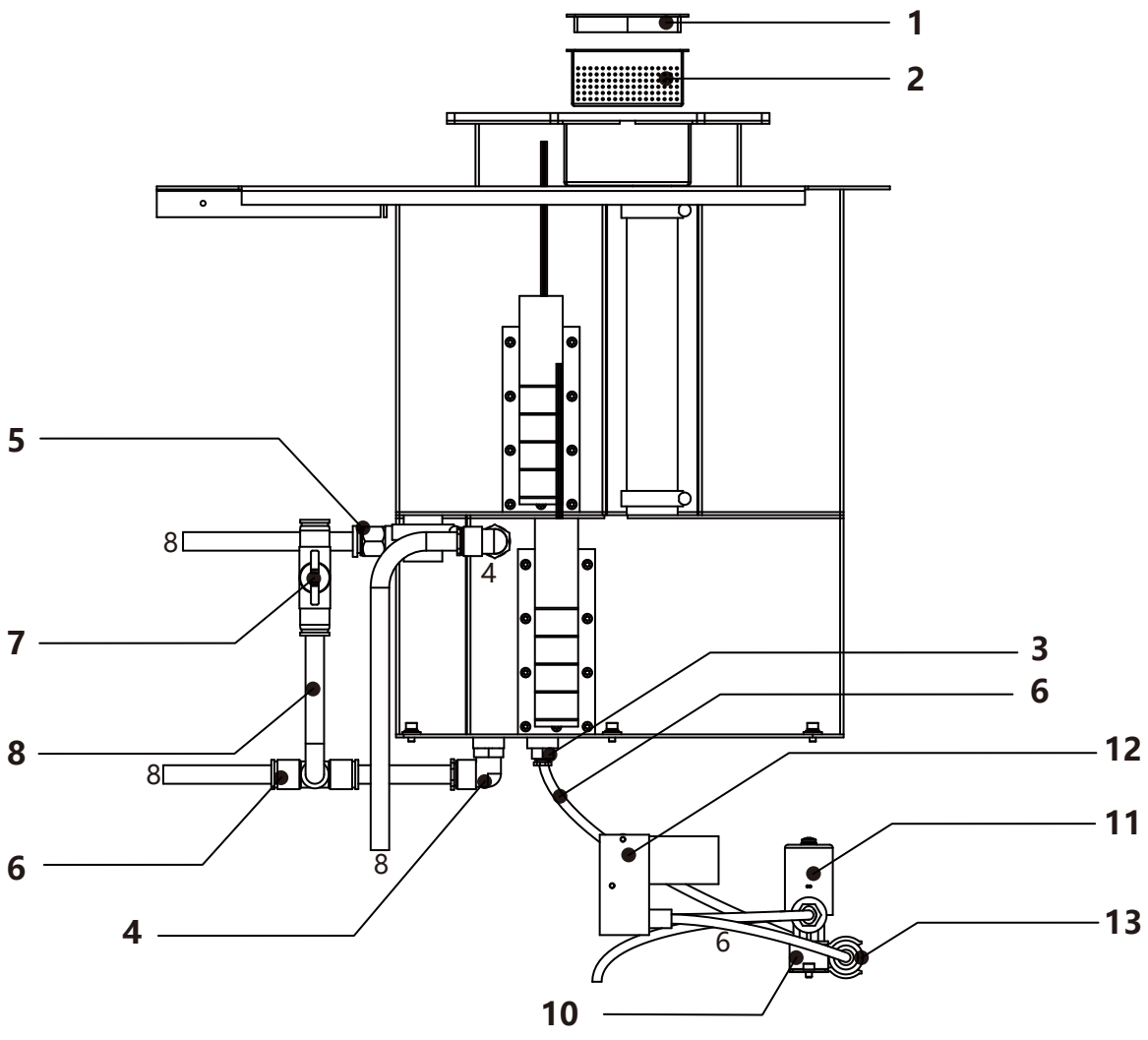
45-3-01-02 污水系统
Recovery Water Assembly

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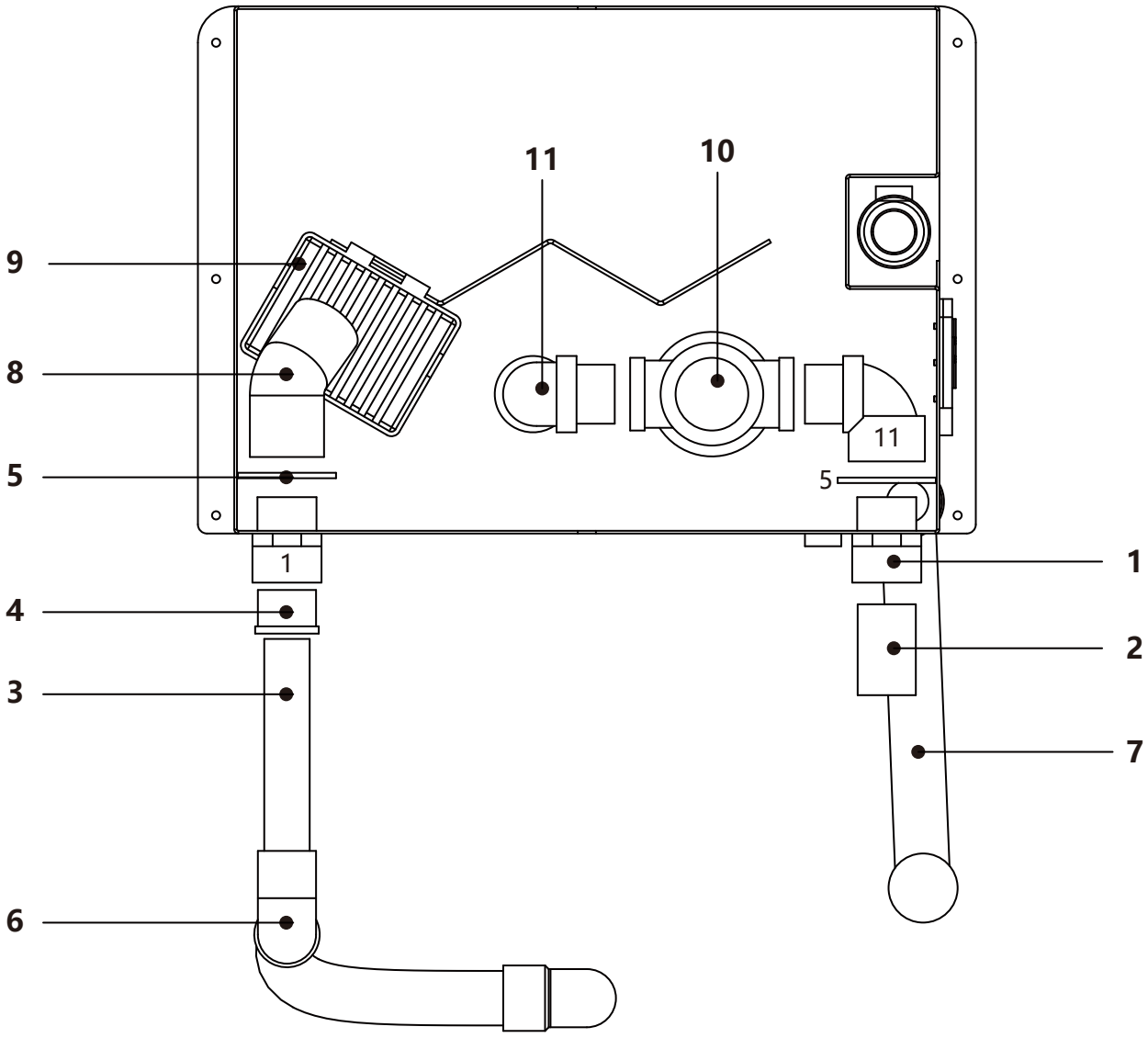
NO.	CODE	DESCRIPTION	商品名称
1	451000039	Clean water tank	清水箱
2	451000040	Recovery tank	污水箱
3	452000008	EVA sewage outlet gasket	EVA污水口密封垫
4	452000007	Translucent silicone pad	半透明硅胶垫(背胶)
5	452000006	Nylon plate	尼龙板
6	453000009	Liquid level sensor	液位传感器
7	454000008	Transparent PVC pipe	PVC透明水管
8	454000062	German-style hose clamp	德式喉箍



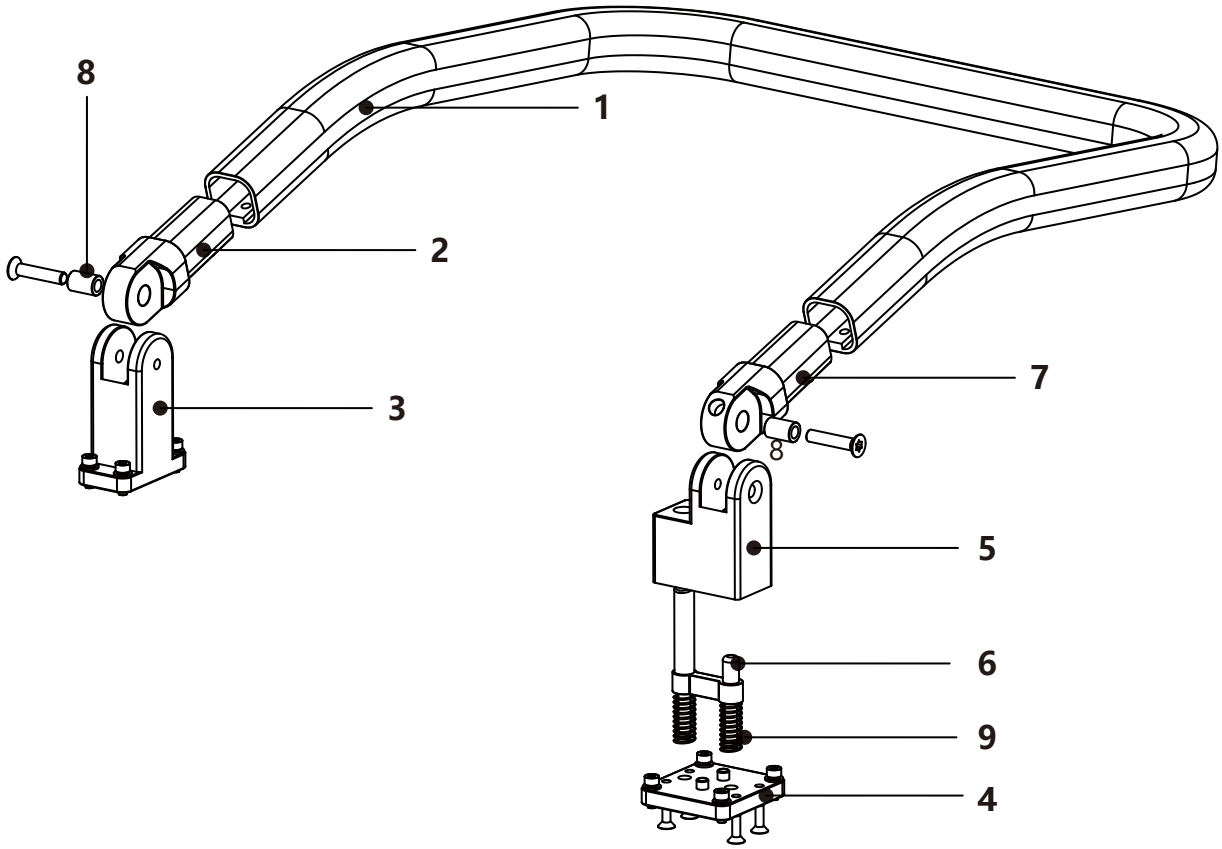
NO.	CODE	DESCRIPTION	商品名称
1	451000075	Water inlet filter cover	加水口滤网盖
2	451000041	Water inlet filter screen	加水口滤网
3	454000039	Threaded straight joint- 6	螺纹直通-6
4	454000029	Black L-type threaded elbow- 12	黑色L型螺纹弯通-12
5	454000038	Threaded straight joint- 12	螺纹直通-12
6	454000010	T-type tee - 12	T型三通-12
7	454000045	Manual valve switch- 12	手阀开关- 12
8	454000052	Transparent PU hose- 12	PU透明软管- 12
9	454000053	Transparent PU hose-6	PU透明软管-6
10	451000008	Solenoid valve fixture	电磁阀固定件
11	453000010	Solenoid valve fixture	电池阀
12	453000011	Water pump	水泵
13	454000150	Small pipeline filter	小型管道过滤器

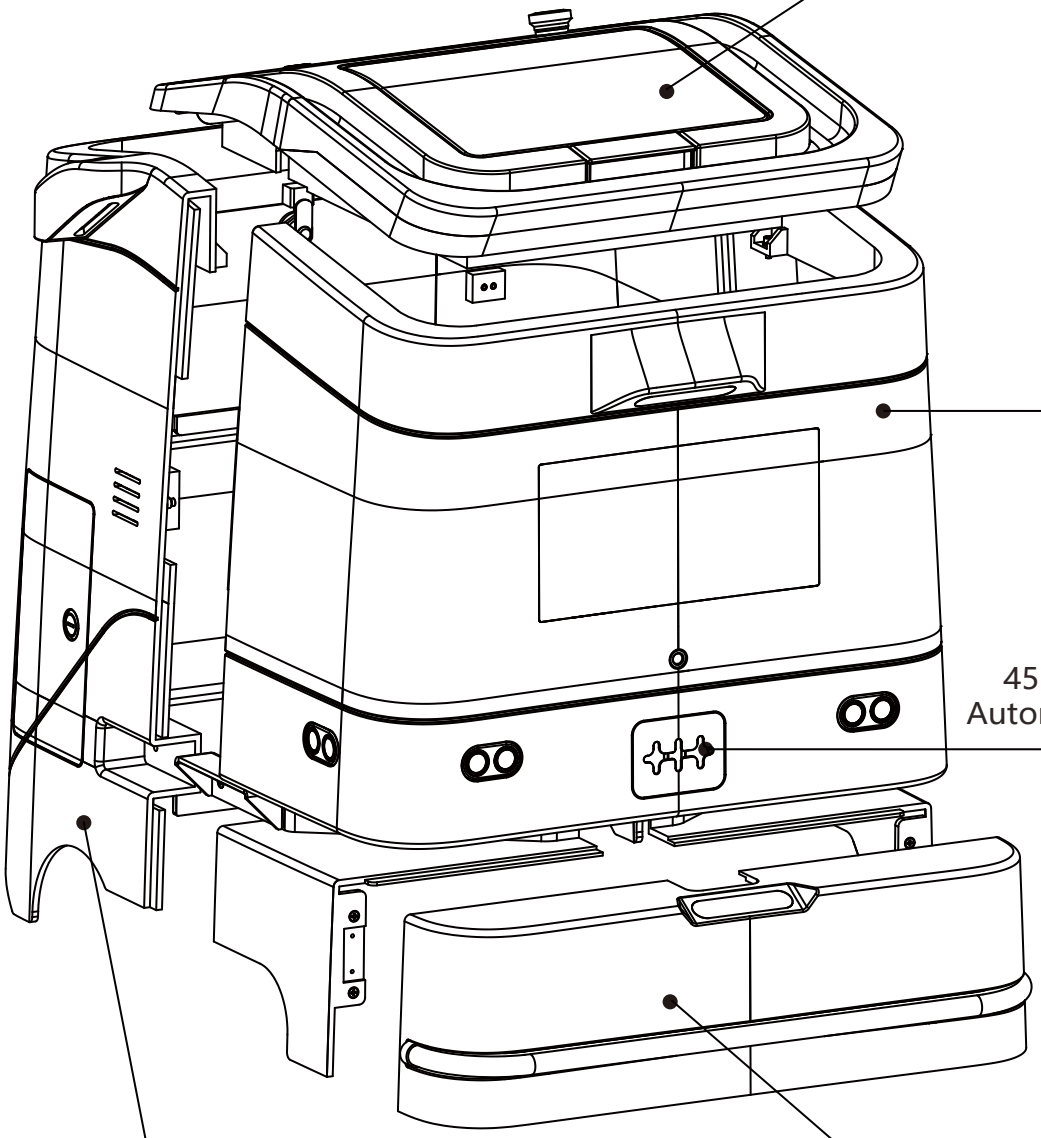


NO.	CODE	DESCRIPTION	商品名称
1	454000002	1-inch male thread straight joint	1寸外牙直通
2	454000001	1-inch PVC pipe	1寸PVC水管
3	454000004	3/4-inch PVC pipe	6分PVC水管
4	454000016	"1" x ¾" PVC reducer bushing	1寸转6分PVC补芯
5	454000028	Silicone gasket	硅胶垫圈
6	452000029	Corrugated hose, sewage suction pipe	波纹软管、吸污管
7	452000027	Corrugated hose, sewage discharge pipe	波纹软管、排污管
8	454000152	45° female thread elbow	45度内牙弯头
9	454000153	Drain basket	沥水篮
10	454000147	Pipeline filter	管道过滤器
11	454000043	Male-female thread elbow	内外丝弯头



NO.	CODE	DESCRIPTION	商品名称
1	451000031	Handrail tube	扶手管
2	451000032	Handrail connector (left)	扶手连接件左
3	451000033	Handrail fixture (left)	扶手固定件左
4	451000034	Handrail fixing base	扶手固定座
5	451000035	Handrail fixture (right)	扶手固定件右
6	451000036	Locating pin shaft	定位销轴
7	451000037	Handrail connector (right)	扶手连接件右
8	454000044	Graphite copper sleeve	石墨铜套
9	454000121	Handrail spring	扶手弹簧





45-4-03 上壳 Upper Housing

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45-4-01 前壳
Front Housing

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45-5-01-05 自动对接触点
Automatic Docking Station

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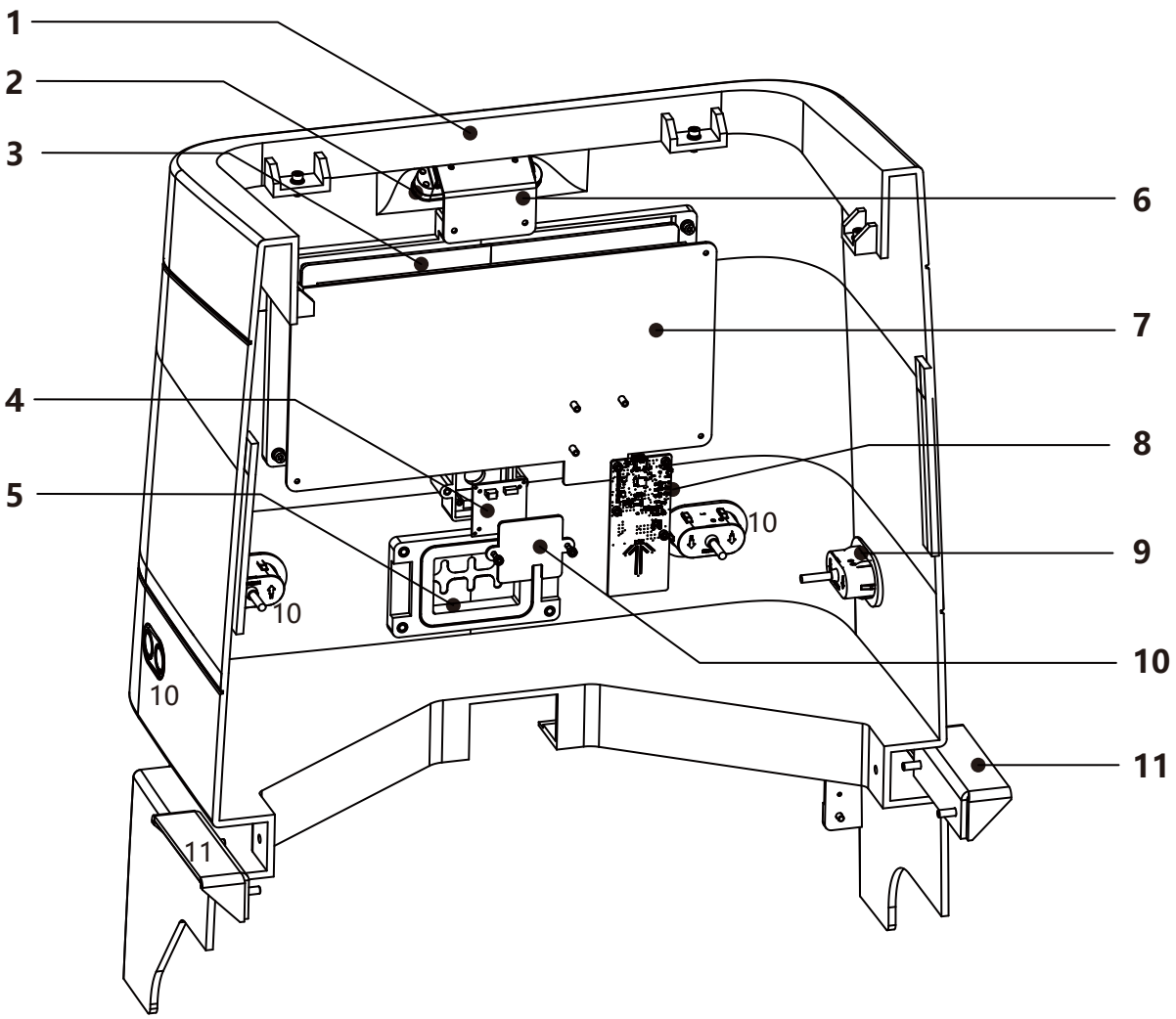
45-4-04 下壳 Lower Housing

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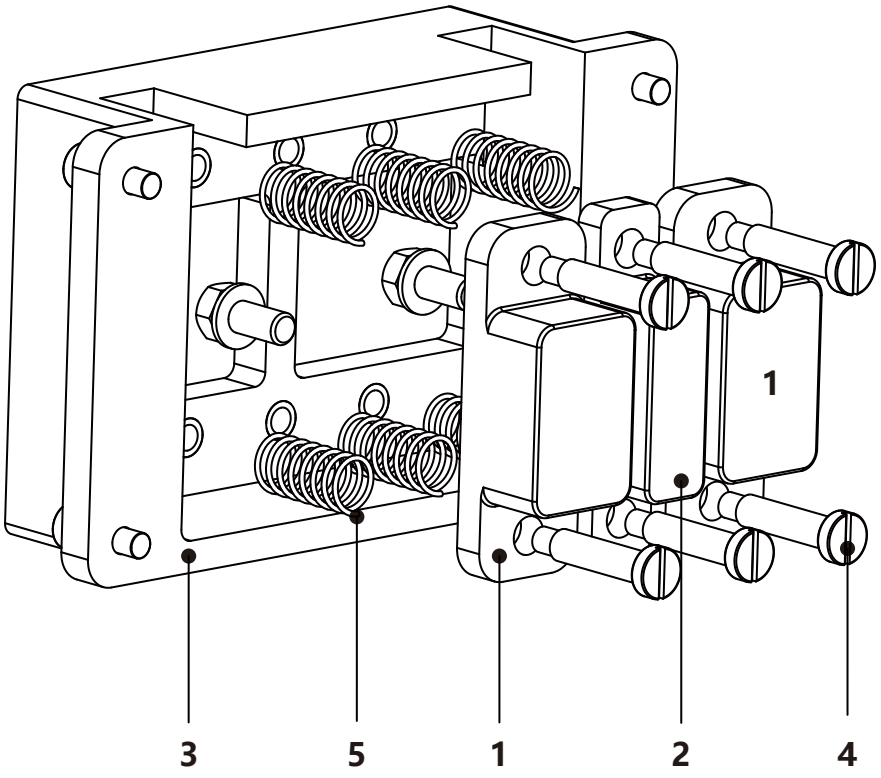
45-4-02 后壳 Rear Housing

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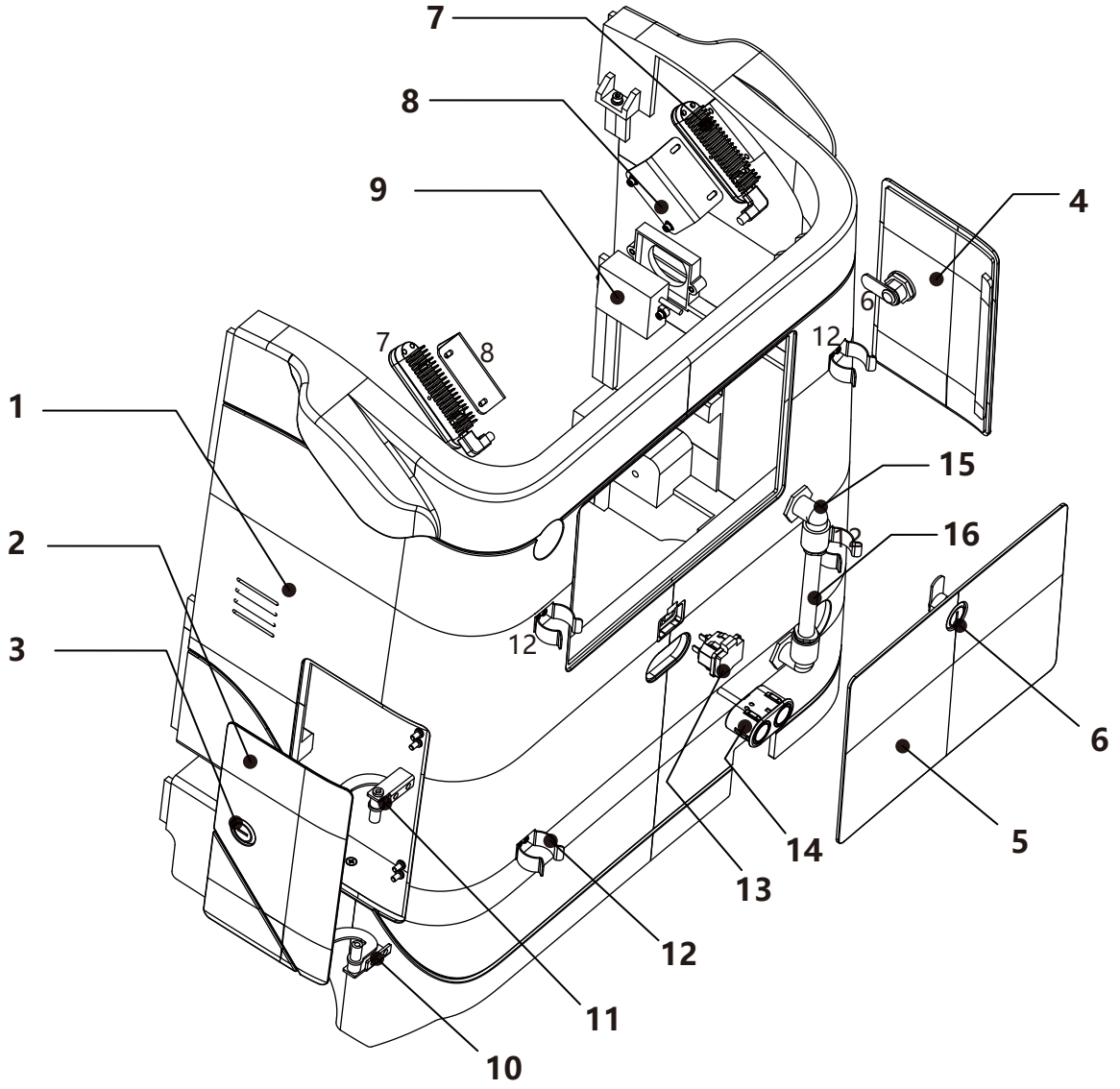
NO.	CODE	DESCRIPTION	商品名称
1	452000015	Front housing	前壳
2	453000012	Depth camera	深度摄像头
3	453000013	LED display panel	LED显示屏
4	453000014	Surveliance camera	监控摄像头
5	452000011	Charging port rubber sleeve	充电口胶套
6	451000046	Upper depth camera bracket	上深度摄像头支架
7	451000044	Front display cover plate	前显示屏盖板
8	453000016	AOA station	AOA基站
9	453000017	Black ultrasonic sensor	黑色超声波
10	451000042	Monitoring cover plate	监控盖板
11	451000009	Handle	提手



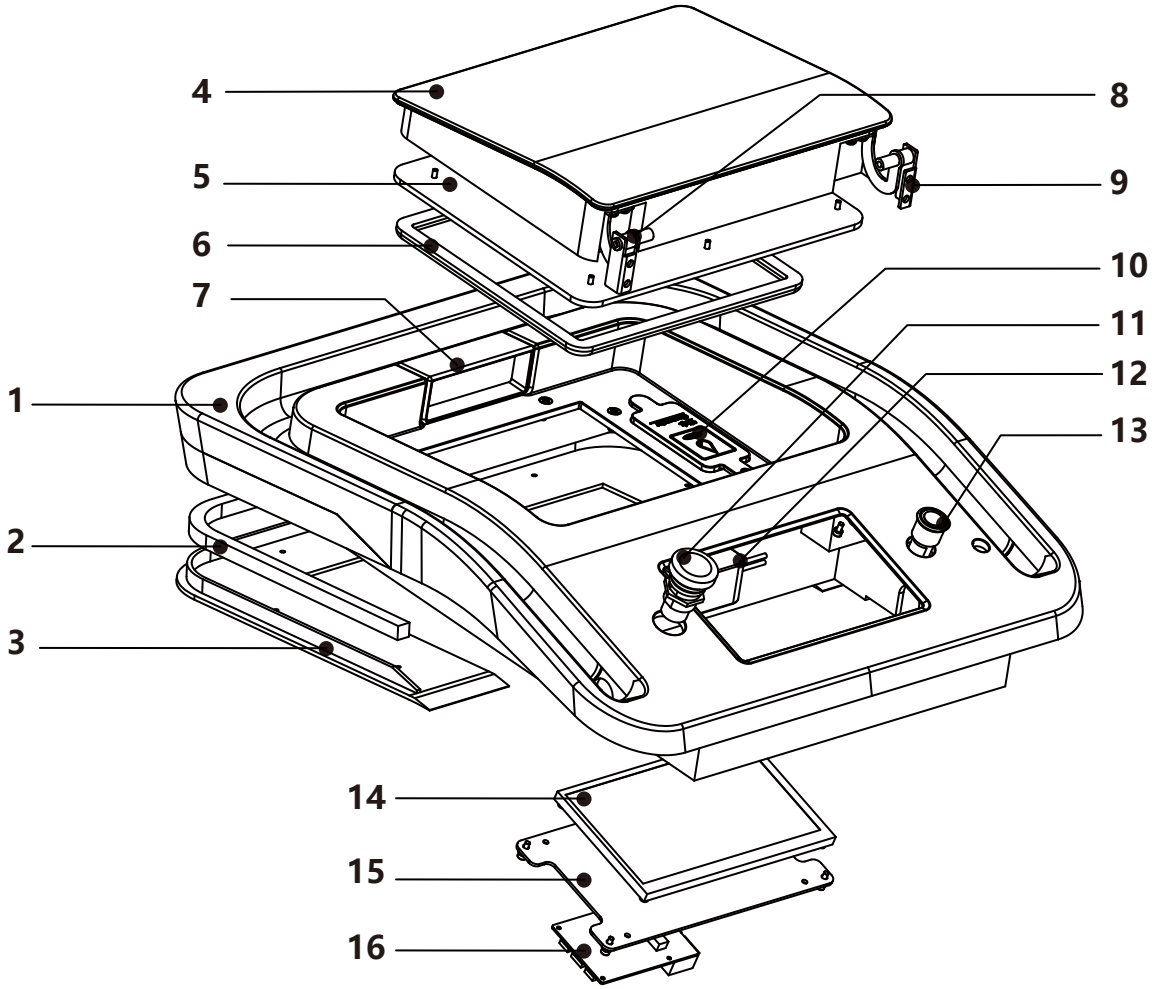
NO.	CODE	DESCRIPTION	商品名称
1	451000048	Machine charging pole piece	机器充电极片
2	451000051	Micro switch top plate	微动开关顶板
3	451000050	charging pole piece fixture	充电极片固定件
4	454000064	Slotted pan head screw	一字赛打螺丝
5	454000120	Pole piece spring	极片弹簧



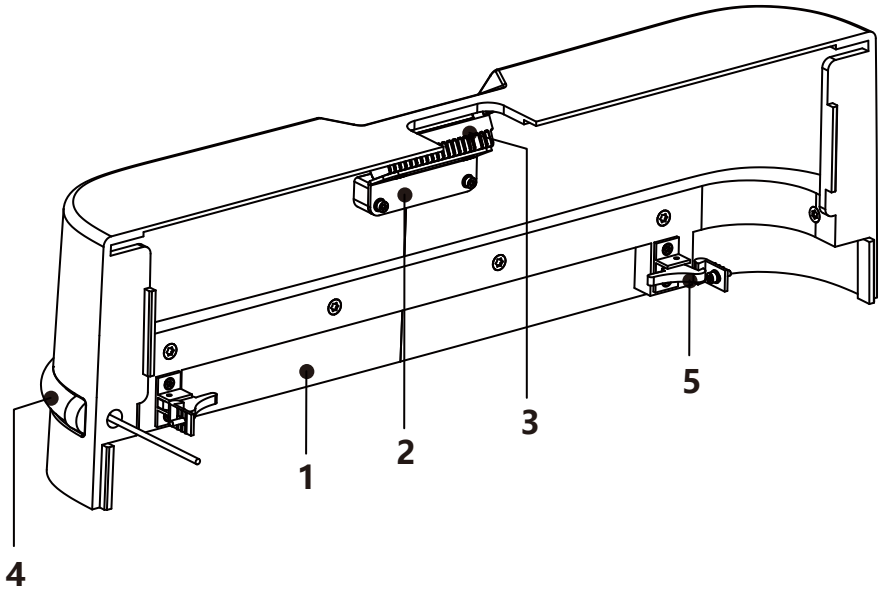
NO.	CODE	DESCRIPTION	商品名称
1	452000016	Rear housing	后壳
2	452000017	Left compartment door	左舱门
3	454000135	Round cam lock	圆形转舌锁
4	452000009	Right compartment door	右舱门
5	452000010	Electrical control compartment door	电控舱门
6	454000061	Cam lock	转舌锁
7	453000012	Depth camera	深度摄像头
8	451000049	Left & right depth camera bracket	左右深度摄像头支架
9	453000018	Speaker	喇叭
10	454000033	Hinge (left)	铰链（左）
11	454000032	Hinge (right)	铰链（右）
12	454000046	Double-hole pipe clamp	双孔管夹
13	453000019	IEC 60320 socket with cover	带盖品字插座
14	453000017	Black ultrasonic sensor	黑色超声波
15	454000019	Through-panel quick-connect fitting	穿板快插接头
16	454000052	Transparent PU hose	PU透明软管

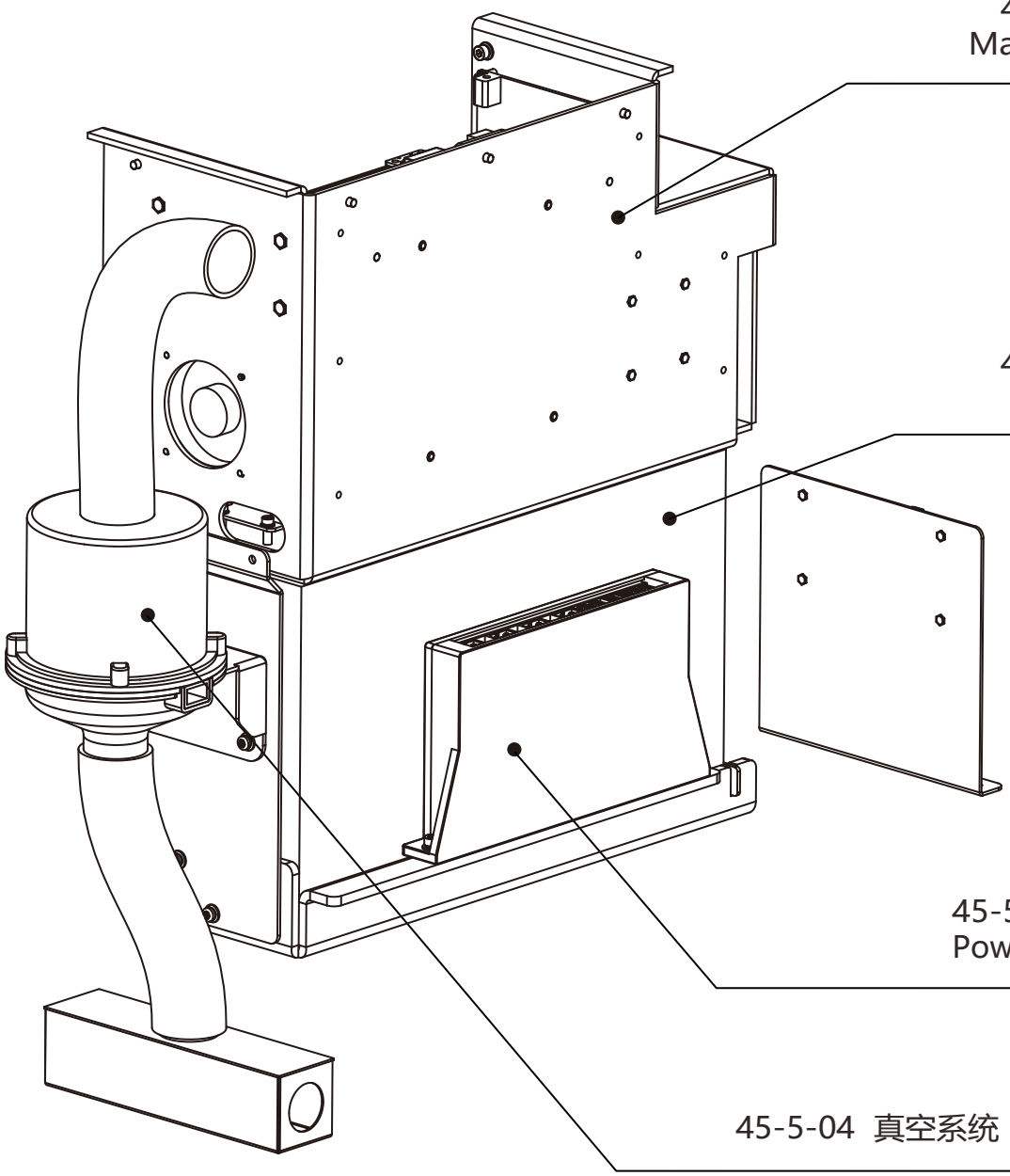


NO.	CODE	DESCRIPTION	商品名称
1	452000018	Upper housing	上壳
2	452000019	Water tank cover	水箱盖
3	451000043	Water tank cover plate	水箱盖板
4	452000012	Light strip cover plate	灯带盖板
5	452000013	Water inlet rubber sleeve	加水口胶套
6	452000014	Handrail rubber sleeve	扶手橡胶套
7	451000052	Operation screen fixing plate	操作屏固定板
8	454000033	Hinge (left)	铰链（左）
9	454000032	Hinge (right)	铰链（右）
10	454000025	Foamed solid sealing strip	发泡实心密封条
11	453000020	Emergency stop switch + lead wire	急停开关+引线
12	453000048	Metal push button switch	金属按钮开关
13	453000022	Operation screen	操作屏
14	453000023	Operation screen driver board	操作屏驱动板
15	453000024	Top cover LED light strip	顶盖LED灯带
16	453000089	Power supply	电源



NO.	CODE	DESCRIPTION	商品名称
1	452000020	Lower housing	下壳
2	451000047	Lower depth camera bracket	下深度摄像头支架
3	453000012	Depth camera	深度摄像头
4	453000025	Touch strip	触碰条
5	454000125	Bird-shaped buckle	小鸟搭扣





45-5-01 主控制板
Main Control Board

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45-5-05 电池系统
Battery System

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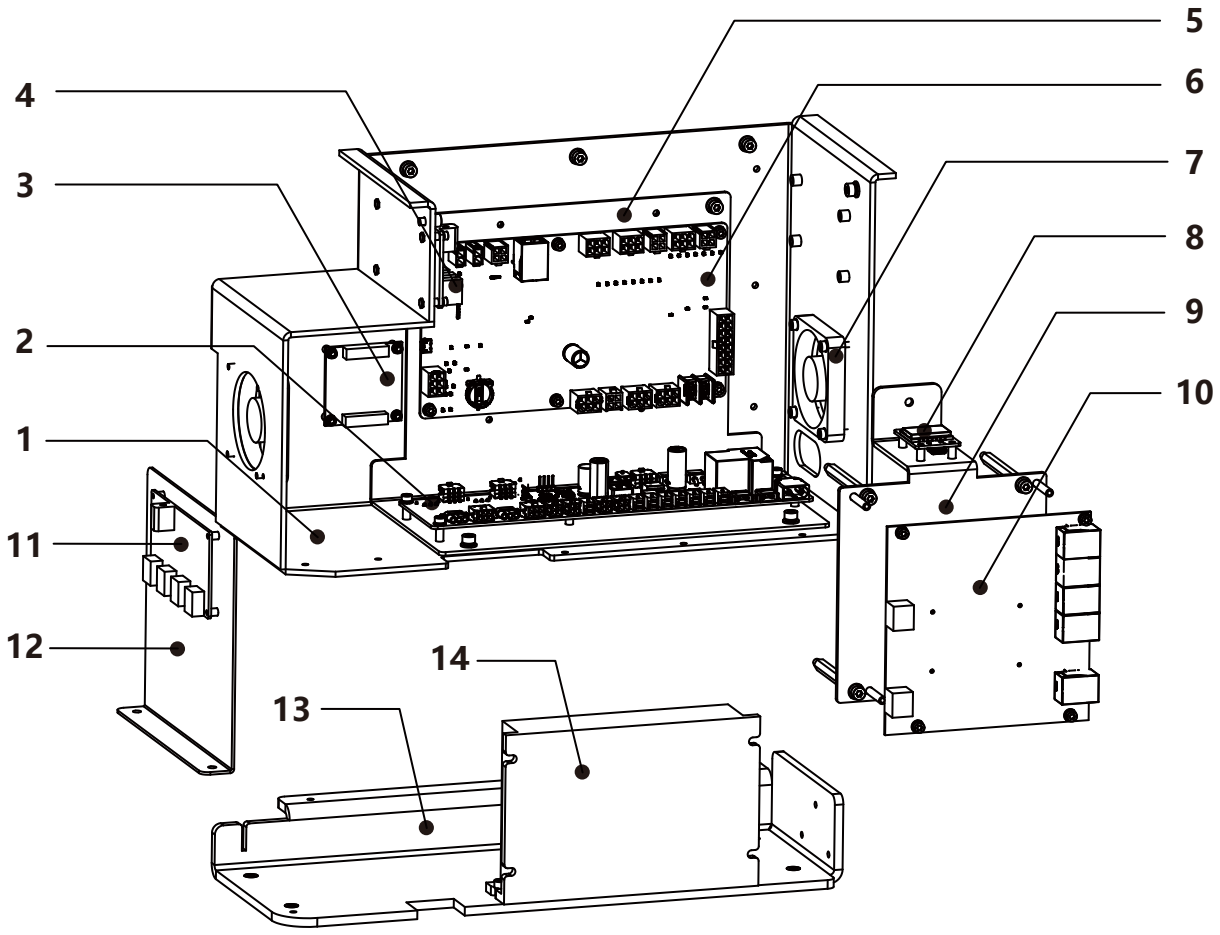
45-5-03 电源管理系统
Power Control System

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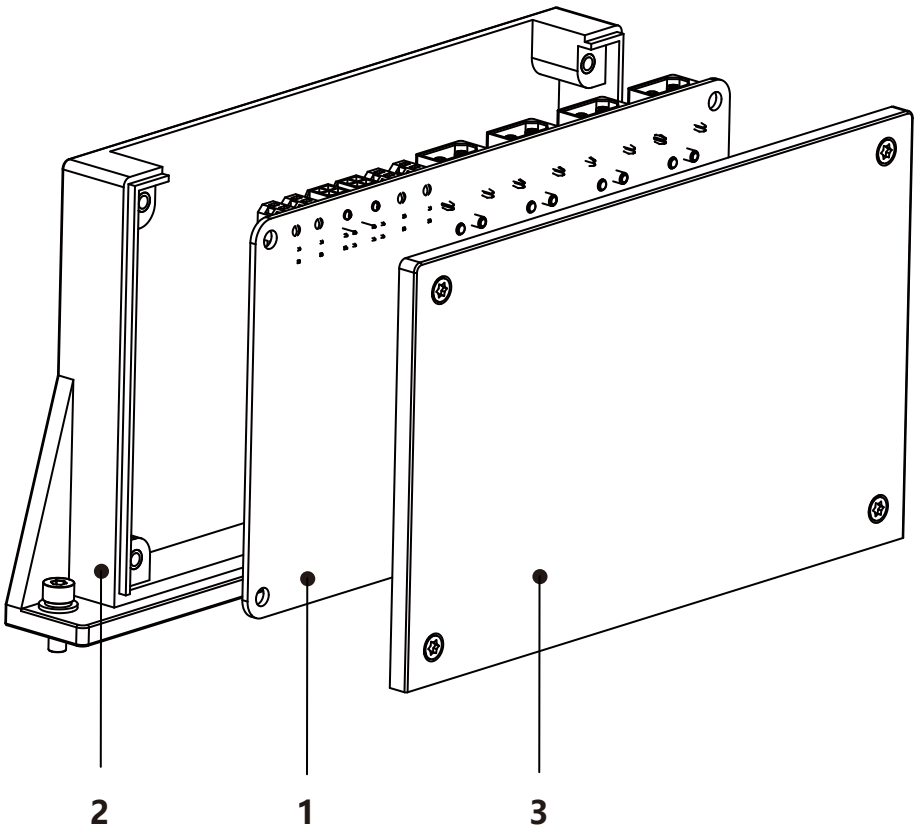
45-5-04 真空系统 Vacuum System

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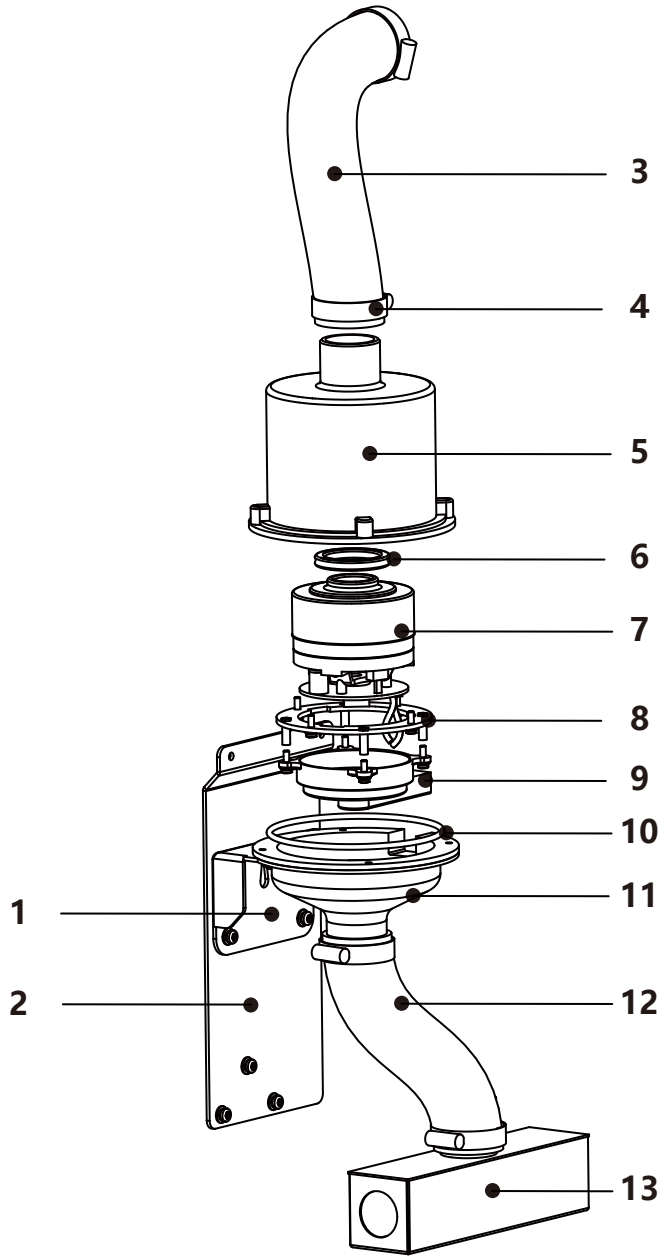
NO.	CODE	DESCRIPTION	商品名称
1	451000054	Main control compartment	主控仓
2	451000055	PCB fixing bracket	PCB固定支架
3	453000026	Fan	风扇
4	453000027	Interface board	接口板
5	453000028	VCU(vehicle control board)	控制板VCU
6	453000029	Roller brush driver board	滚刷驱动板
7	453000032	USB 7-port hub	USB扩展7口
8	454000022	Single-head hexagonal terminal	单头六角接线柱
9	451000015	Battery fixing plate	电池固定板
10	453000002	Drive wheel driver	轮毂电机驱动器
11	451000053	Industrial computer fixing plate	工控机固定板
12	453000033	IPC	工控机
13	453000042	IMU	IMU
14	451000067	USB fixing bracket	USB固定支架
15	453000015	4-port USB hub	USB扩展4口



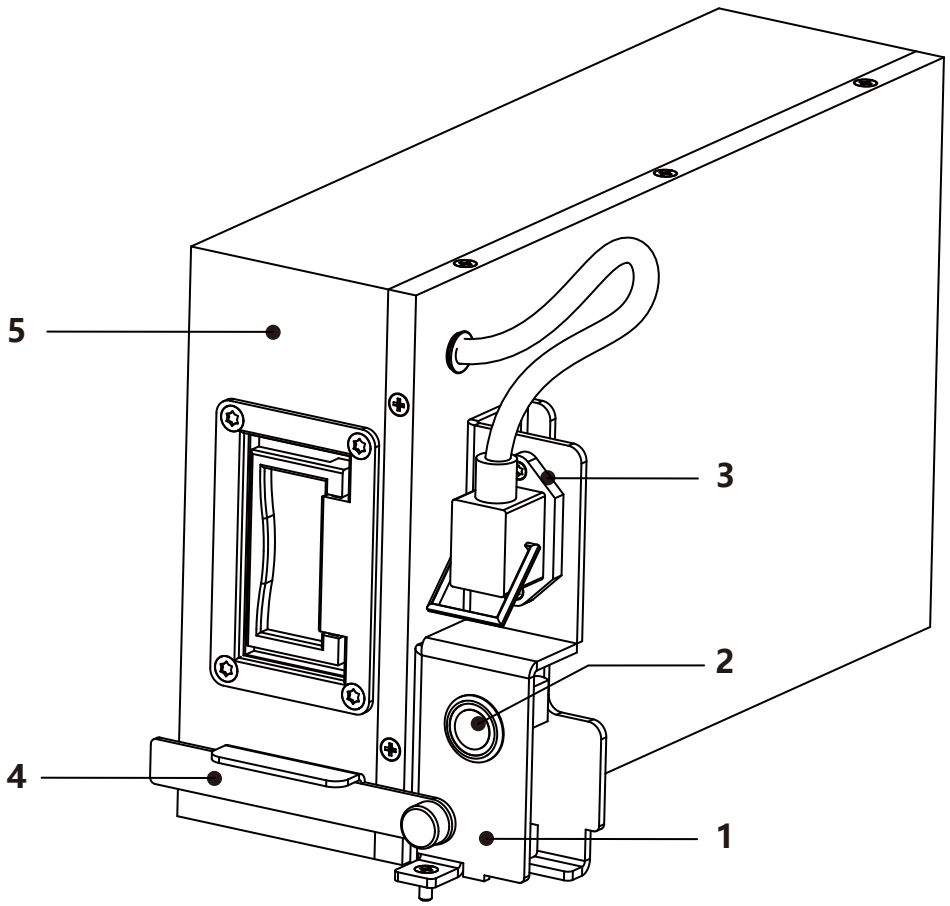
NO.	CODE	DESCRIPTION	商品名称
1	453000043	Charging PCB board	电源PCB
2	452000022	Charging PCB box	电源PCB盒
3	452000021	Charging PCB box cover	电源PCB盒盖

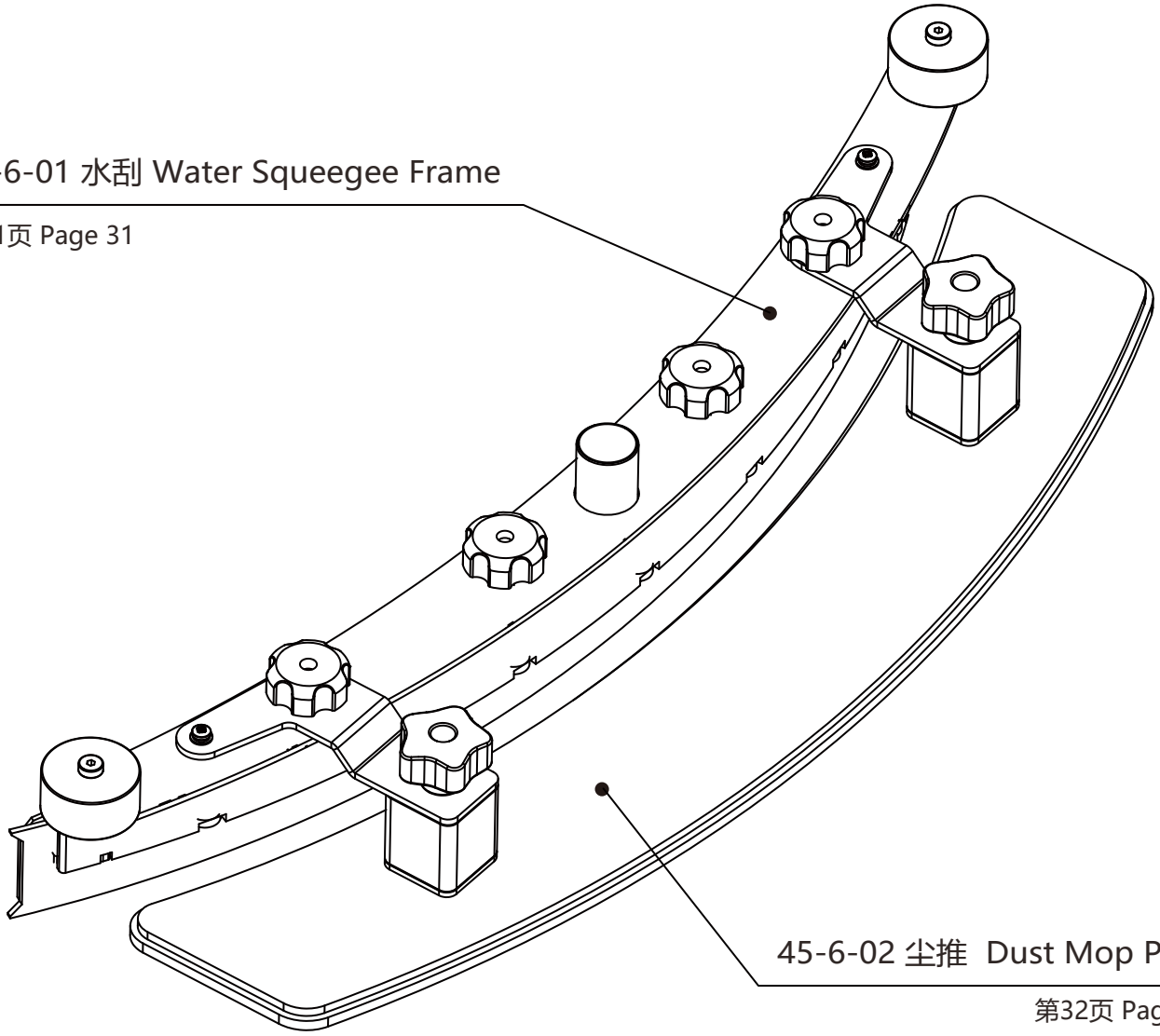


NO.	CODE	DESCRIPTION	商品名称
1	451000081	Fan fixing bracket	风机固定支架
2	451000082	Fan fixing plate	风机固定板
3	452000028	air suction pipe	吸风管
4	454000062	German-style hose clamp	德式喉箍
5	452000034	Fan upper housing	风机上壳
6	454000145	Star ring	星型圈
7	453000044	Vacuum Motor	吸力电机
8	451000045	Suction motor bracket	吸力电机支架
9	452000033	Fan wire cover	风机过线罩
10	454000144	O-ring	O型圈
11	452000032	Fan lower housing	风机下壳
12	452000030	Air exhaust pipe	排风管
13	451000069	Muffler box	消音盒



NO.	CODE	DESCRIPTION	商品名称
1	451000016	Socket switch fixture	插座开关固定件
2	453000021	Metal push button switch (power logo)	金属按钮开关(电源标)
3	453000045	Tower-type 2+6 female socket	铁塔2+6母座
4	451000017	Battery baffle	电池挡片
5	453000046	Lithium-ion Battery Pack	锂电池





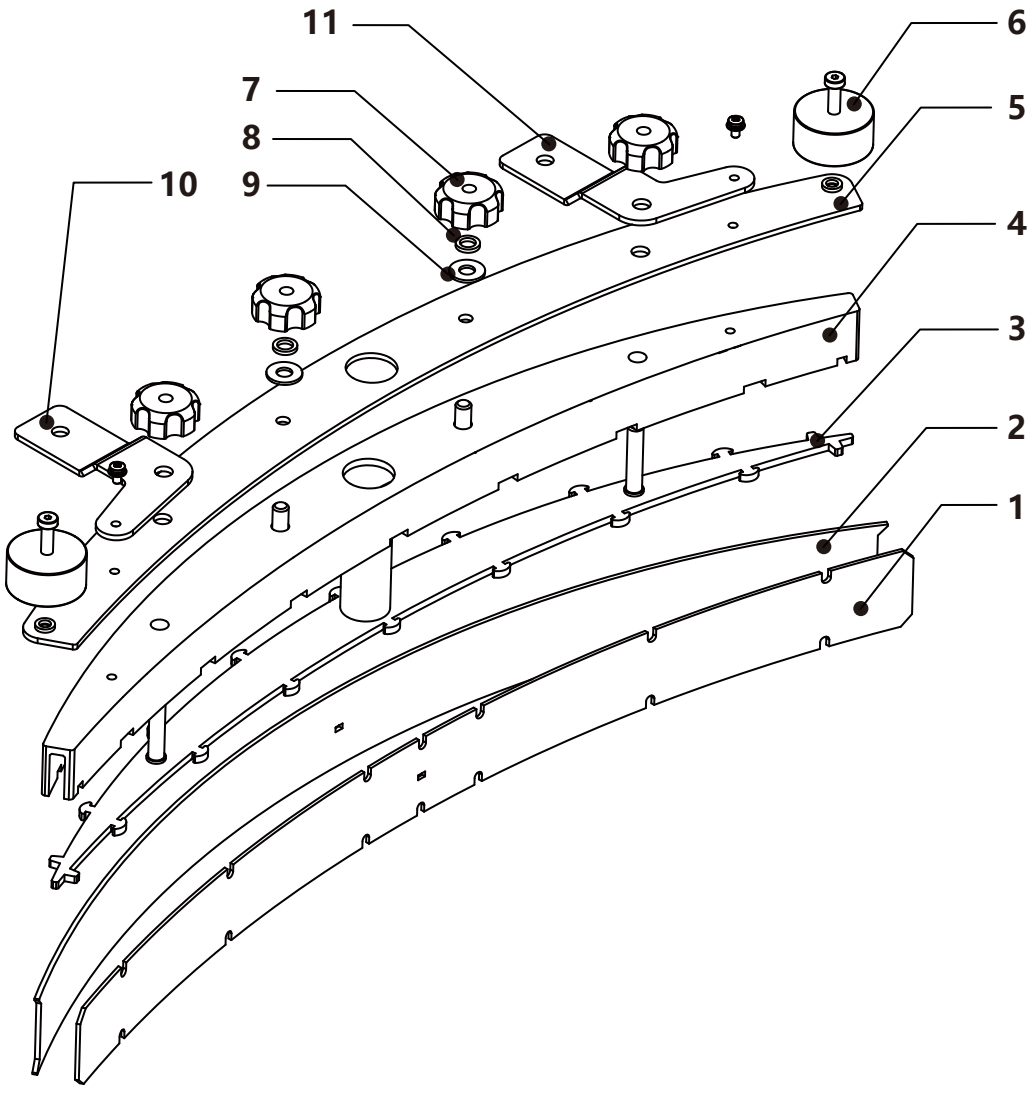
45-6-01 水刮 Water Squeegee Frame

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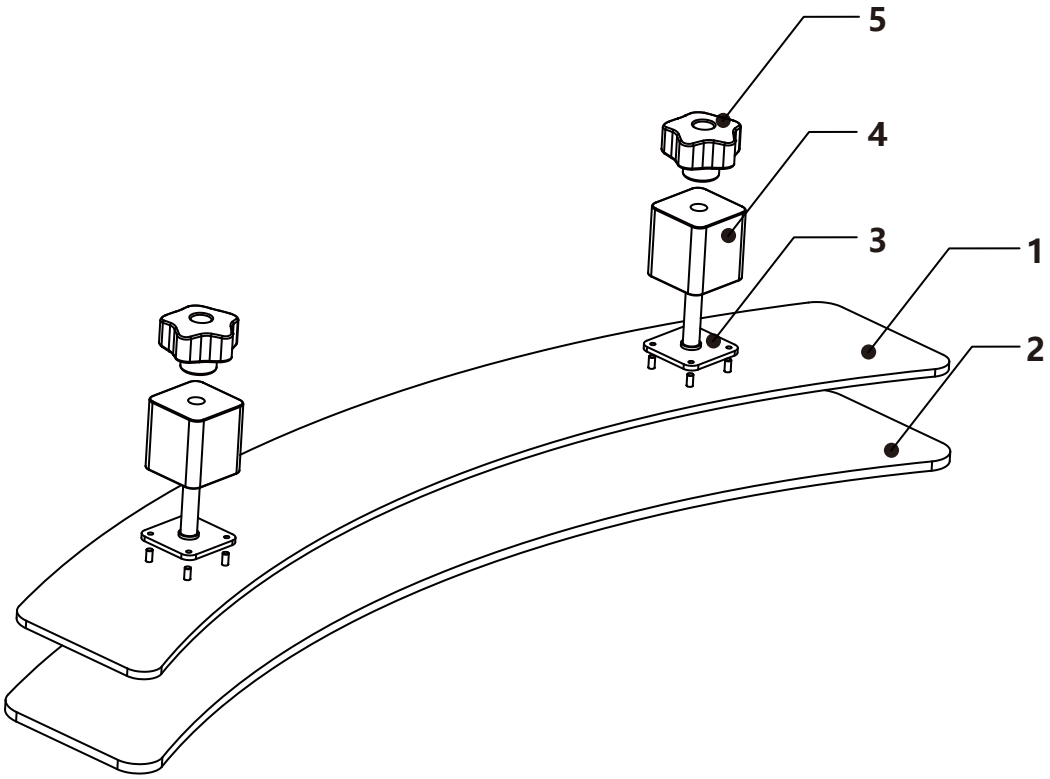
45-6-02 尘推 Dust Mop Plate

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NO.	CODE	DESCRIPTION	商品名称
1	452000024	Front rubber strip	前胶条
2	452000025	Rear rubber strip	后胶条
3	451000057	Rubber strip fixing plate	胶条固定板
4	452000023	Water Squeegee rubber strip fixture	水刮胶条固定件
5	451000056	Water Squeegee fixing plate	水刮固定板
6	454000015	Rubber-coated bearing wheel	包胶轴承轮
7	454000162	Through-hole plum nut	通孔梅花螺母
8	454000127	Black spring washer	黑色弹簧垫圈
9	454000126	Black flat washer	黑色平垫片
10	451000078	Dust mop plate fixing bracket (right)	推尘板固定支架右
11	451000079	Dust mop plate fixing bracket (left)	推尘板固定支架左



NO.	CODE	DESCRIPTION	商品名称
1	451000077	Dust mop plate	推尘板
2	455000019	Dust mop cloth	尘推布
3	451000080	Dust mop plate connector	尘推连接件
4	452000036	Limit rubber block (dust mop)	限位胶块（推尘）
5	454000054	Pentagon-shaped hand nut	五角星型手拧螺母

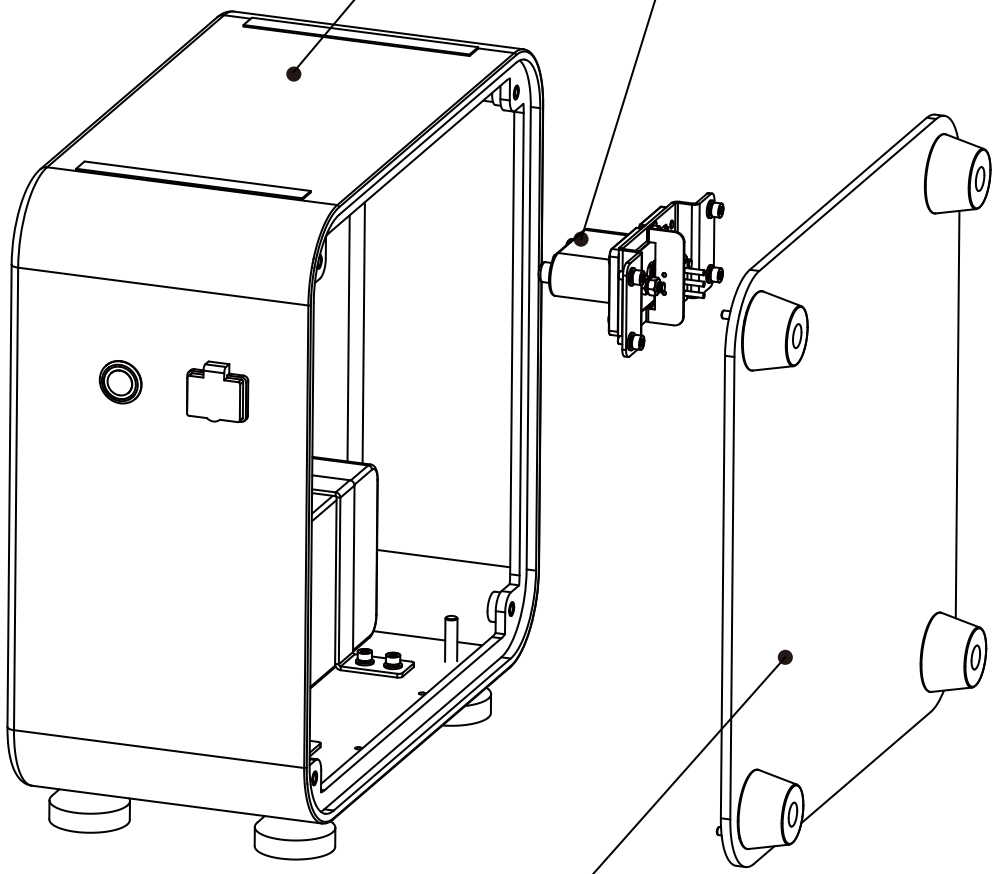


45-7-01 壳体组件
Housing Assembly

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45-7-01-02 电极触点
Charging Contact

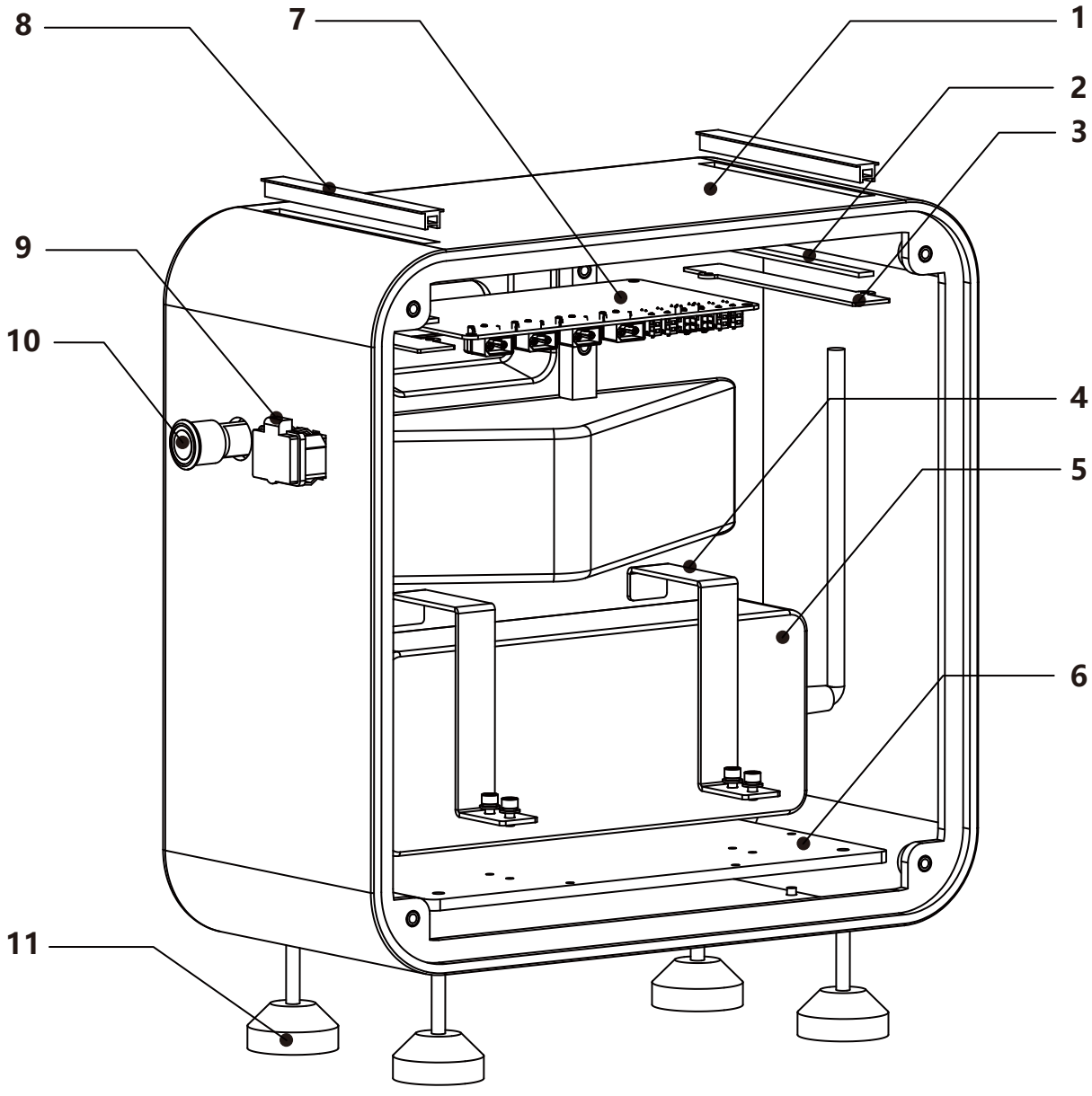
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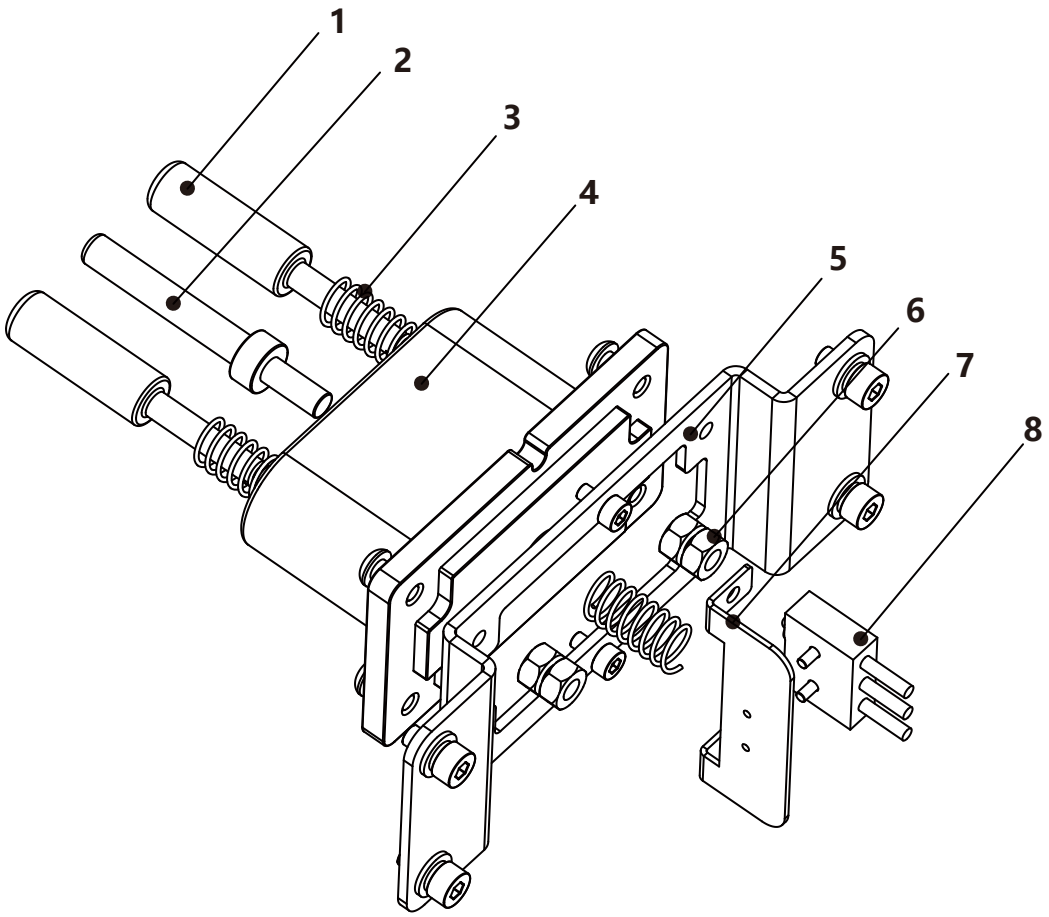
45-7-01-03 维修门
Charging Dock Back Cover Assembly

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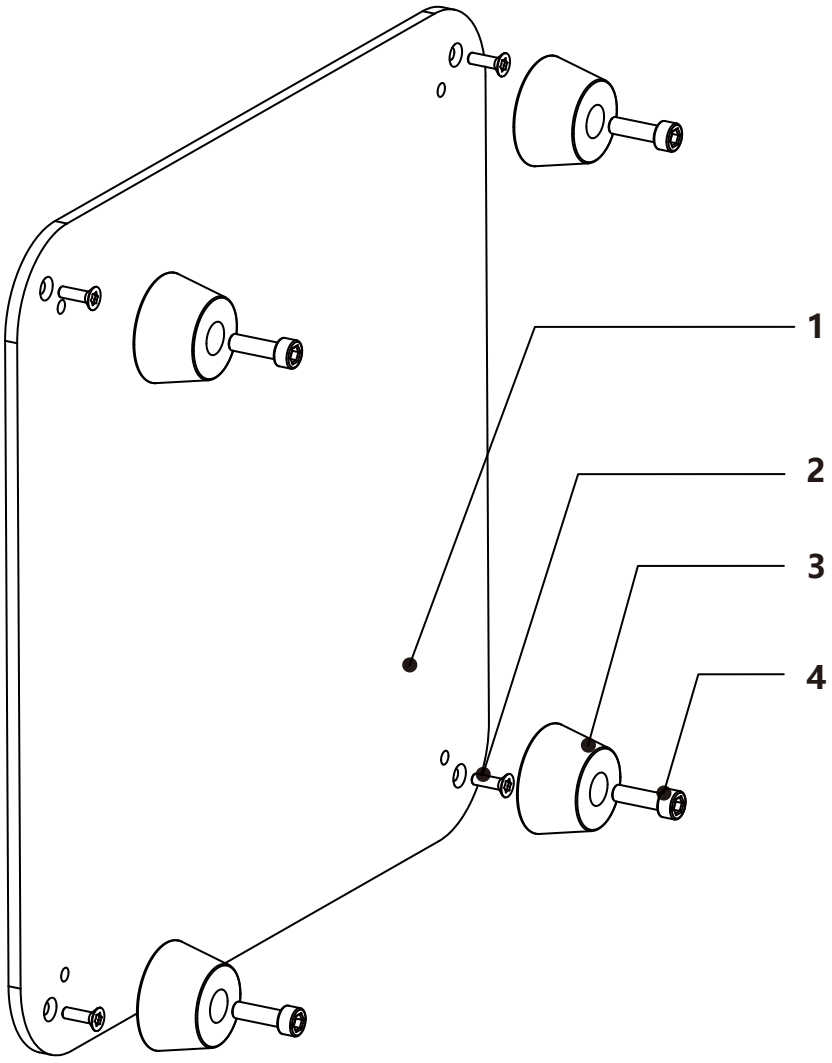
NO.	CODE	DESCRIPTION	商品名称
1	452000026	Charging station housing	充电桩外壳
2	453000051	Charging station LED light strip	充电桩LED灯带
3	451000064	Light strip pressing plate	灯带压板
4	451000066	Charger pressing strip	充电器压条
5	453000049	Charging station charger	充电桩充电器
6	451000059	Base plate	底板
7	453000043	Charging PCB board	充电PCB板
8	454000027	Silicone light strip groove	硅胶灯带槽
9	453000019	IEC 60320 socket with cover	带盖品字插座
10	453000048	Metal push button switch	金属按钮开关
11	454000036	Adjustable foot pad	可调节脚垫



NO.	CODE	DESCRIPTION	商品名称
1	451000060	Charging plate	充电桩极片
2	451000061	Micro switch contact pin	微动开关触顶针
3	454000121	Charging plate spring	极片弹簧
4	451000062	Charging plate bracket	极片固定件
5	451000065	Charging plate bracket assembly	极片组件固定件
6	454000114	Copper nut	铜螺母
7	451000063	Micro switch fixture	微动开关固定件
8	453000052	Micro switch	微动开关



NO.	CODE	DESCRIPTION	商品名称
1	451000058	Charging dock back cover	维修门
2	454000094	Black flat-head plum screw	黑色平头梅花螺丝
3	454000055	Rubber foot pad	橡胶脚垫
4	454000089	Black socket head cap screw	黑色杯头内六角螺丝





METABOTS