



## **Electronic Service Manuals**

This electronic document is provided as a service to our customers. We do not create the contents of the information contained in this document. Should you have detailed questions pertaining to the information contained in this document, you may contact Michco, or the manufacturer which provided the original information in this electronic deliverable. Michco's only part in this electronic deliverable was the electronic assembly process. By providing this manual online we are not guaranteeing parts availability.

You may contact Michco through the following methods:

**Phone (517) 484-9312**

2011 N. High St. -- Lansing, Michigan -- 48906

Fax: (517) 484-9836

Email: [CustomerService@Michco.com](mailto:CustomerService@Michco.com)

Website: [www.Michco.Com](http://www.Michco.Com)

Order Parts online at:

**[www.Michco.Com](http://www.Michco.Com)**

Directly to Parts & Service:

By Email: **[CustomerService@Michco.com](mailto:CustomerService@Michco.com)**

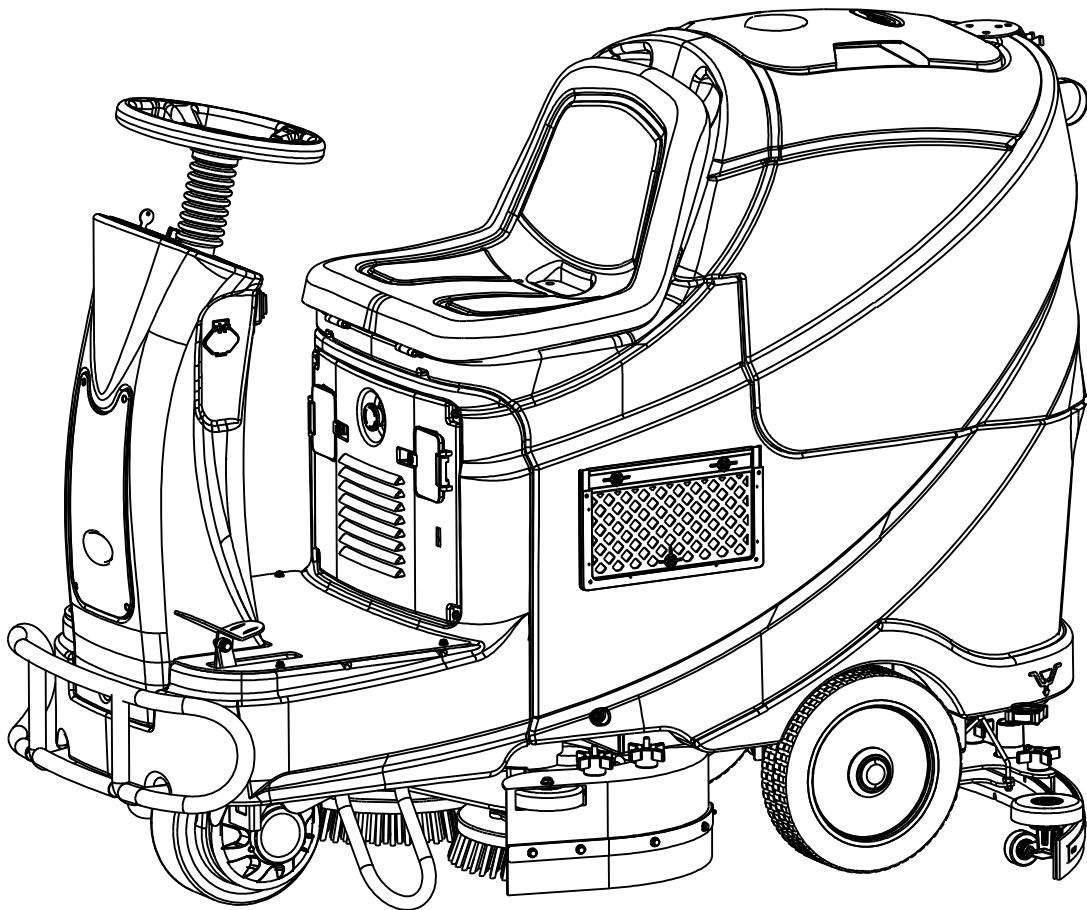
By Fax: (517) 484-9836

By Voice: (517) 484-9312

**Serving the Cleaning Industry Since 1922**

Notice: All copyrighted material remains property of original owners, all trademarks are property of respective owners. Manuals are subject to Manufacturer's reproduction limitations. Originals or reproductions were provided by manufacturers through a request. We make no warranty as to the correctness of information provided in this document and you assume all risk. By placing these manuals on line we are not declaring our corporation to be an manufacturer authorized dealer or provider, please check our web site for authorized manufacturers we represent.

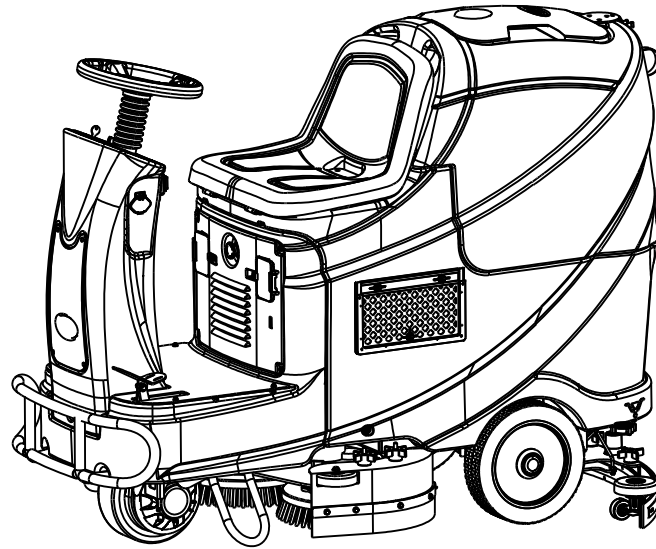
# AS850R PARTS LIST



VR19118  
REV.04 2019-6-14



# TABLE OF CONTENTS



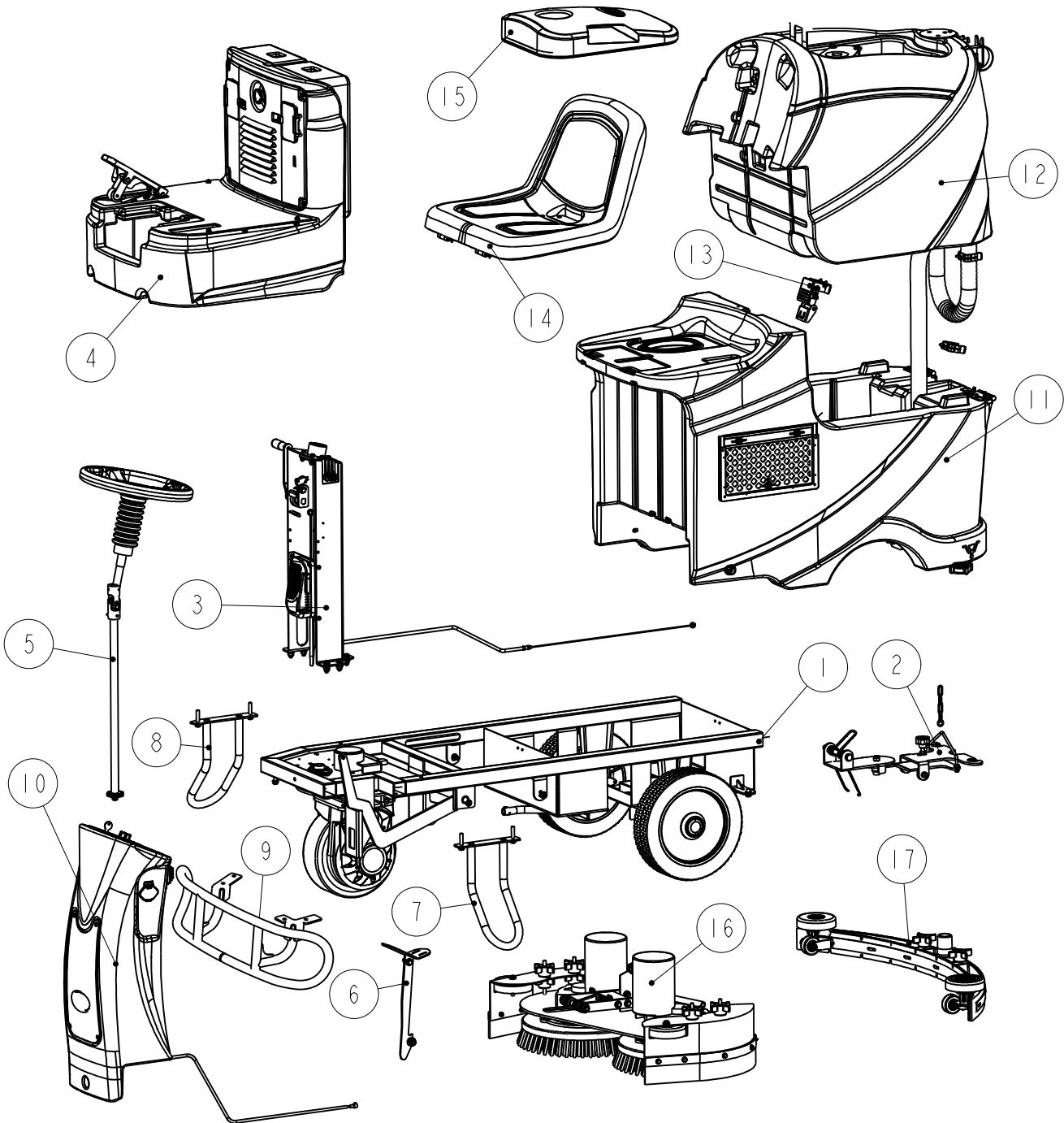
<b>Description</b>	<b>Page</b>
COMPLETE ASSEMBLY	2--3
DRIVE MOTOR AND CHASSIS ASSEMBLY	4--5
DIRECTION CONTROL ASSEMBLY	6--7
FRONT MAIN FRAME ASSEMBLY	8--9
BRUSH ASSEMBLY	10--11
ELECTRIC PARTS ASSEMBLY	12--13
CONTROL HOUSING ASSEMBLY	14--15
SQUEEGEE BRACKET ASSEMBLY	16--17
SQUEEGEE ASSEMBLY	18--19
SOLUTION TANK ASSEMBLY	20--21
RECOVERY TANK ASSEMBLY	22--23
SEAT ASSEMBLY	24--25
BUMPER ASSEMBLY	26--27
ELECTRIC PARTS	28--29
OTHER ELECTRIC PARTS ASSEMBLY	30--31
MAIN CONNECTING WIRE-VR13440	32
WEAR AND TEAR PARTS	33

## WHEN ORDERING PARTS

- \* Specify the model and serial number of the machine.
- \* Use the space below to record the model and serial number for future reference.

Model \_\_\_\_\_ Serial No. \_\_\_\_\_

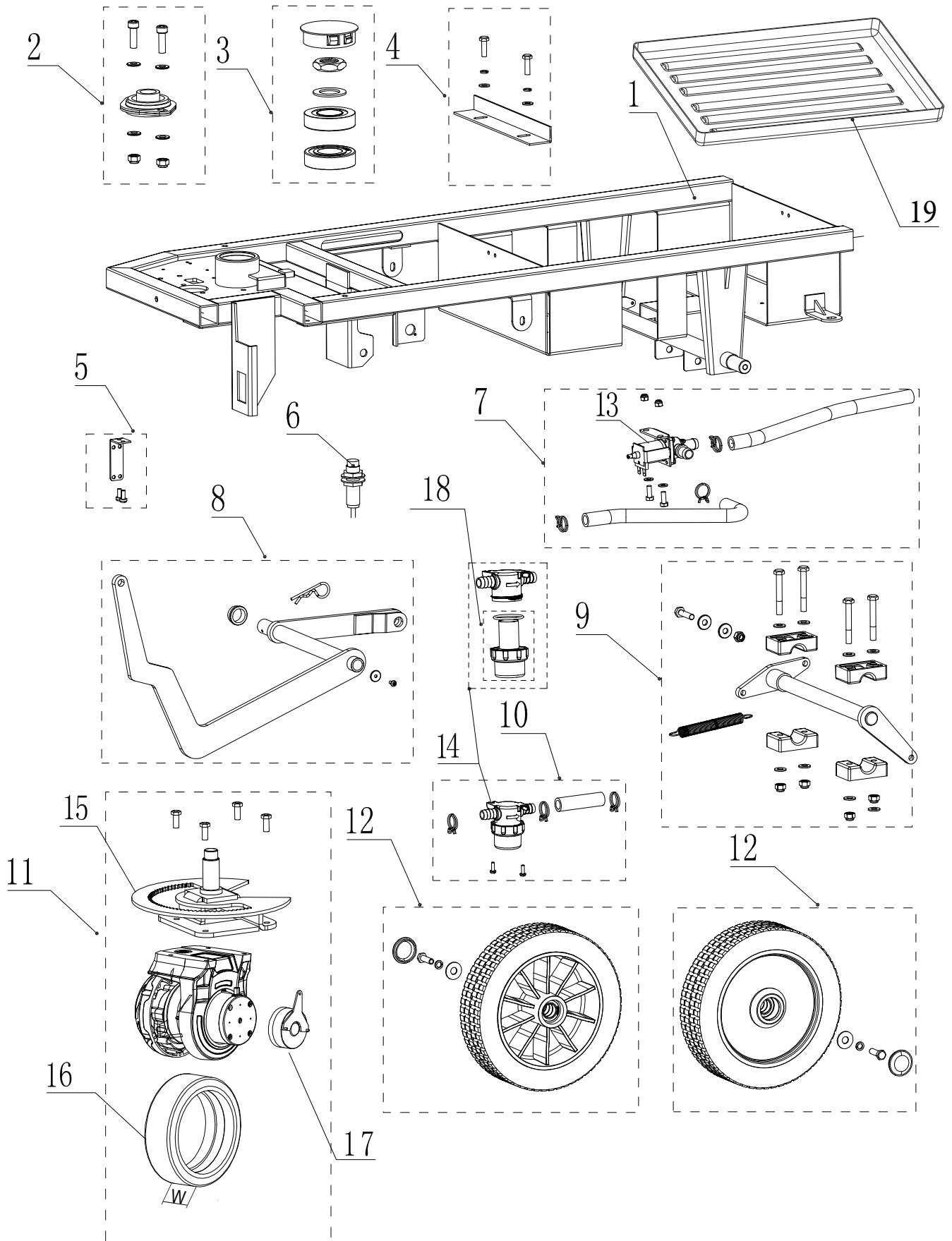
# COMPLETE ASSEMBLY



---

<b>COMPLETE ASSEMBLY</b>		
<b>Item</b>	<b>Description</b>	<b>Qty</b>
1	DRIVER ASSY AND MAIN FRAME	1
2	SQUEEGEE BRACKET ASSEMBLY	1
3	FRONT MAIN FRAME ASSEMBLY	1
4	ELECTRI PARTS ASSEMBLY	1
5	DIRECTION CONTROL ASSEMBLY	1
6	LIFT BRUSH PEDAL ASSEMBLY	1
7	LEFT CRUSH-PROTECT ASSEMBLY	1
<b>8</b>	RIGHT CRUSH-PROTECT ASSEMBLY	1
9	KIT FRONT CRUSH-PROTECT	1
10	FRONT HOUSING ASSEMBLY	1
11	SOLUTION TANK ASSEMBLY	1
12	RECOVERY TANK ASSEMBLY	1
13	RECOVERY TANK LOCK ASSEMBLY	1
14	SEAT ASSEMBLY	1
15	RECOVERY TANK COVER ASSEMBLY	1
16	BRUSH ASSEMBLY	1
17	SQUEEGEE ASSEMBLY	1

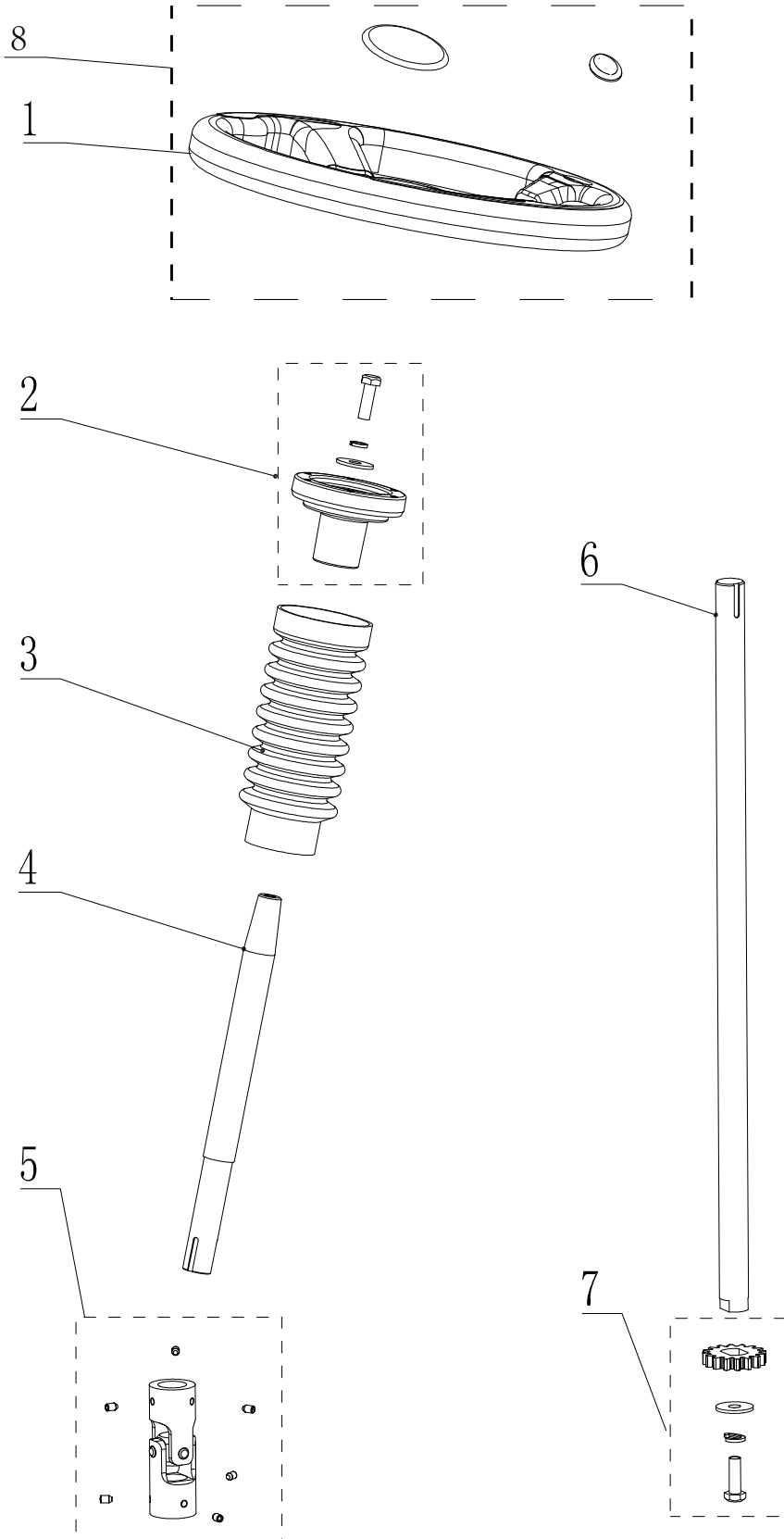
# DRIVE MOTOR AND CHASSIS ASSEMBLY



<b>DRIVE MOTOR AND CHASSIS ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR19100	CHASSIS	1
2	VR11016	KIT BEARING WITH BRACKET	1
3	VR11501	KIT DRIVE MOTOR BEARING	1
4	VR11502	KIT BATTERY BRACKET	1
5	VR11503	KIT DRIVE MOTOR BRACKET	1
6	VR13435	SENSOR SWITCH	1
7	VR11506	KIT SOLENOID VALVE	1
8	VR19126	BRACKET KIT BRUSH LIFT	1
9	VR11507	BRACKET KIT SQUEEGEE LIFT	1
10	VR11508	KIT FILTER	1
11	VR11200	KIT DRIVE MOTOR	1
12	VR11504	KIT REAR WHEEL	2
13	VR11600	VALVE	1
14	VF90621	FILTER	1
15	VR11202	PRECURSOR FIXED PLATE	1
16	VR11204	PLASTIC WHEEL FOR DRIVE MOTOR W=80MM old version	1
	VR11208	PLASTIC WHEEL FOR DRIVE MOTOR W=90MM new version	1
17	VR11205	PRECURSOR BRAKING	1
18	VR11509	KIT FILTER COVER	1
19*	VR10048	BATTERY TRAY	1

\*-----OPTIONAL

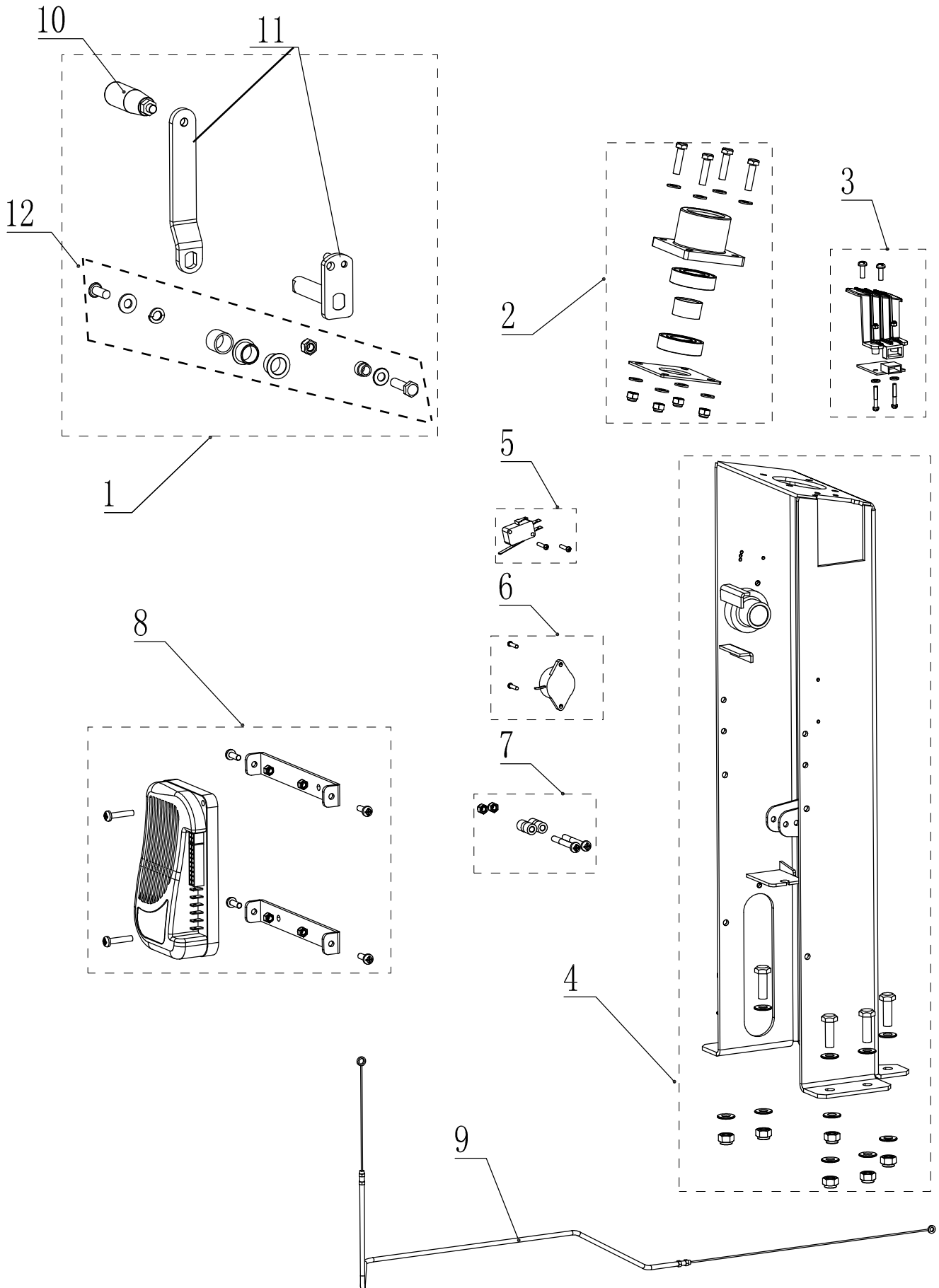
## DIRECTION CONTROL ASSEMBLY



---

<b>DIRECTION CONTROL ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR34012	STEERING WHEEL	1
2	VR10039	KIT STEERING WHEEL LOCK	1
3	VR10014	RUBBER SLEEVE STEERING WHEEL	1
4	VR10001	UP SHAFT STEERING WHEEL	1
5	VR10040	KIT UNIVERSAL JOINT	1
6	VR11301	DOWN SHAFT STEERING WHEEL	1
7	VR11303	KIT GEAR	1
8	VR19127	STEERING WHEEL	1

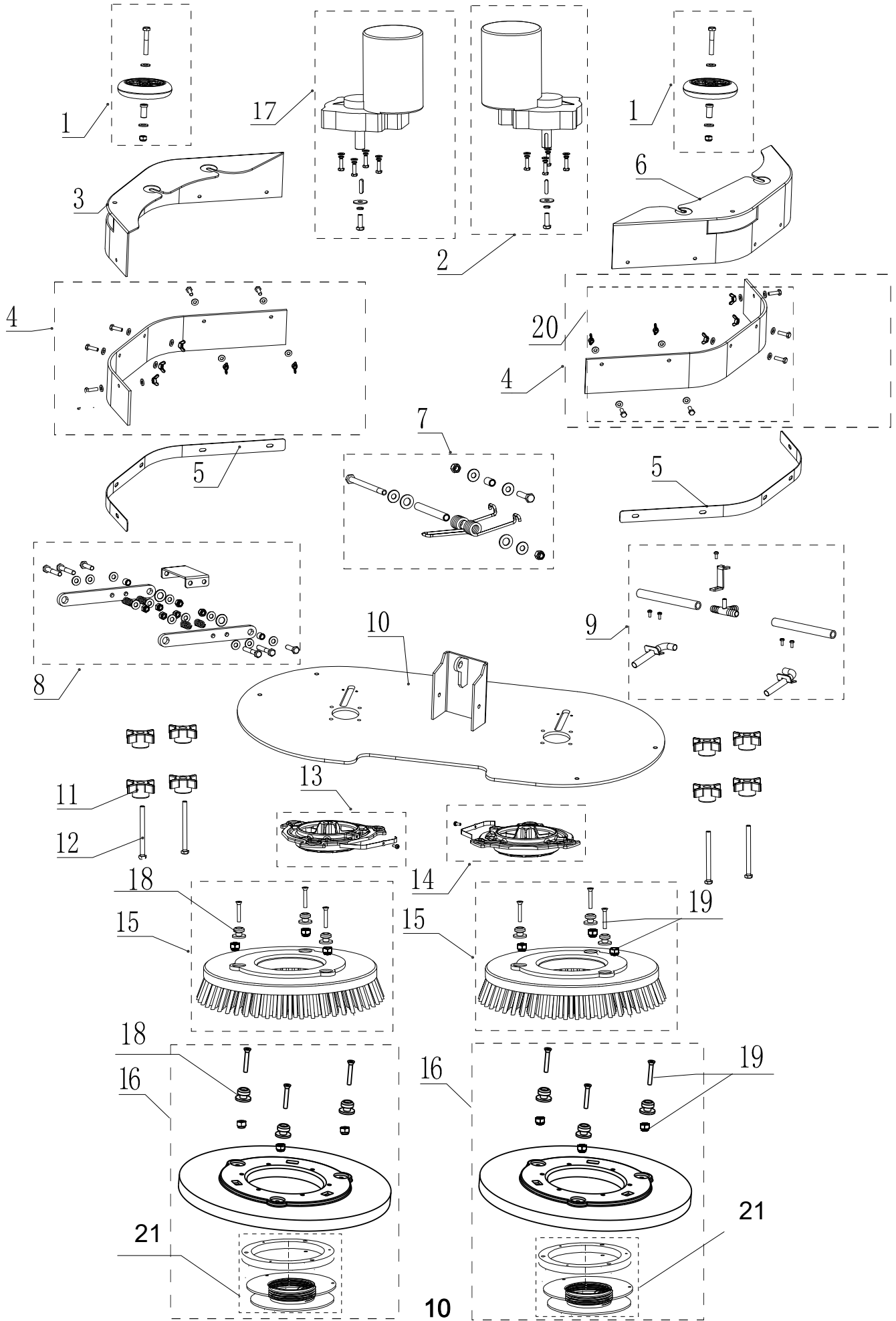
# FRONT MAIN FRAME ASSEMBLY



---

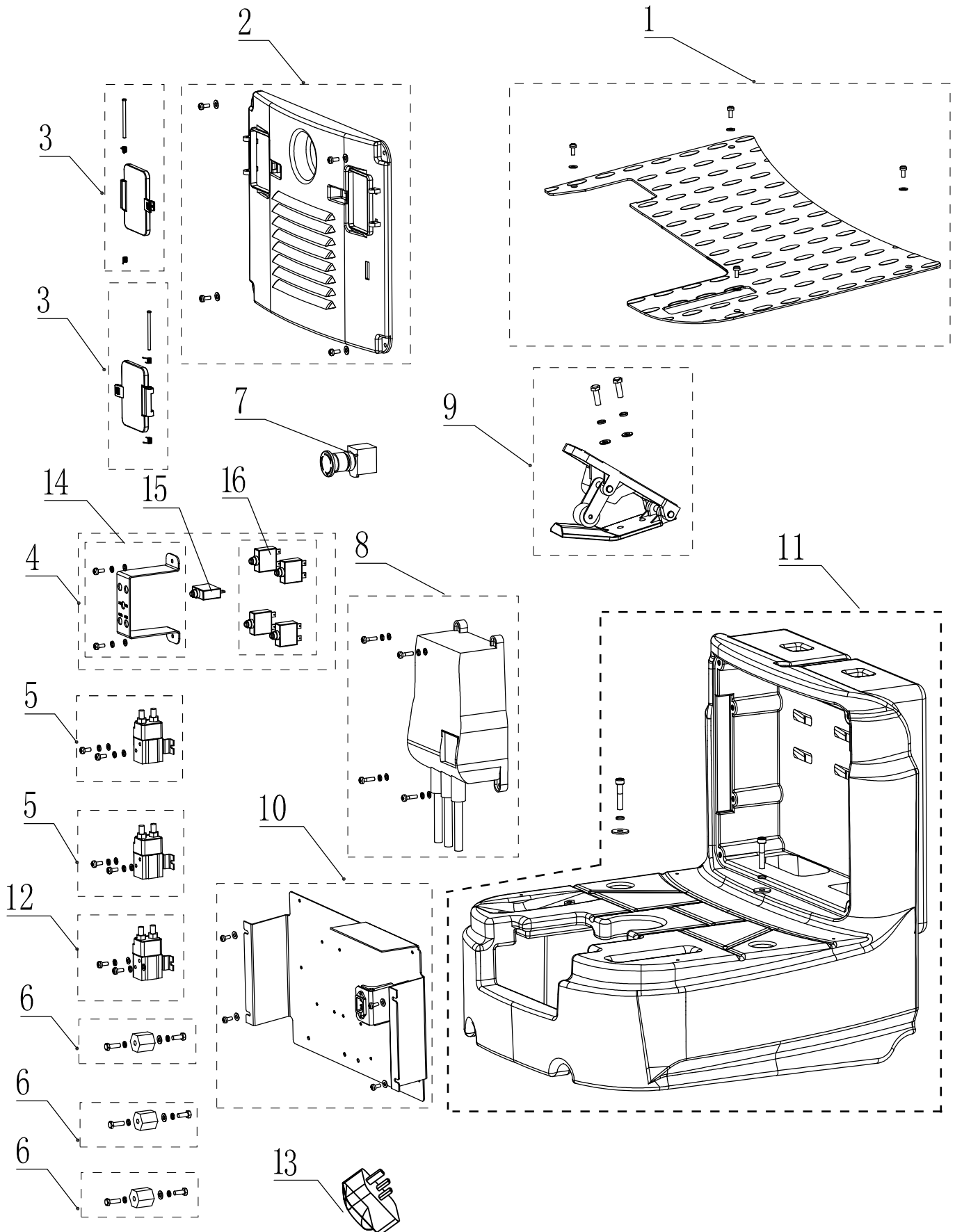
<b>FRONT MAIN FRAME ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR12100	HANDLE KIT SQUEEGEE LIFT	1
2	VR12200	KIT BEARING BASE	1
3	VR12300	KIT USB	1
4	VR12401	KIT FRONT FRAME	1
5	VR12403	KIT SQUEEGEE SWITCH	1
6	VR12013	KIT HORN	1
7	VR12402	KIT CABLE GUIDE WHEEL SQUEEGEE LIFT	1
8	VR12404	KIT DRIVE MOTOR CONTROL	1
9	VR12004	CABLE SQUEEGEE LIFT	1
10	VR12102	HANDLE SQUEEGEE LIFT	1
11	VR12107	BRACKET LEVER	1
12	VR12108	HARDWARE KIT BRACKET LEVER	1

BRUSH ASSEMBLY



<b>BRUSH ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR14016	KIT BUMPER WHEEL	2
2	VR14013	KIT BRUSH MOTOR LEFT	1
3	VR19107	BRUSH SKIRT MOUNT RIGHT	1
4	VR19123	KIT BRUSH SKIRT	2
5	VR19106	STRAP KIT SKIRT	2
6	VR19105	BRUSH SKIRT MOUNT LEFT	1
7	VR14017	KIT BRUSH TORSION SPRING	1
8	VR14012	KIT BRUSH LIFT ARM	1
9	VR14014	KIT BRUSH WATER OUTLET	1
10	VR19104	BRUSH MOUNTING FRAME	1
11	VF81210	TUMB NUT	8
12	VR14005	BOLT M8X100 HEX	4
13	VR14100	KIT LEFT BRUSH HUB	1
14	VR14200	KIT RIGHT BRUSH HUB	1
15	VR19120	KIT BRUSH	2
16	VR19121	PAD DRIVER 15"	2
17	VR14023	KIT BRUSH MOTOR RIGHT	1
18	VR14301	BRUSH BUCKLE	12
19	VR14304	KIT BUCKLE HEADWARE	12
20	VR14202	KIT BRUSH SKIRT HEADWARE	2
21	VS10131	KIT RETAINER PAD	2

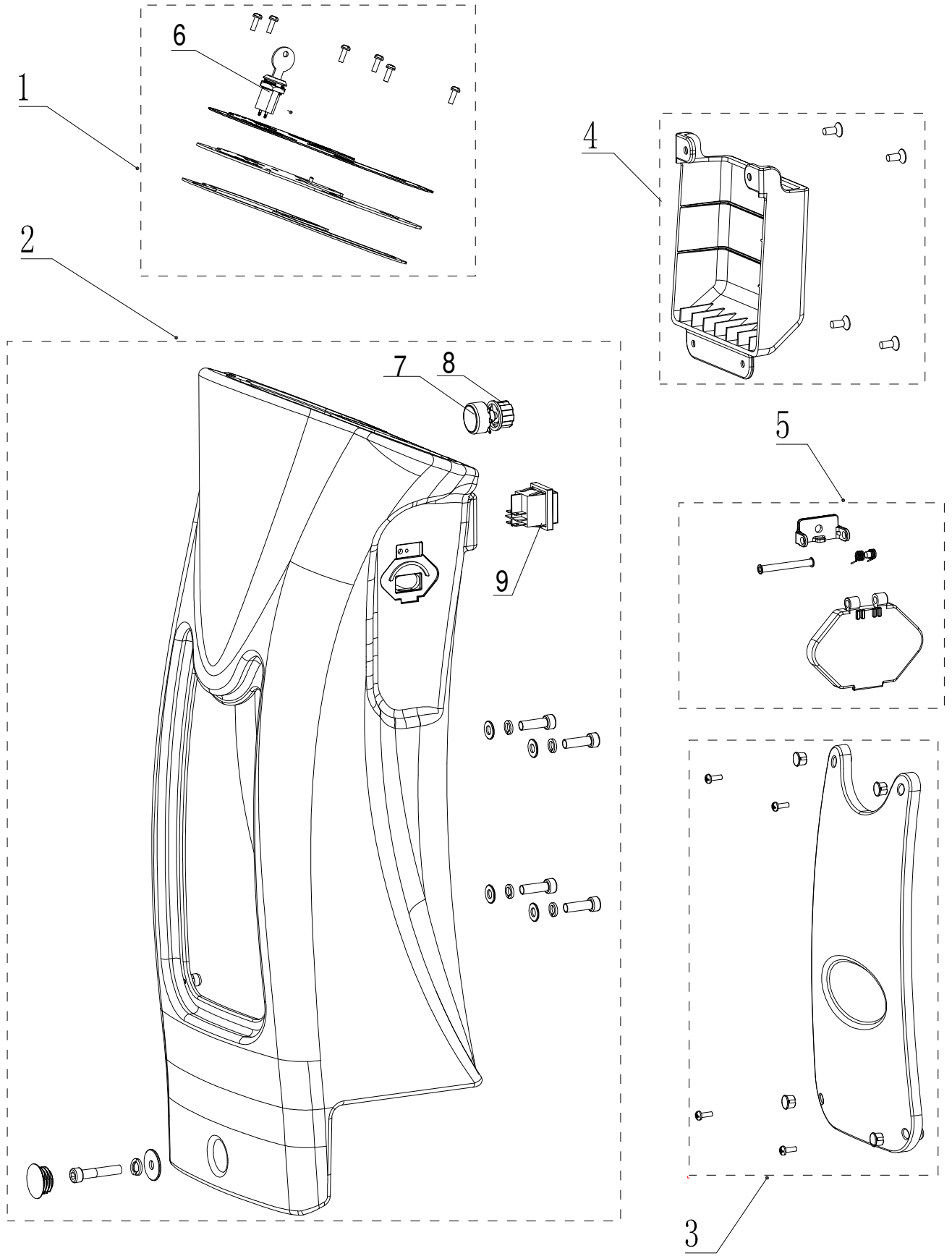
# ELECTRIC PARTS ASSEMBLY



<b>ELECTRIC PARTS ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR13003	KIT ANTI-SKID PLATE	1
2	VR13110	LID KIT ELECTRIC BOX	1
3	VR13120	KIT TRANSPARENT LID	2
4	VR13220	KIT BREAKER	1
5	VR13230	KIT CONTACTOR 125A	2
6	VR13250	KIT CONNECT WIRE POLE	3
7	VR13132	EMERGENCY-STOP BUTTON	1
8*	VR13240	KIT CHARGER EU VERSION	1
	VR13445	KIT CHARGER CN VERSION	1
	VR13442	KIT CHARGER US VERSION	1
9	VR13300	KIT SPEED CONTROL PEDAL	1
10	VR13210	KIT ELECTRIC PARTS MOUNTING PLATE	1
11	VR13004	KIT ELECTRIC BOX	1
12	VR13260	KIT CONTACTOR 80A	1
13*	VF82178	UK CONVERTER	1
14	VR13270	KIT BREAKER BRACKET	1
15	ZD48320	BREAKER 30A	4
16	VF90747	BREAKER 5A	1

\*-----OPTIONAL

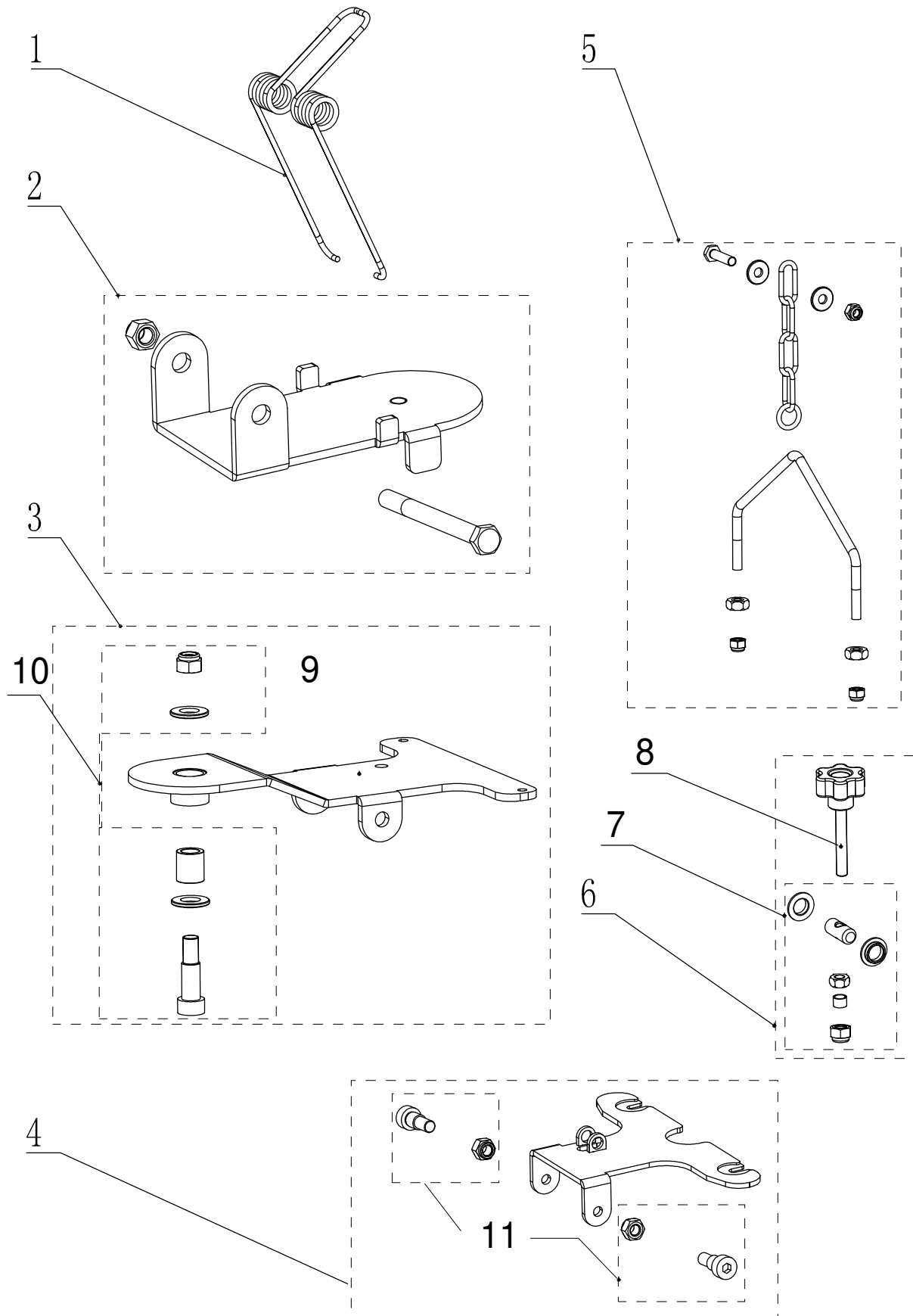
CONTROL HOUSING ASSEMBLY



---

<b>CONTROL HOUSING ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR15100	KIT CONTROL PANEL	1
2	VR15008	KIT CONTROL HOUSING	1
3	VR15009	LID KIT DRIVE MOTOR CONTROL	1
4	VR15011	KIT PHONE STORAGE	1
5	VR15200	KIT USB COVER	1
6	VR13436	KEY SWITCH	1
7	VR13441	SPEED POTENTIOMETER	1
8	VF81730	POTENTIOMETER KNOB	1
9	VR15110	FORWARD OR REVERSE BUTTON	1

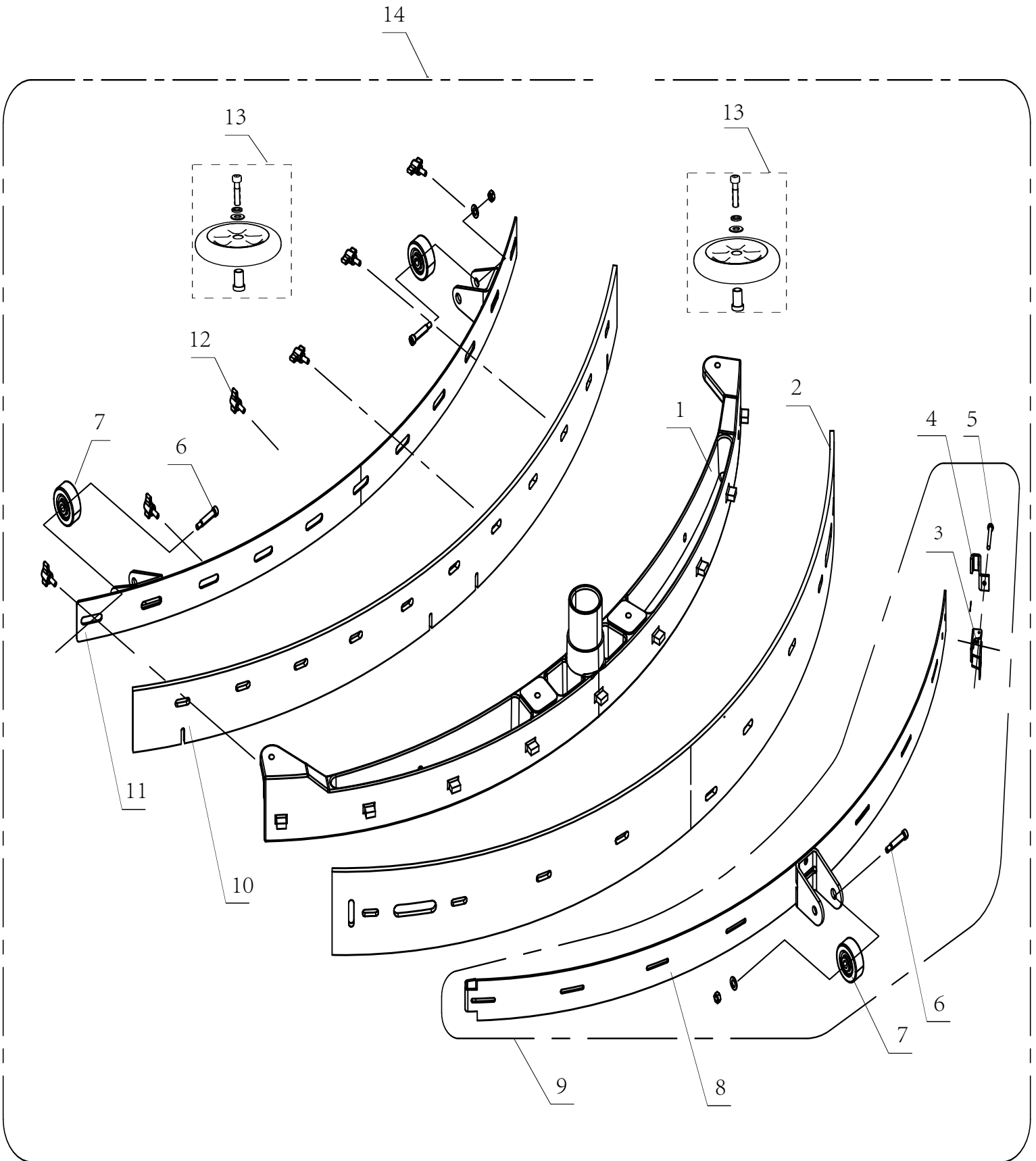
# SQUEEGEE BRACKET ASSEMBLY



---

<b>SQUEEGEE BRACKET ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR36028	TORSION SPRING SQUEEGEE	1
2	VR11408	KIT SQUEEGEE BRACKET	1
3	VR11409	KIT SQUEEGEE MOUNTING PIVOT	1
4	VR19125	KIT SQUEEGEE ADJUSTMENT BRACKET	1
5	VR19124	KIT SQUEEGEE LIFT CHAIN	1
6	VR11412	KIT SQUEEGEE ADJUSTMENT HANDLE	1
7	VR11416	KIT HARDWARE ADJUSTMENT HANDLE	1
8	VF85104	ADJUSTMENT HANDLE	1
9	VR11403	SQUEEGEE MOUNTING PIVOT	1
10	VR11414	KIT HARDWARE SQUEEGEE MOUNTING PIVOT	1
11	VR11415	KIT HARDWARE SQUEEGEE ADJUSTMENT BRACKET	2

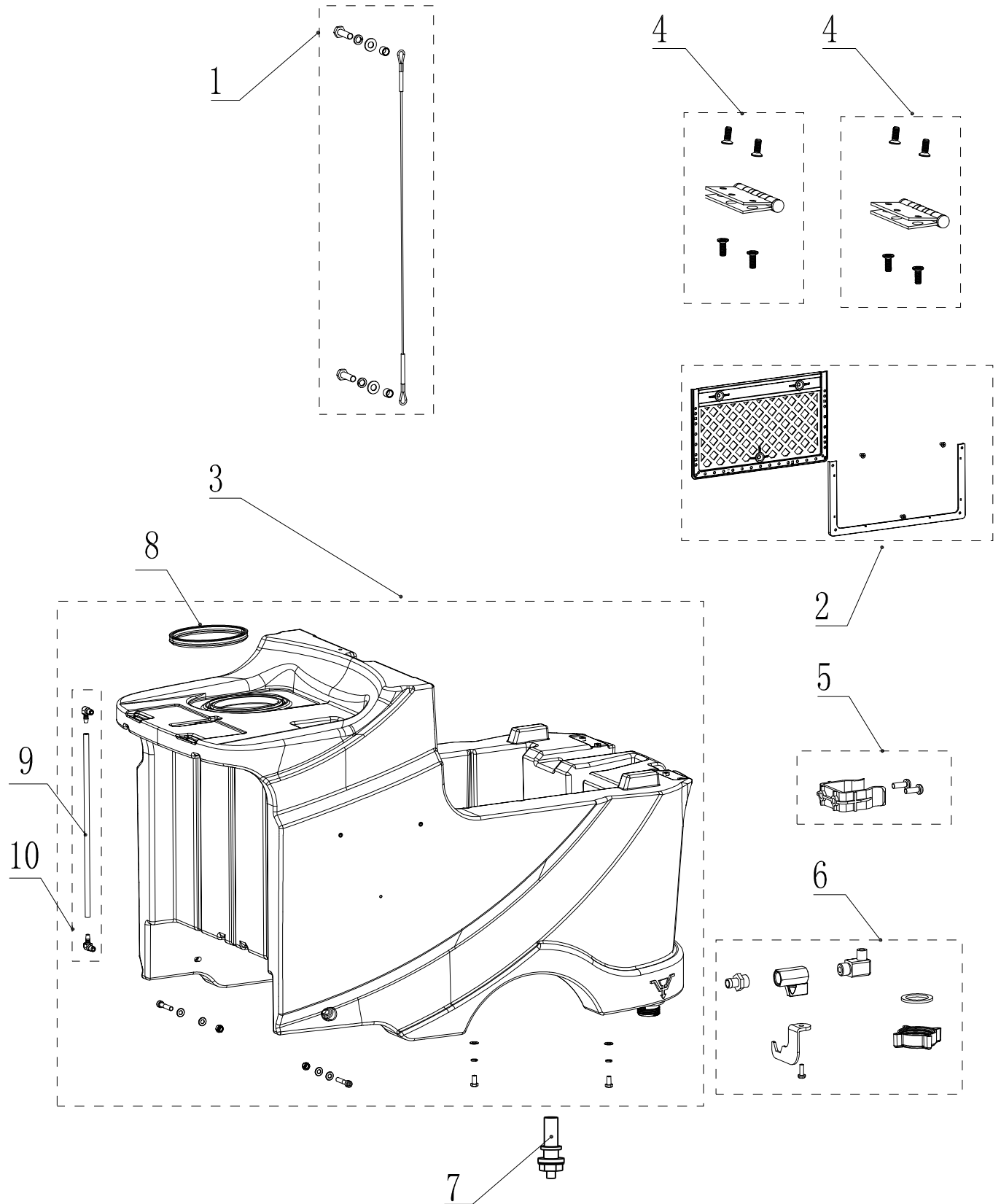
SQUEEGEE ASSEMBLY



---

SQUEEGEE ASSEMBLY			
Item	Part No	Description	Qty
1	VF84202	HOUSING,SQUEEGEE	1
2	VF84208	BLADE,SQUEEGEE,REAR,PU	1
3	VF81218	LATCH,HOOD	1
4	VF81209	HOOK,REAR SQUEEGEE	1
5	VF14310	SCREW, M5 X 70	1
6	VF81222	BOLT,SHOULDER, 5/16" X 1.25"	3
7	VF81219	WHEEL, 2	3
8	VF84206	BACKUP STRIP,SQUEEGEE,REAR	1
9	VF84206A	KIT,BACKUP STRIP,SQUEEGEE	1
10	VF84207	BLADE,SQUEEGEE,FRONT,PU	1
11	VF84205	BACKUP STRIP,SQUEEGEE,FRONT	1
12	VF82121	KNOB, M6	6
13	VR14016	KIT BUMPER WHEEL	2
14	VR19122	SQUEEGEE ASSEMBY	1

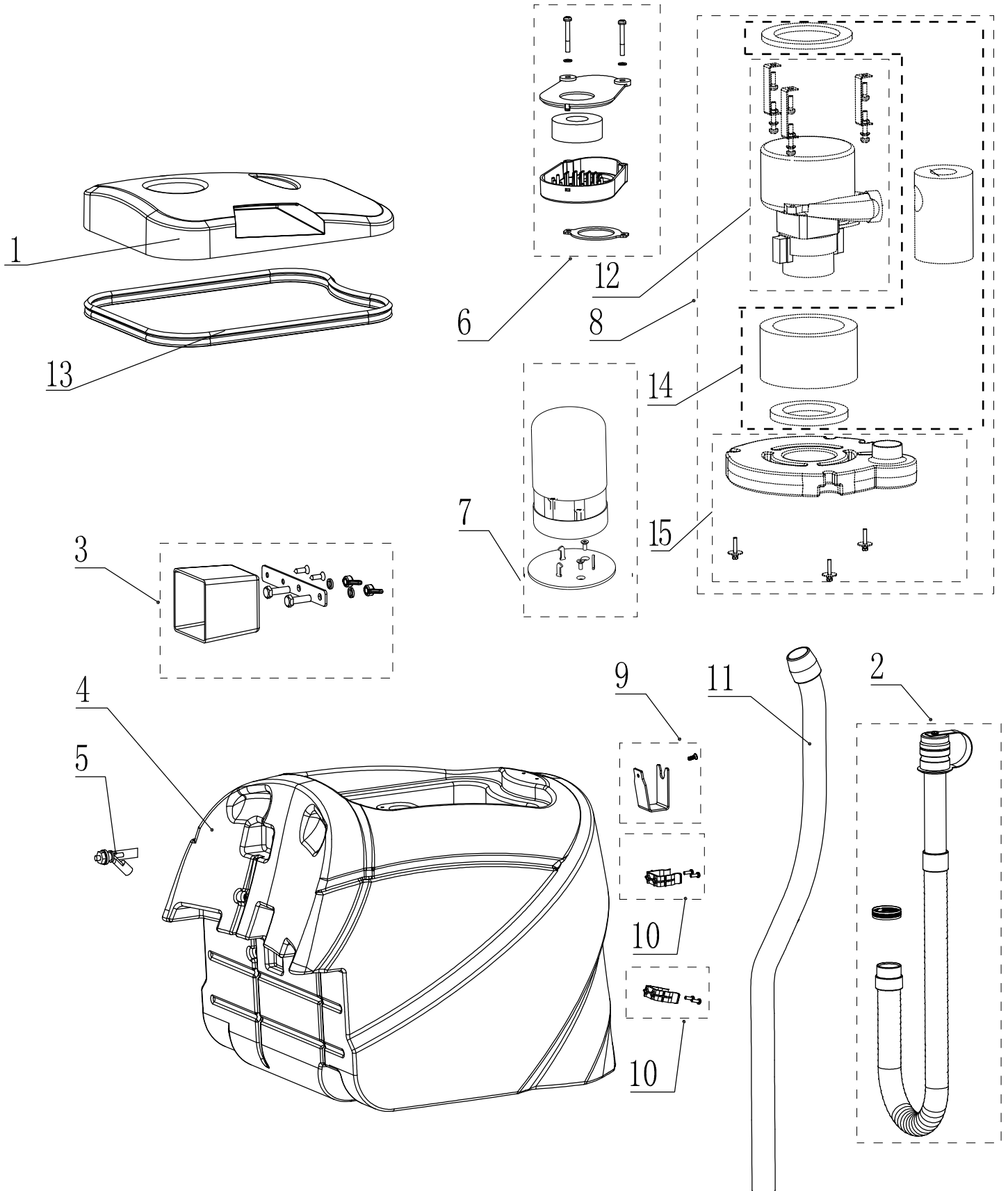
# SOLUTION TANK ASSEMBLY



---

<b>SOLUTION TANK ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR17170	PULL CABLE RECOVERY TANK	1
2	VR17300	KIT NET BAG	1
3	VR17601	KIT SOLUTION TANK	1
4	VR17602	HINGE KIT RECOVEY TANK	2
5	GV70034	HOSE CLAMP	2
6	VR17604	KIT WATER ADJUSTMENT	1
7	VR13430	SWITCH SOLUTION TANK WATER LEVEL	1
8	VR17009	SEALING	1
9	VR17003	WATER LEVEL SIGHT TUBE	1
10	VR17608	KIT WATER LEVEL SIGHT TUBE	1

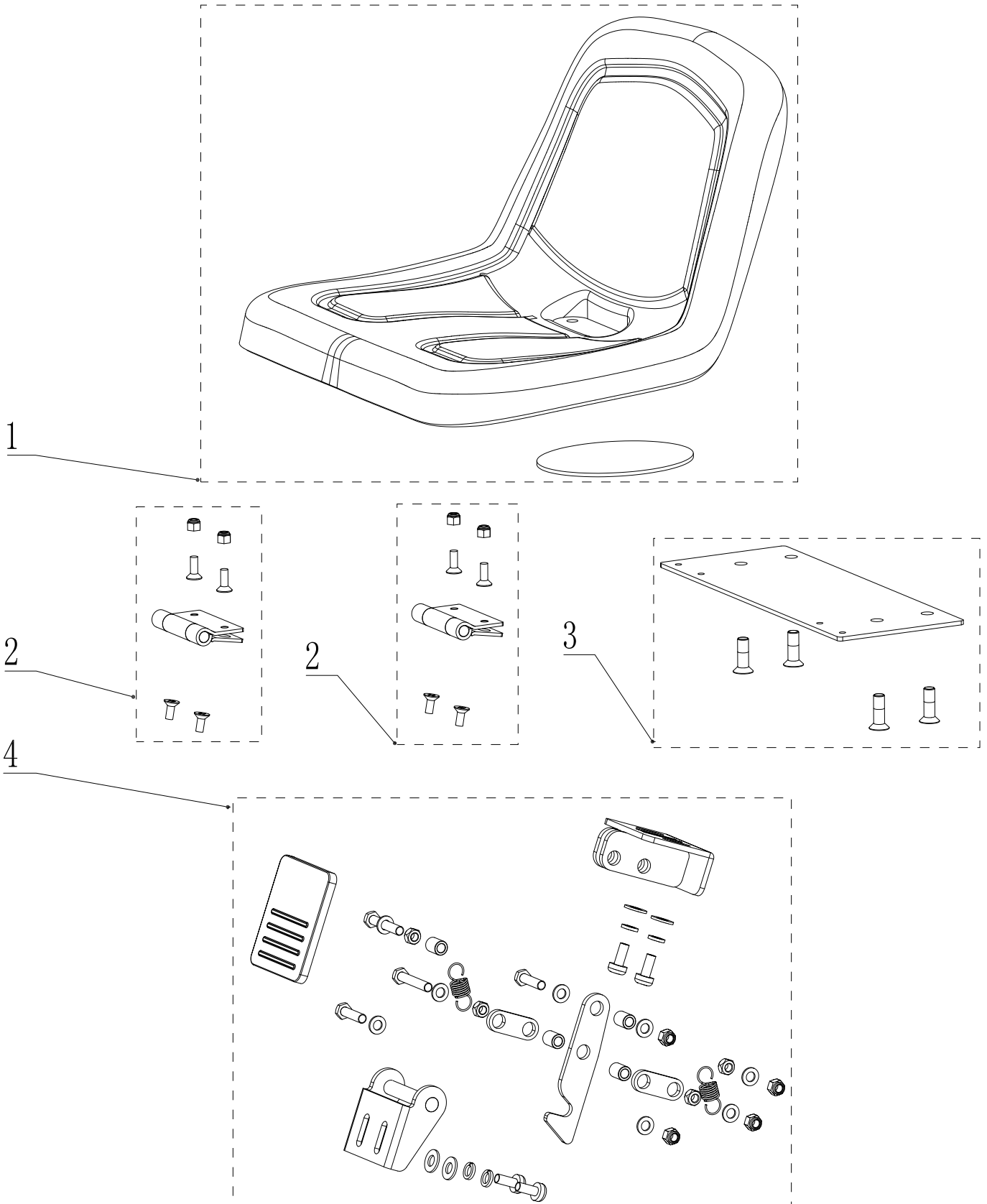
# RECOVERY TANK ASSEMBLY



<b>RECOVERY TANK ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR17108	LID RECOVERY TANK	1
2	VR17606	KIT DRAIN HOSE	1
3	VR17107	LID KIT WATER LEVEL SWITCH RECOVER TANK	1
4	VR17101	RECOVERY TANK	1
5	VR13431	SWITCH WATER LEVEL RECOVERY TANK	1
6	VR17130	KIT VACUUM HOLE	1
7*	VR17160	KIT WARNING LIGHT	1
8	VR17120	KIT VACUUM MOTOR AND FIXING	1
9	VR17605	KIT SQUEEGEE HOOK	1
10	VR17603	KIT HOSE CLAMP	2
11	VR17006	SQUEEGEE HOSE	1
12	VR17119	KIT VACUUM MOTOR	1
13	VR17109	SEALING	1
14	VR17123	KIT VACUUM GASKET OR SPONGE	1
15	VR17124	KIT SILENCER	1

\*-----OPTIONAL

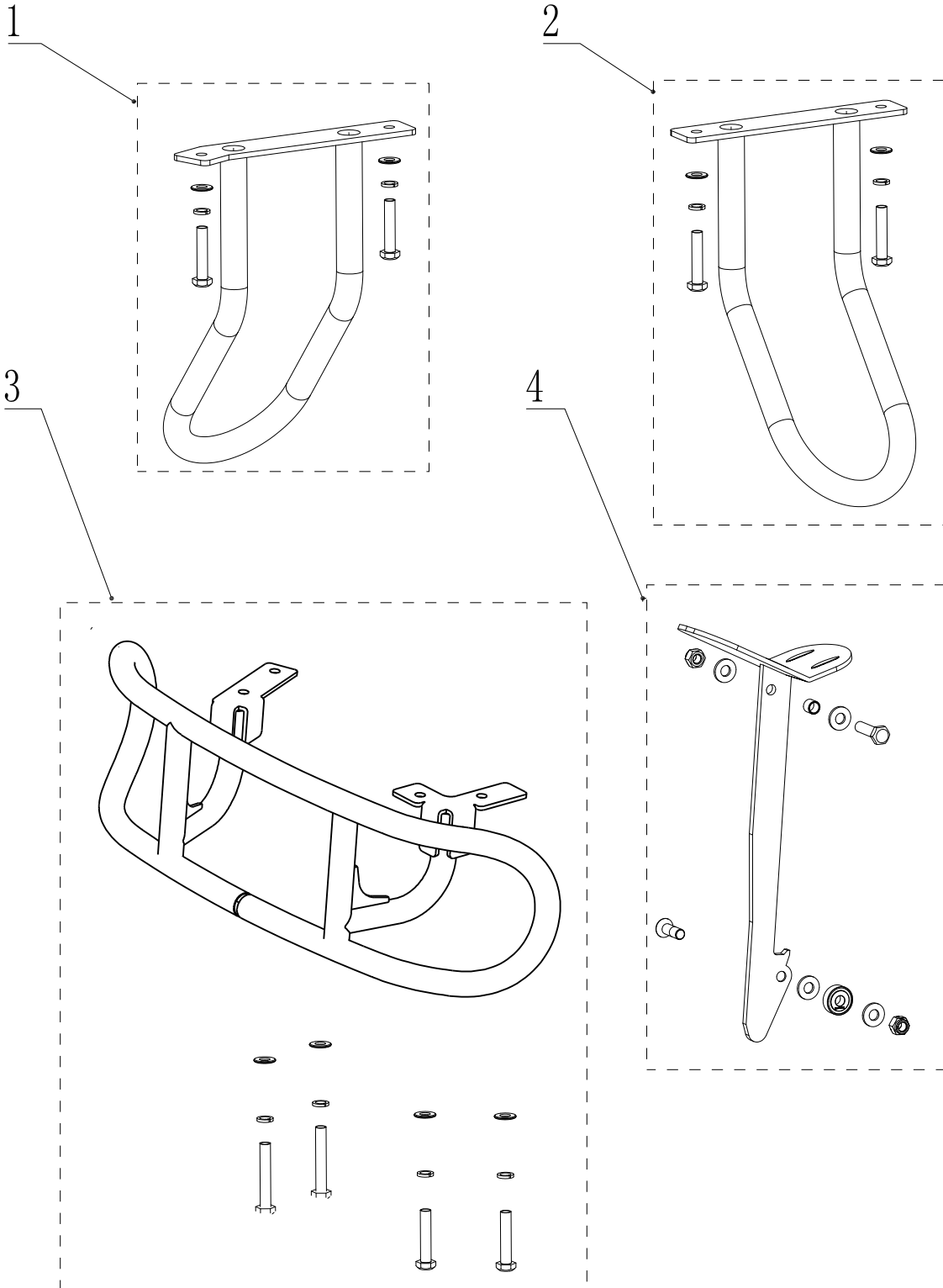
SEAT ASSEMBLY



---

<b>SEAT ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR17405	KIT SEAT WITH SAFETY SWITCH	1
2	VR17406	HINGE KIT SEAT	2
3	VR17407	KIT SEAT MOUNTING PLATE	1
4	VR17200	KIT RECOVERY TANK LATCH	1

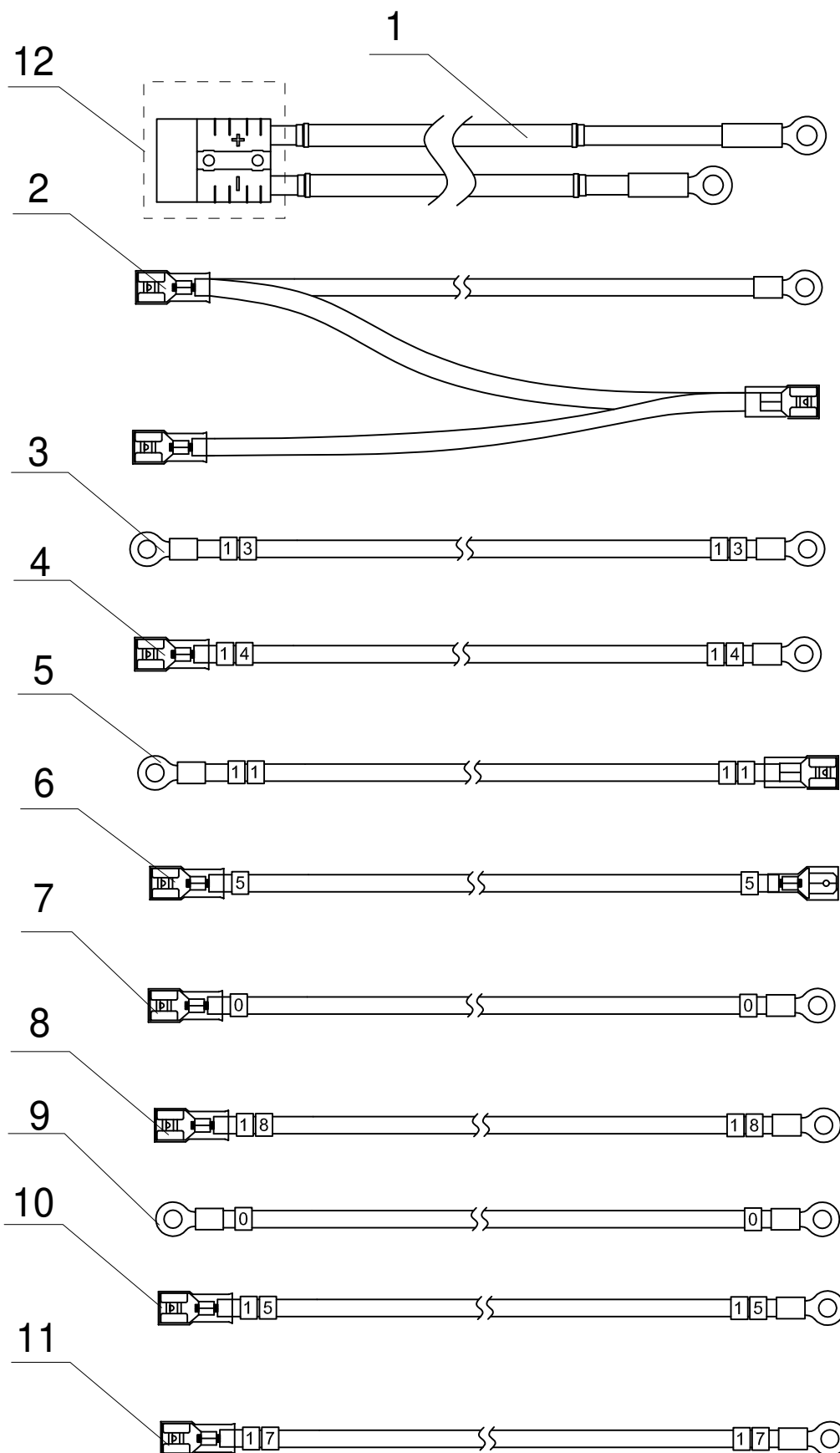
## BUMPER ASSEMBLY



---

<b>BUMPER ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR19128	KIT RIGHT BUMPER	1
2	VR19129	KIT LEFT BUMPER	1
3	VR10027	KIT FRONT BUMPER	1
4	VR10012	PEDAL KIT BRUSH LIFT	1

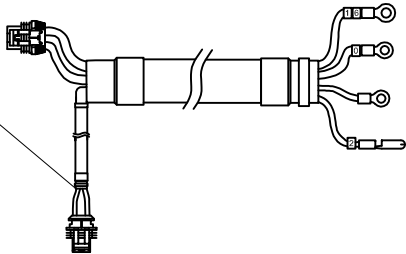
ELECTRIC PARTS



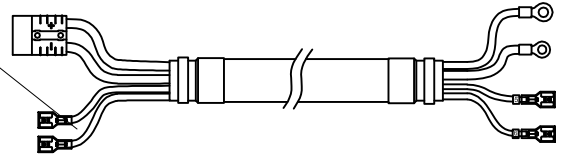
<b>ELECTRIC PARTS</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR13414	KIT BATTERIES 24V WIRE	1
2	VR13418	KIT CONTACTOR WIRE	1
3	VR13424	MAIN CONTACTOR TO BRUSH MOTOR CONTACTOR WIRE	1
4	VR13422	VACUUM MOTOR BREAKER TO VACUUM MOTOR BREAKER WIRE	1
5	VR13425	BRUSH MOTOR CONTACTOR TO BRUSH MOTOR BREAKER WIRE	1
6	VR13421	MAIN BREAKER TO EMERGENCY-STOP BUTTON WIRE	1
7	VR13417	MAIN CONTACTOR TO NEGATIVE CONNECT POLE WIRE	1
8	VR13419	MAIN CONTACTOR TO MAIN BREAKER WIRE	1
9	VR13416	NEGATIVE CONNECT POLE WIRE	1
10	VR13420	MAIN CONTACTOR TO VACUUM MOTOR BREAKER WIRE	1
11	VR13437	MAIN CONTACTOR TO DRIVE MOTOR BREAKER WIRE	1
12	VF81306-1	ANDERSON PLUG 175A 600V	1

OTHER ELECTRIC PARTS ASSEMBLY

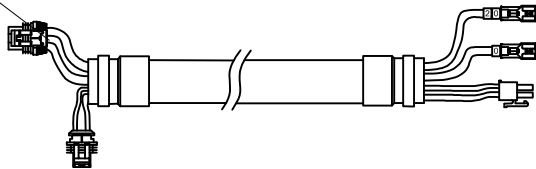
1



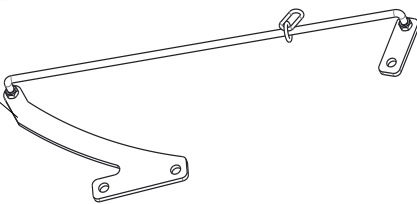
5



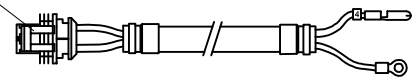
2



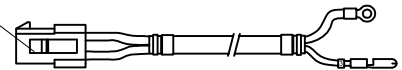
2A



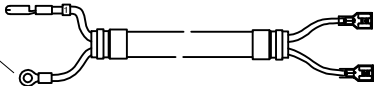
6



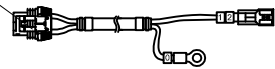
7



3



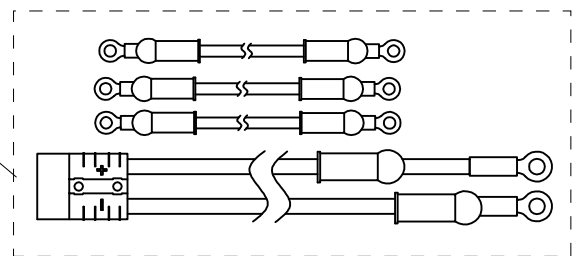
8



4



9



---

<b>OTHER ELECTRIC PARTS ASSEMBLY</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR13423	KIT VACUUM MOTOR WIRE EU VERSION	1
	VR13443	KIT VACUUM MOTOR WIRE CN/US VERSION	1
2	VR13438	KIT DRIVE MOTOR WIRE	1
2A	VR10200	KIT DRIVE MOTOR WIRE MOUNTING	1
3	VR13428	KIT WATER ELETRO VALVE WIRE	1
4	VR13426	KIT RIGHT BRUSH MOTOR WIRE	1
5	VR13413	KIT OUTWITH CHARGER WIRE	1
6	VR13429	SWITCH SOLUTION TANK WATER LEVEL WIRE	1
7	VR13433	KIT SEAT SWITCH WIRE	1
8	VR13427	KIT LEFT BRUSH MOTOR WIRE	1
9	VR13412	KIT BATTERIES 6V 245AH WIRE	1



<b>WEAR AND TEAR PARTS</b>			
<b>Item</b>	<b>Part No</b>	<b>Description</b>	<b>Qty</b>
1	VR11506	KIT SOLENOID VALVE	1
2	VR12403	KIT SQUEEGEE SWITCH	1
3	VR12013	KIT HORN	1
4	VR14016	KIT BUMPER WHEEL	2
5	VR19123	KIT BRUSH SKIRT	2
6	VR19120	KIT BRUSH	2
7	VR13220	KIT BREAKER	1
8	VR13132	EMERGENCY-STOP BUTTON	1
9	VR15100	KIT CONTROL PANEL	1
10	VF84207	SQUEEGEE BLADE FRONT	1
11	VF84208	SQUEEGEE BLADE REAR	1
12	VR17300	KIT NET BAG	1
13	VR17603	KIT HOSE CLAMP	3
14	VR13431	SWITCH WATER LEVEL RECOVERY TANK	1
15	VR17006	SQUEEGEE HOSE	1
16	VR17606	KIT DRAIN HOSE	1
17	VR11600	VALVE	1
18	VF90621	FILTER	1
19	VR13436	KEY SWITCH	1
20	VR13441	SPEED POTENTIOMETER	1
21	VF81730	POTENTIOMETER KNOB	1
22	VR15110	FORWARD OR REVERSE BUTTON	1
23	VF81210	TUMB NUT	2
24	VF90136	SQUEEGEE GUIDE WHEEL	3
25	VR17109	SEALING	1
26	VR19121	PAD DRIVER 15"	2

