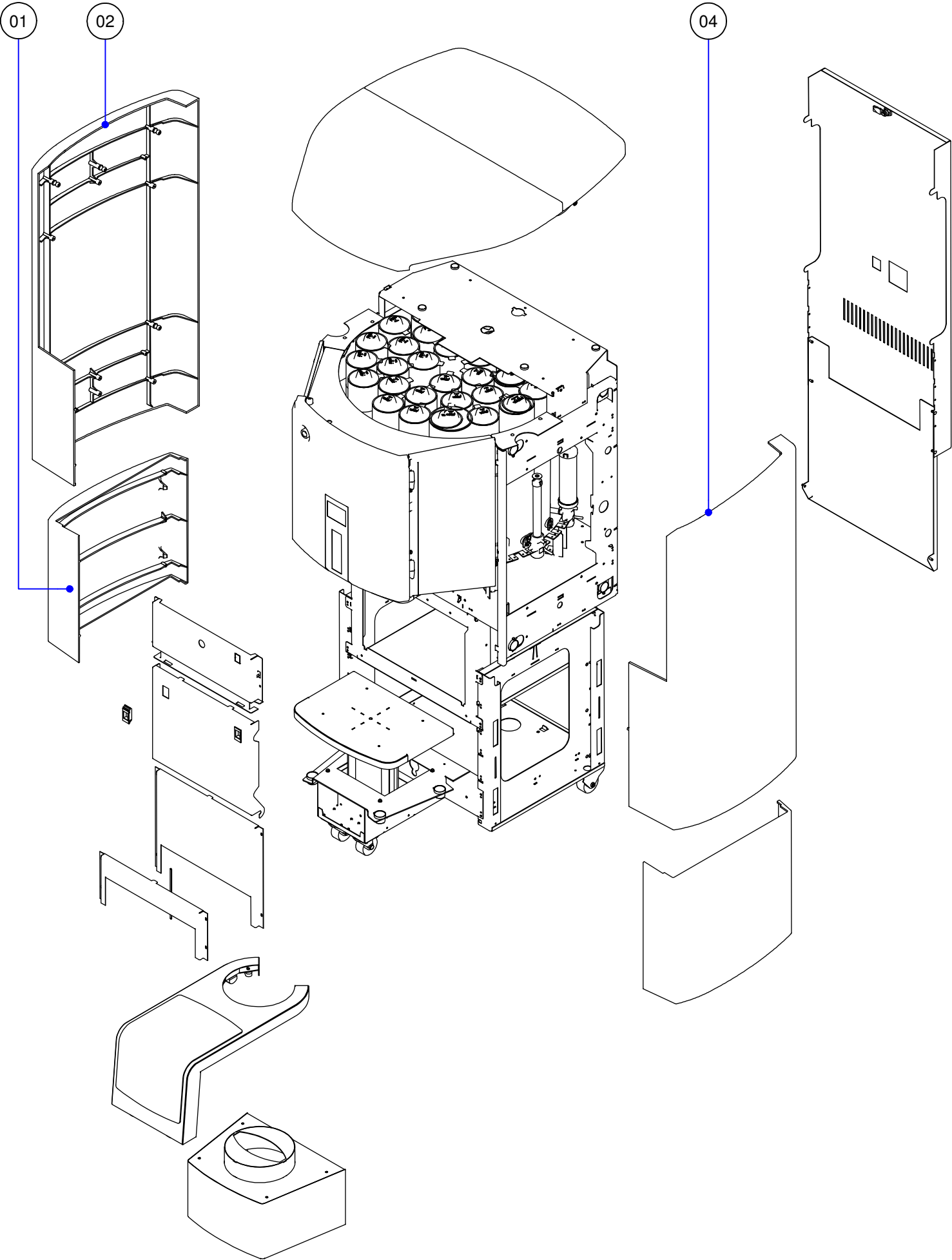


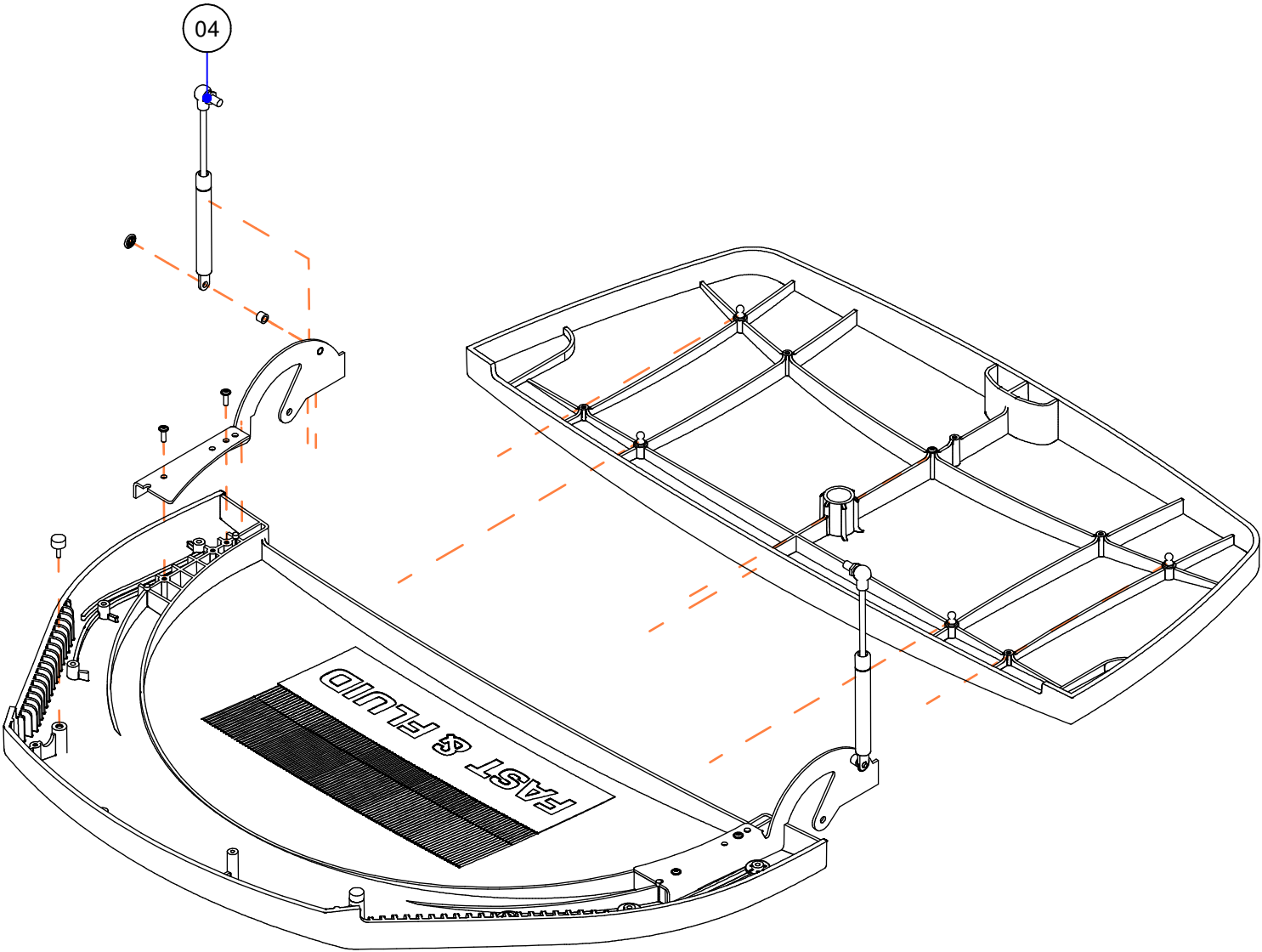


HA450

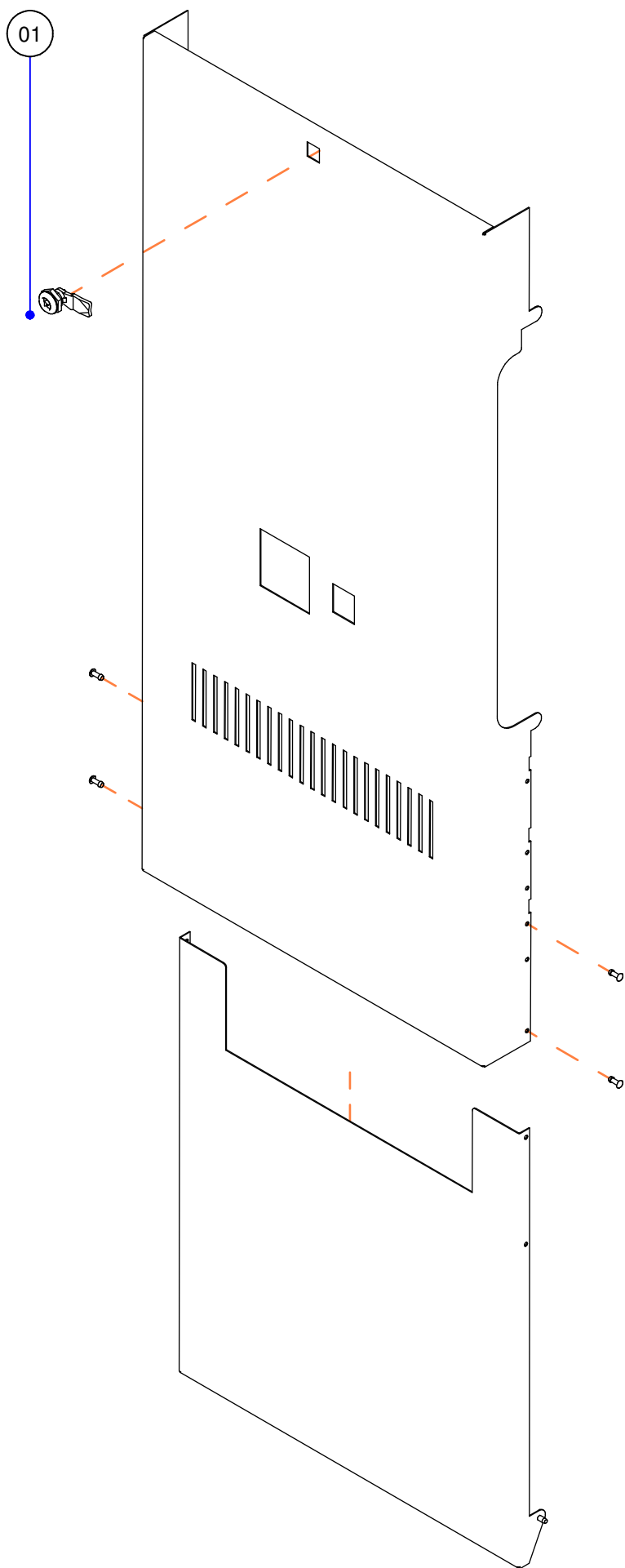
Sparepartsbook



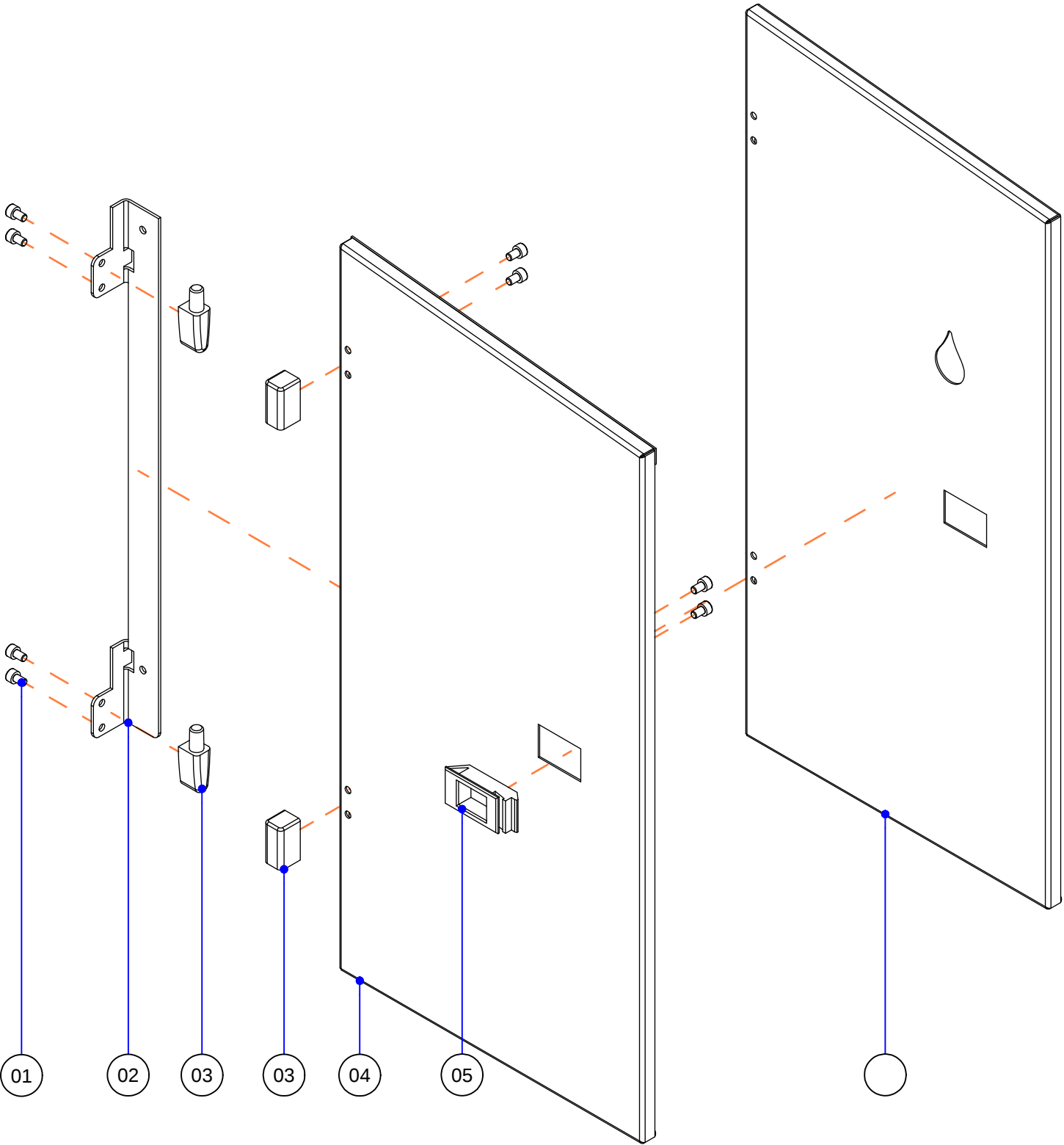
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1863914-SP	Panel,LR,bottom,HA450,1pcs		2
02	1863912-SP	panel,L,HA450		1
04	1863913-SP	panel,R,HA450		1



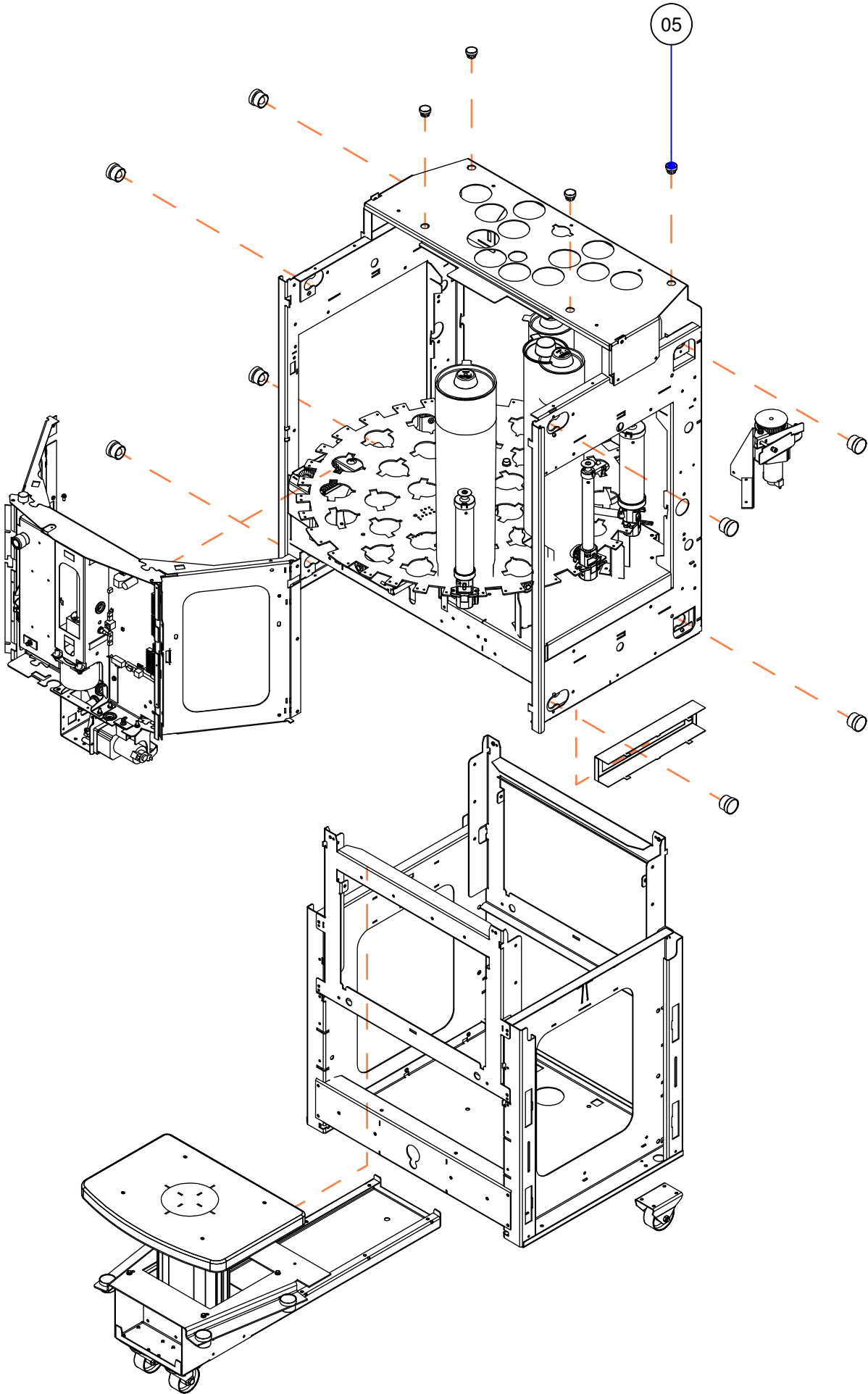
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
04	1814025-SP	Gas-spring,50N,0849RX,2pcs		2



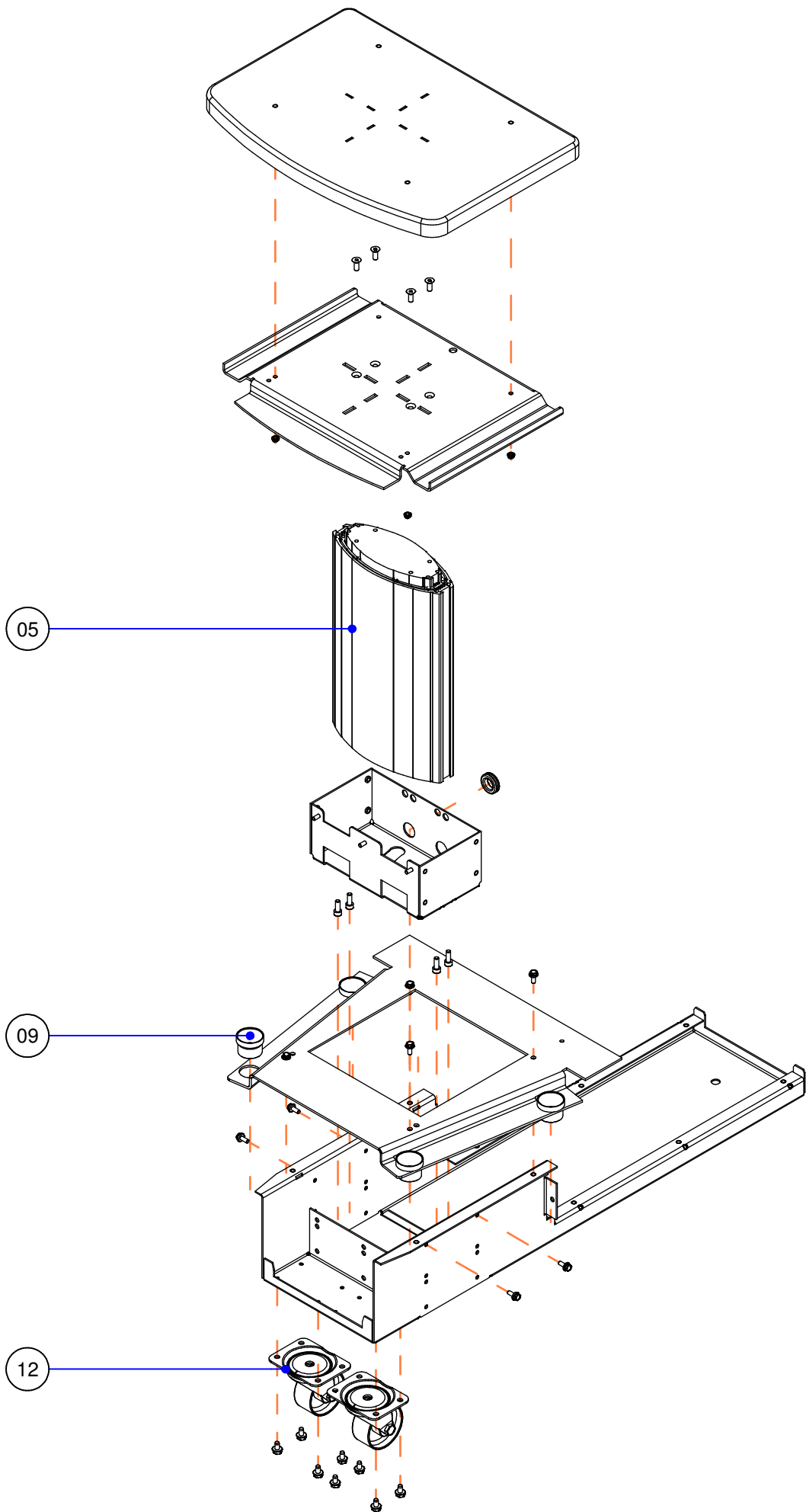
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1862860-SP	Quad,panel,latche,SET		1



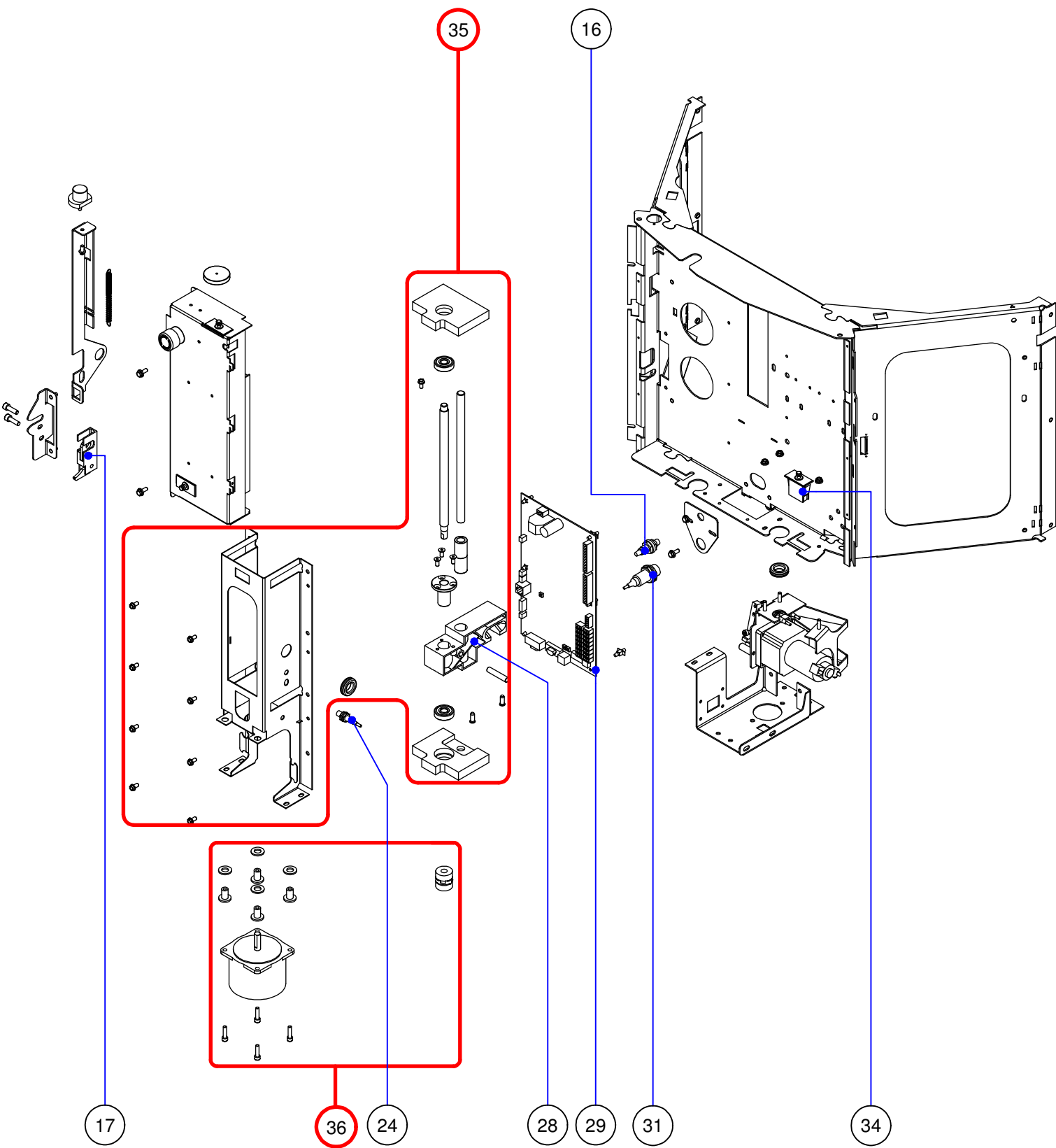
Parts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1850179	Screw,M5x6,socket,hex.,DIN912		8
02	1813868	bracket,hinge,brushdoor		1
03	1863188	hinge,M/F,TMHC		2
04	1813759	Panel,front,L,HA450		1
05	1862332	Latch,slide,40-525		1
	1814510	Panel,door,front,fluid,HA450		1



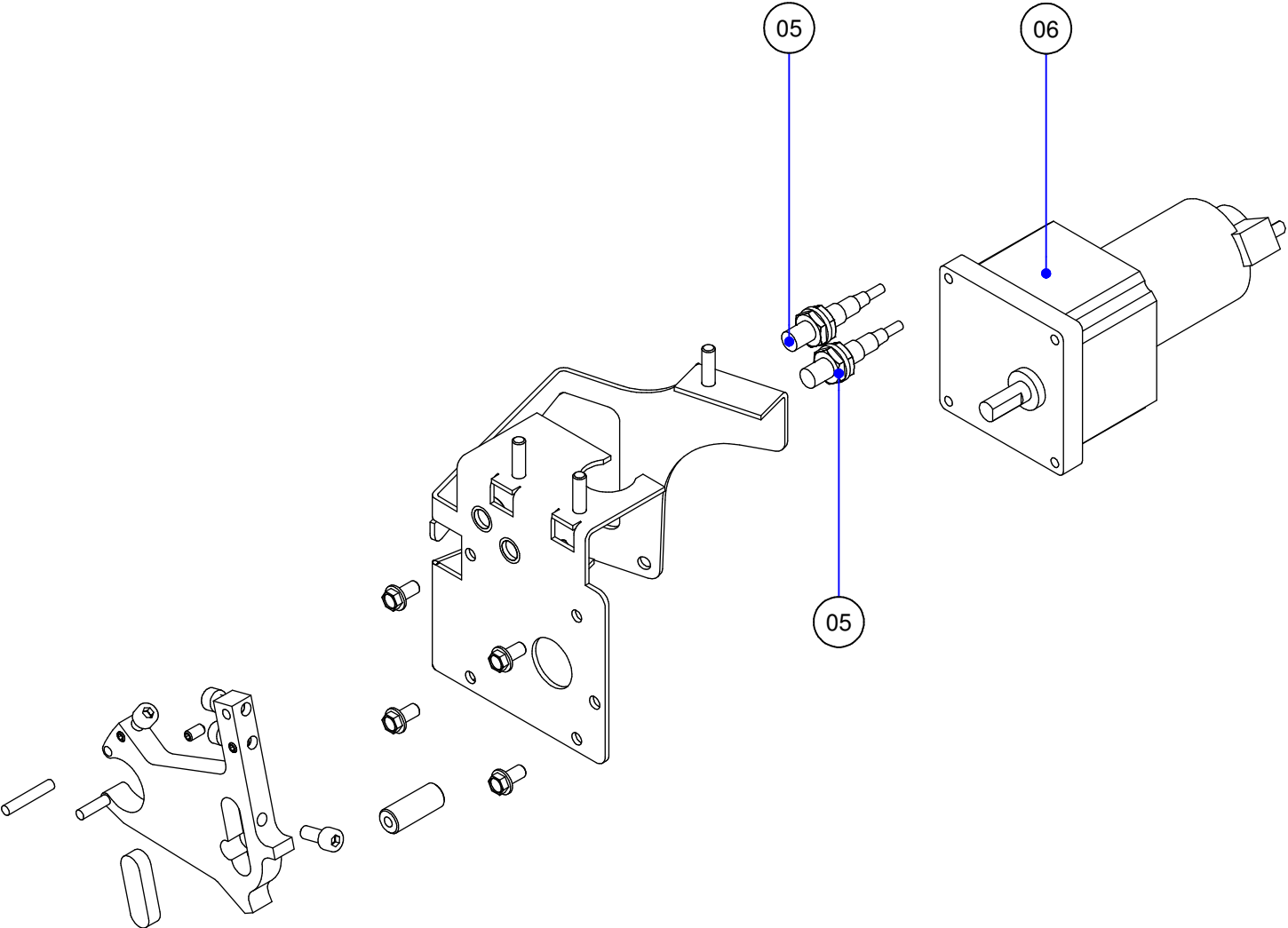
Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
05	1863898-SP	Coupling,snaplock,Ø8,plate,4x		4
06			Page 5732/5776	1
21				2



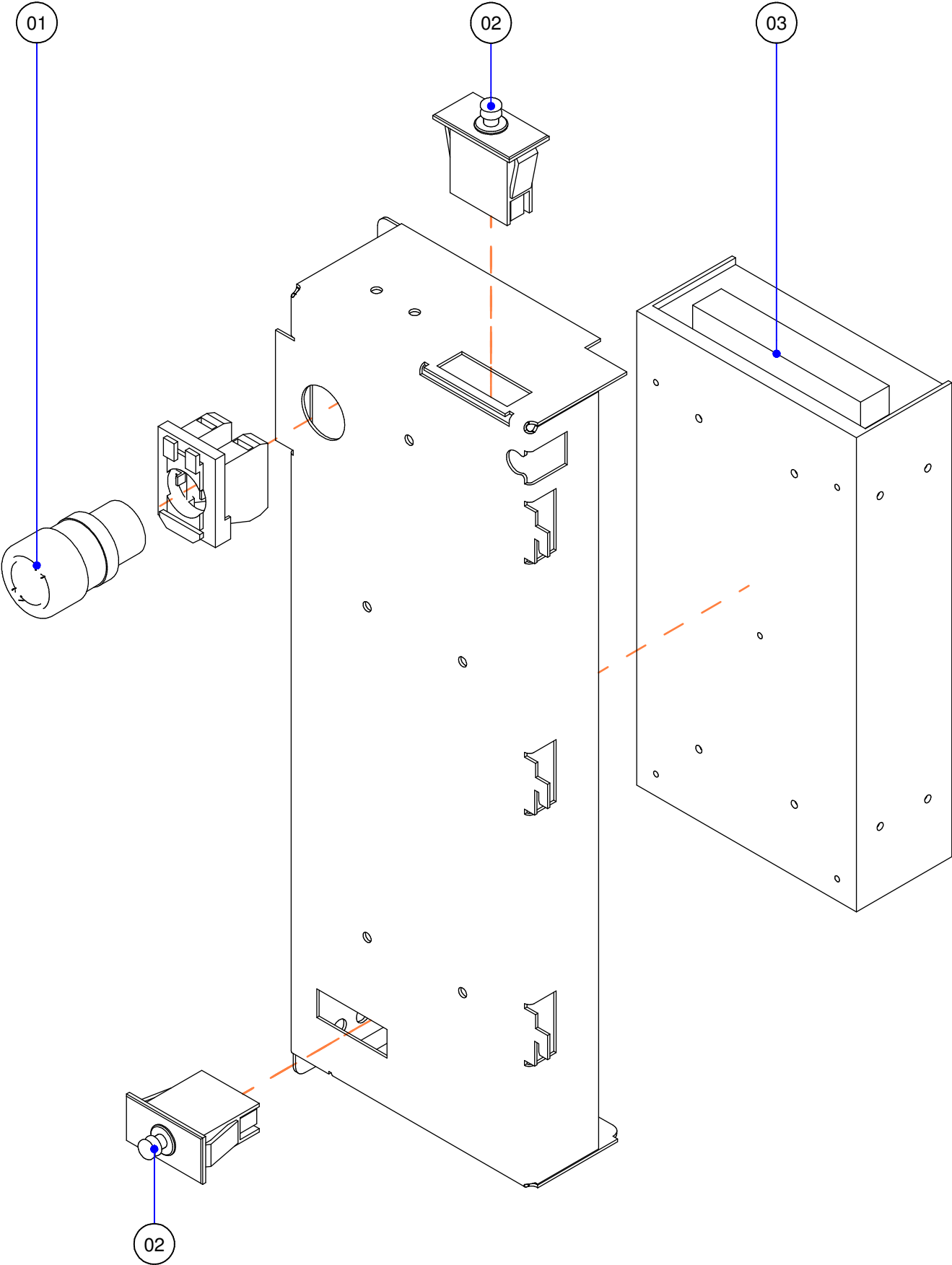
Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
05	1862015-SP	Actuator,cantable+ screws,8x		1
09	1864131-SP	Coupling,snaplock,Ø15,white,4x		4
12	1110340-SP	Wheel,swiveling,set 4 pcs		2



Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
16	1861979-SP	sensor5,tablehomesensor-assy		1
17	1864174-SP	Lock,frontdoor,R4,HA450		1
24	1864020-SP	sensor2/4/8,HA450		1
28	1810651-SP	Gripper,block,pump,assy,2002SD		1
29	1863370-SP	Powerboard,HA,2002,5-Phase		1
31	1863284-SP	Sensor 6,tablepos.HA150/HA		1
34	1812528-SP	Switch,D2D 1100		1
44	1860071-SP	Stepmotor,2-fase,with coupling		1
45	1813733-SP	Complete gripper assy,HA450		1



Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
05	1864020-SP	sensor2/4/8,HA450		1
06	1861943-SP	Motor,80.805.0,24V,i=245		1



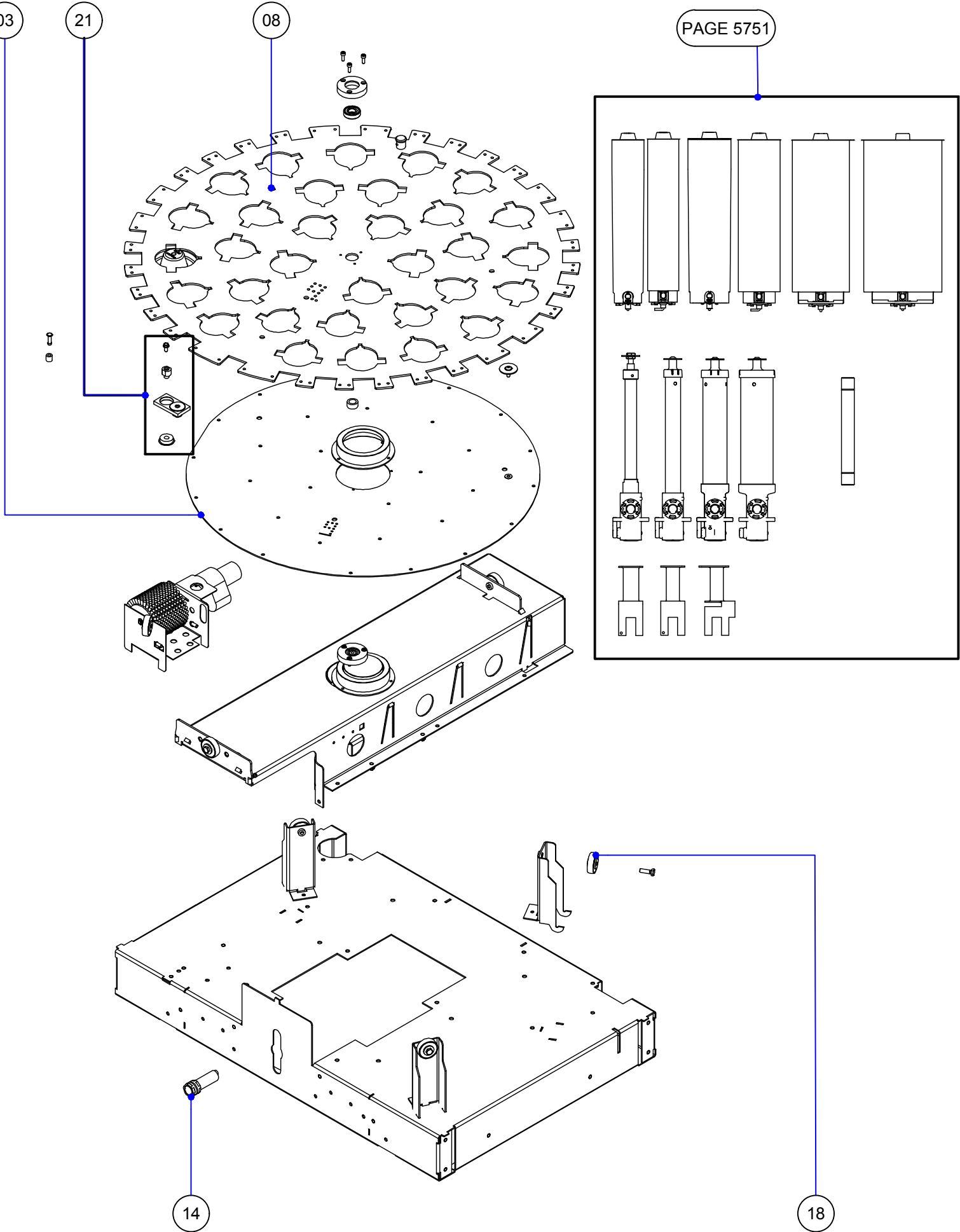
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1862235-SP	Emergency, switch SO/SK		1
02	1862231-SP	Switch,D2D-1102		1
03	1863891-SP	Power supply,48VDC 300W,SC-48		1

03

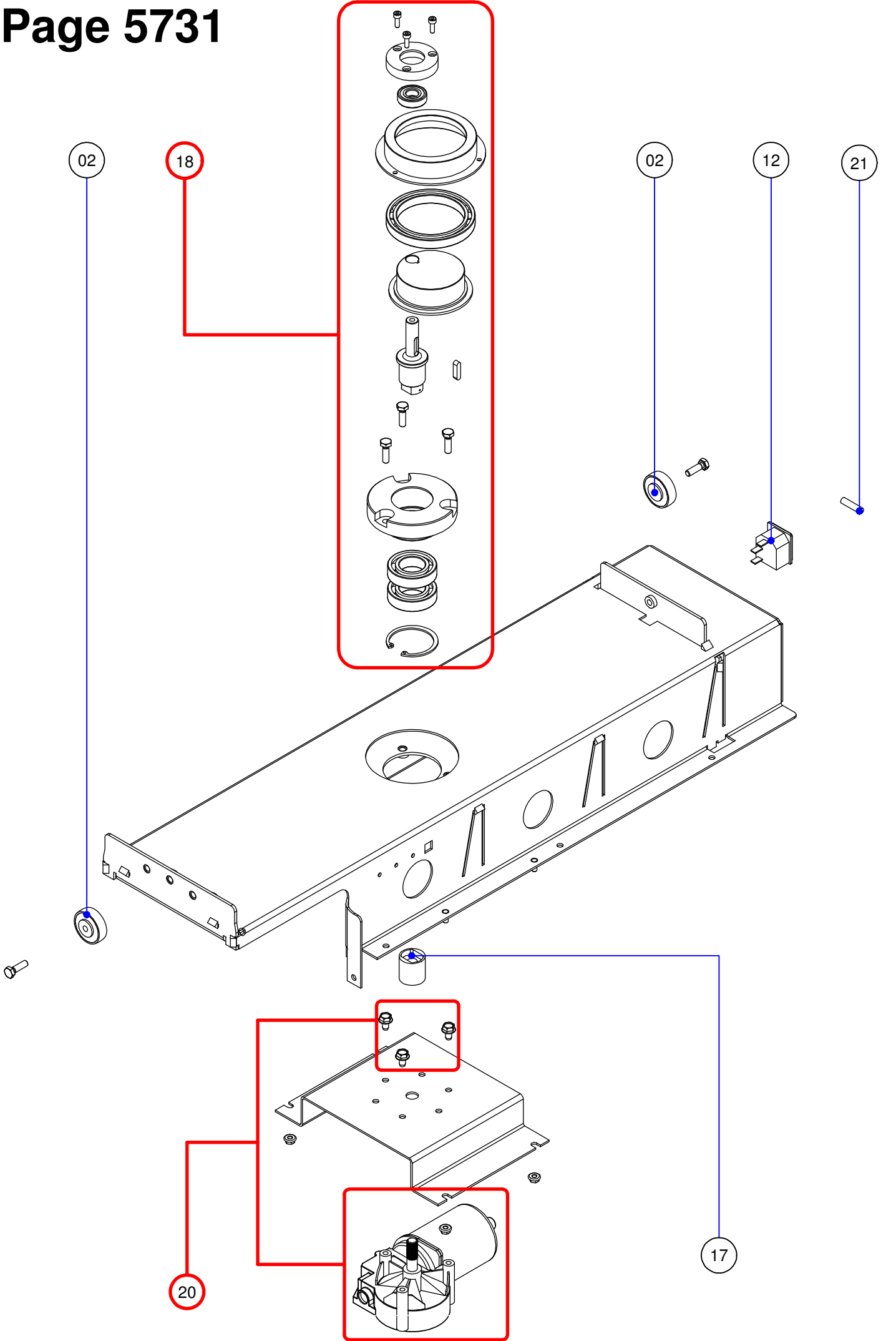
21

08

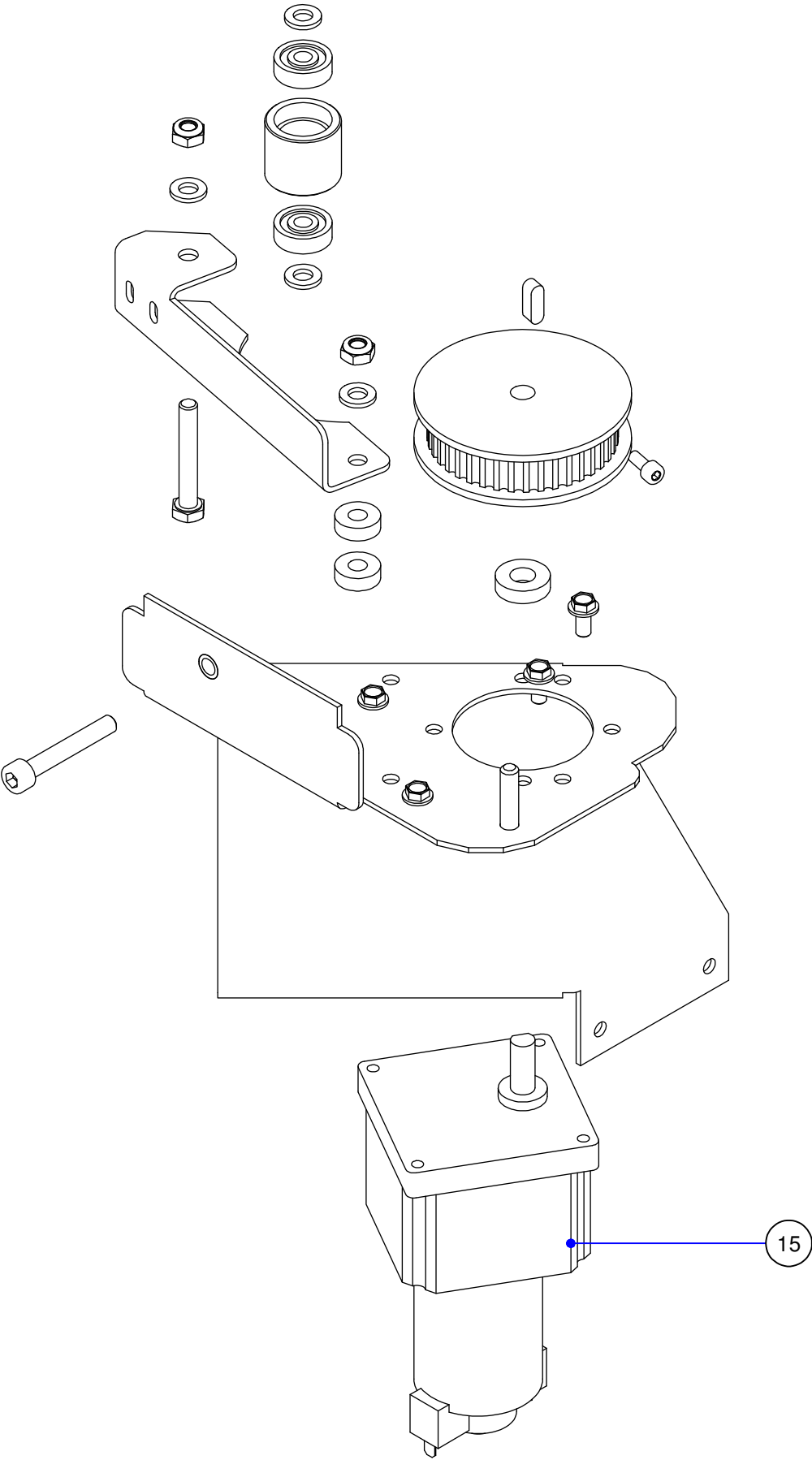
PAGE 5751



Spare Parts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
03	1809200-SP	Plate,agit,32C(9),2002SD		1
08	1810147-SP	Turntable,32C(9),HA400/450		1
14	1861975-SP	Sensor1,HA450		1
18	1862422-SP	Wheel,traversing,centric,35mm		1
21	1809251-SP	Plate,crank,support,2002SD		1

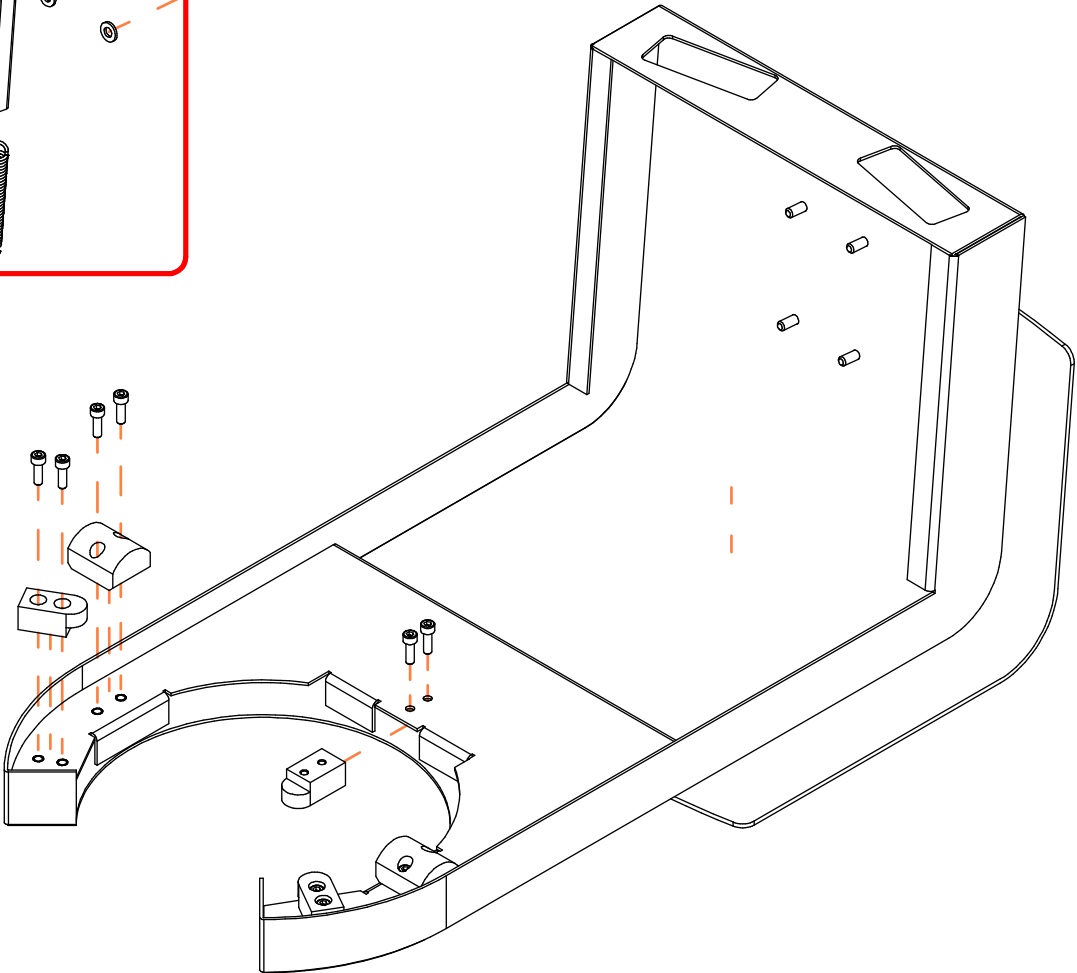
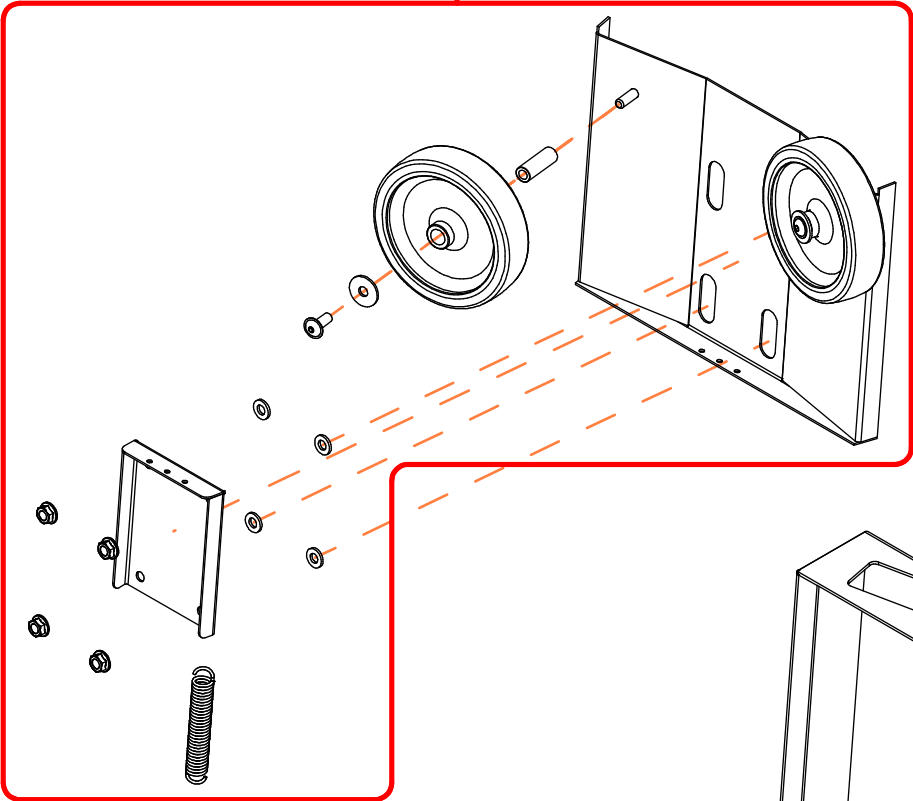


Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
02	1862422-SP	Wheel,traversing,centric,35mm		1
17	1813254-SP	Coupling,motor,subframe,HA		1
18	1864531-SP	Crank,assy,HA450/650		1
20	1863708-SP	Motor,404.938		1
21	1602782-SP	Fuse,10A,set,10pcs		10

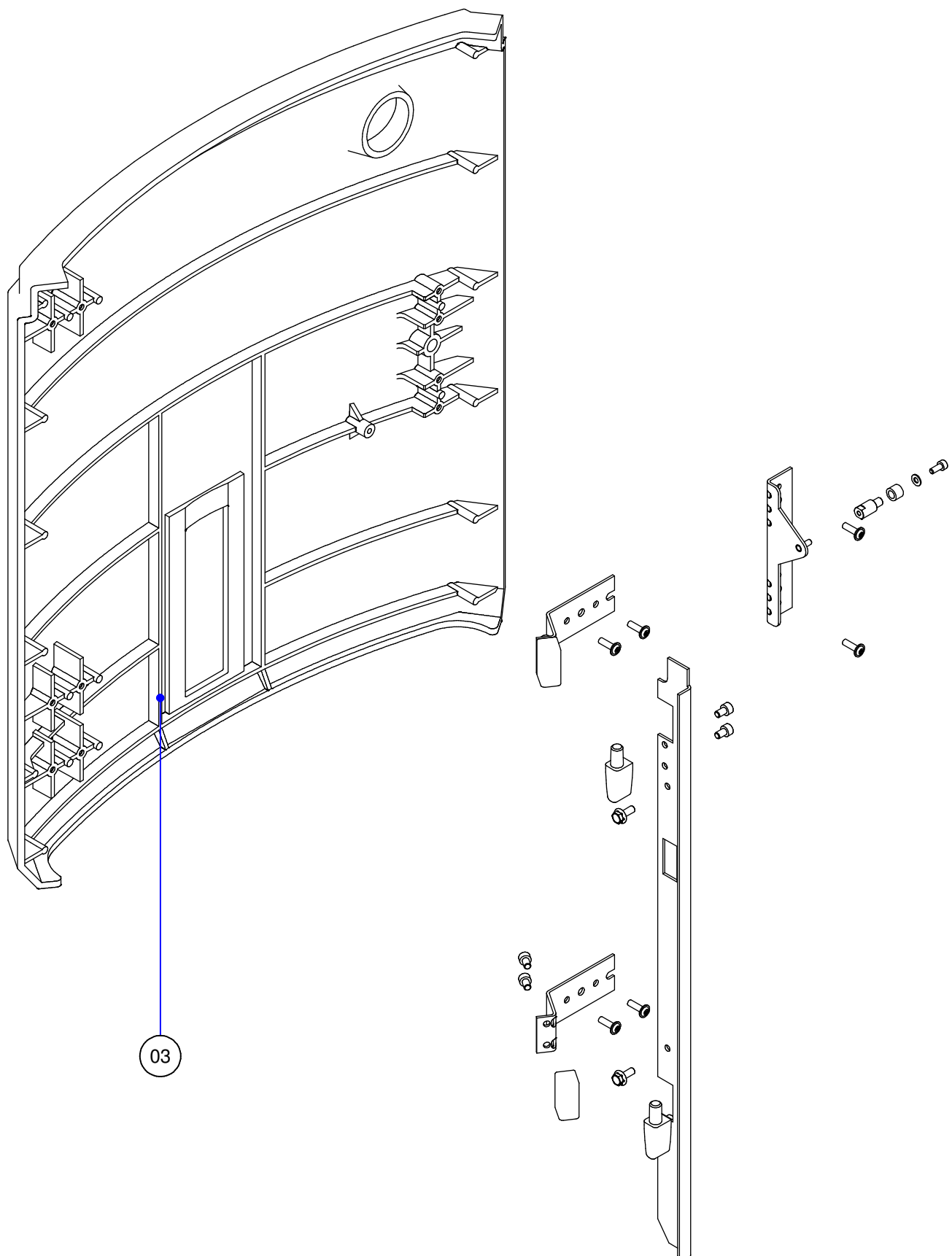


Spare Parts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
15	1861940-SP	Motor,80.805.0,24V,i=49		1

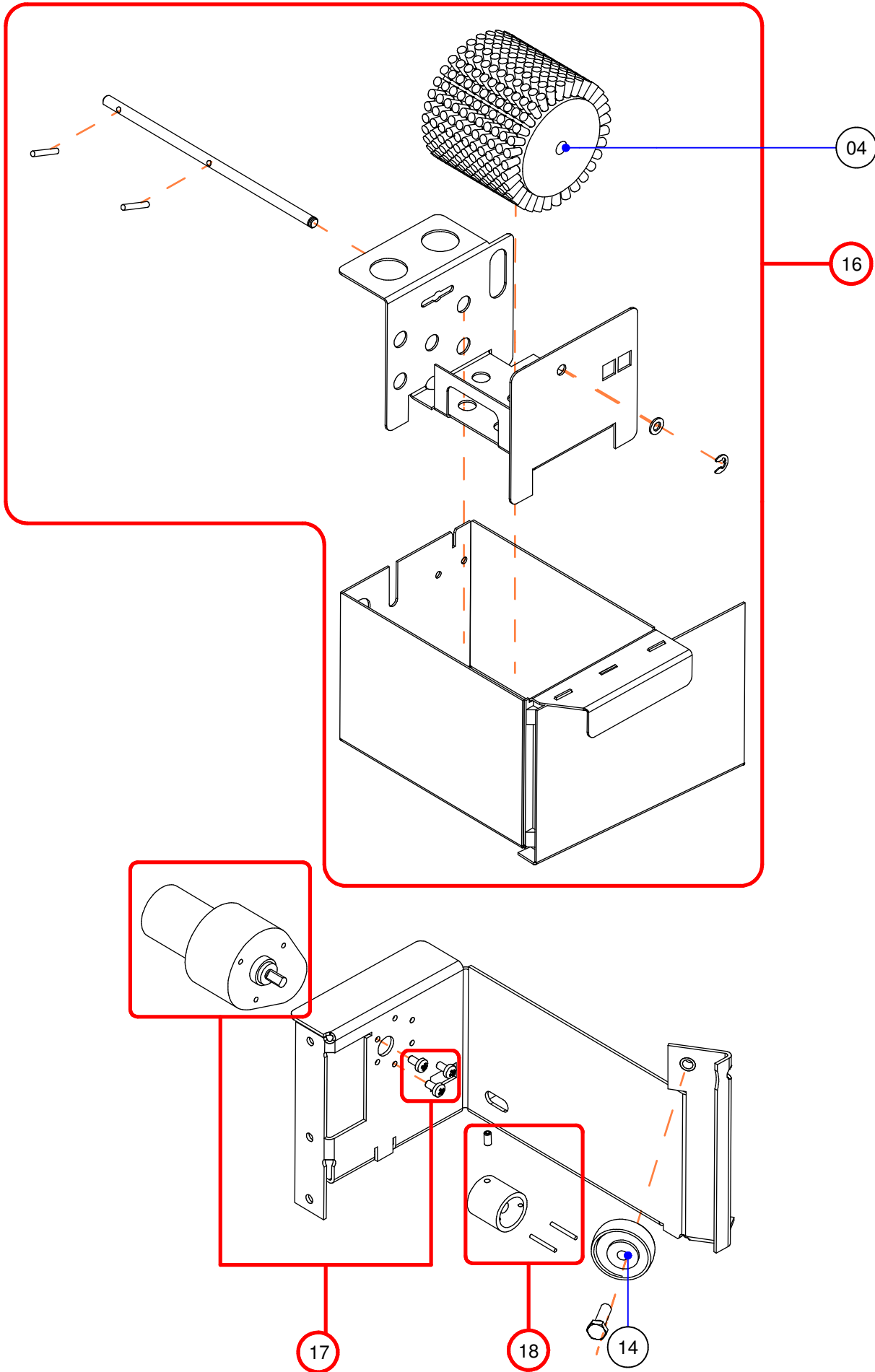
16



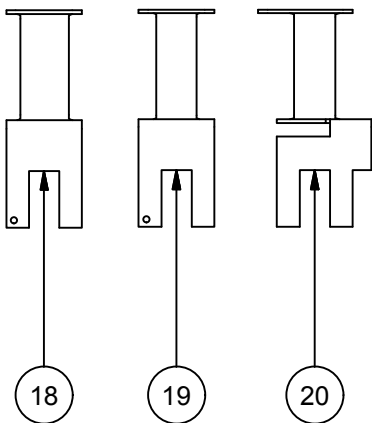
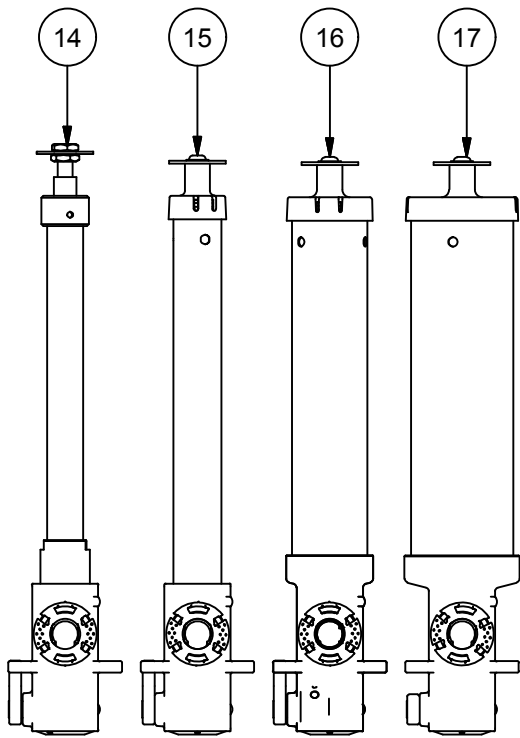
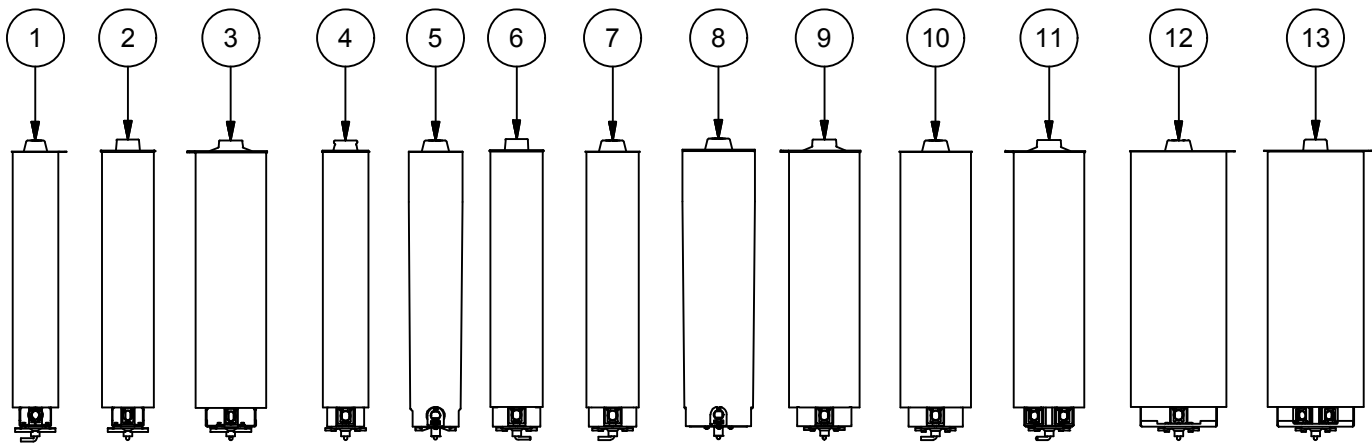
Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
16	1864035-SP	Wheel,f100x25+nut+shaft,ha450		1



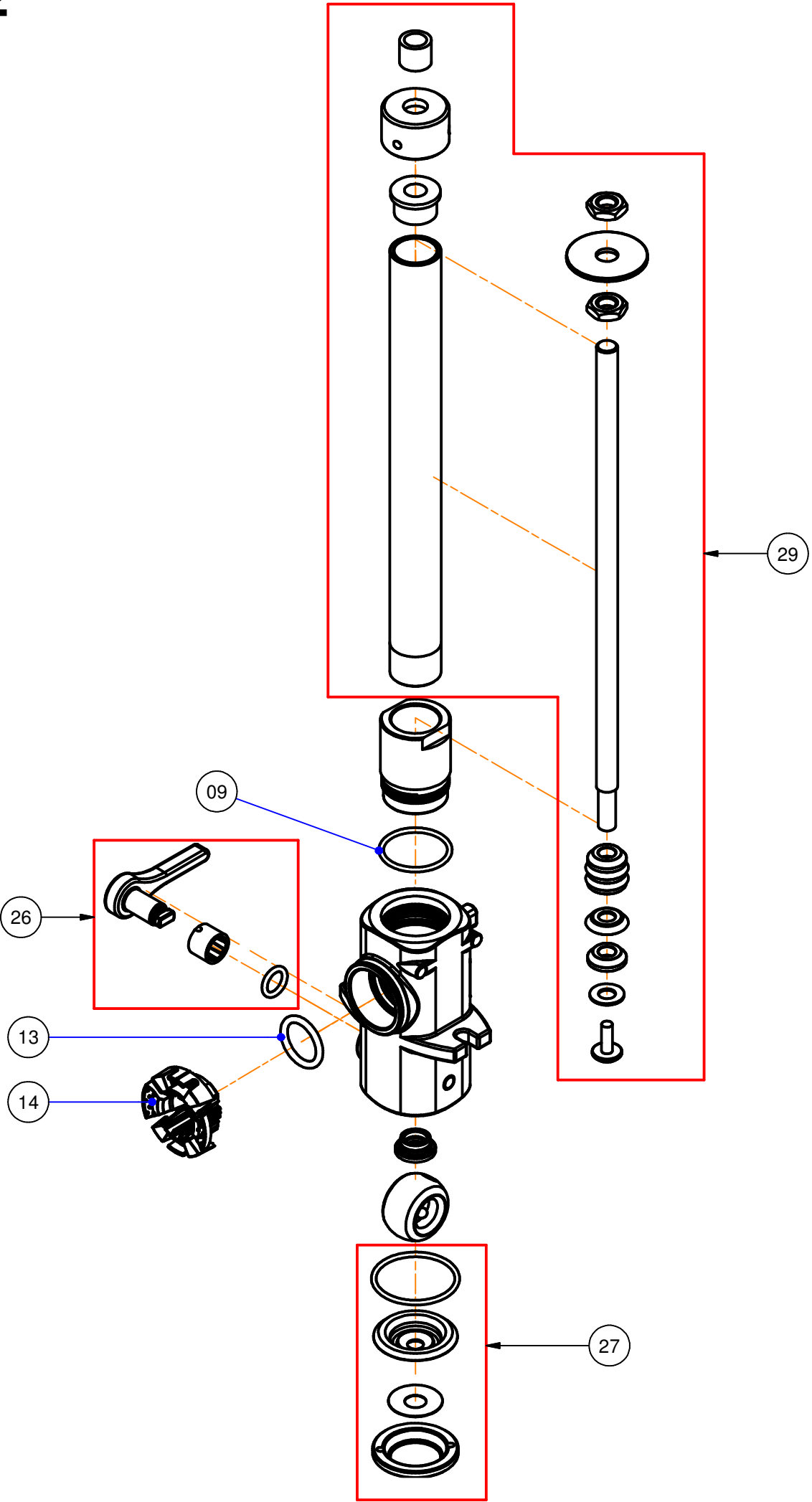
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
03	1813726-SP	Panel,front,HA450		1



Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
04	1814029-SP	Brush,HA450		1
14	1862422-SP	Wheel,travesing,entr.,35mm		1
16	1813952-SP	Brush container,assy,Ha450		1
17	1863862-SP	Motor,micro,158-24-200		1
18	1801842-SP	Fork,container,brush		1

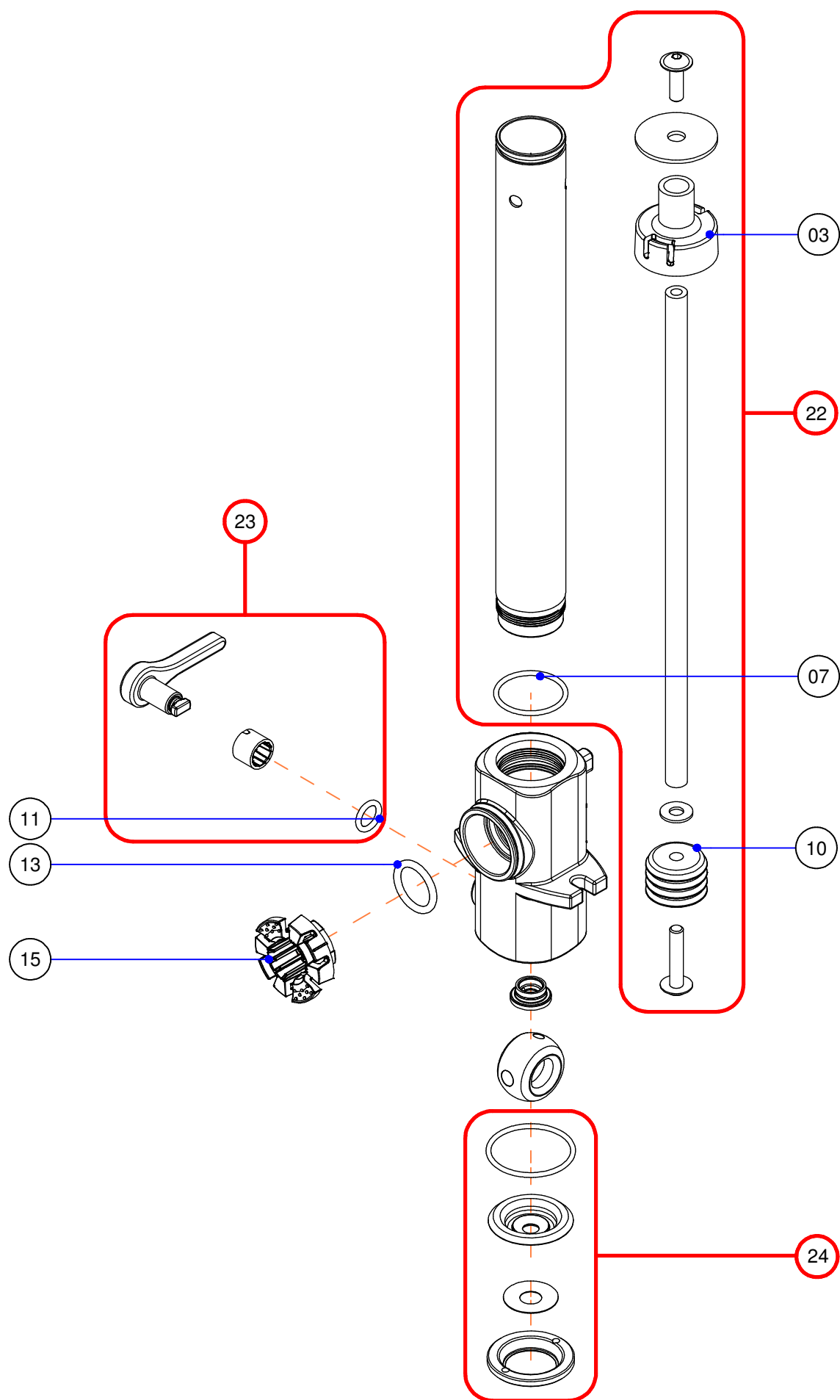


SPARE PARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARK	QTY
1	1815740-SP	Canister,RVS,assy,2L,turn,HA		1
2	1816186-SP	canister,assy,3L,HA,turn		1
3	1815737-SP	Canister,assy,6L,turn,HA		1
4	1814147-SP	Canister,2L,RVS,assy,HA450		1
5	1862307-SP	Canister,3L,POM,assy,HA		1
6	1809888-SP	Canister,assy,3L,sst,HA		1
7	1863215-SP	Can.,steel,st.agit,3L,HA		1
8	1862380-SP	Canister,assy,6L,POM,HA		1
9	1810596-SP	Canister,6L,RVS,assy,HA		1
10	1863216-SP	Can.,steel,st.agit,6L,HA		1
11	1814168-SP	Canister,6L,2exits,HA450		1
12	1810599-SP	Canister,10L,assy,HA		1
13	1810602-SP	Canister, 10L,2ex,centr.		1
14	1814533-SP	Ballvalve,2006,1-oz		1
15	1863711-SP	ballvalve,2006,2-oz		1
16	1863712-SP	ballvalve,2006,5-oz		1
17	1863713-SP	ballvalve,2006,10-oz		1
18	1815307-SP	Bracket,reset,1oz		1
19	1813866 -SP	bracket,reset		1
20	1814524-SP	bracket,reset,5oz		1
21	1810574-SP	Tube,ø16x134.3,2002SD		1
21	1810575-SP	Tube,ø16x134.3,2002SD		1
21	1810576-SP	Tube,ø16x151.3,2002SD		1
21	1810577-SP	Tube,ø16x59.3,2002SD		1
21	1810578-SP	Tube,ø16x173.3,2002SD		1
21	1810579-SP	Tube,ø16x190.3,2002SD		1
21	1810580-SP	Tube,ø16x180.3,2002SD		1
21	1810581-SP	Tube,ø16x197.3,2002SD		1
21	1810582-SP	Tube,ø16x117.3,2002SD		1
21	1810583-SP	Tube,ø16x232.3,2002SD		1
21	1810584-SP	Tube,ø16x74.3,2002SD		1
21	1810585-SP	Tube,ø16x91.3,2002SD		1
21	1810586-SP	Tube,ø16x263.3,2002SD		1
21	1810587-SP	Tube,ø16x280.3,2002SD		1
21	1810588-SP	Tube,ø16x316.3,2002SD		1
21	1810589-SP	Tube,ø16x237.3,2002SD		1
21	1810590-SP	Tube,ø16x254.3,2002SD		1
21	1810591-SP	Tube,ø16x333.3,2002SD		1
21	1810592-SP	Tube,ø6x139.8,2002SD		1
21	1816198-SP	Tube,ø16x44.7		1
21	1816199-SP	Tube,ø16x222, angle 25deg		1
21	1816200-SP	Tube,ø16x183, angle 25deg		1
21	1816201-SP	Tube,ø16x61.6		1
21	1816202-SP	Tube,ø16x228.5, angle 25deg		1
21	1816204-SP	Tube,ø16x140.3, angle 25deg		1
21	1816205-SP	Tube,ø16x153, angle 25deg		1
21	1816207-SP	Tube,ø16x265, angle 15deg		1
21	1816208-SP	Tube,ø16x165,5 angle 5deg		1



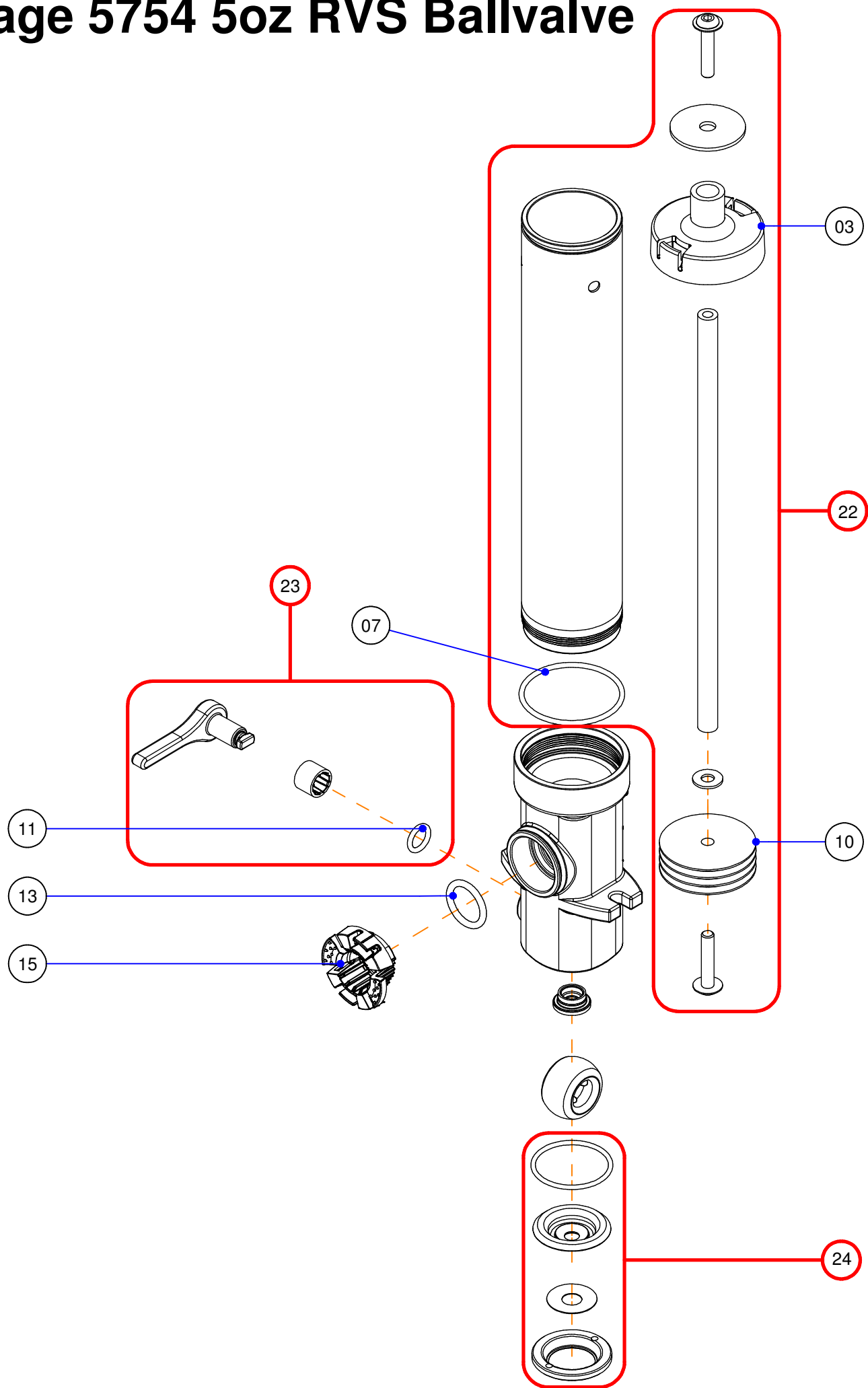
PARTS LIST				
ITEM	PARTNUMBER	DESCRIPTION	REMARKS	QTY
09	1861350-SP	O-ring,23.52x1.78.vit/set10pcs		1
13	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
14	1861349-SP	ring,click,tube,ballvalve06(5x		1
26	1810556-SP	Arm,assy,ballvalve		1
27	1863528-SP	Ballvalve,Disc 5pcs		1
29	42241100-SP	Pumptube&piston,rod,assy,1ozUS		1

Page 5753 2oz RVS Ballvalve



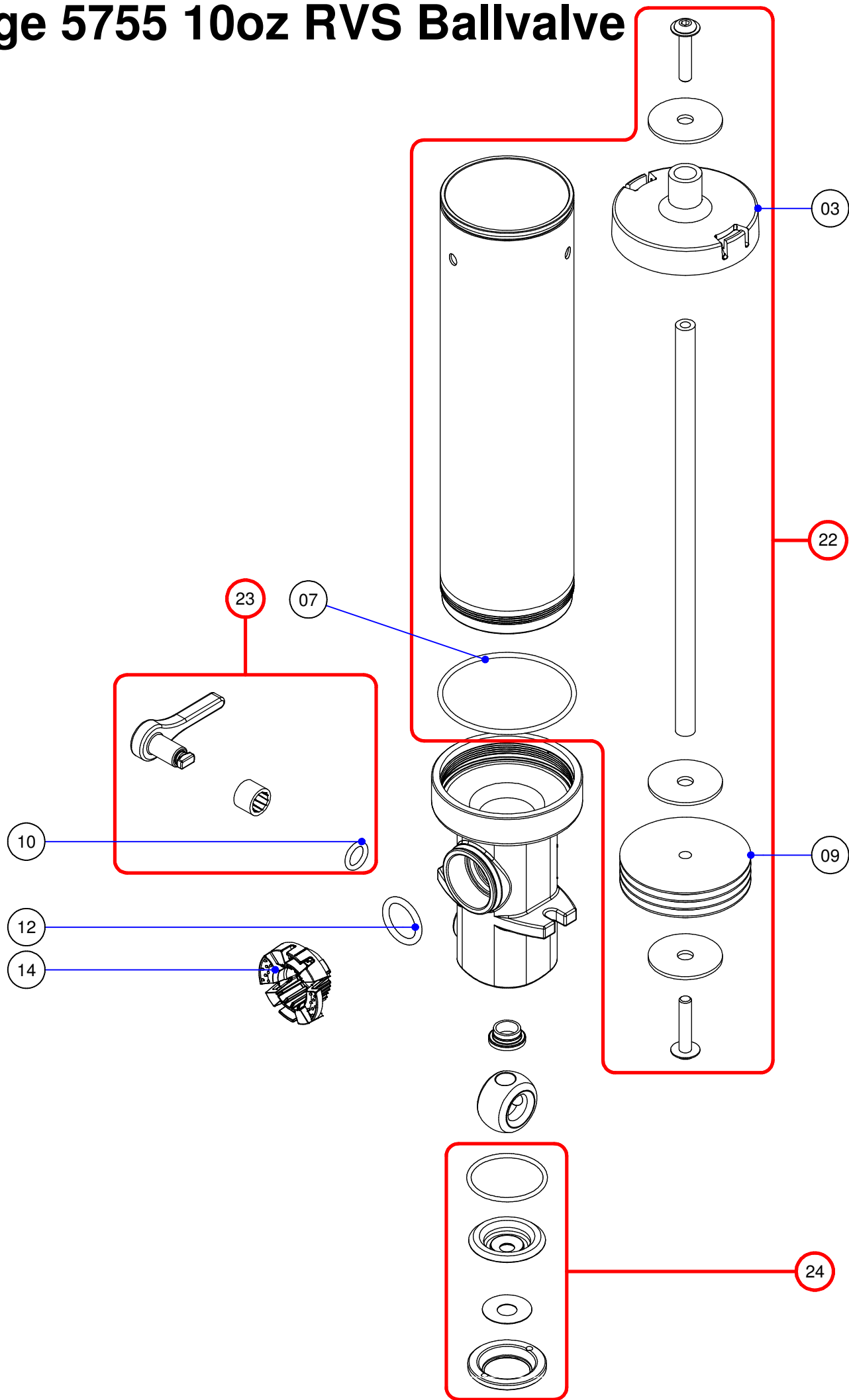
Spareparts List				
ITEM	SP NUMBER	DESCRIPTION	REMARKS	QTY
03	1813428-SP	cap,tube,2-oz,5pcs		1
07	1861350-SP	O-ring,23.52x1.78.vit/set10pcs		1
10	1810932-SP	Piston,teflon,2oz,4seals,1pcs		1
11	1863649-SP	O-ring,8,5x2,lever,ballv,10pcs		1
13	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
15	1861349-SP	ring,click,tube,ballvalve06(5x		1
22	1813327-SP	tube,ballvalve,2-oz,complete		1
23	1810556-SP	Arm,assy,ballvalve		1
24	1863528-SP	Ballvalve,Disk 5pcs		1

Page 5754 5oz RVS Ballvalve



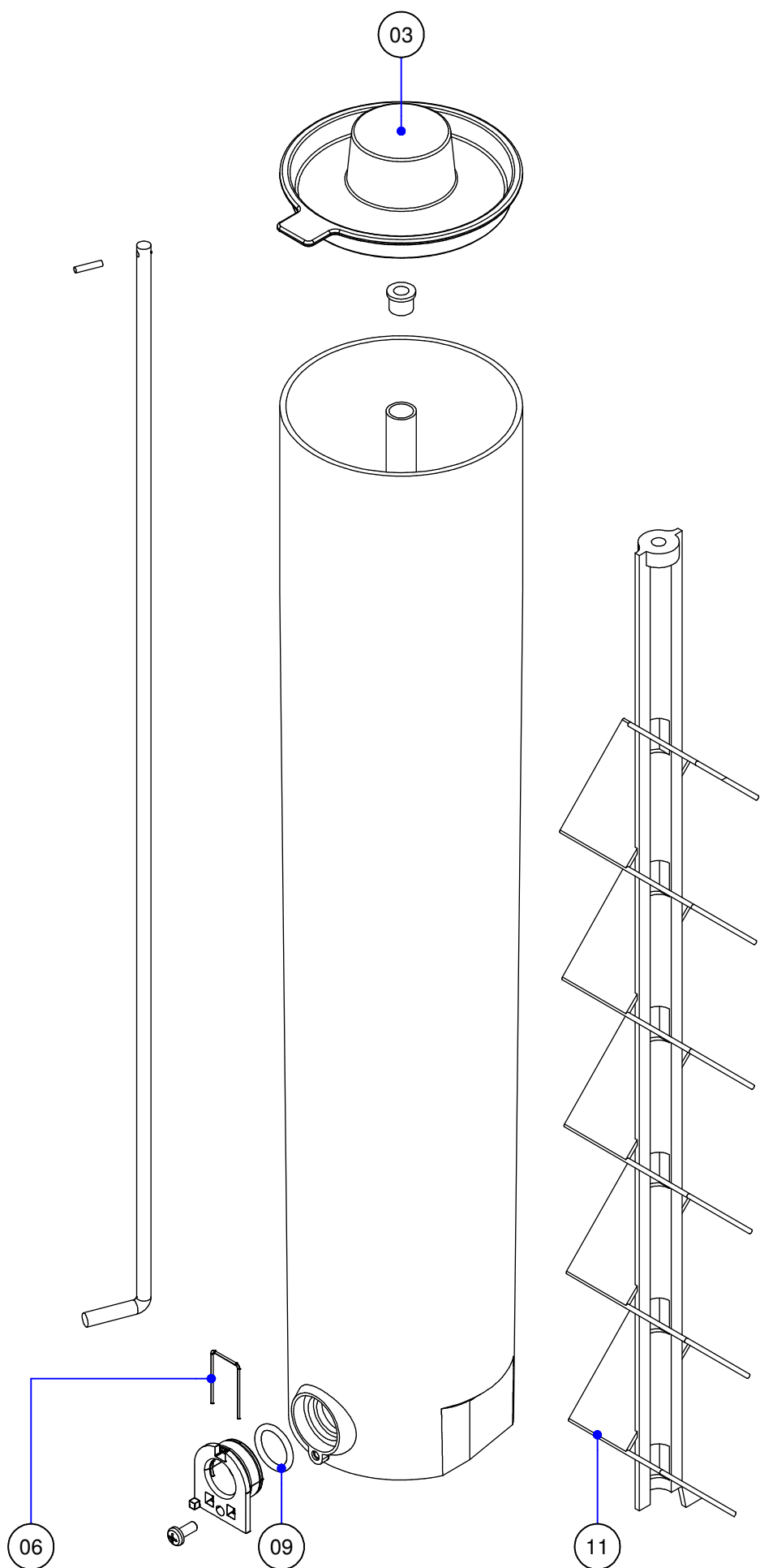
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
03	1863759-SP	cap,5-oz,inj.mould		1
07	1863714-SP	O-ring,38x2, viton (10x)		1
10	1810933-SP	Piston,teflon,5oz,4seals,10pcs		1
11	1863649-SP	O-ring,8,5x2,lever,ballv,10pcs		1
13	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
15	1861349-SP	ring,click,tube,ballvalve06(5x		1
22	1813419-SP	tube,ballvalve,5-oz,complete		1
23	1810556-SP	Arm,assy,ballvalve		1
24	1863528-SP	Ballvalve.Disk 5pcs		1

Page 5755 10oz RVS Ballvalve



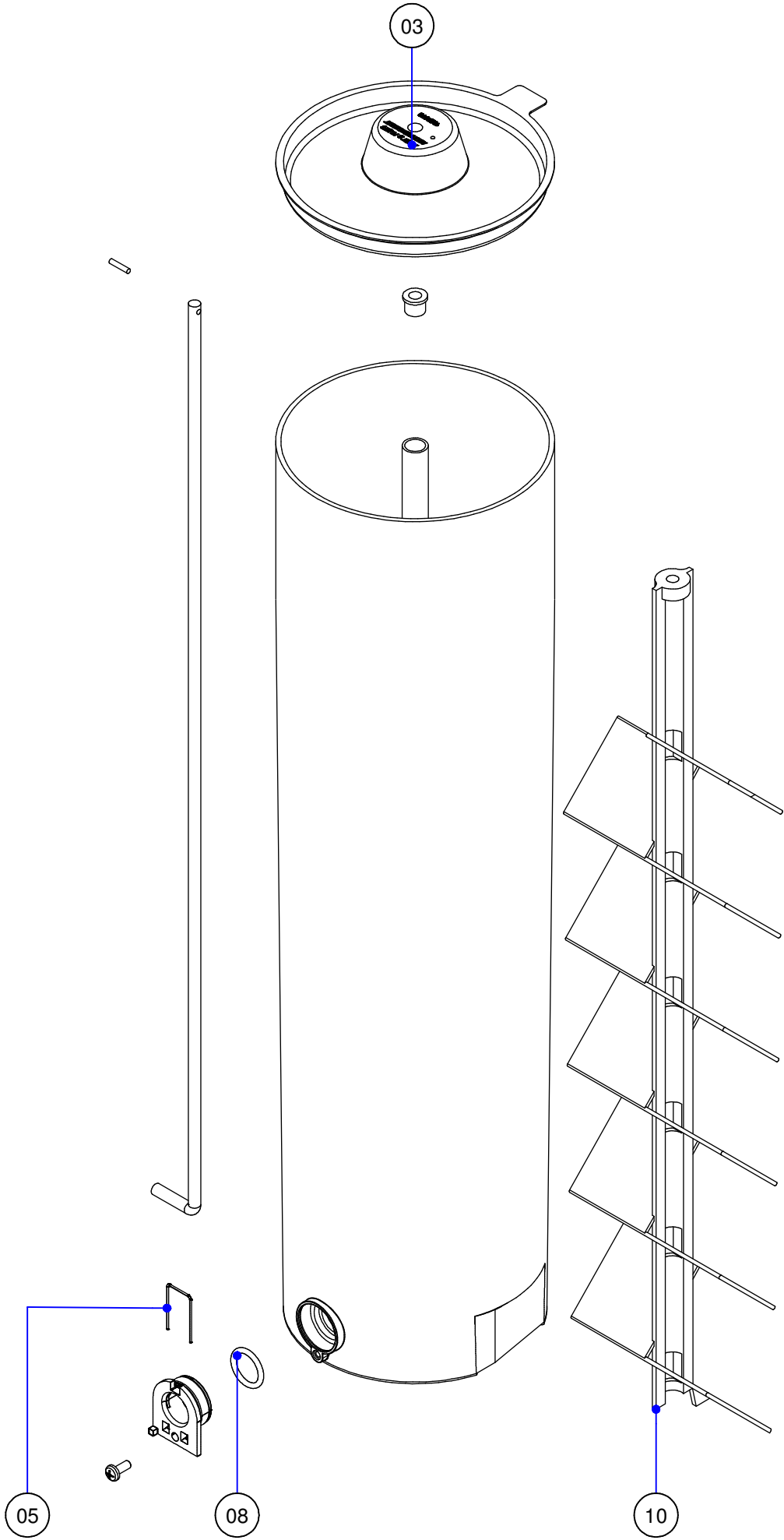
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
03	1863710-SP	cap,tube,10-oz, 5pcs		1
07	1863653-SP	O-ring,52x2,viton,10oz,10pcs		1
09	1813322-SP	piston,ballvalve,10-oz,10pcs		1
10	1863649-SP	O-ring,8,5x2,lever,ballv,10pcs		1
12	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
14	1861349-SP	ring,click,tube,ballvalve06(5x		1
22	1813326-SP	tube,ballvalve,10-oz,complete		1
23	1810556-SP	Arm,assy,ballvalve		1
24	1863528-SP	Ballvalve,Disk 5pcs		1

Page 5756 3L canister (Polymeric)



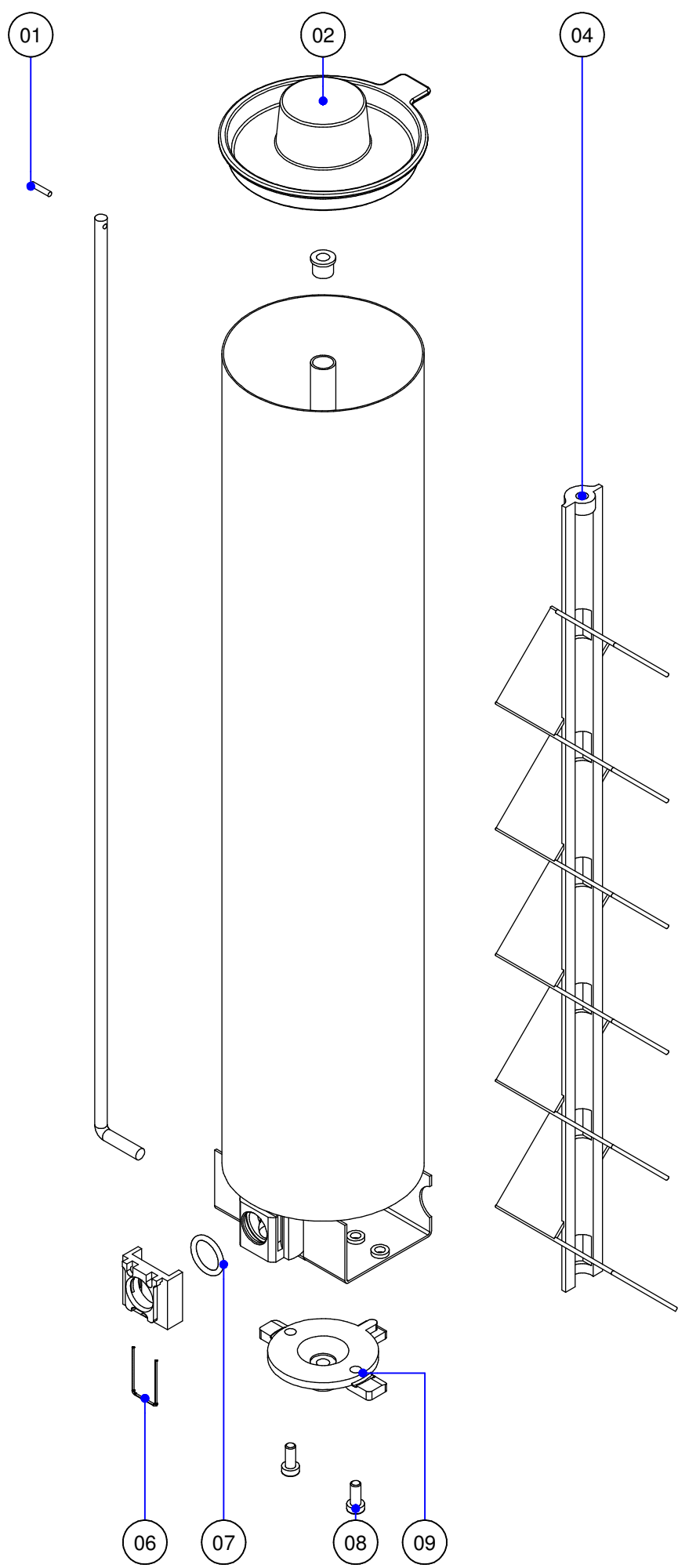
Spare Parts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
03	1802146-SP	Cover,POM,can.2.5/3L,HA-s/m/l		1
06	1809909-SP	Spring,tube,can/pump,set,10pcs		1
09	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
11	1807645-SP	Agitator,POM,3L,POM,can,HA		1

Page 5757 6L canister (Polymeric)



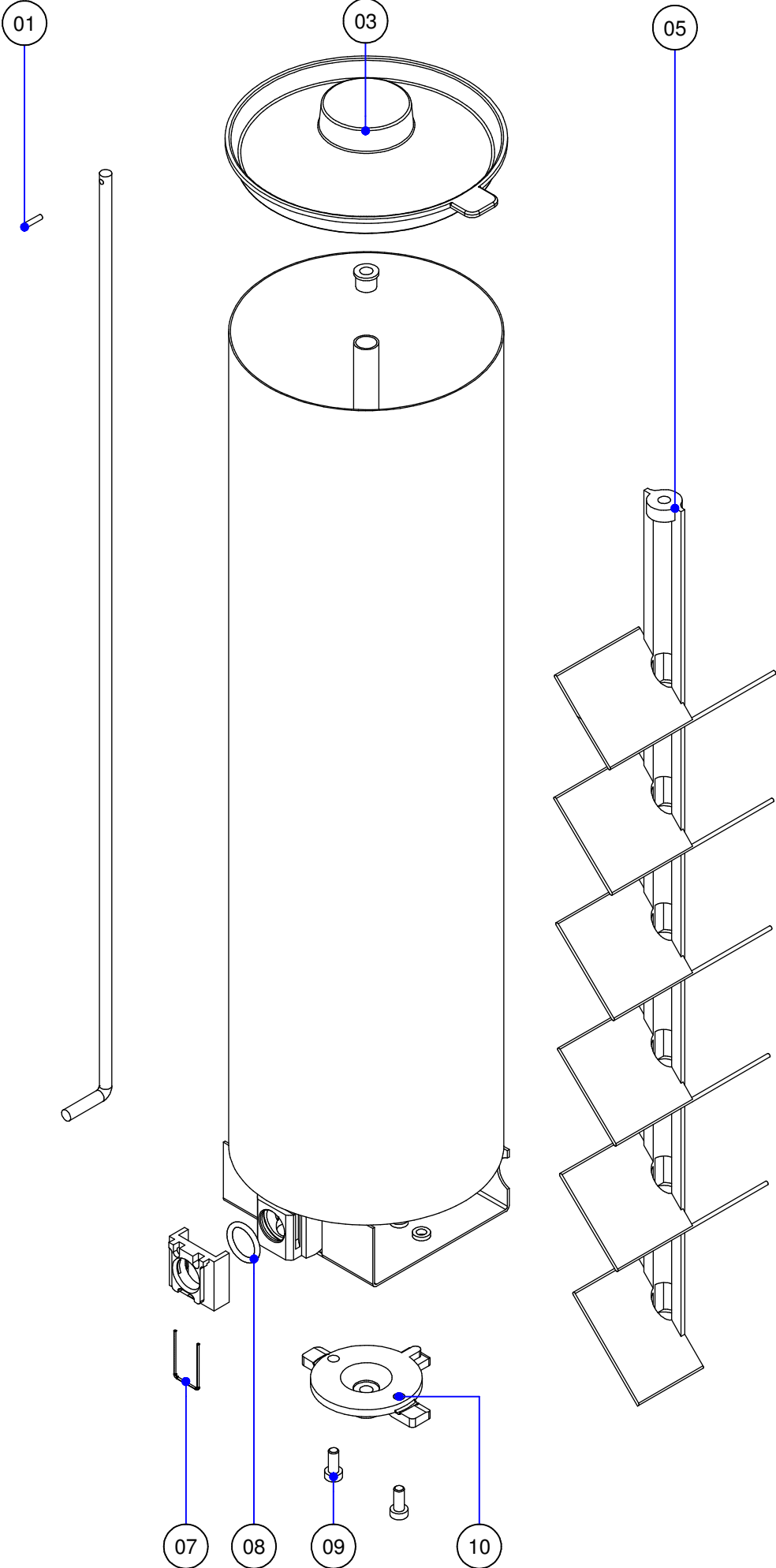
Spare Parts List				
ITEM	PART NUMBER	DESCRIPTION	POS NRS	QTY
03	1802378-SP	Cover,POM,5/6l can,HA-s/m/l		1
05	1809909-SP	Spring,tube,can/pump,set,10pcs		1
08	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
10	1807682-SP	Agitator,POM,5.9L,POM,can,HA		1

Page 5758 3L canister (RVS)



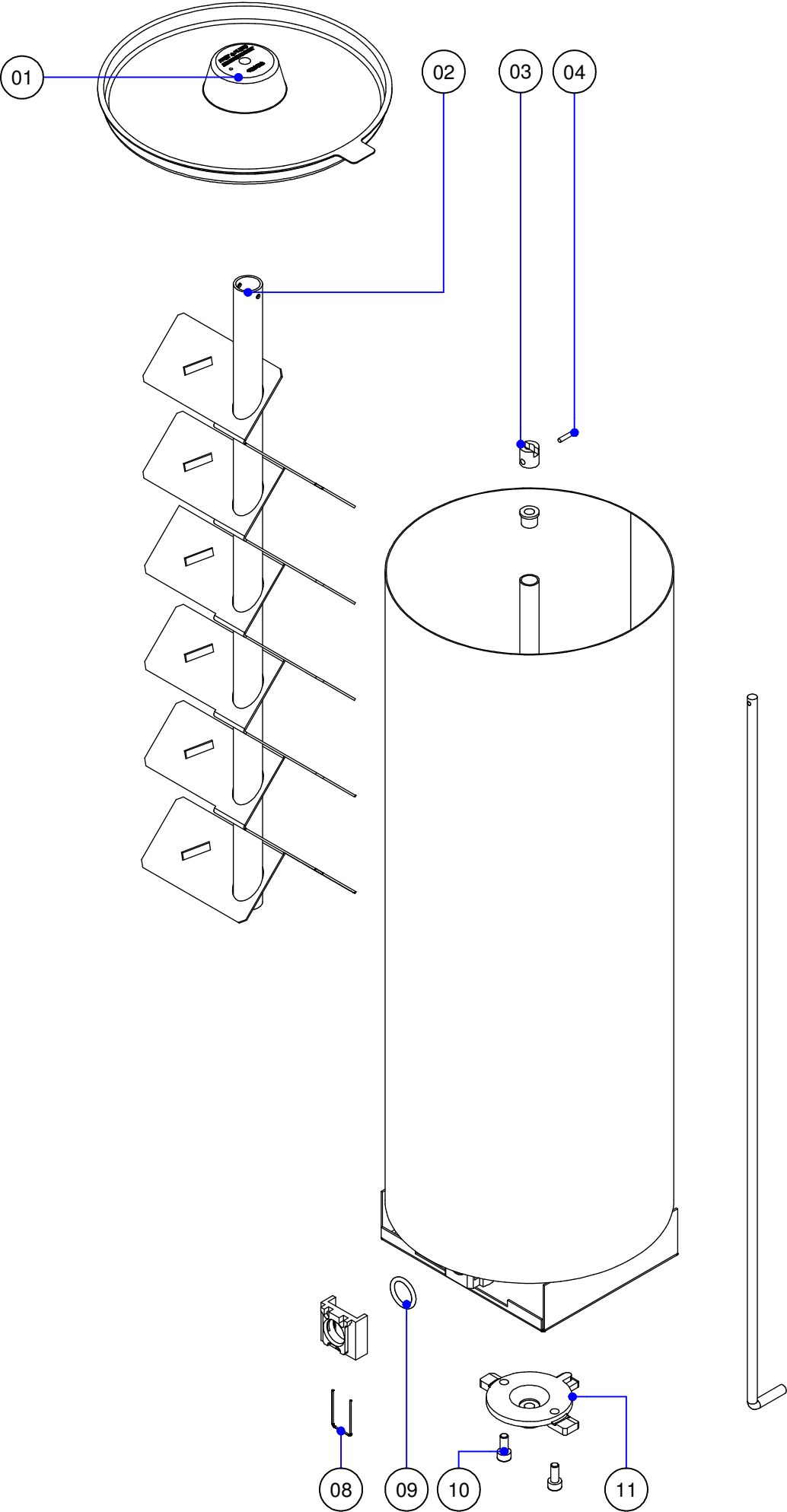
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs		1
02	1802146-SP	Cover,POM,can.2.5/3L,HA-s/m/l		1
04	1805622-SP	Agitator(POM),3L can.,HA-m/l	pos.1,4	1
06	1809909-SP	Spring,tube,can/pump,set,10pcs		1
07	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
				1
	1809854-SP	Cap,bottom,Sst can,with screws	pos.8,9	1

Page 5759 6L canister (RVS)



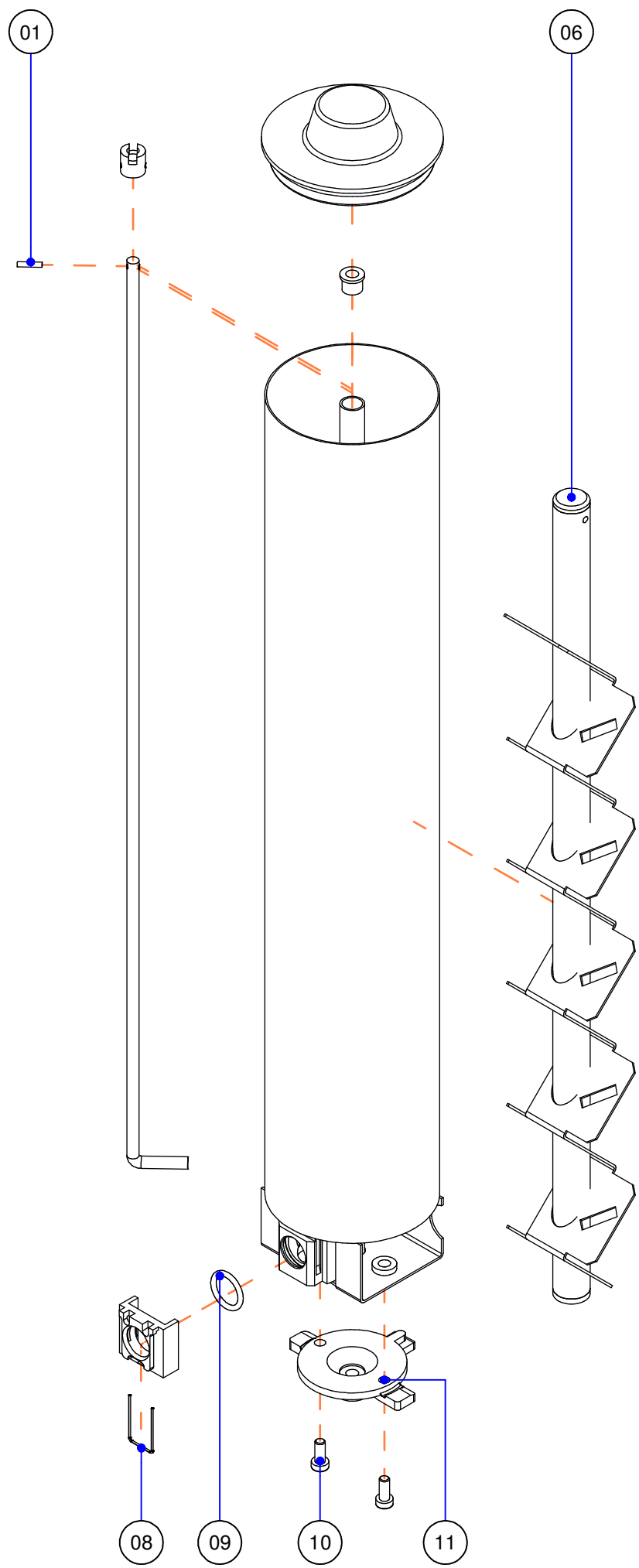
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs		1
03	1802378-SP	Cover,POM,5/6l can,HA-s/m/l		1
05	1807682-SP	Agitator,POM,5.9L,POM,can,HA		1
07	1809909-SP	Spring,tube,can/pump,set,10pcs		1
08	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
				1
	1809854-SP	Cap,bottom,Sst can,with screws	pos.9,10	1

Page 5760 10L canister (RVS)



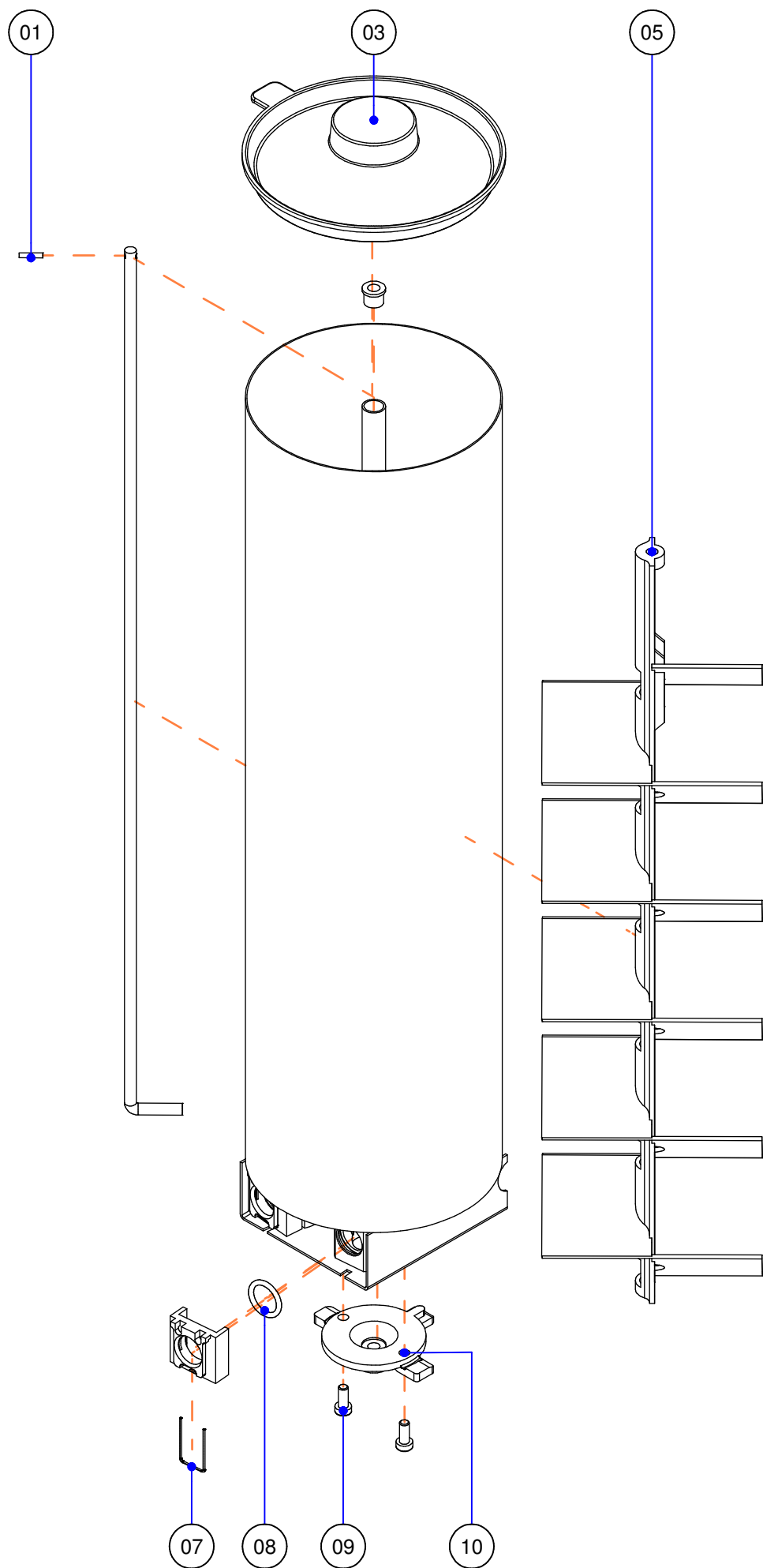
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	PAGE	QTY
01	1802393-SP	Cover,POM,can.10L,1/2ex,HA-m/l		1
02	1803443-SP	Agitator,assy,10L,1/2 ex,HAm/l		1
03	1801798-SP	Bush,center,agit.shaft,HAs/m/l		1
04	1860110-SP	Pin,spiroI,f2.5x12,Sst,25pcs		1
08	1809909-SP	Spring,tube,can/pump,set,10pcs		1
09	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
				1
	1809854-SP	Cap,bottom,Sst can,with screws	pos.10,11	1

Page 5761 2L canister (RVS)



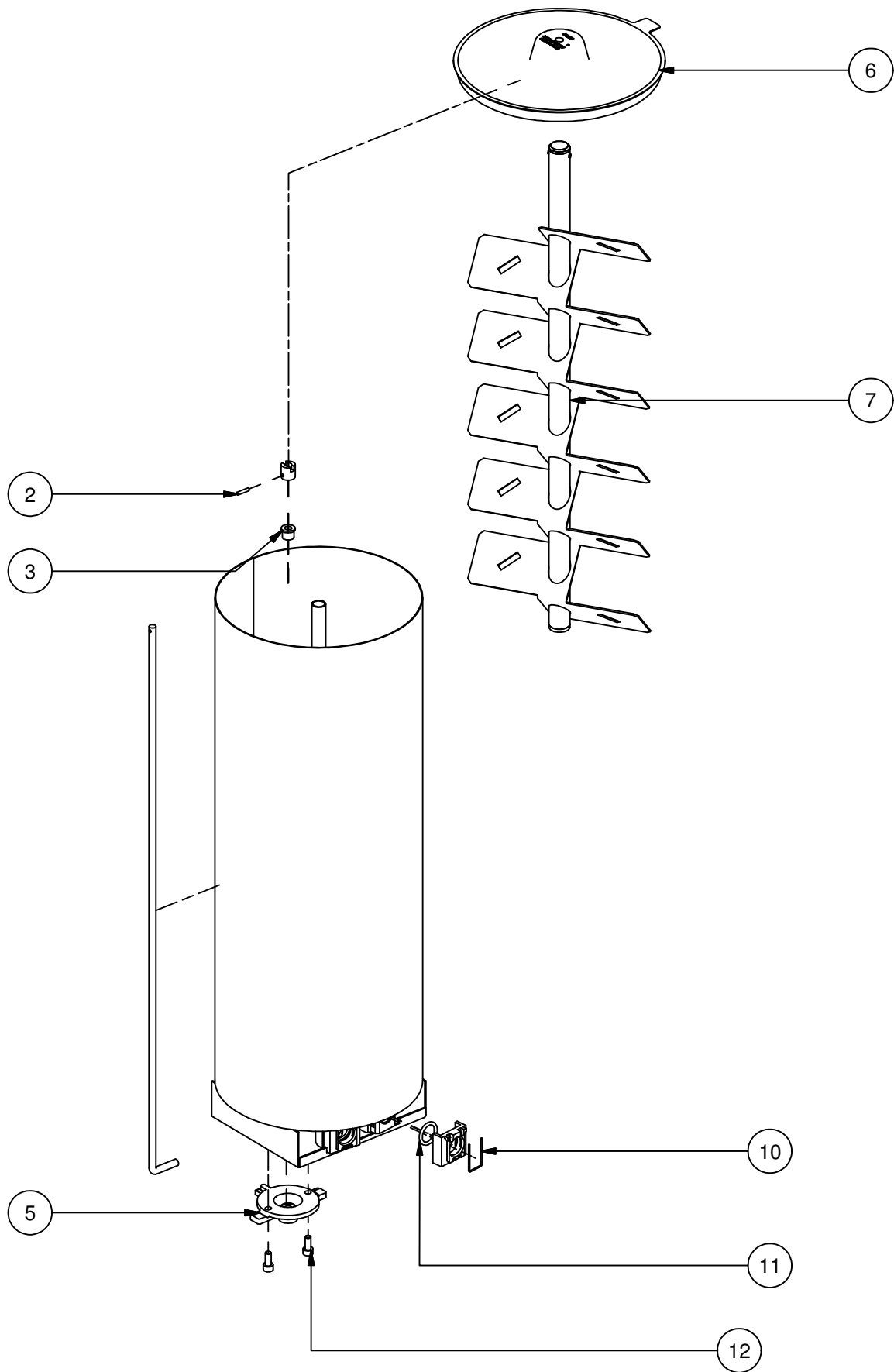
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs		1
06	1814153-SP	Agitator,assy,2L,HA450		1
08	1809909-SP	Spring,tube,can/pump,set,10pcs		1
09	1362230-SP	O-ring,can,vit,15.88x2.62 10st		1
	1809854-SP	Cap,bottom,Sst can,with screws		1

Page 5762 6L canister (RVS)



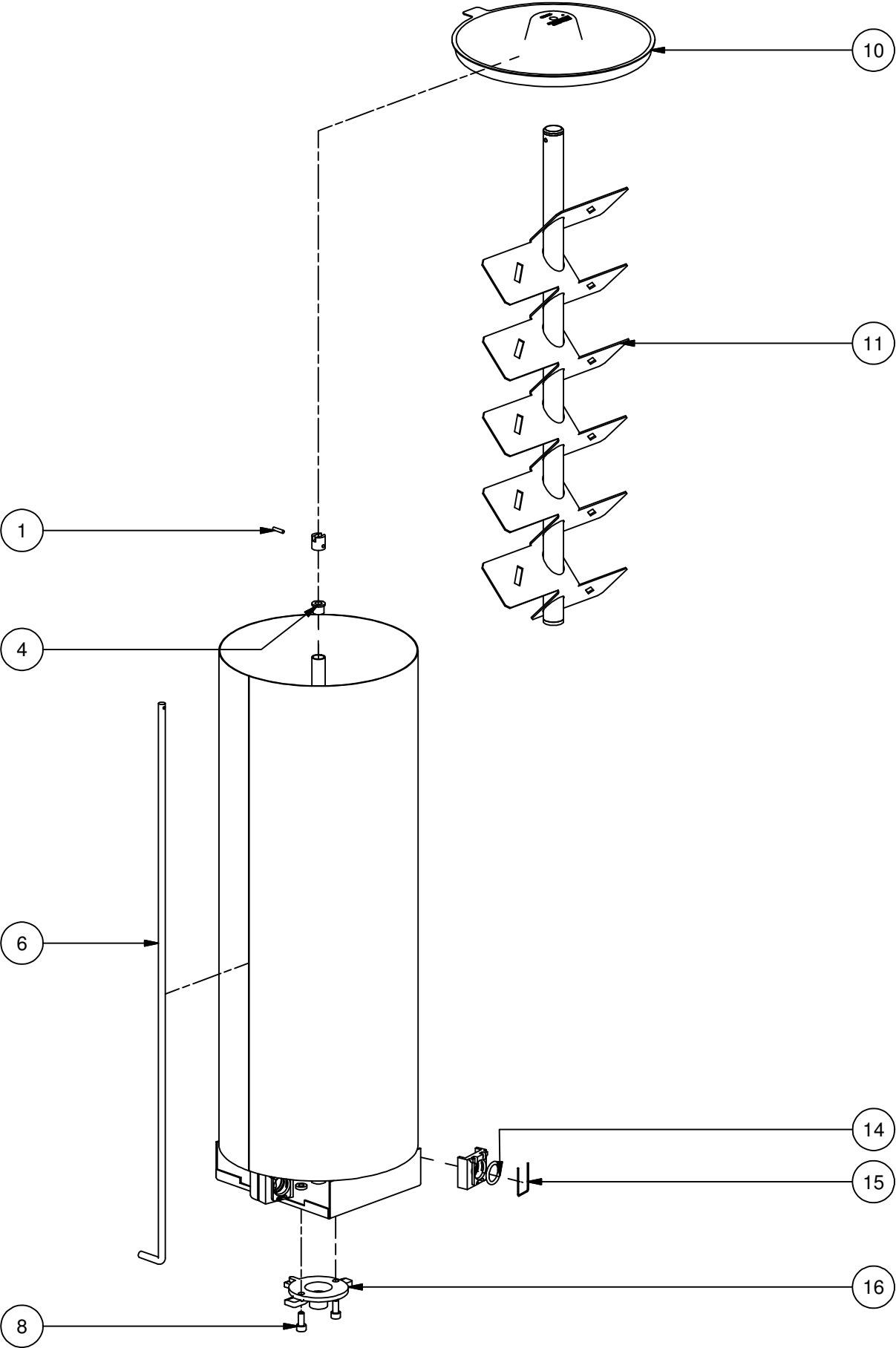
Spareparts List				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
01	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs		1
03	1802378-SP	Cover,POM,5/6l can,HA-s/m/l		1
05	1807682-SP	Agitator,POM,5.9L,POM,can,HA		1
07	1809909-SP	Spring,tube,can/pump,set,10pcs		2
08	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
	1809854-SP	Cap,bottom,Sst can,with screws		1

5763 10L 2 exits inner ring canister (RVS)



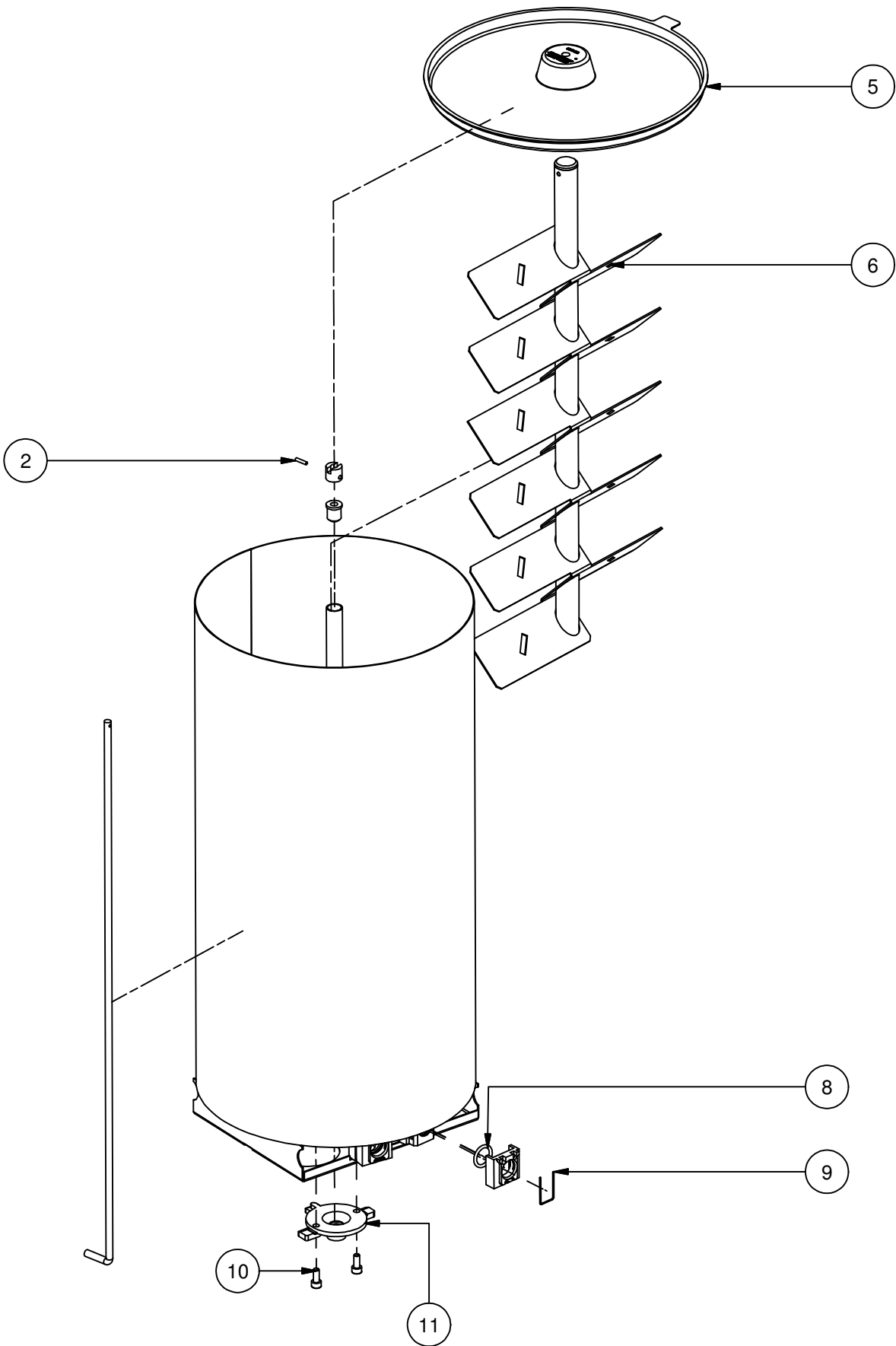
PARTS LIST				
ITEM	PARTNUMBER	DESCRIPTION	REMARKS	QTY
2	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs.		1
3	1801447-SP	Bush,shaft-pipe,set,HA,10pcs		1
6	1802393-SP	Cover,POM,can.10L,1/2ex,HA		1
10	1809909-SP	Spring,tube,can/pump,set,10pcs		2
11	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
13	1809854-SP	Cap,bottom,Sst can,with screws	pos.5, 12	1

5764 10L 2 exits outer ring canister



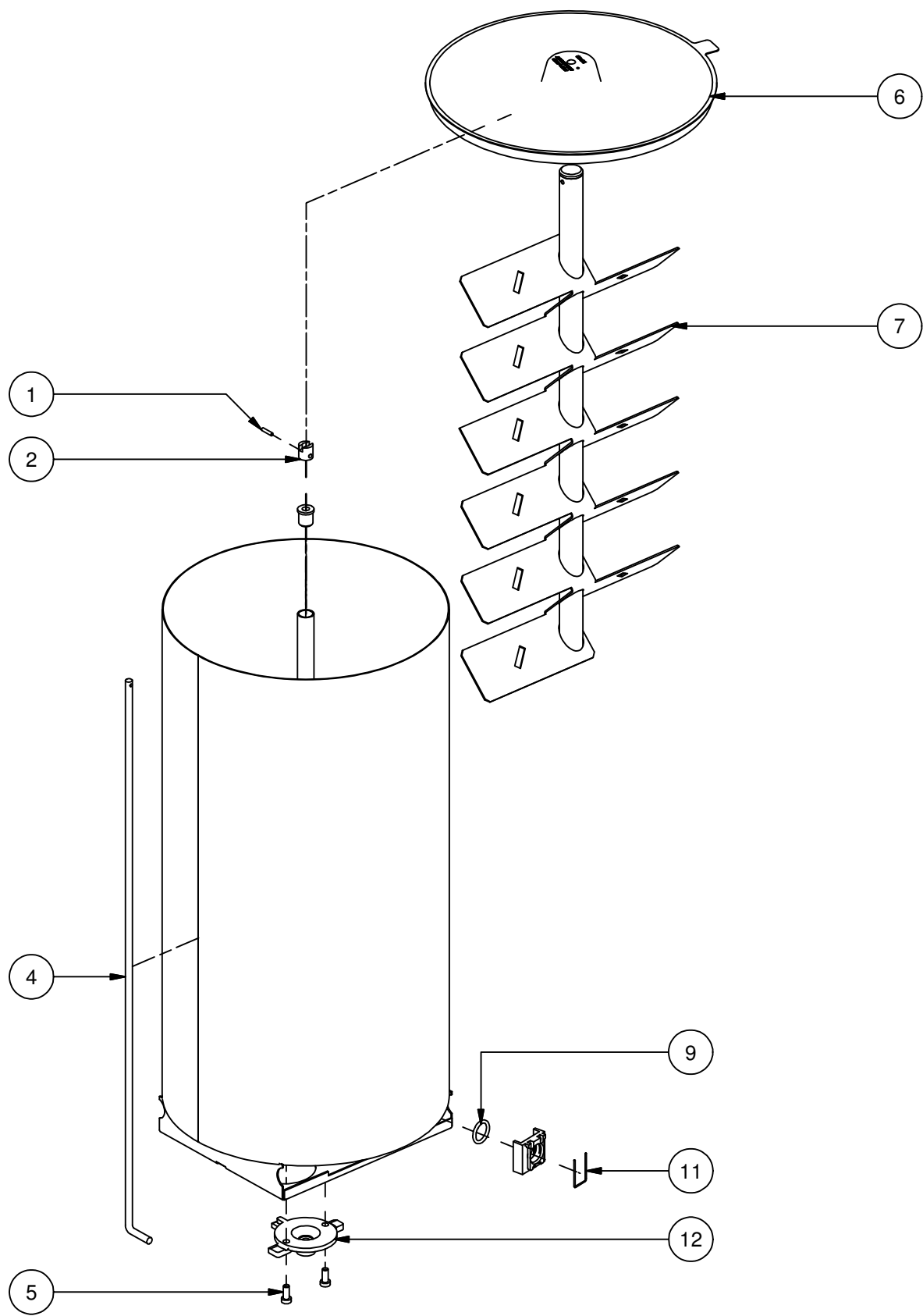
SPAREPARTS LIST				
ITEM	STOCK NUMBER	AUTHORITY	REMARKS	QTY
1	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs.		1
4	1801447-SP	Bush,shaft-pipe,set,HA,10pcs		1
6	1809284-SP	Shaft,agit,3-6-10-20L,can		1
10	1802393-SP	Cover,POM,can.10L,1/2ex,HA		1
14	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
15	1809909-SP	Spring,tube,can/pump,set,10pcs		2
	1809854-SP	Cap,bottom,Sst can,with screws	pos. 8, 12	2

5765 20L 2exit Canister (RVS)



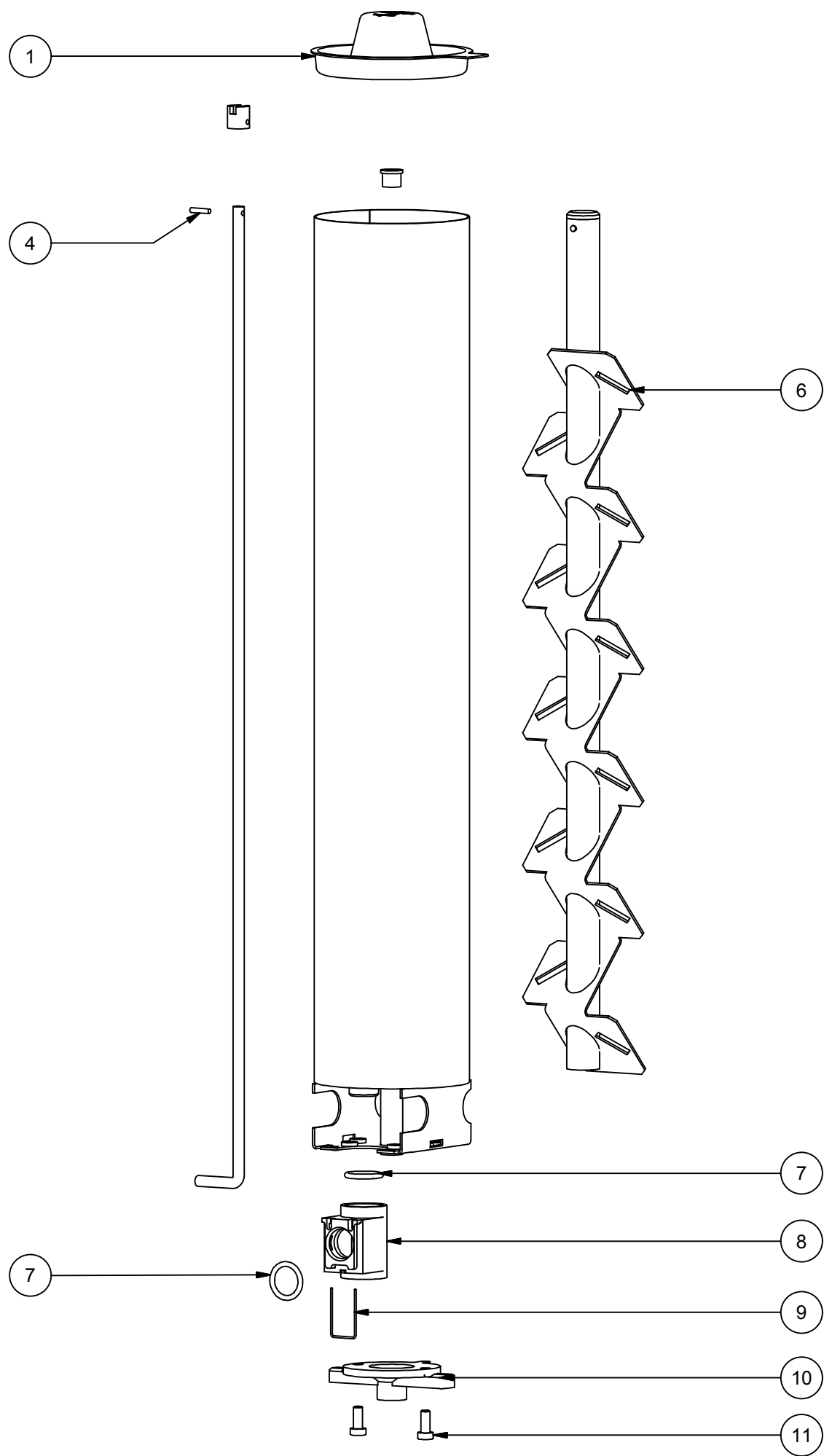
PARTS LIST				
ITEM	PARTNUMBER	DESCRIPTION	REMARKS	QTY
2	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs.		1
5	1804196-SP	Cover,POM,20,can,HA		1
6	1804202-SP	Agitator,assy,20L,HA1		1
8	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
9	1809909-SP	Spring,tube,can/pump,set,10pcs		2
	1809854-SP	Cap,bottom,Sst can,with screws	pos. 10, 11	1

5766 20L canister (RVS)



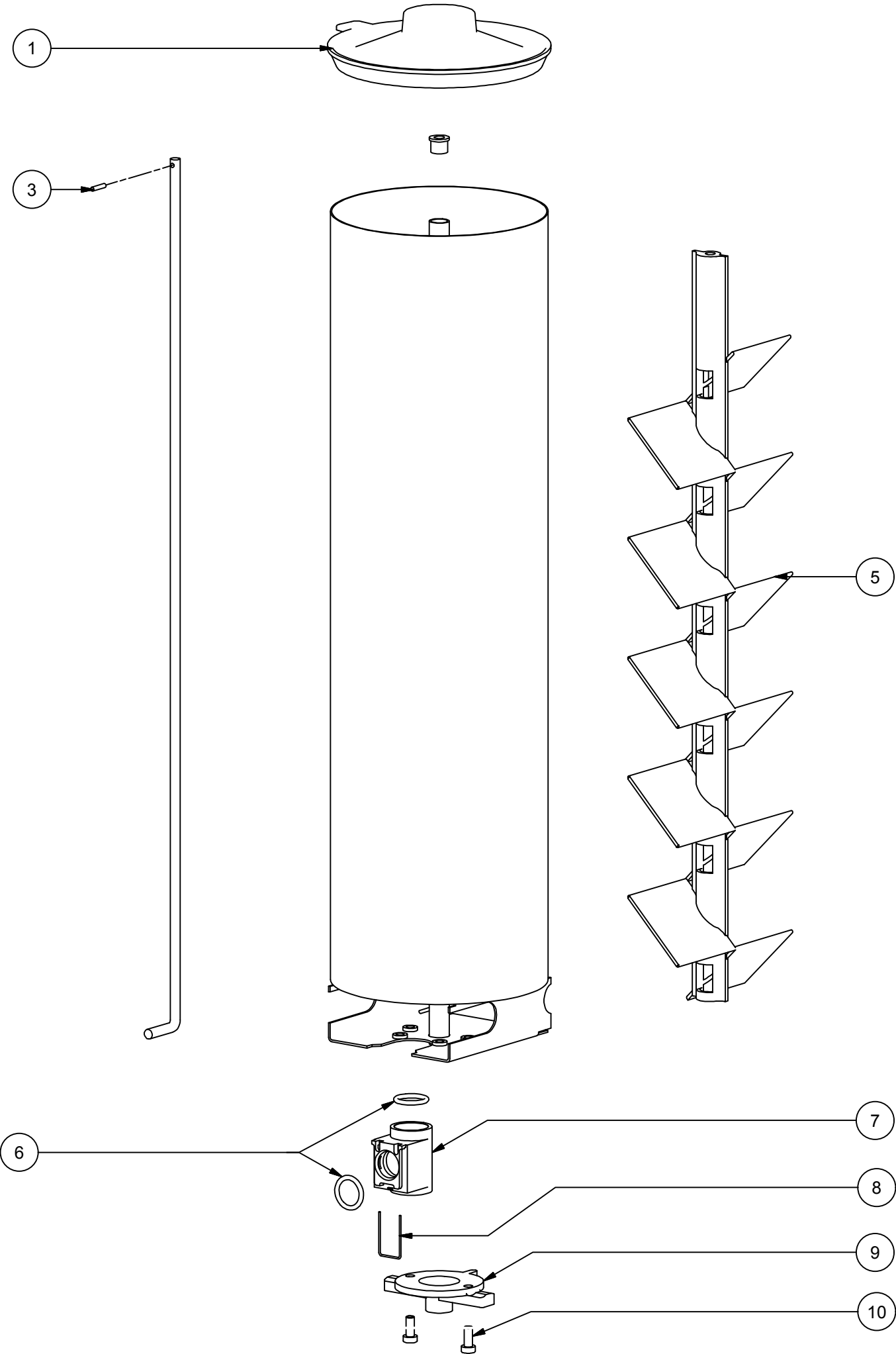
SPAREPARTS LIST				
ITEM	PARTNUMBER	DESCRIPTION	REMARKS	QTY
1	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs.		1
2	1801798-SP	Bush,center,agit.shaft,HA		1
4	1809284-SP	Shaft,agit,3-6-10-20L,can		1
7	1804202-SP	Agitator,assy,20L,HA		1
9	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
11	1809909-SP	Spring,tube,can/pump,set,10pcs		2
17	1809854-SP	Cap,bottom,Sst can,with screws	pos. 5, 12	1

5767 2L canister SSSt turn (option)



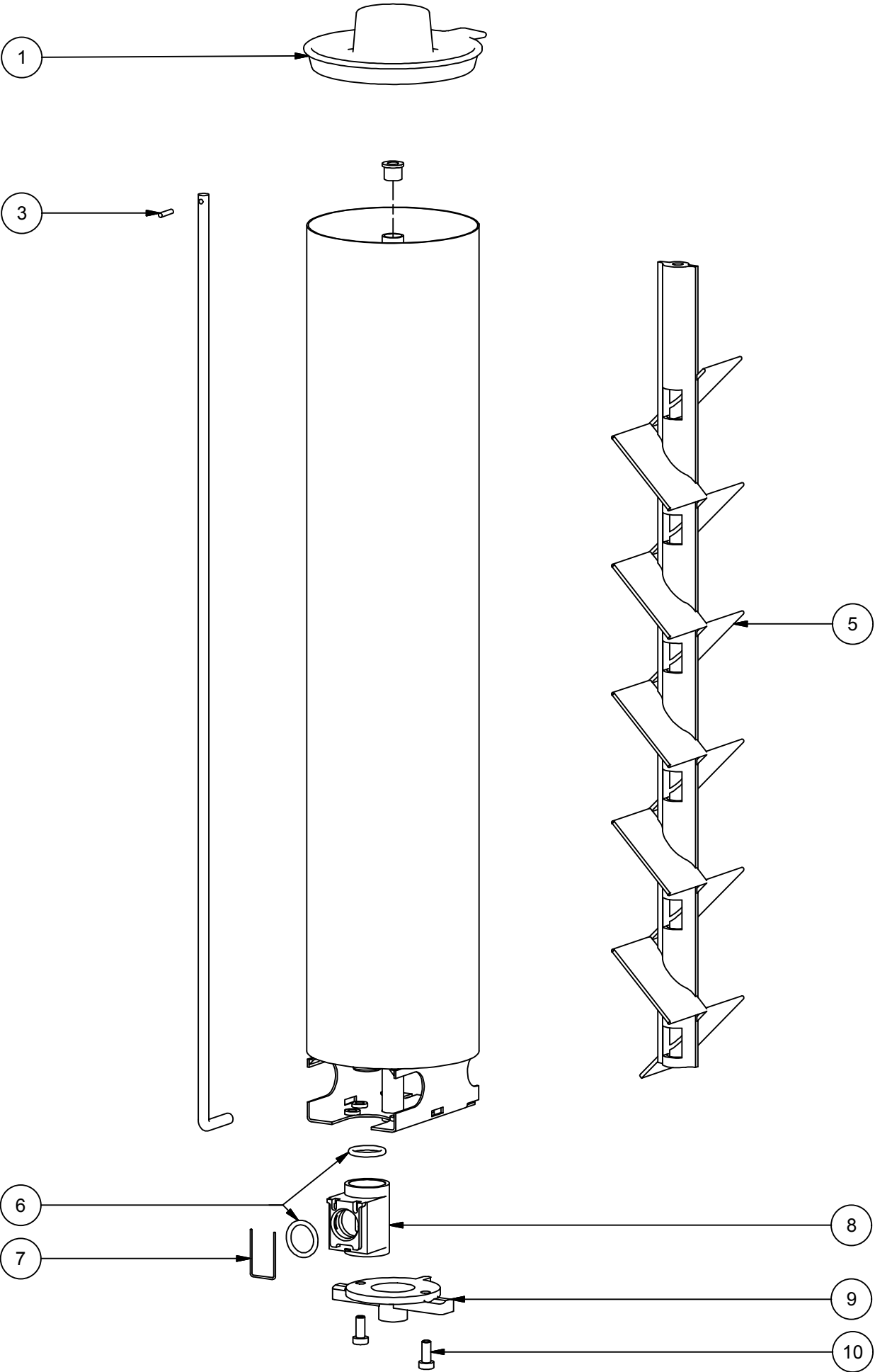
PARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARK	QTY
1	1814102 - SP	Cap,2L,canister,HA		1
4	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs.		1
6	1814153-SP	Agitator,assy,2l,HA		1
7	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
8	1815731 - SP	Fitting,turning,HA450		1
9	1809909-SP	Spring,tube,can/pump,set,10pcs		1
10,11	1816106-SP	cap,bottom, sst can. with screws		1

5768 Canister SSt turn 6L (option)

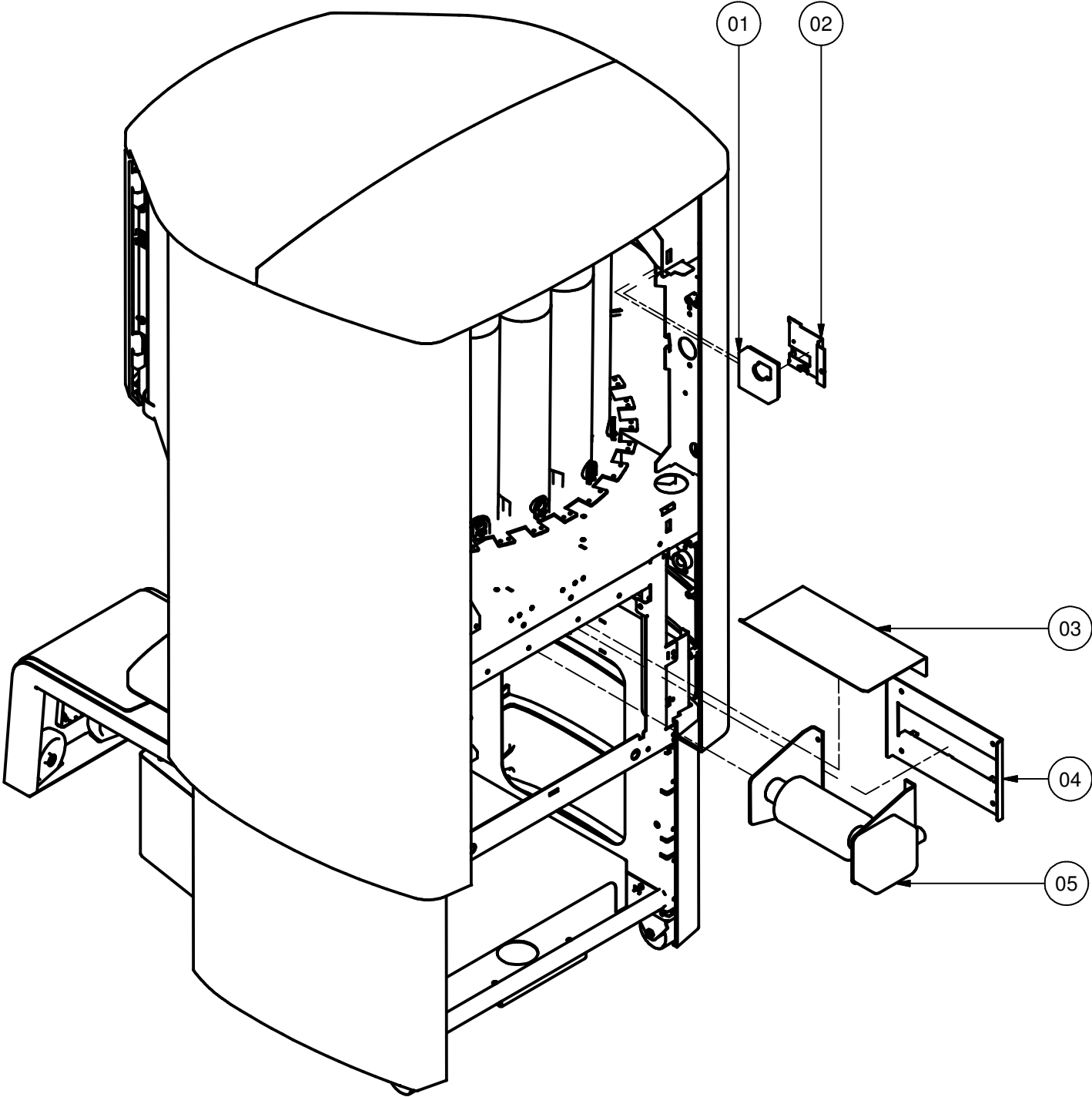


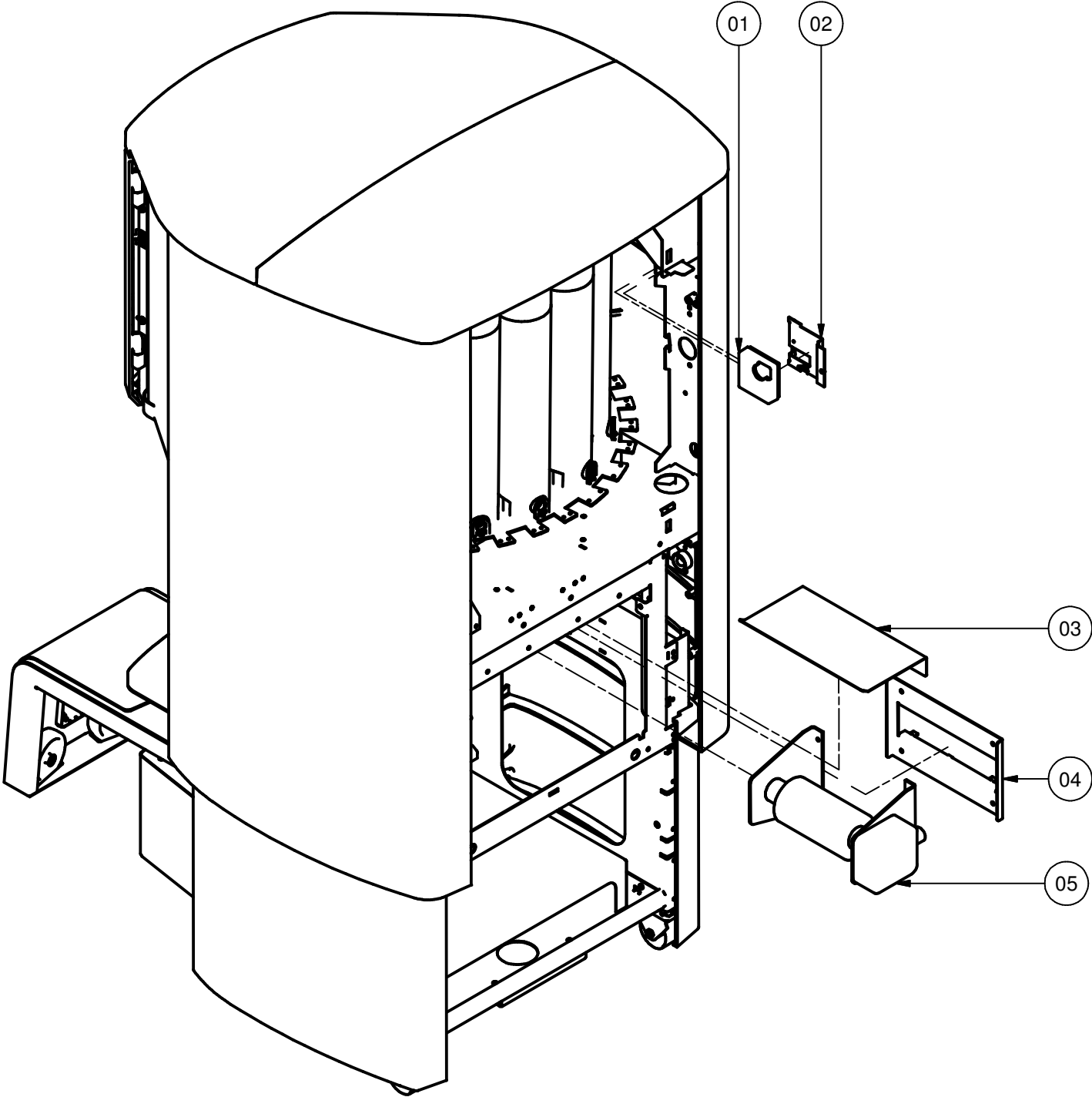
PARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARK	QTY
1	1802378 - SP	Cover,POM,5/6l can,HA-s/m/l		1
3	1860110-SP	Pin,spirol,f2.5x12,Sst,25pcs.		1
5	1807682 - SP	Agitator,POM,5.9L,POM,can,HA		1
6	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
7	1815731 - SP	Fitting,turning,HA450		1
8	1809909-SP	Spring,tube,can/pump,set,10pcs		1
9,10	1816106-SP	cap,bottom,sst can with screws		1

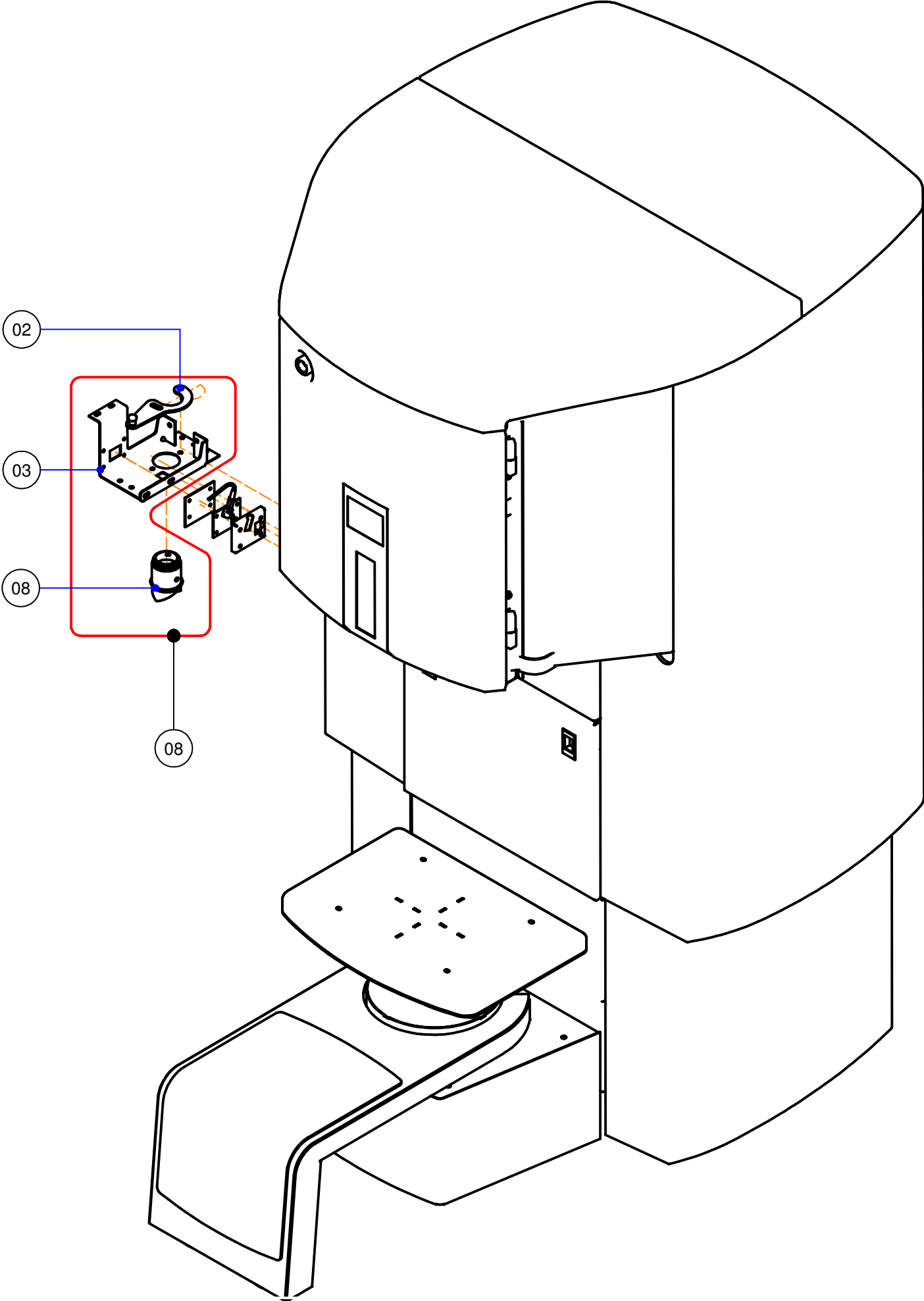
5769 Canister SSSt turn 3L (option)



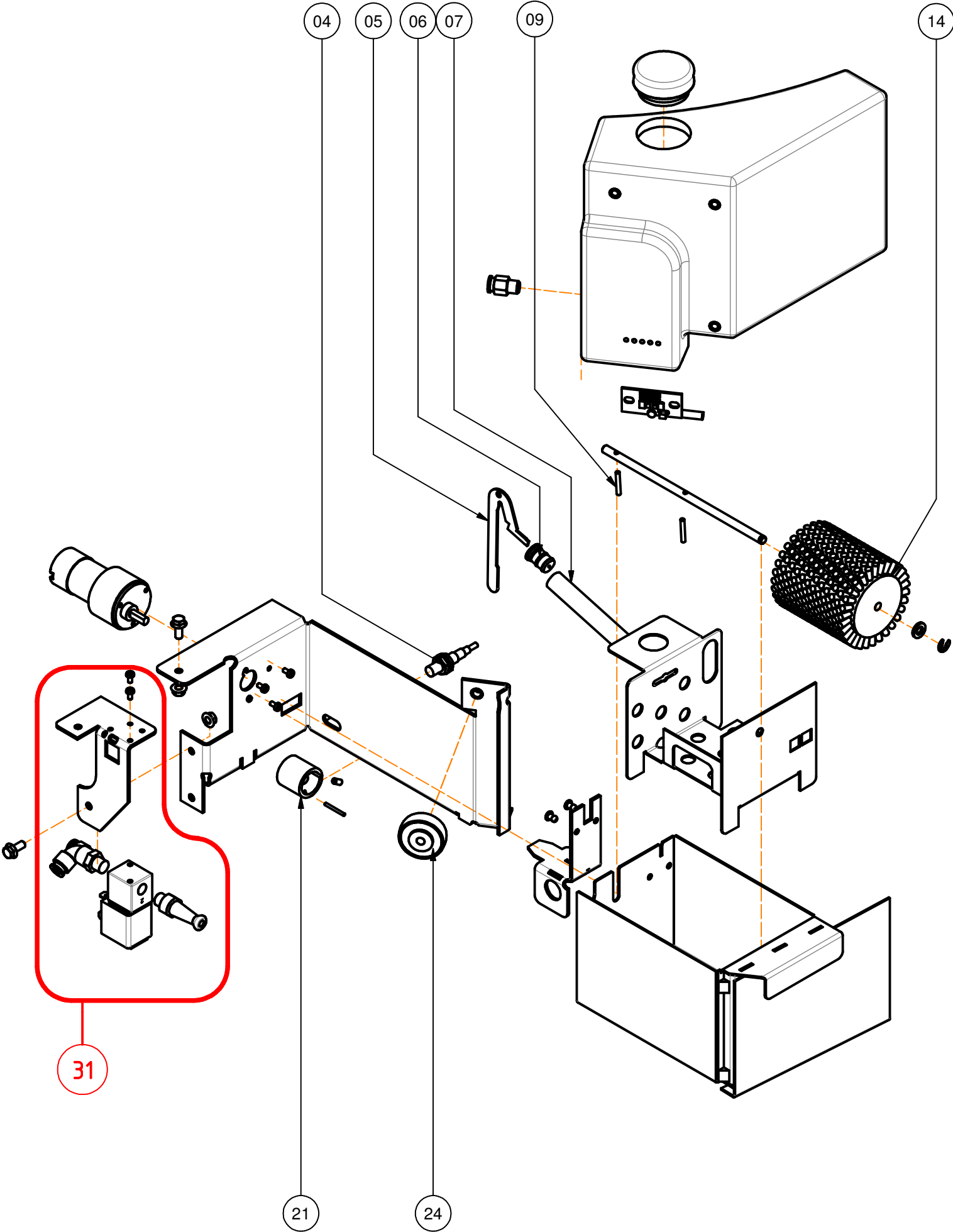
PARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARK	QTY
1	1802146-SP	Cover,POM,can,2,5-3L		1
3	1860110-SP	Pin,spirof,f2.5x12,Sst,25pcs.		1
5	1805622-SP	Agitator(POM),3L can.,HA-m/l		1
6	1362230-SP	O-ring,can,vit,15.88x2.62 10st		2
7	1809909-SP	Spring,tube,can/pump,set,10pcs		1
8	1815731 - SP	Fitting,turning,HA450		1
9, 10	1816106-SP	cap,bottom,sst can with screws		1



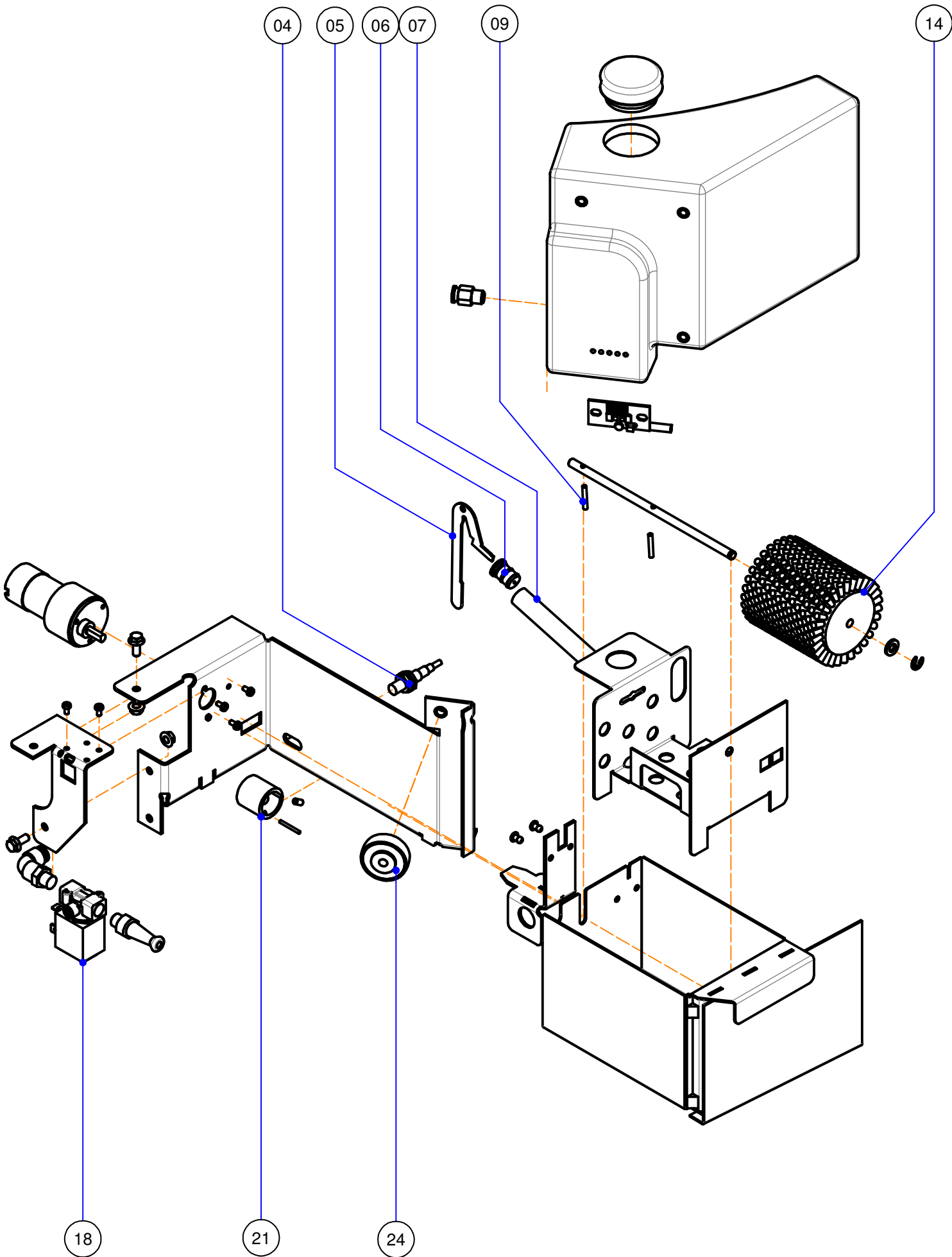




Spare Parts list				
ITEM	PARTNUMBER	DESCRIPTION	REMARKS	QTY
08	1814896-SP	Blade,punch,46mm,HA450,2pcs		1
08	1864277-SP	Complete punch set		1

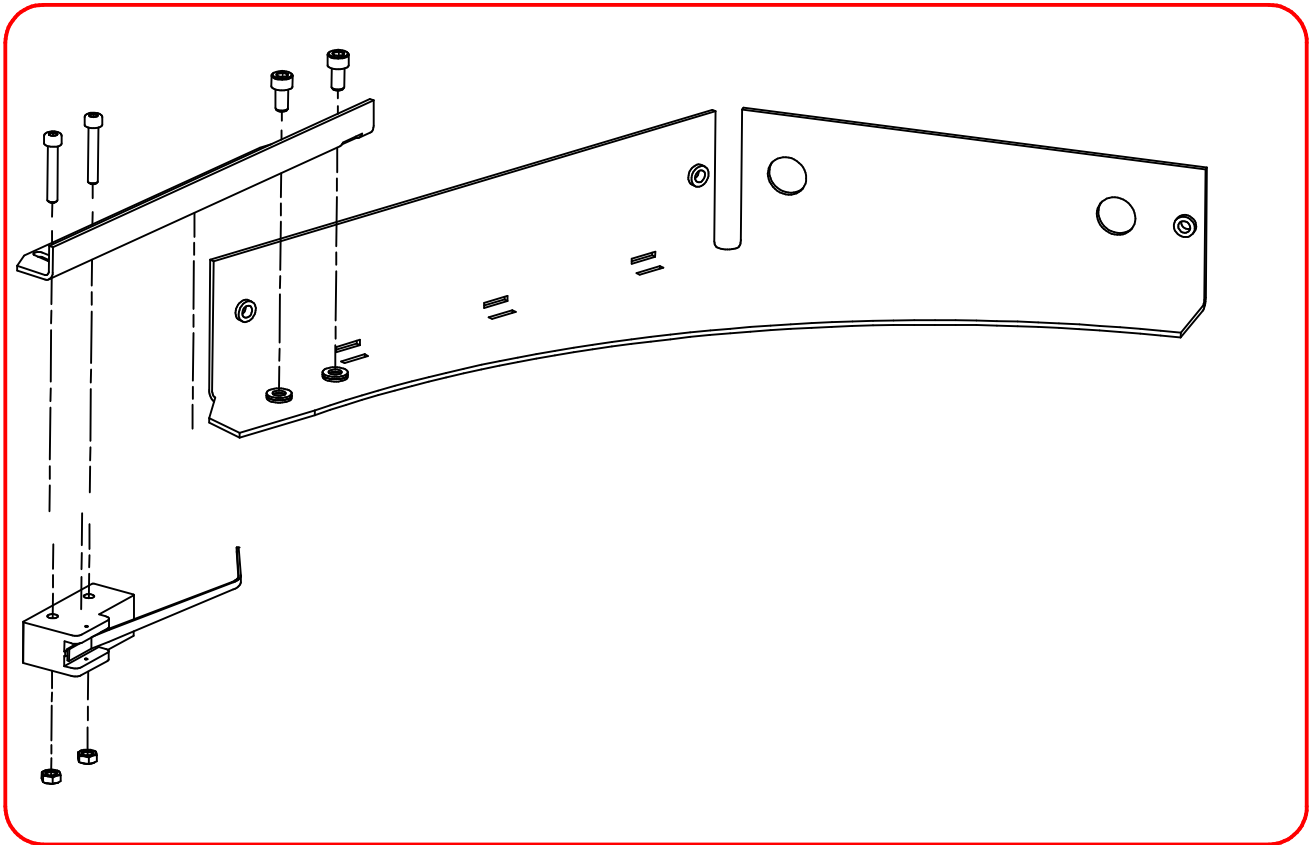


Parts list				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
04	1864020-SP	sensor2/4/8,HA450		1
05	1815200-SP	Float,sensor,brush	Position 5+6+7	1
09	4000063-SP	Pin,spirol,1/8"x3/4"set,100pcs		2
14	1814029-SP	Brush,HA450		1
21	1801842-SP	Fork,container,brush		1
24	1862422-SP	Wheel,traversing,centric,35mm		1
31	1814983-SP	Kit, valve, brush-unit		1



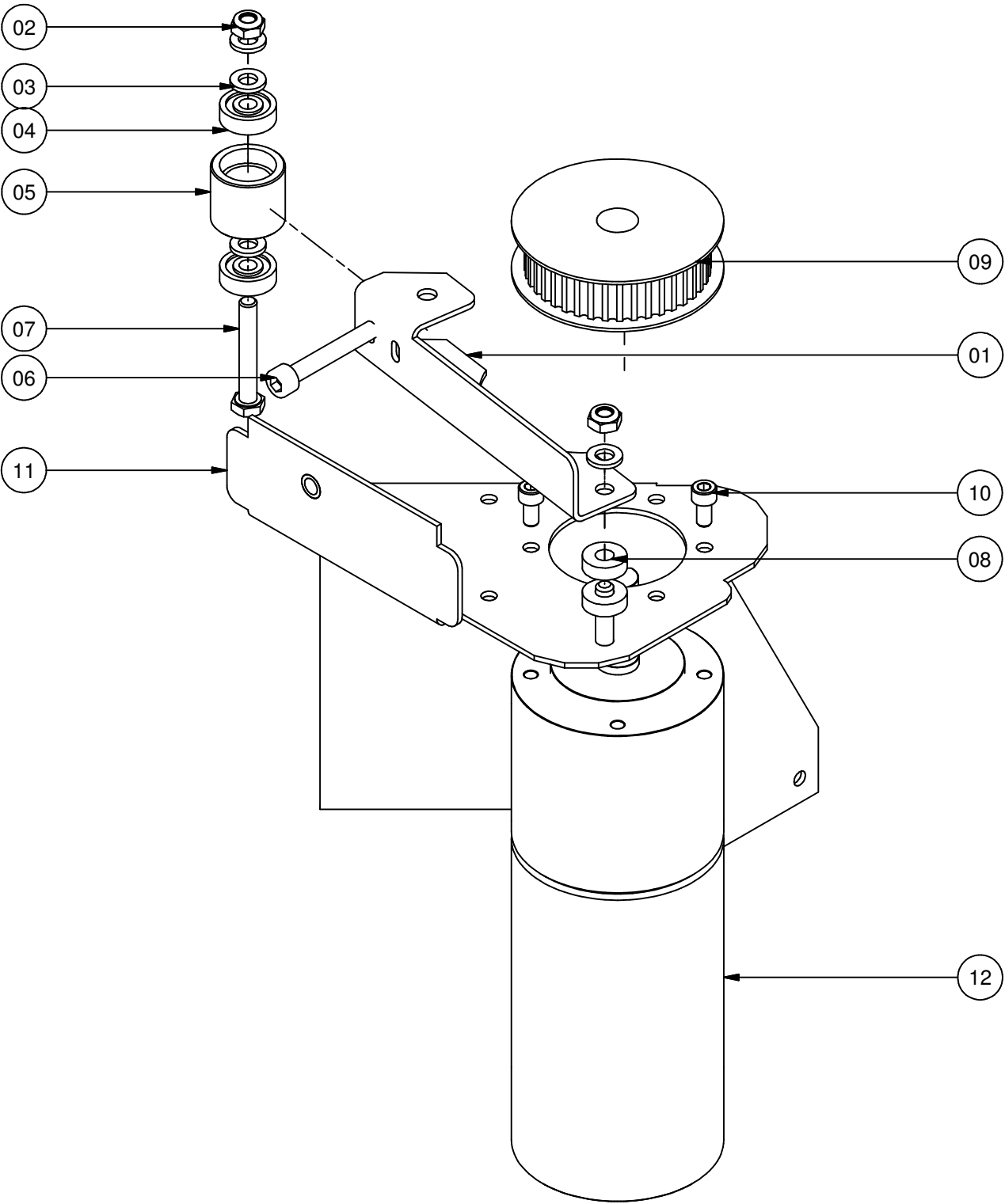
Parts list				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
04	1864020-SP	sensor2/4/8,HA450		1
05	1815200-SP	Float,sensor,brush	Position 5+6+7	1
09	4000063-SP	Pin,spirol,1/8"x3/4"set,100pcs		2
14	1814029-SP	Brush,HA450		1
18	1814160-SP	Valve,fluid,brush-unit		1
21	1801842-SP	Fork,container,brush		1
24	1862422-SP	Wheel,traversing,centric,35mm		1

5775



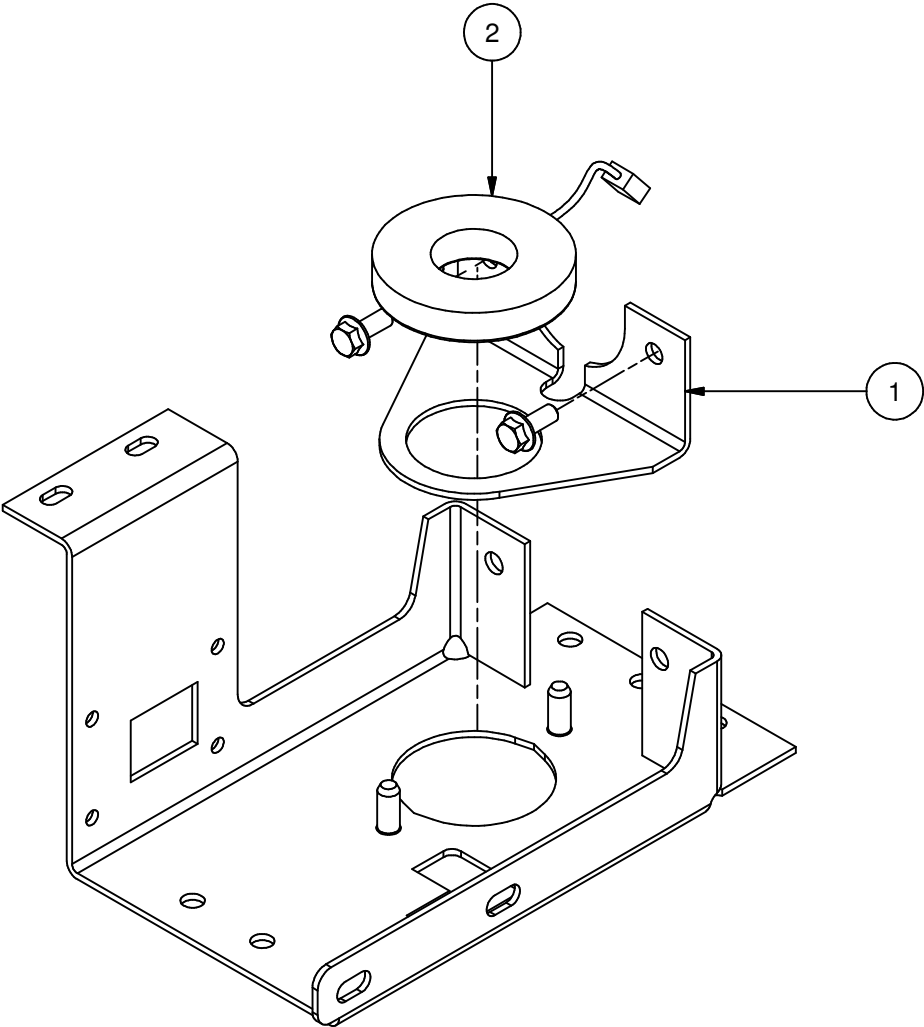
SPAREPARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
	1864500-SP	Piston detector HA450		1

5776



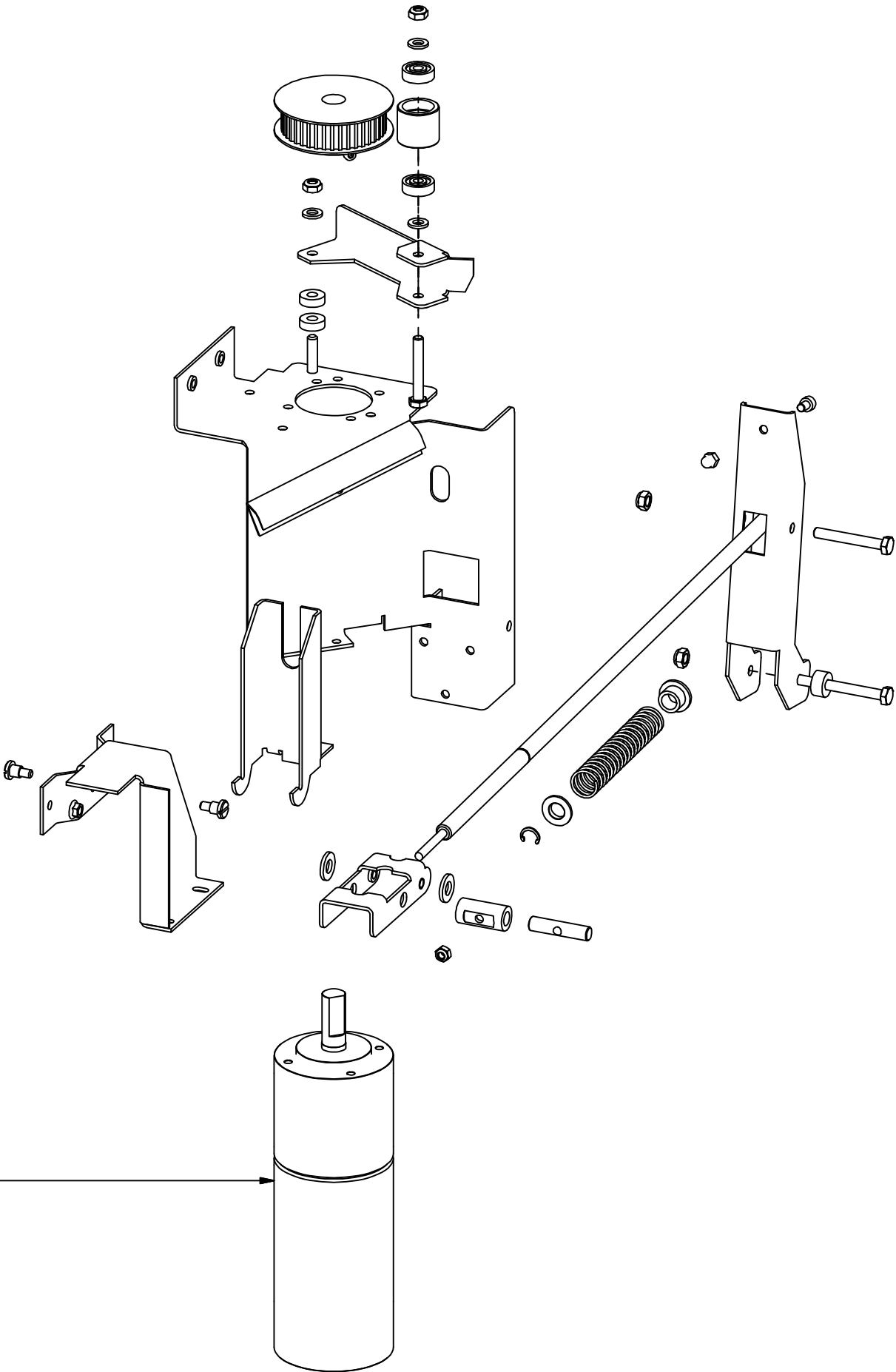
SPARE PARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
12	1861940-SP	Motor,80.805.0,24 V,i=49		1

5777



SPAREPARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARKS	QTY
1+2	1864262-SP	LED,can.pos,HA450		1

5780 spanner mechanism (option)



PARTS LIST				
ITEM	PART NUMBER	DESCRIPTION	REMARK	QTY
13	1861940-SP	Motor,80.805.0,24V,i=49		1