

# SPARE PARTS BOOK

## HA480



v. 04-04-2022

INDEX

**Panels .....7200**

Top frame parts ..... 7201

Top panel..... 7202

Door panel..... 7203

Back panel ..... 7204

Operator display ..... 1818275-SP ..... 7205 -A

Operator display ..... 1820239-SP ..... 7205 -B

**Frame.....7210**

Can table ..... 7213-A

Can table ..... 7213-B

**Mechanica.....7220**

Gripper, spindle ..... 7221-A

Gripper, spindle ..... 7221-B

Valve motor unit..... 7222

Emergency switch..... 7223

**Sub frame.....7230**

Brush ..... 7231-A

Brush ..... 7231-B

Table drive motor unit..... 7232-A

Table drive motor unit..... 7232-B

Mid beam ..... 7233

Power module ..... 1818222-SP ..... 7234-A

Power module UL HAxX ..... 1820083-SP ..... 7234-B

Power module HAxX..... 1820013-SP ..... 7234-C

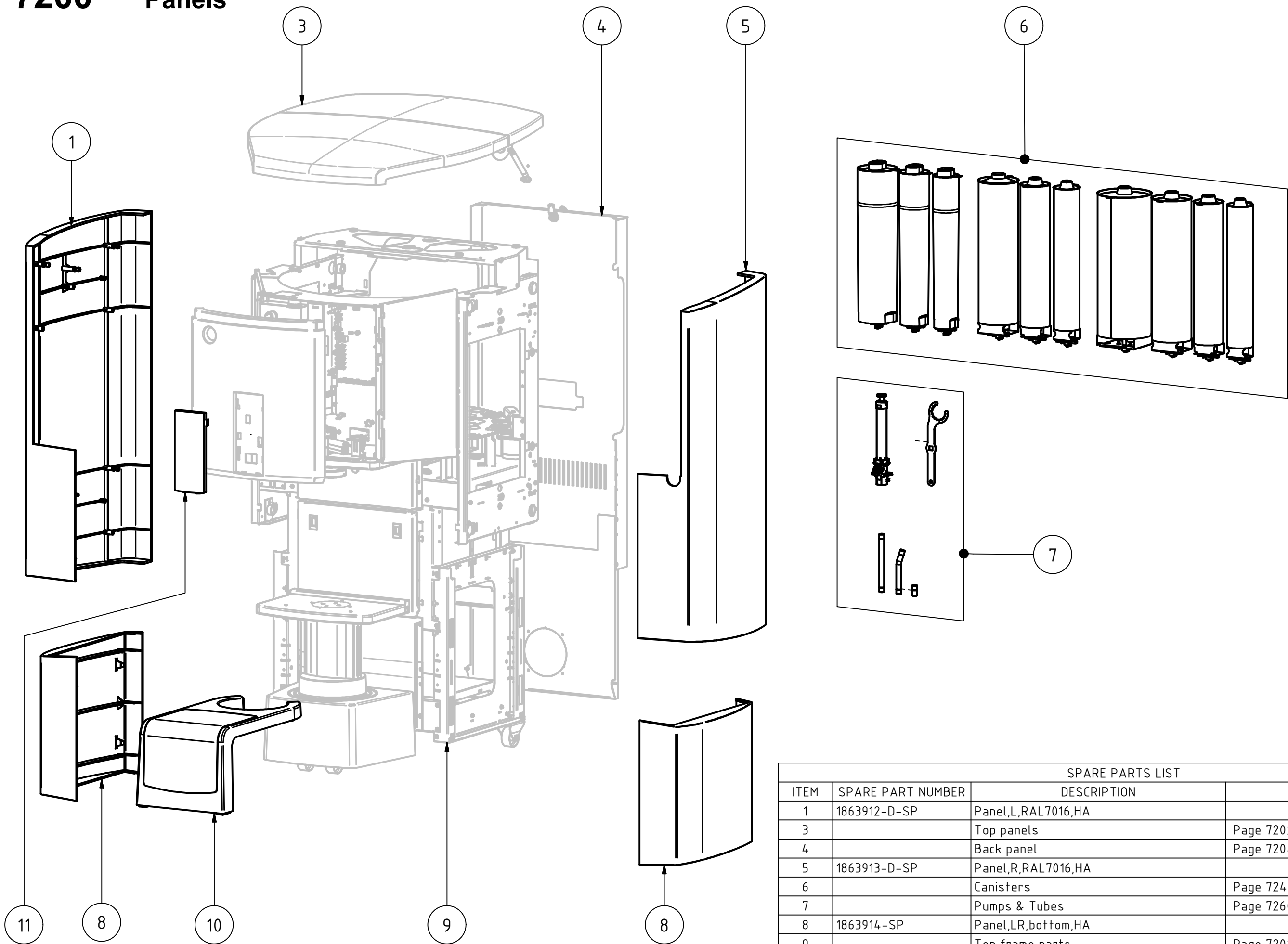
Power module UL HAxX ..... 1820083-SP ..... 7234-D

Canister plates ..... 7235

|                                                              |                 |
|--------------------------------------------------------------|-----------------|
| <b>Canisters .....</b>                                       | <b>7240</b>     |
| 2L,SST can,1ex,SST agit.....1814147-SP .....                 | 7241            |
| 3L,SST can,1ex,SST agit.....1863215-SP .....                 | 7242            |
| 6L,SST can,1ex,SST agit.....1863216-SP .....                 | 7243            |
| 10L,SST can,1ex,SST agit.....1810599-SP .....                | 7244            |
| 2L,SST can,1ex,POM agit .....1814988-SP.....                 | 7245            |
| 3L,SST can,1ex,POM agit .....1809888-SP.....                 | 7246            |
| 6L,SST can,1ex,POM agit .....1810596-SP.....                 | 7247            |
| 2L,POM can,1ex,POM agit.....1865010-SP .....                 | 7248            |
| 3L,POM can,1ex,POM agit.....1865011-SP .....                 | 7249            |
| 6L,POM can,1ex,POM agit.....1865012-SP .....                 | 7250            |
| <br><b>Pumps and tubes.....</b>                              | <br><b>7260</b> |
| Pump,ballvalve,100ml .....1818238-SP .....                   | 7261            |
| Pump,ballvalve, 55ml, Sample .....1818612-SP .....           | 7263            |
| Pump,ballvalve, 100ml hybrid .....1830356-SP .....           | 7264            |
| Pump,ballvalve, 100ml high performance .....1820345-SP ..... | 7265            |
| Pump,ballvalve, 29ml, Sample .....1819671-SP .....           | 7266            |
| <br>Punch.....                                               | <br>7271-B      |
| <br>Heating module.....1865765 .....                         | <br>7275        |
| <br><b>Sample brush .....</b>                                | <br><b>7277</b> |
| Sample brush container.....                                  | 7278            |
| Sample brush float.....                                      | 7279            |
| <br>Can Positioning Light .....                              | <br>7280        |
| Sample bearing plate, valve motor .....                      | 7281            |

7200

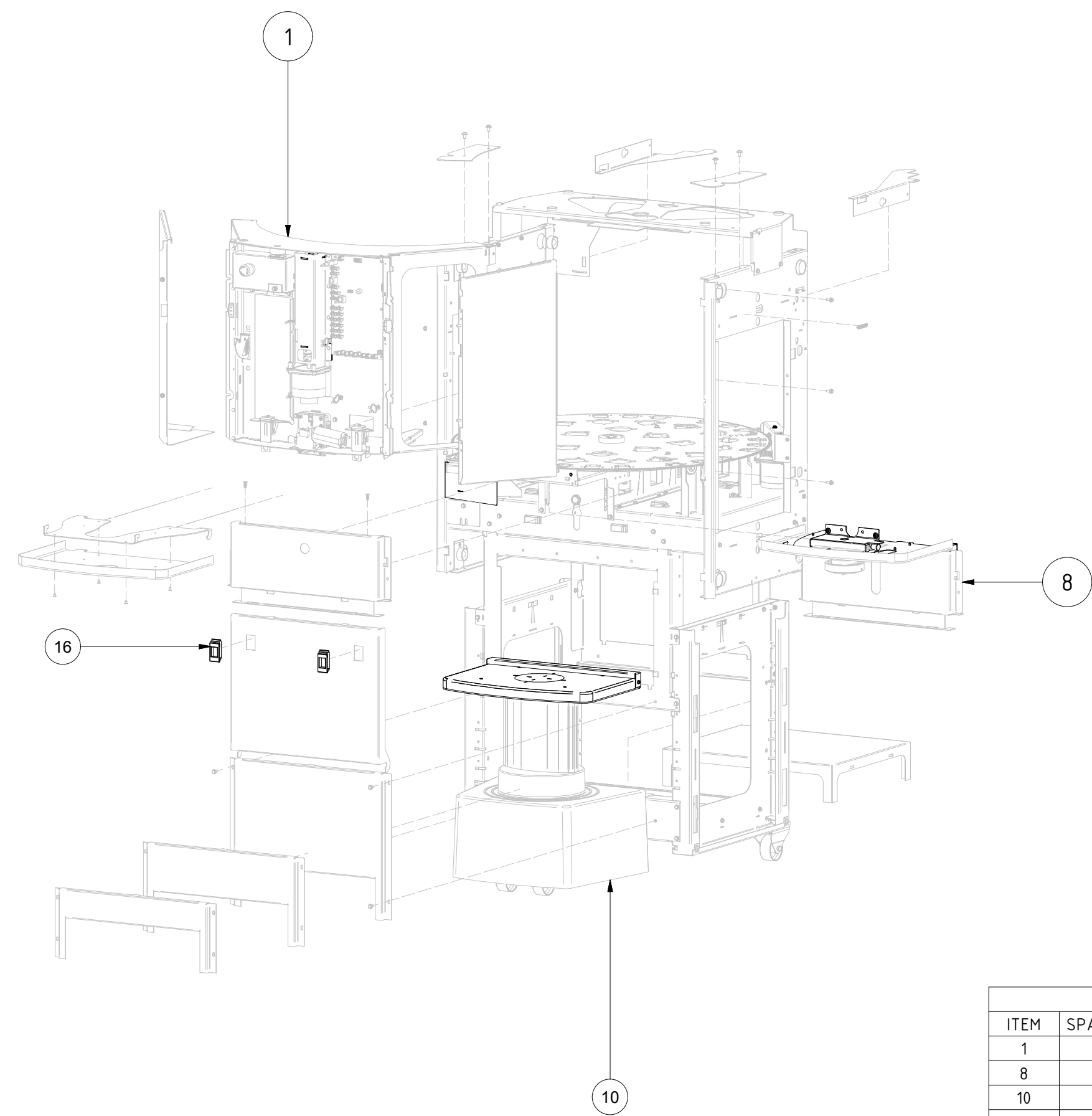
Panels



| SPARE PARTS LIST |                   |                           |           |
|------------------|-------------------|---------------------------|-----------|
| ITEM             | SPARE PART NUMBER | DESCRIPTION               | REMARKS   |
| 1                | 1863912-D-SP      | Panel,L,RAL7016,HA        |           |
| 3                |                   | Top panels                | Page 7202 |
| 4                |                   | Back panel                | Page 7204 |
| 5                | 1863913-D-SP      | Panel,R,RAL7016,HA        |           |
| 6                |                   | Canisters                 | Page 7240 |
| 7                |                   | Pumps & Tubes             | Page 7260 |
| 8                | 1863914-SP        | Panel,L,R,bottom,HA       |           |
| 9                |                   | Top frame parts           | Page 7201 |
| 10               | 1864480-SP        | Step,HA                   |           |
| 11               | 1818275-SP        | Operator display complete | Page 7205 |

7201

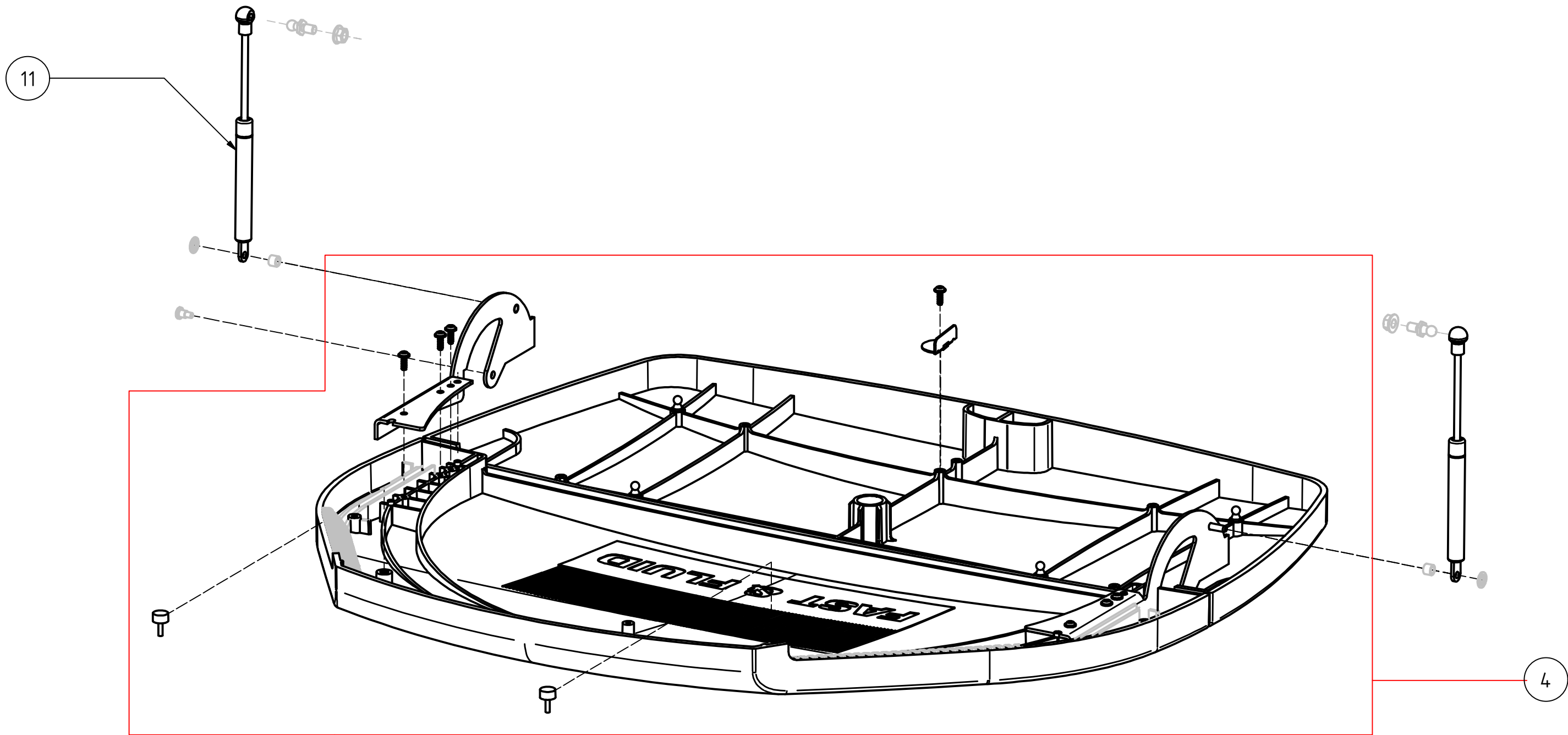
Top frame parts



| PARTS LIST |                   |                           |             |
|------------|-------------------|---------------------------|-------------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION               | REMARKS     |
| 1          |                   | Mechanica                 | Page 7220   |
| 8          |                   | Punch                     | Page 7271-B |
| 10         |                   | Frame                     | Page 7210   |
| 16         | 1862332-SP        | Latch,slide,40-525, 2 pcs |             |

7202

Top panel

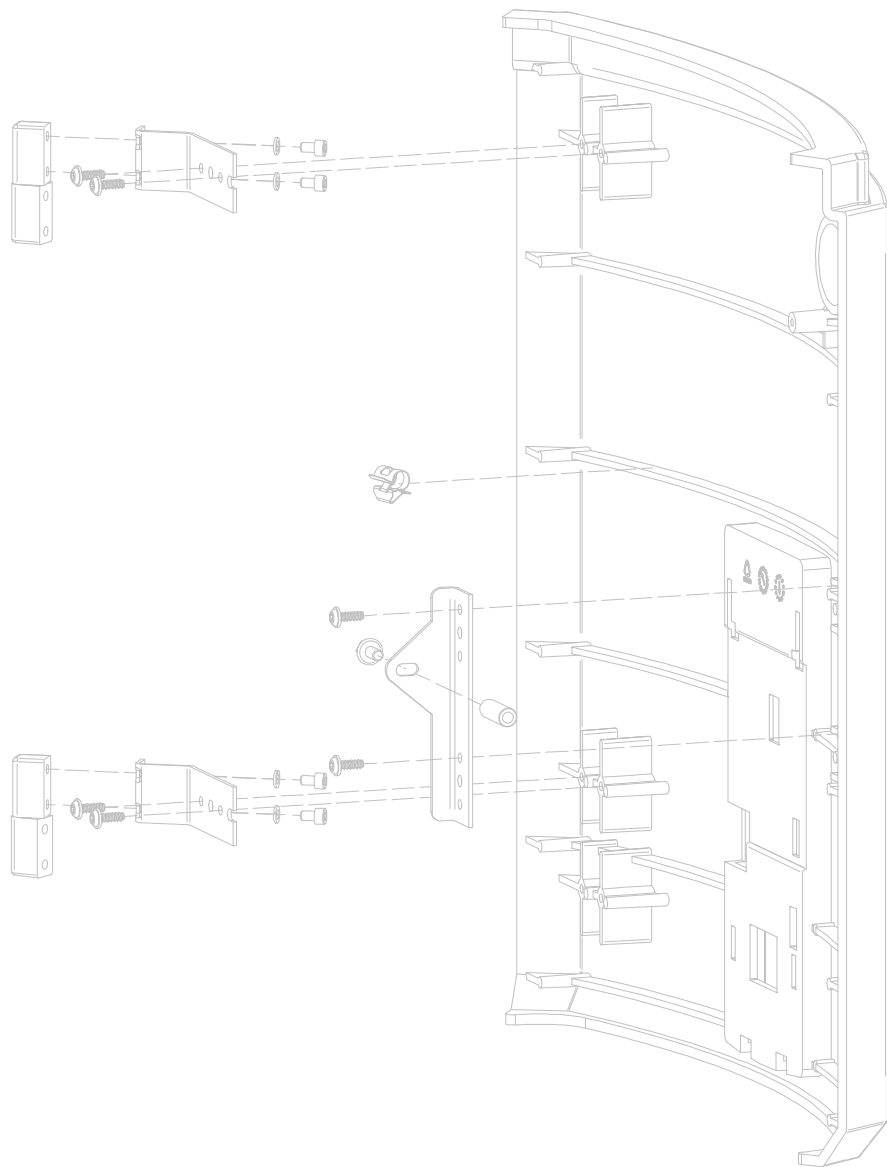


| SPARE PARTS LIST |                   |                             |         |
|------------------|-------------------|-----------------------------|---------|
| ITEM             | SPARE PART NUMBER | DESCRIPTION                 | REMARKS |
| 4                | 1865611-SP        | Top cover set, RAL7016      |         |
| 11               | 1814.025-SP       | Gas-spring,50N,084.9RX,2pcs |         |



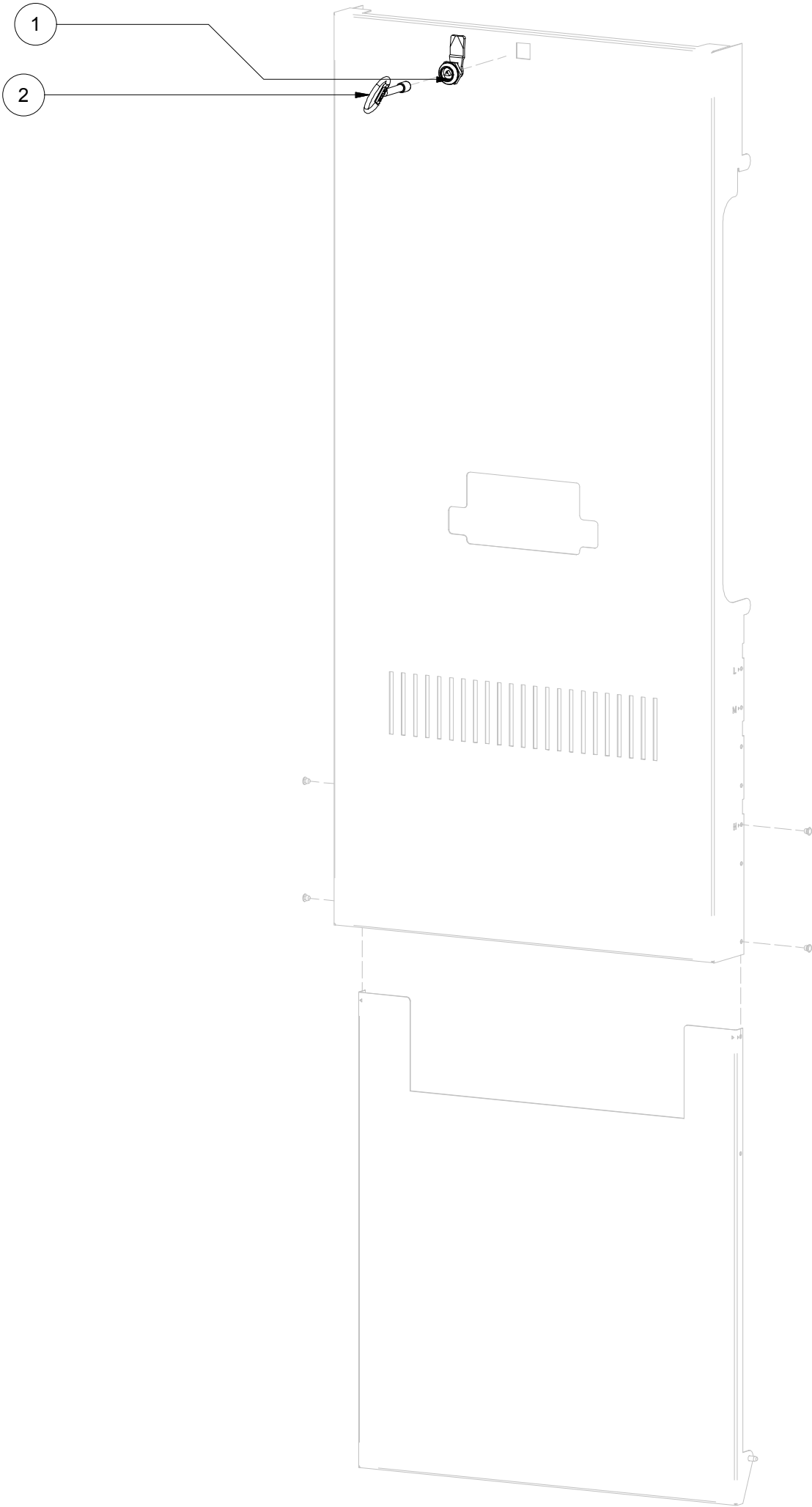
7203

Door panel



| PARTS LIST |                   |             |         |
|------------|-------------------|-------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION | REMARKS |

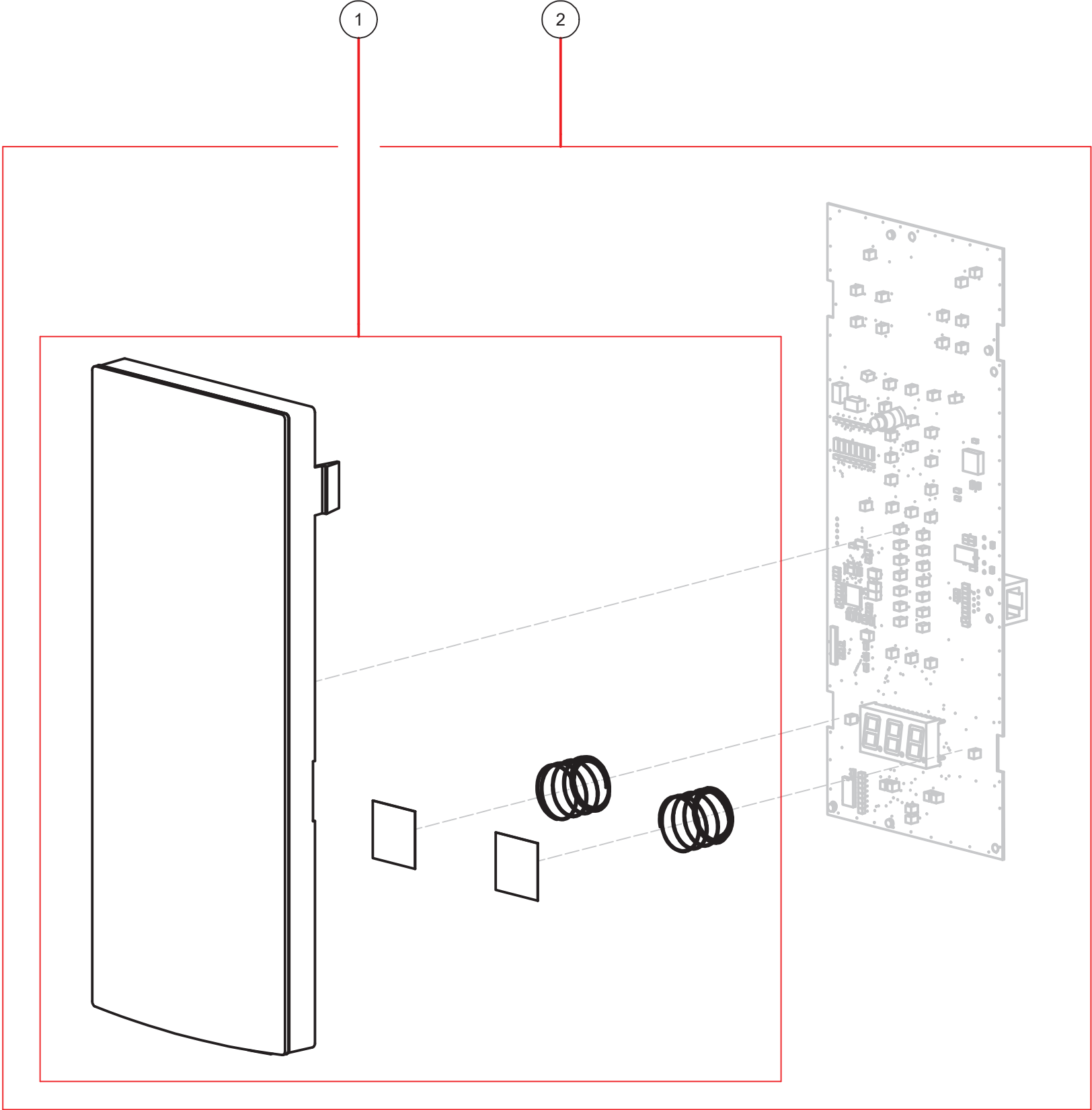
Back panel



| PARTS LIST |                   |                 |         |
|------------|-------------------|-----------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION     | REMARKS |
| 1          | 1862860-SP        | Quad,panel,latc |         |
| 2          | 1111010-SP        | Key,triangle    |         |

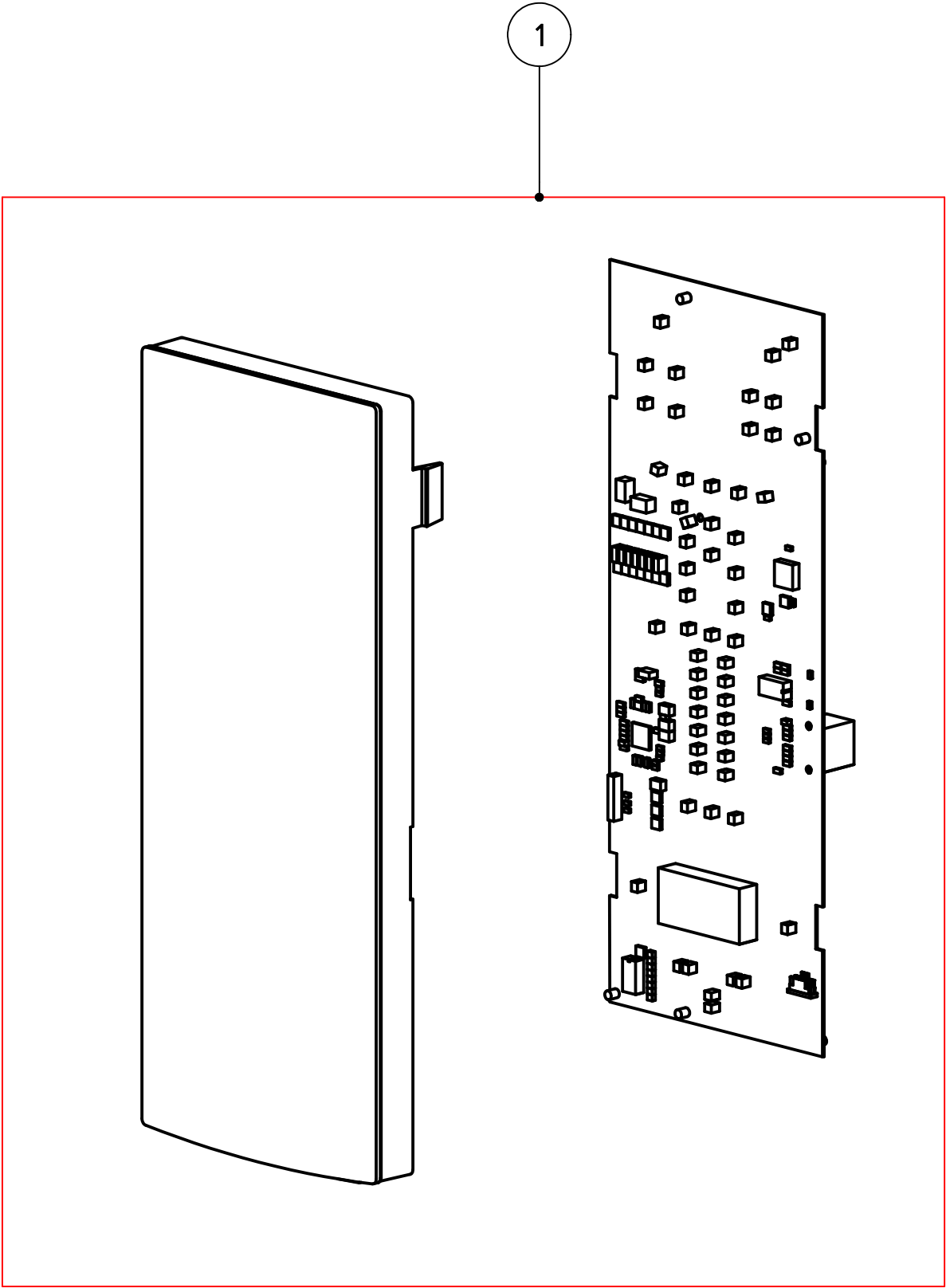


7205-A Operator display 1818275 -SP



| PARTS LIST |                   |                              |         |
|------------|-------------------|------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                  | REMARKS |
| 1          | 1818272-SP        | Operator,display with spacer |         |
| 2          | 1818275-SP        | Operator display complete    |         |

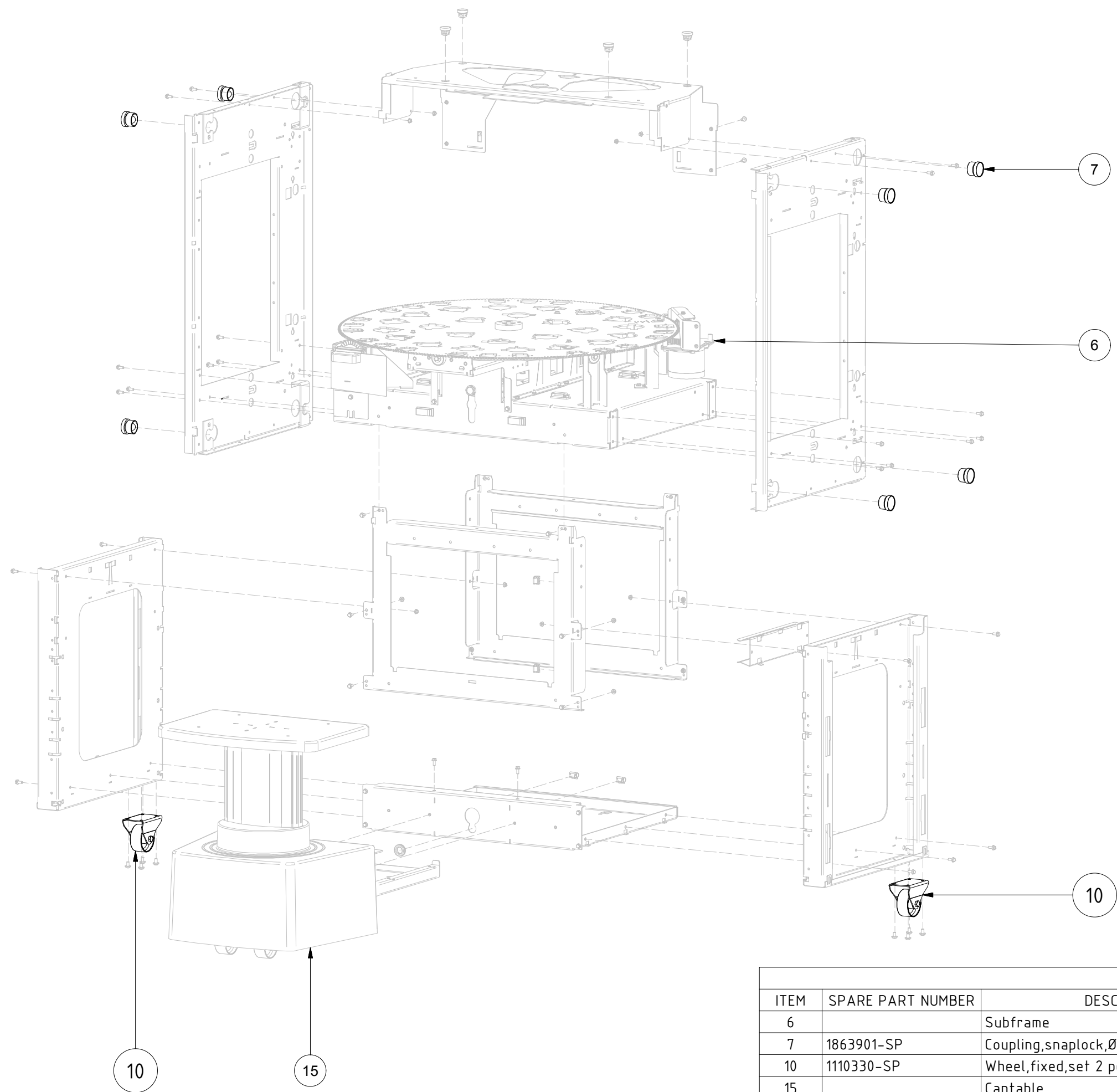
7205-B Operator display 1820239-SP



| PARTS LIST |             |                            |         |     |
|------------|-------------|----------------------------|---------|-----|
| ITEM       | PART NUMBER | DESCRIPTION                | REMARKS | QTY |
| 1          | 1820239-SP  | Operator,Display,Module,V2 |         | 1   |

7210

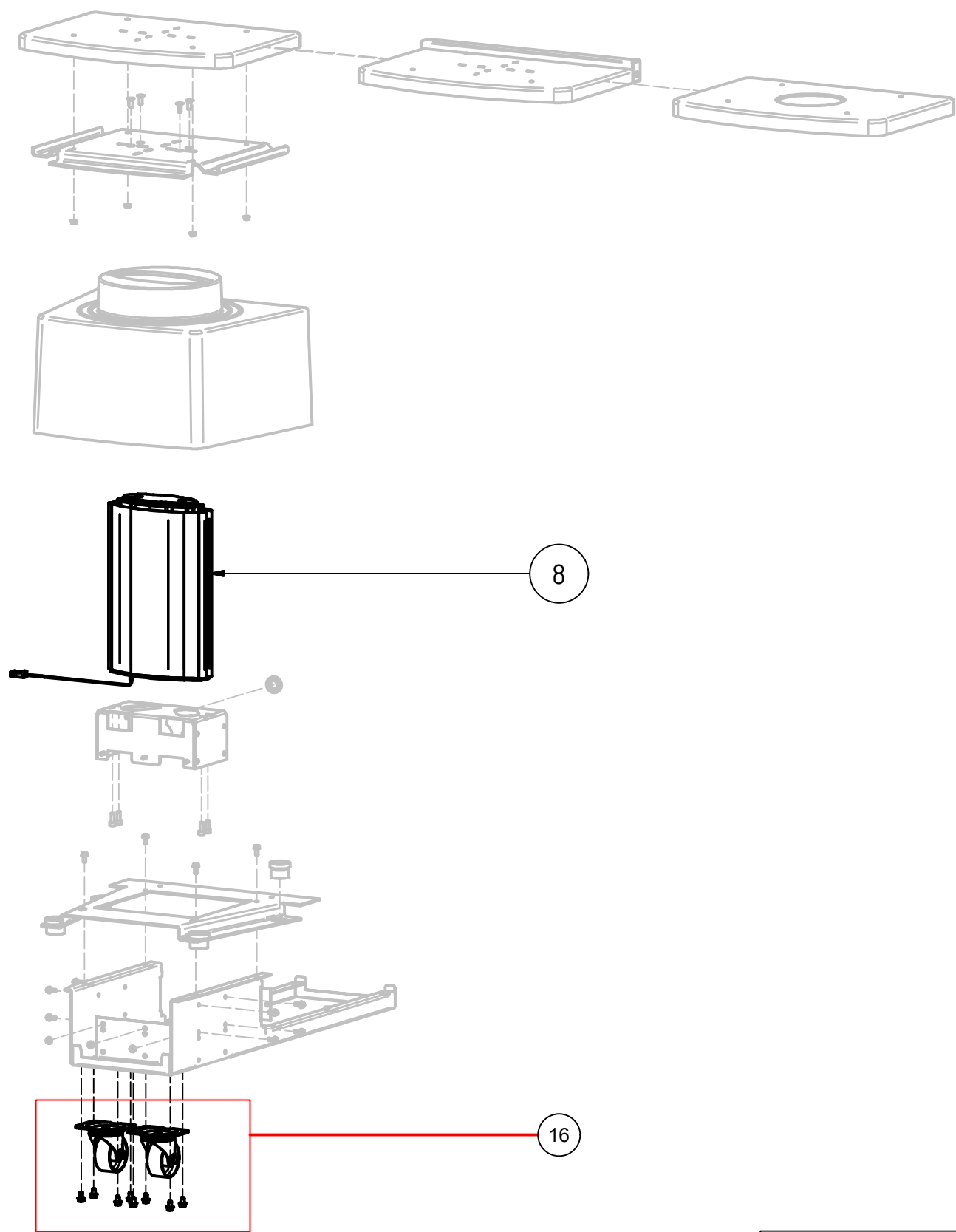
Frame



| PARTS LIST |                   |                                |           |
|------------|-------------------|--------------------------------|-----------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS   |
| 6          |                   | Subframe                       | Page 7230 |
| 7          | 1863901-SP        | Coupling,snaplock,Ø15,black,4x |           |
| 10         | 1110330-SP        | Wheel,fixed,set 2 pcs          |           |
| 15         |                   | Cantable                       | Page 7213 |

7213-A Can table

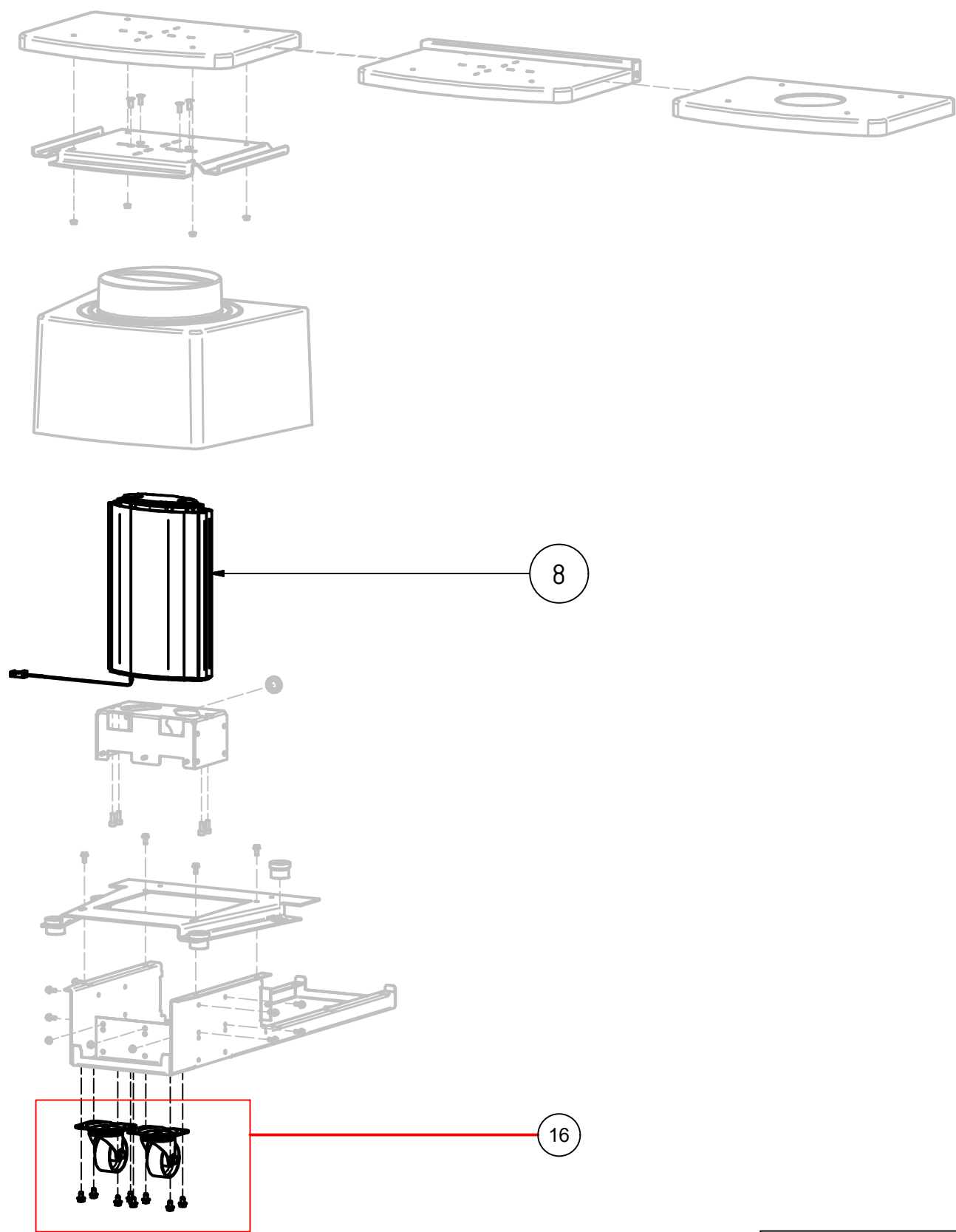
Up to W13, 2018, S.N. 1049071



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 8          | 1862015-SP        | Actuator, cantable + screws,8x |         |
| 16         | 1110340-SP        | Wheel,swiveling,set 4 pcs      |         |

7213-B Can table

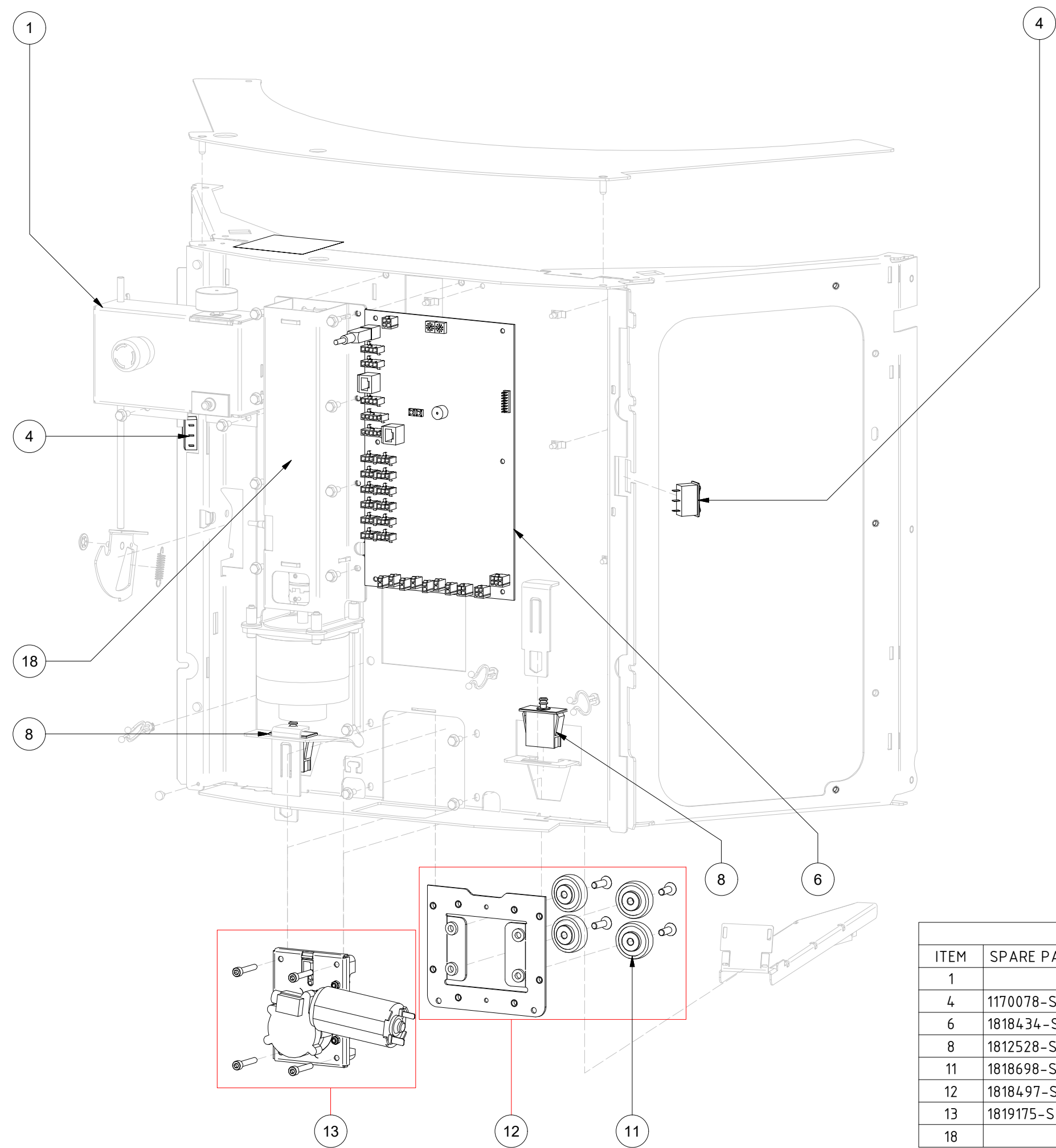
From W13, 2018, S.N. 1049072



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 8          | 1865600-SP        | Actuator, cantable + screws,8x |         |
| 16         | 1110340-SP        | Wheel,swiveling,set 4 pcs      |         |

7220

Mechanica



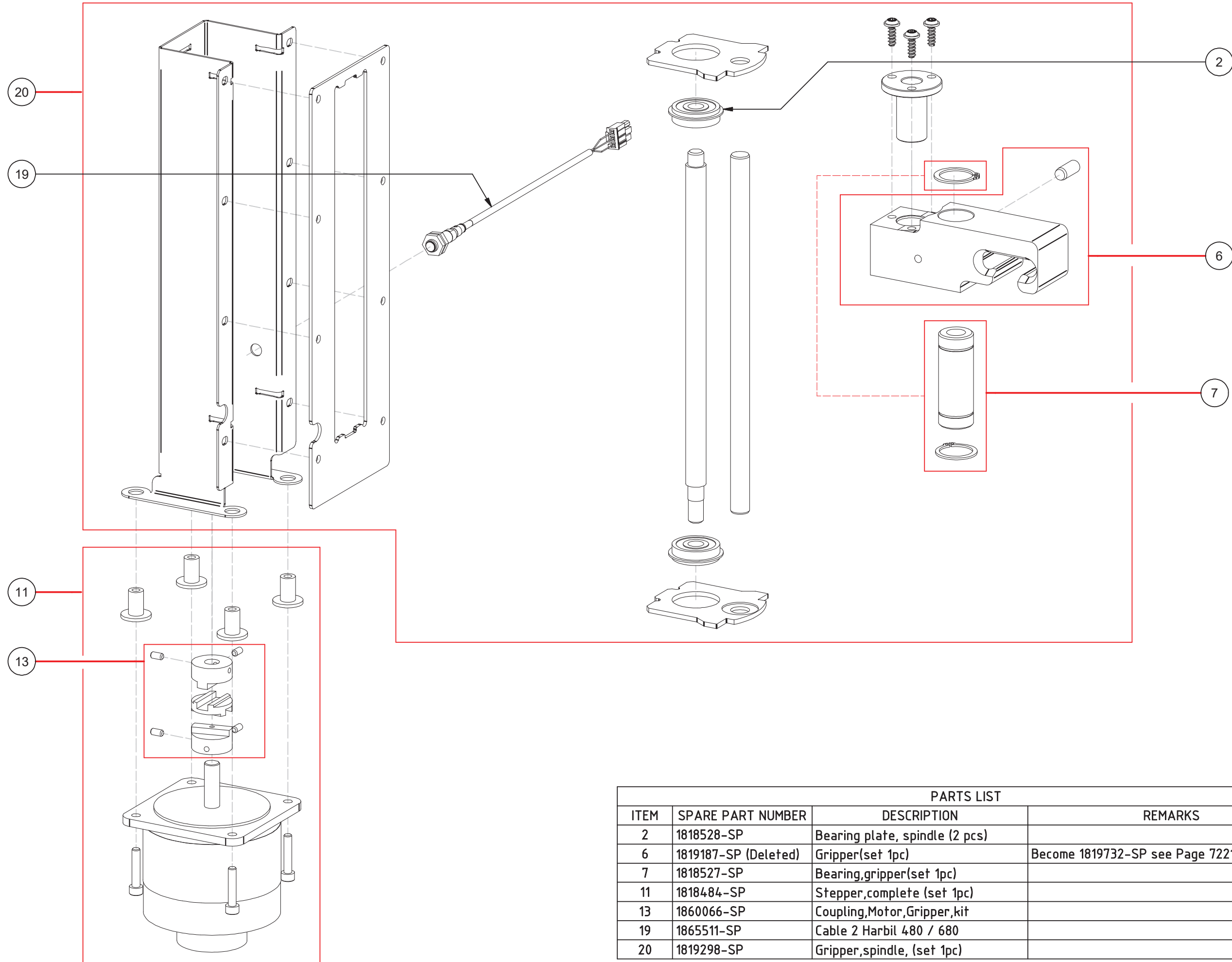
| PARTS LIST |                   |                                 |                                          |
|------------|-------------------|---------------------------------|------------------------------------------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                     | REMARKS                                  |
| 1          |                   | Emergency switch                | Page 7223                                |
| 4          | 1170078-SP        | Switch,up/down,single,6A,250V   | Part of cable harness 1865743            |
| 6          | 1818434-SP        | Controlboard,v5                 |                                          |
| 8          | 1812528-SP        | Switch,D2D 1100                 | Part of cable harness 1865743            |
| 11         | 1818698-SP        | Wheel,asymmetric,35mm(set 4pcs) |                                          |
| 12         | 1818497-SP        | Bearings,turntable(set 1pc)     | For special sample bracket see Page 7281 |
| 13         | 1819175-SP        | Valve unit compl.NGH(set 1pc)   | Page 7222                                |
| 18         |                   | Gripper,spindle                 | Page 7221                                |



7221-A

Gripper,spindle

From W5 2018,S.N.1042982 up to W26 2018,S.N.1055332

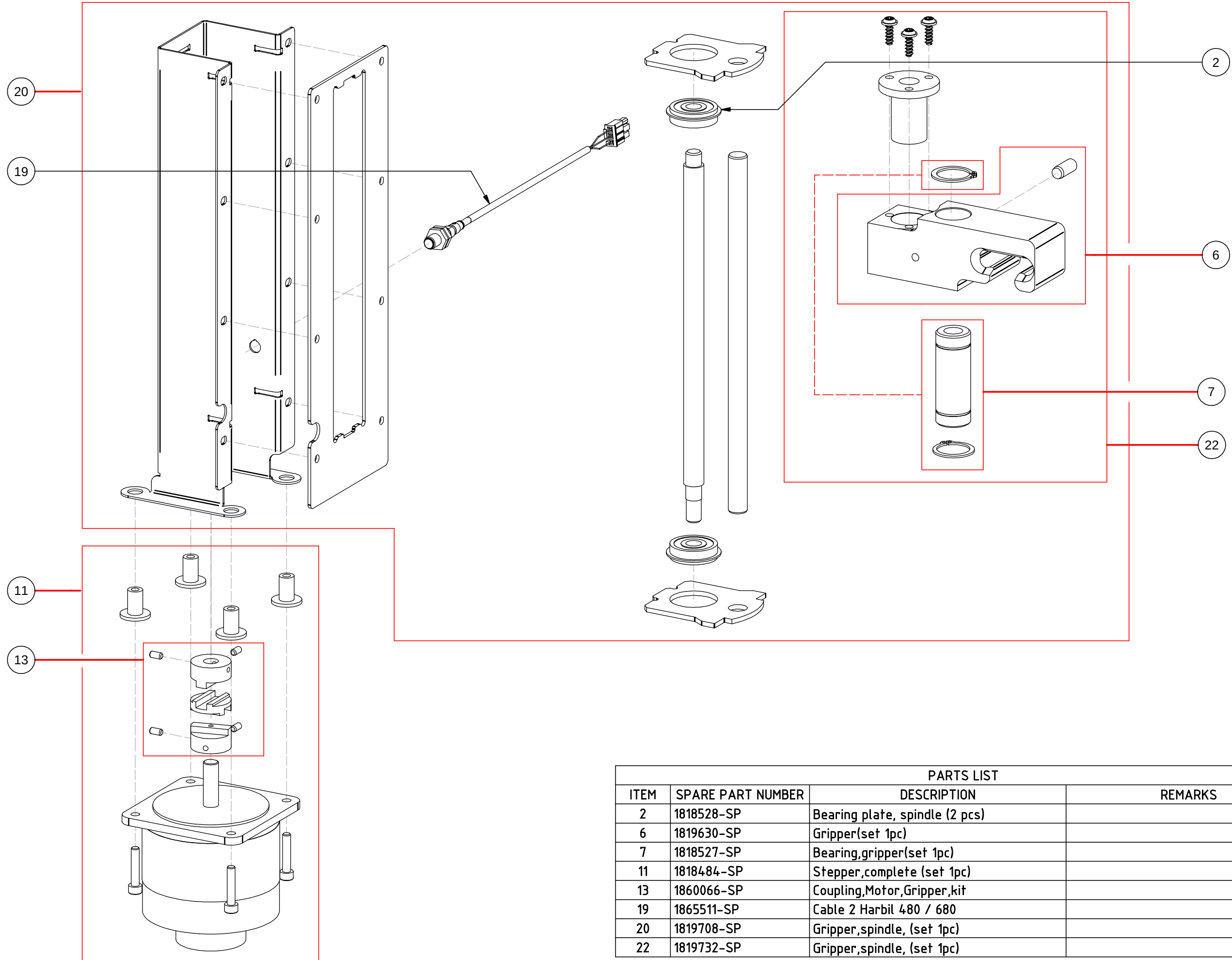


| PARTS LIST |                      |                                |                                          |
|------------|----------------------|--------------------------------|------------------------------------------|
| ITEM       | SPARE PART NUMBER    | DESCRIPTION                    | REMARKS                                  |
| 2          | 1818528-SP           | Bearing plate, spindle (2 pcs) |                                          |
| 6          | 1819187-SP (Deleted) | Gripper(set 1pc)               | Become 1819732-SP see Page 7221-B pos 22 |
| 7          | 1818527-SP           | Bearing,gripper(set 1pc)       |                                          |
| 11         | 1818484-SP           | Stepper,complete (set 1pc)     |                                          |
| 13         | 1860066-SP           | Coupling,Motor,Gripper,kit     |                                          |
| 19         | 1865511-SP           | Cable 2 Harbil 480 / 680       |                                          |
| 20         | 1819298-SP           | Gripper,spindle, (set 1pc)     |                                          |

7221-B

Gripper,spindle

From W26 2018,S.N.1055333

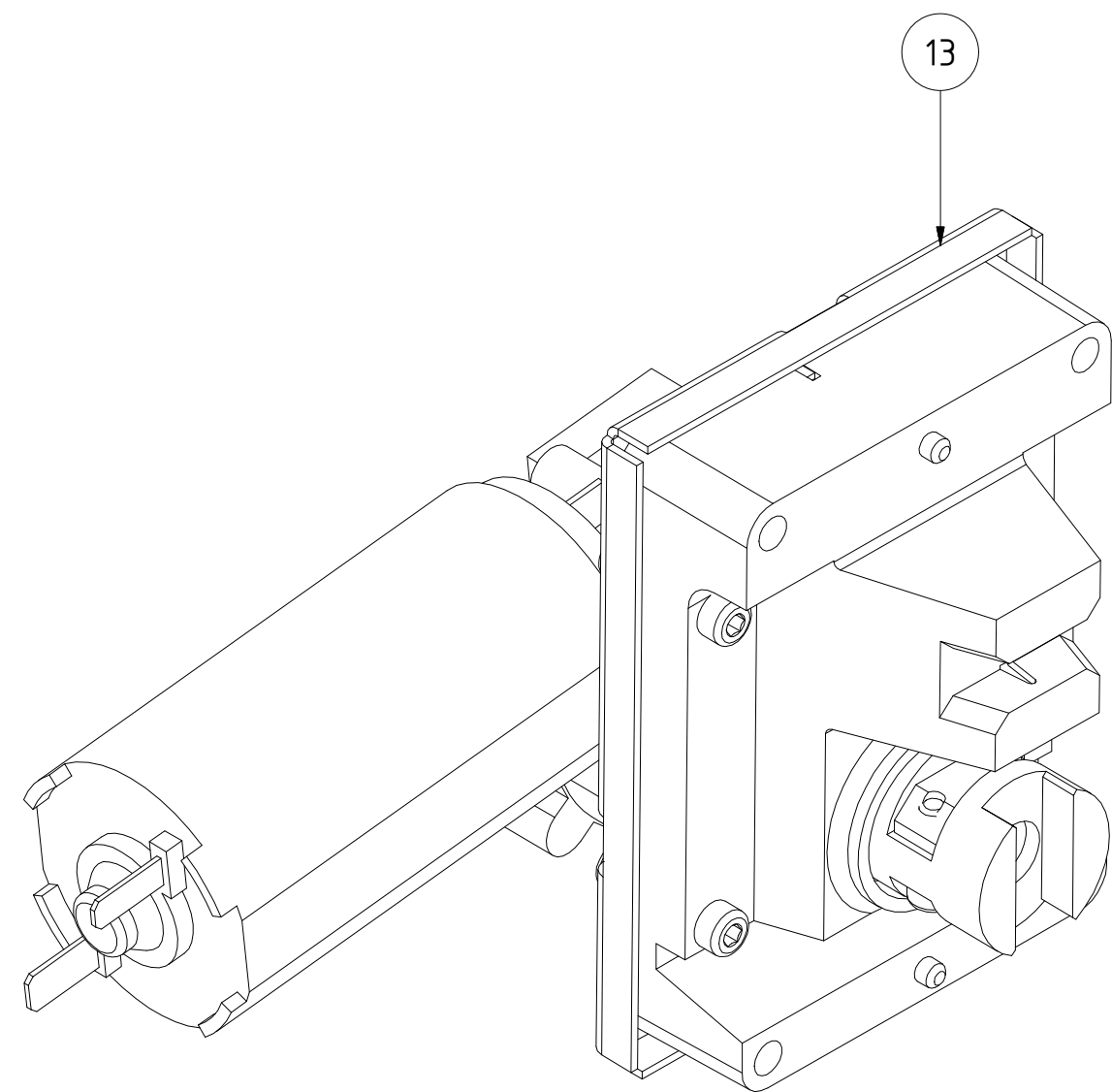


| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 2          | 1818528-SP        | Bearing plate, spindle (2 pcs) |         |
| 6          | 1819630-SP        | Gripper(set 1pc)               |         |
| 7          | 1818527-SP        | Bearing,gripper(set 1pc)       |         |
| 11         | 1818484-SP        | Stepper,complete (set 1pc)     |         |
| 13         | 1860066-SP        | Coupling,Motor,Gripper,kit     |         |
| 19         | 1865511-SP        | Cable 2 Harbil 480 / 680       |         |
| 20         | 1819708-SP        | Gripper,spindle, (set 1pc)     |         |
| 22         | 1819732-SP        | Gripper,spindle, (set 1pc)     |         |



7222

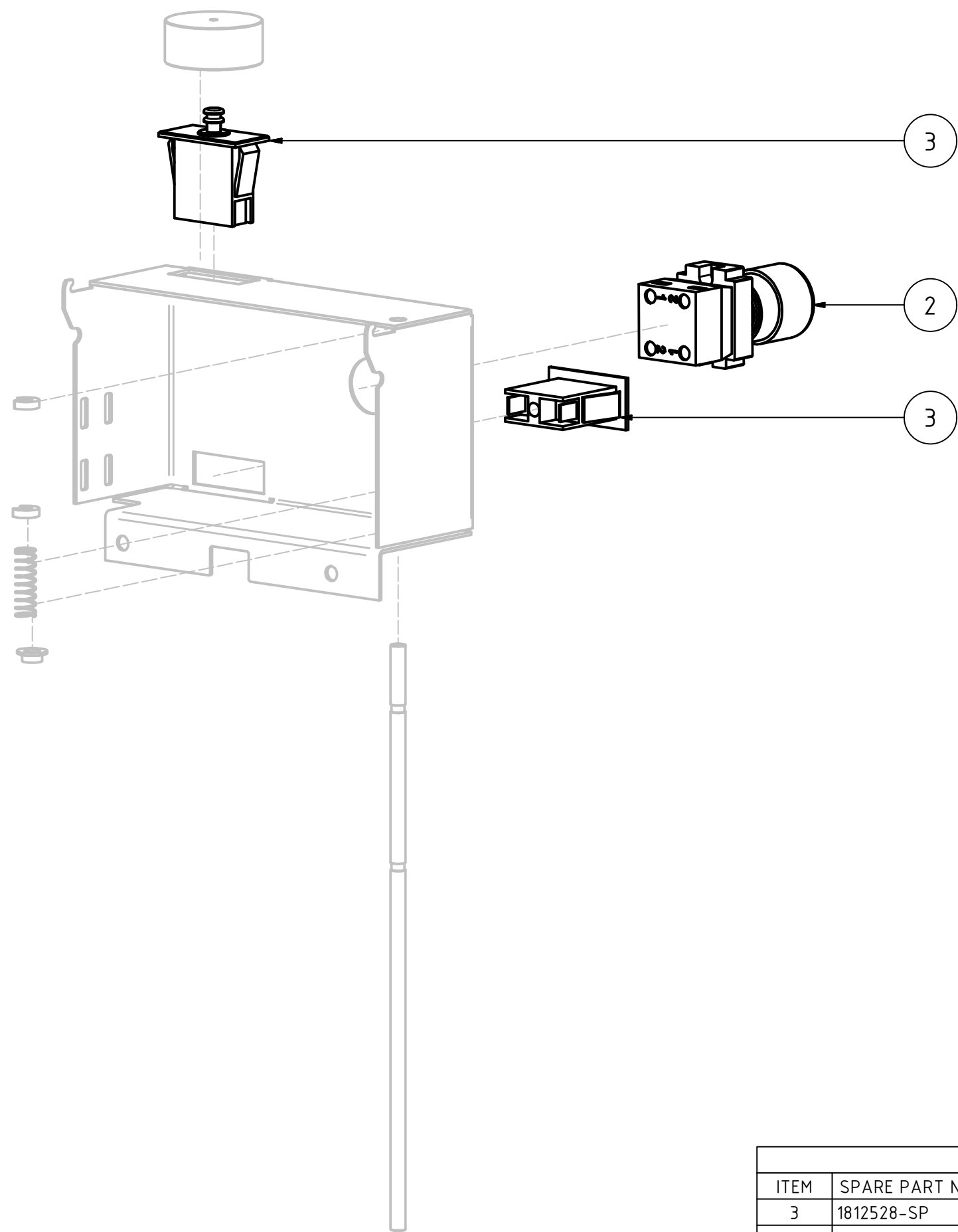
Valve motor unit 1819175-SP



| PARTS LIST |                   |                               |         |
|------------|-------------------|-------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                   | REMARKS |
| 13         | 1819175-SP        | Valve unit complete (set 1pc) |         |

7223

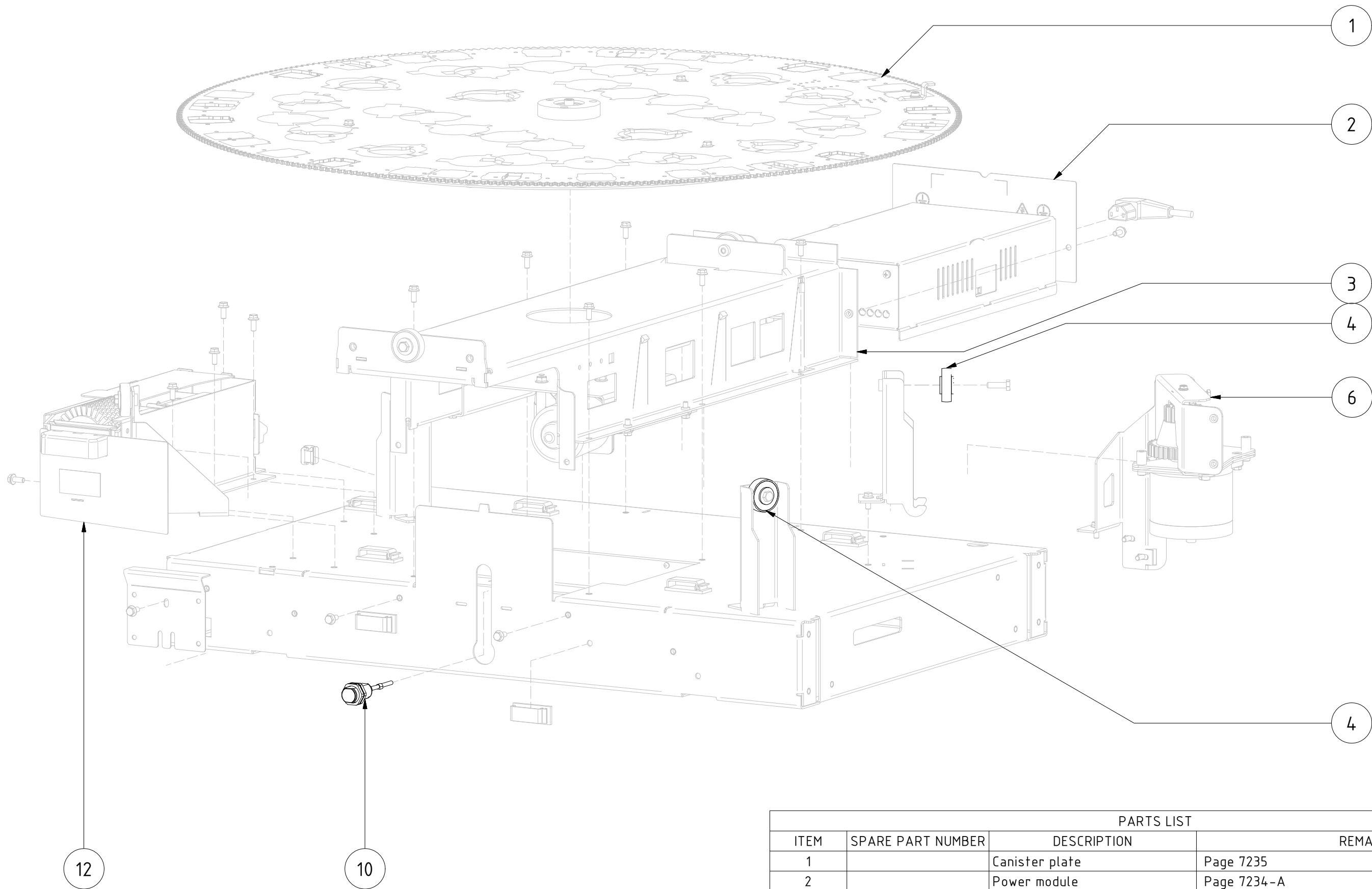
Emergency switch



| PARTS LIST |                   |                           |                               |
|------------|-------------------|---------------------------|-------------------------------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION               | REMARKS                       |
| 3          | 1812528-SP        | Switch,D2D 1100           | Part of cable harness 1865743 |
| 2          | 1864937-SP        | Emergency,switch,complete | Part of cable harness 1865743 |
| 2          | 1817356-SP        | EM-switch,assembly        | UL approved models only       |

7230

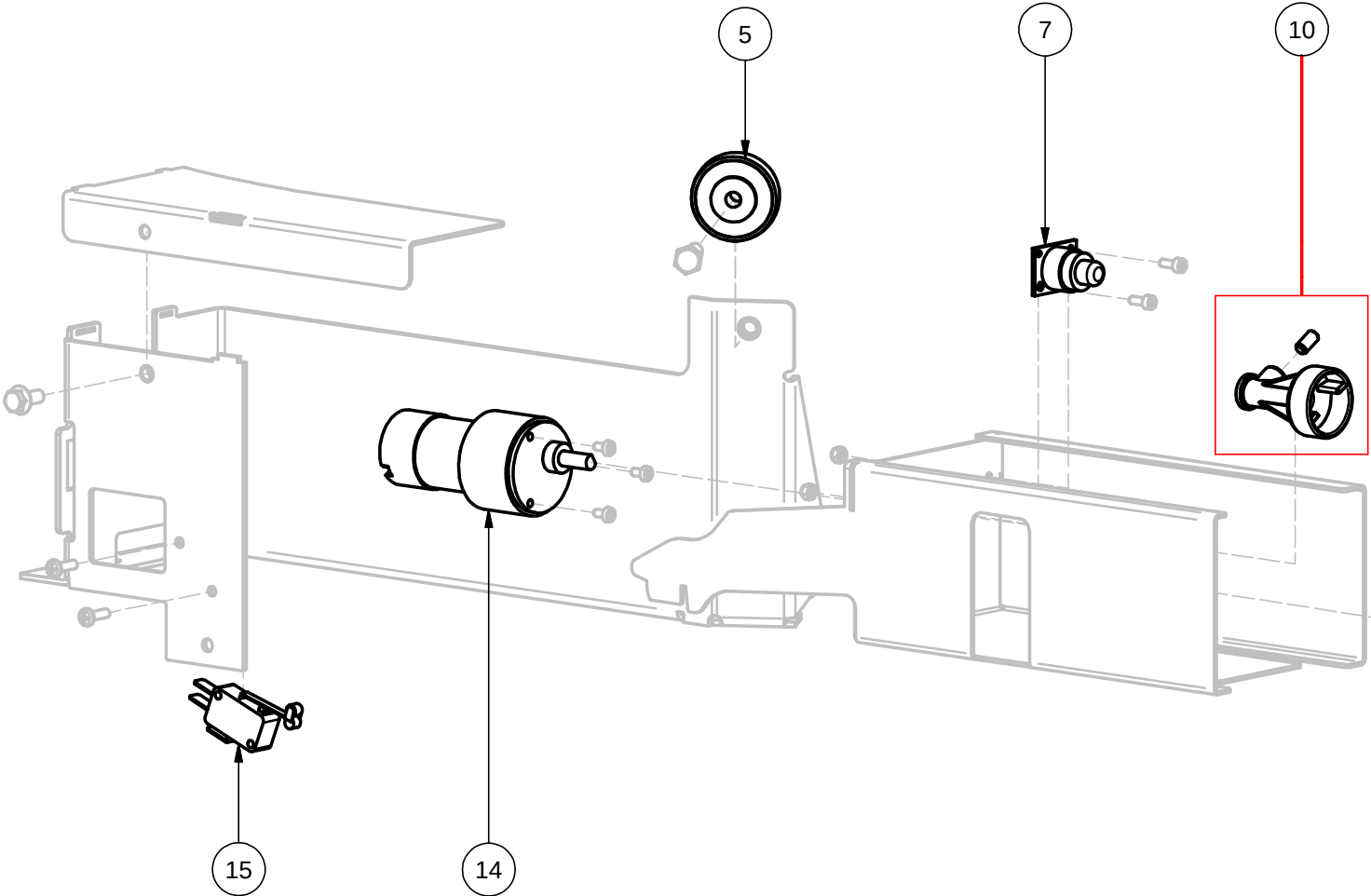
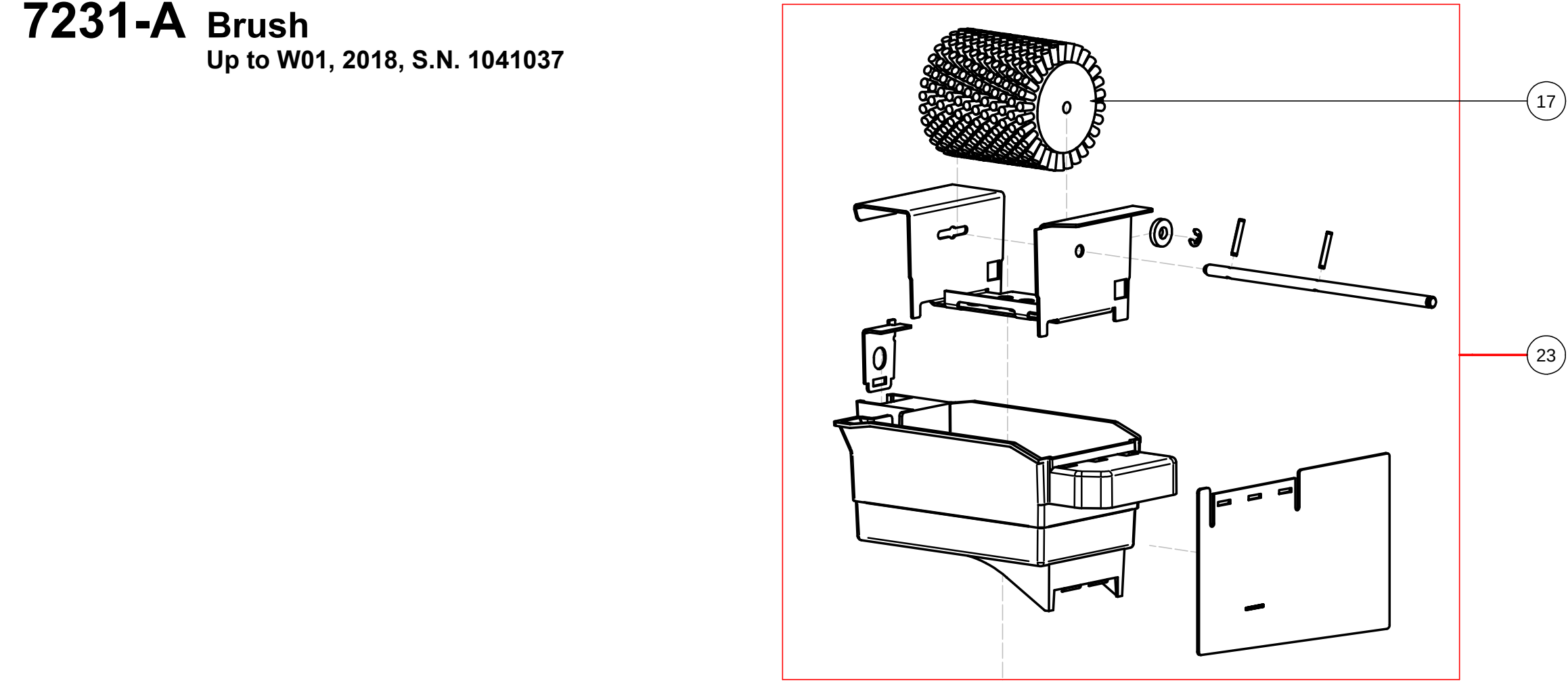
Sub frame



| PARTS LIST |                   |                                  |                                                   |
|------------|-------------------|----------------------------------|---------------------------------------------------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                      | REMARKS                                           |
| 1          |                   | Canister plate                   | Page 7235                                         |
| 2          |                   | Power module                     | Page 7234-A                                       |
| 3          |                   | Midbeam                          | Page 7233                                         |
| 4          | 1862422-SP        | Wheel, traversing, centric, 35mm |                                                   |
| 6          | 1819173-SP        | Table drive (set 1pc)            | Page 7232                                         |
| 10         | 1865510-SP        | Sensor 1, HA                     |                                                   |
| 12         |                   | Brush                            | Page 7231-B Brush, for sample brush see Page 7277 |

7231-A Brush

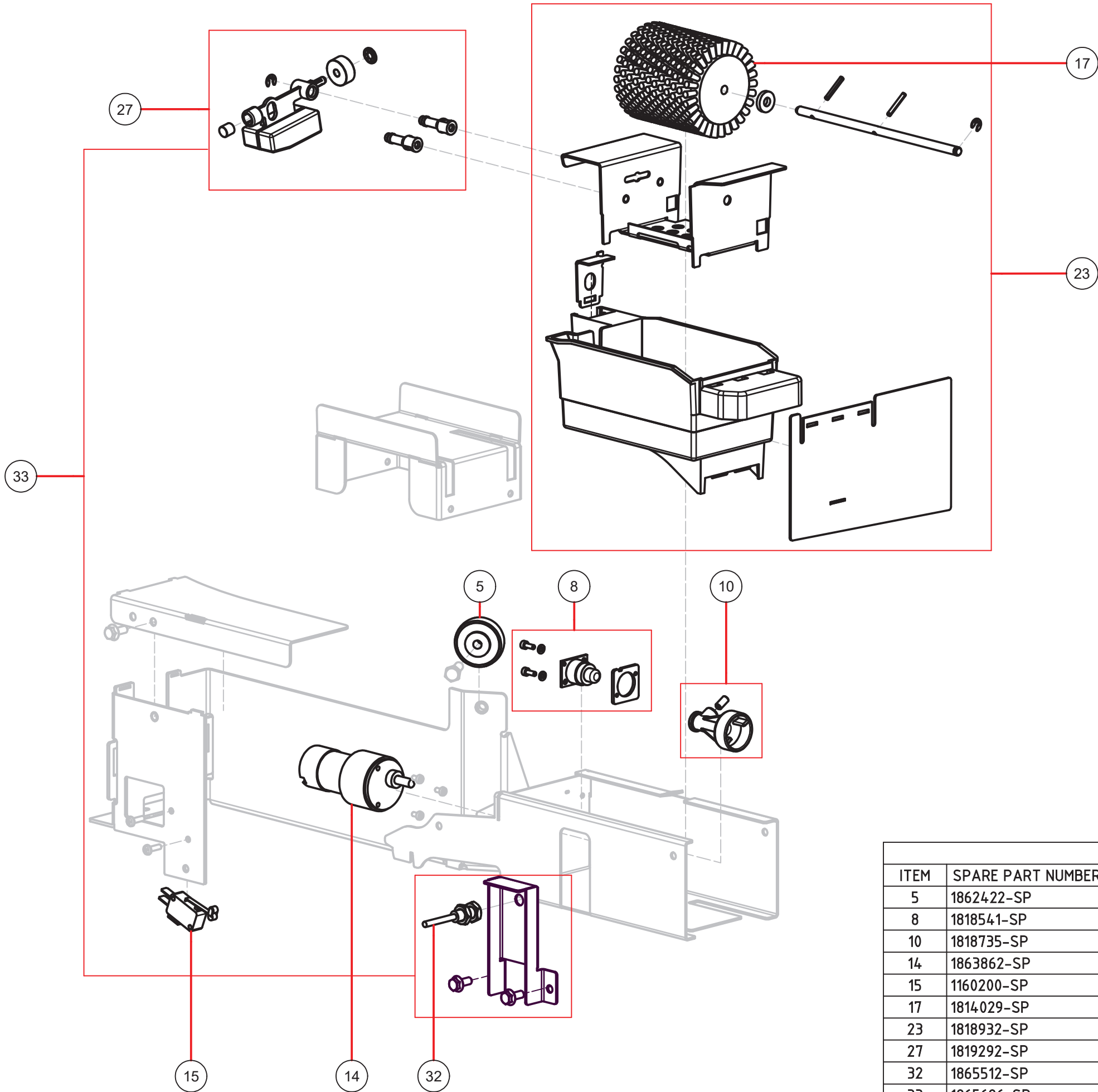
Up to W01, 2018, S.N. 1041037



| PARTS LIST |                   |                                    |         |
|------------|-------------------|------------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                        | REMARKS |
| 5          | 1862422-SP        | Wheel, traversing, centric, 35mm   |         |
| 7          | 1818541-SP        | Latch, push-in/out                 |         |
| 10         | 1818735-SP        | Coupling, fork, brush (set 1pc)    |         |
| 14         | 1863862-SP        | Motor micro, brush                 |         |
| 15         | 1160200-SP        | Switch, micro, V-166-105(R)        |         |
| 17         | 1814029-SP        | Brush, D70x78.3                    |         |
| 23         | 1818932-SP        | Brush, container, compl. (set 1pc) |         |
| 6          |                   |                                    |         |

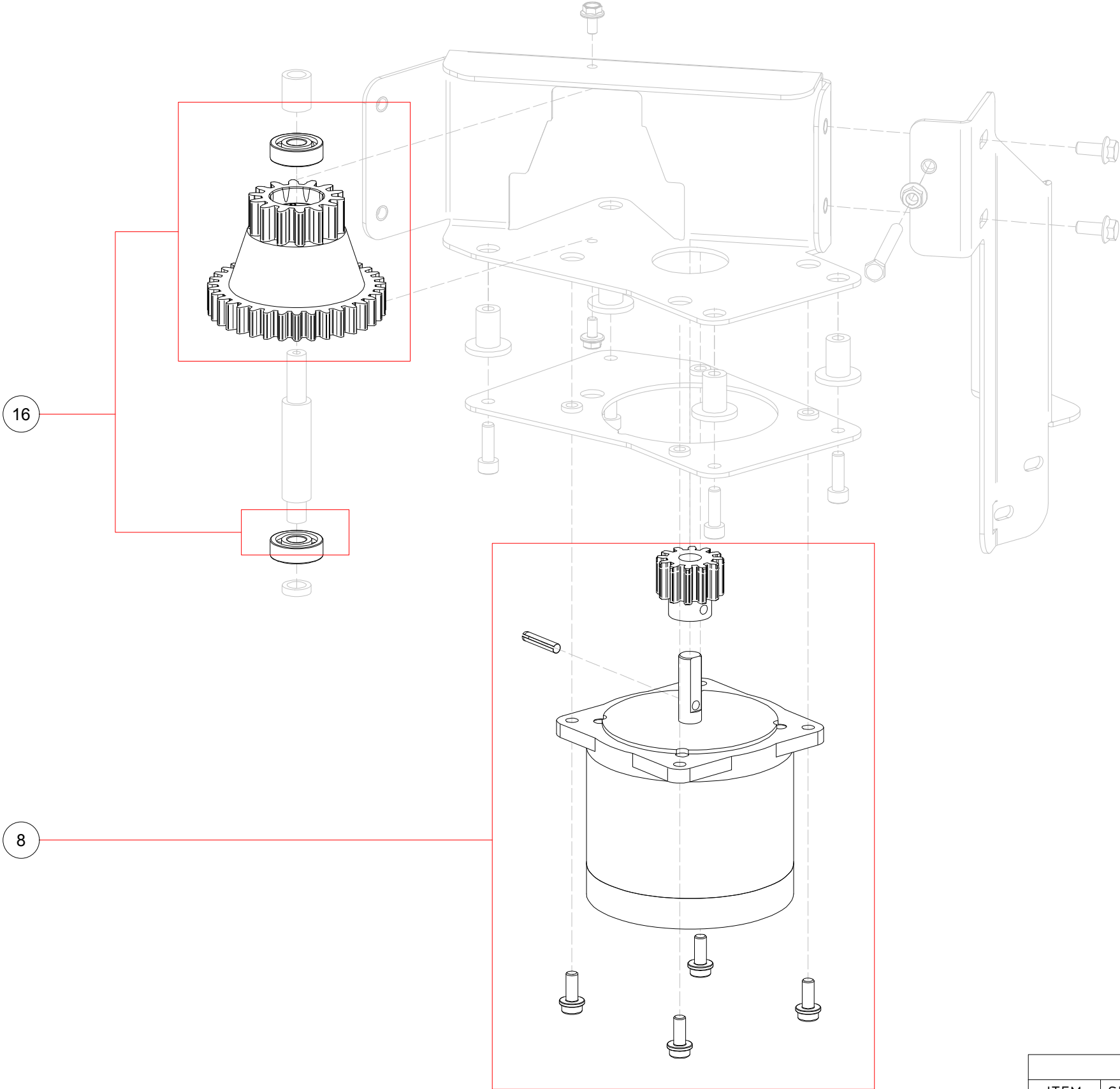
7231-B Brush

From W01, 2018, S.N. 1041038



| PARTS LIST |                   |                                   |          |
|------------|-------------------|-----------------------------------|----------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                       | REMARKS  |
| 5          | 1862422-SP        | Wheel, traversing, centric, 35mm  |          |
| 8          | 1818541-SP        | Latch, push-in/out                |          |
| 10         | 1818735-SP        | Coupling, fork, brush(set 1pc)    |          |
| 14         | 1863862-SP        | Motor micro, brush                |          |
| 15         | 1160200-SP        | Switch, micro, V-166-105(R)       |          |
| 17         | 1814029-SP        | Brush, D70x78.3                   |          |
| 23         | 1818932-SP        | Brush, container, compl.(set 1pc) |          |
| 27         | 1819292-SP        | Float, level, brush               | OPTIONAL |
| 32         | 1865512-SP        | Cable 9 brushlevel                | OPTIONAL |
| 33         | 1865626-SP        | Brush monitor kit                 | OPTIONAL |

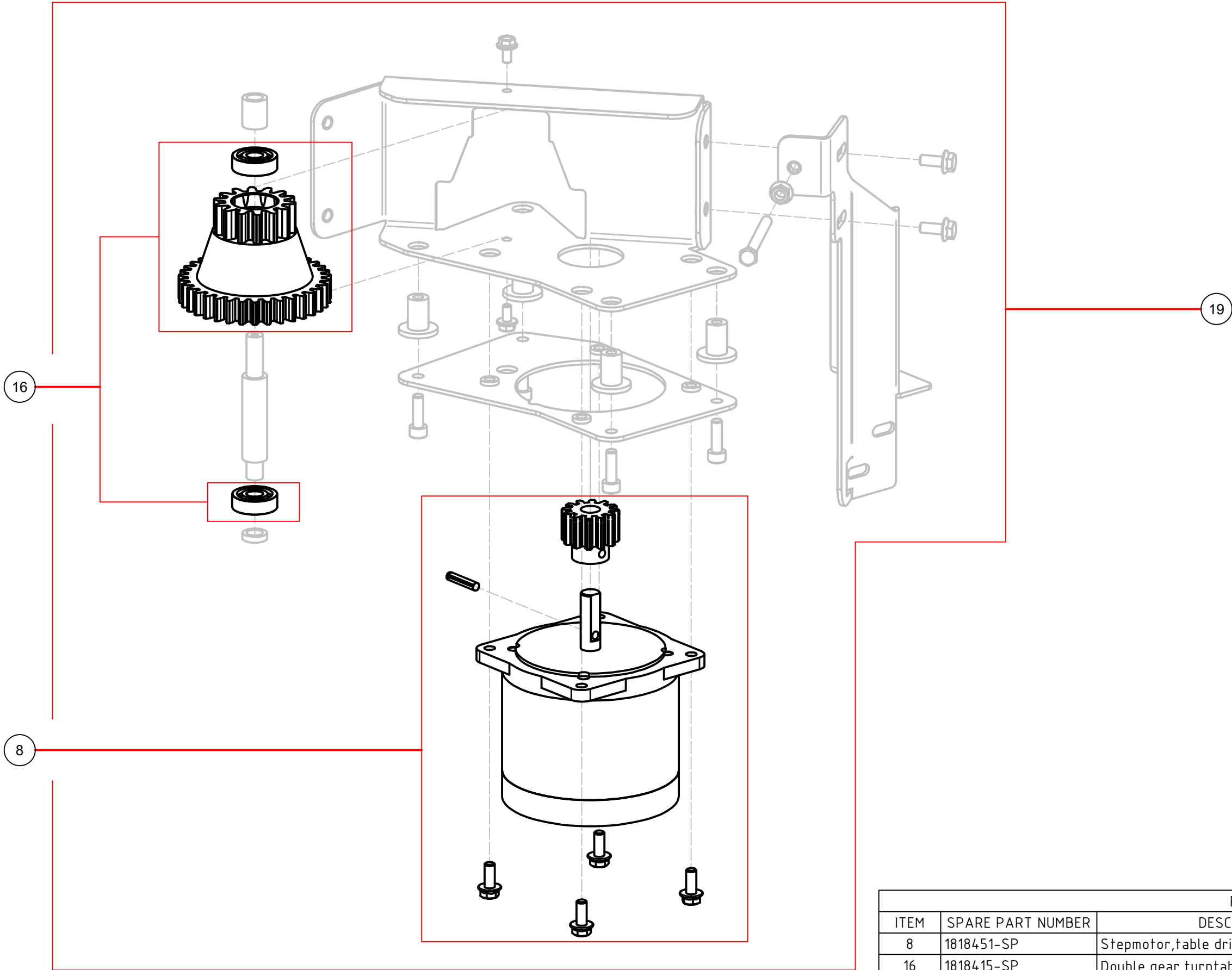
7232-A Table drive motor unit 1819173-SP



| PARTS LIST |                   |                                 |         |
|------------|-------------------|---------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                     | REMARKS |
| 8          | 1818451-SP        | Steptomor,table drive incl.gear |         |
| 16         | 1818415-SP        | Double gear,turntable(set 1pc)  |         |



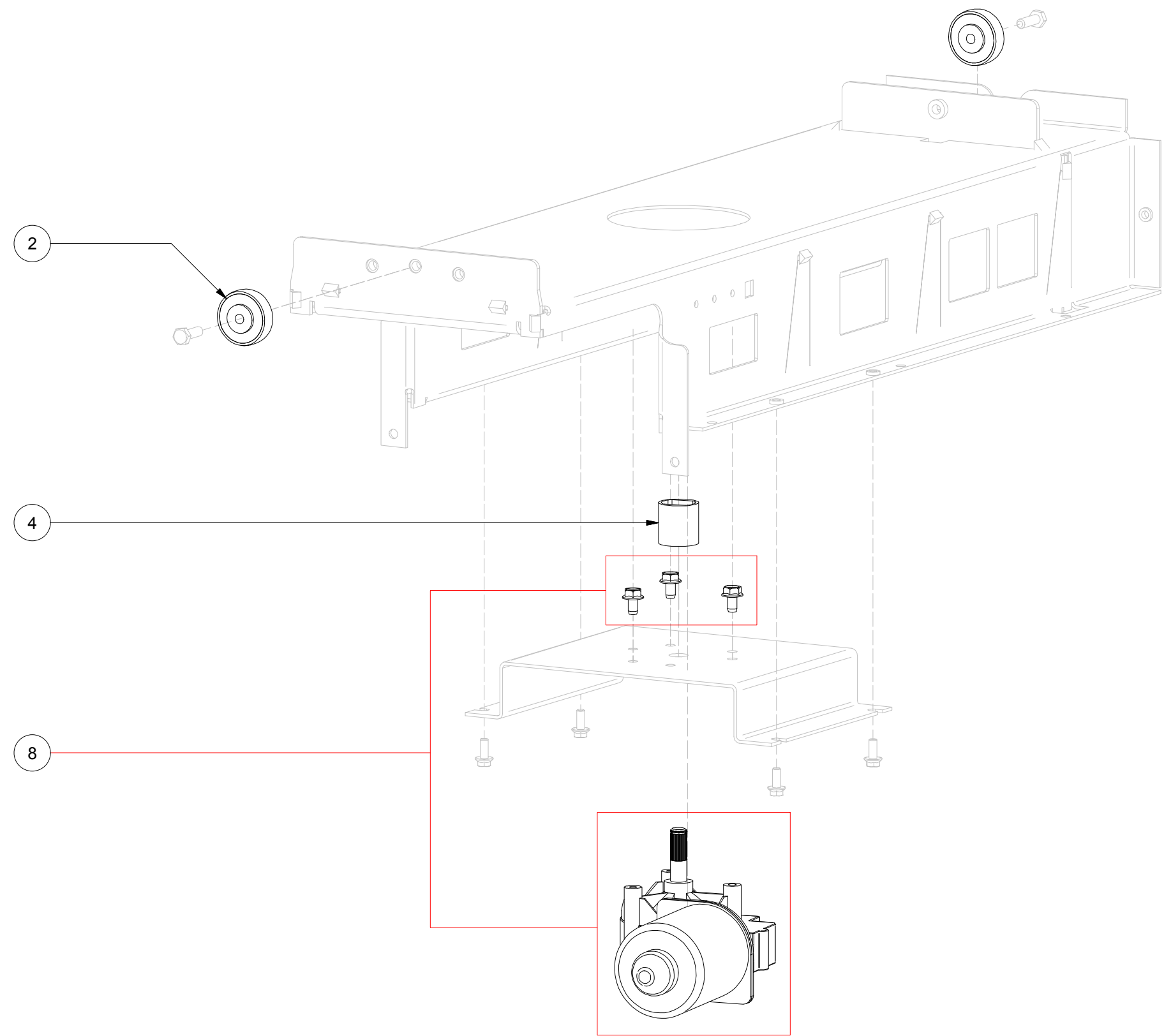
7232-B Table drive motor unit 1819173-SP



| PARTS LIST |                   |                                 |         |
|------------|-------------------|---------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                     | REMARKS |
| 8          | 1818451-SP        | Stepmotor,table drive incl.gear |         |
| 16         | 1818415-SP        | Double gear,turntable(set 1pc)  |         |
| 19         | 1819173-SP        | Table drive (set 1pc)           |         |

7233

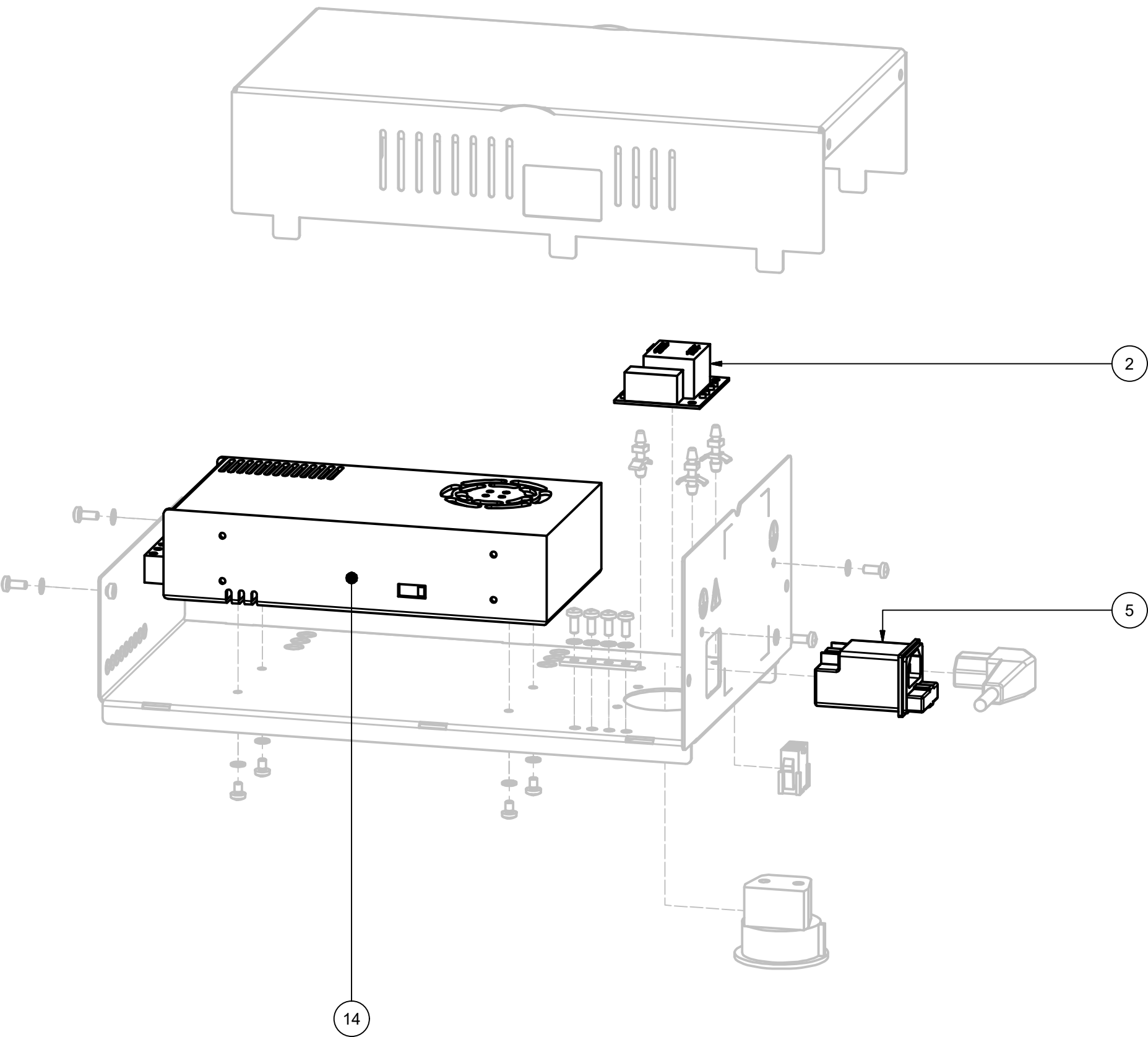
Mid beam



| PARTS LIST |                   |                                  |         |
|------------|-------------------|----------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                      | REMARKS |
| 2          | 1862422-SP        | Wheel, traversing, centric, 35mm |         |
| 4          | 1813254-SP        | Coupling, motor, subframe, HA    |         |
| 8          | 1863708-SP        | Motor 404.938                    |         |



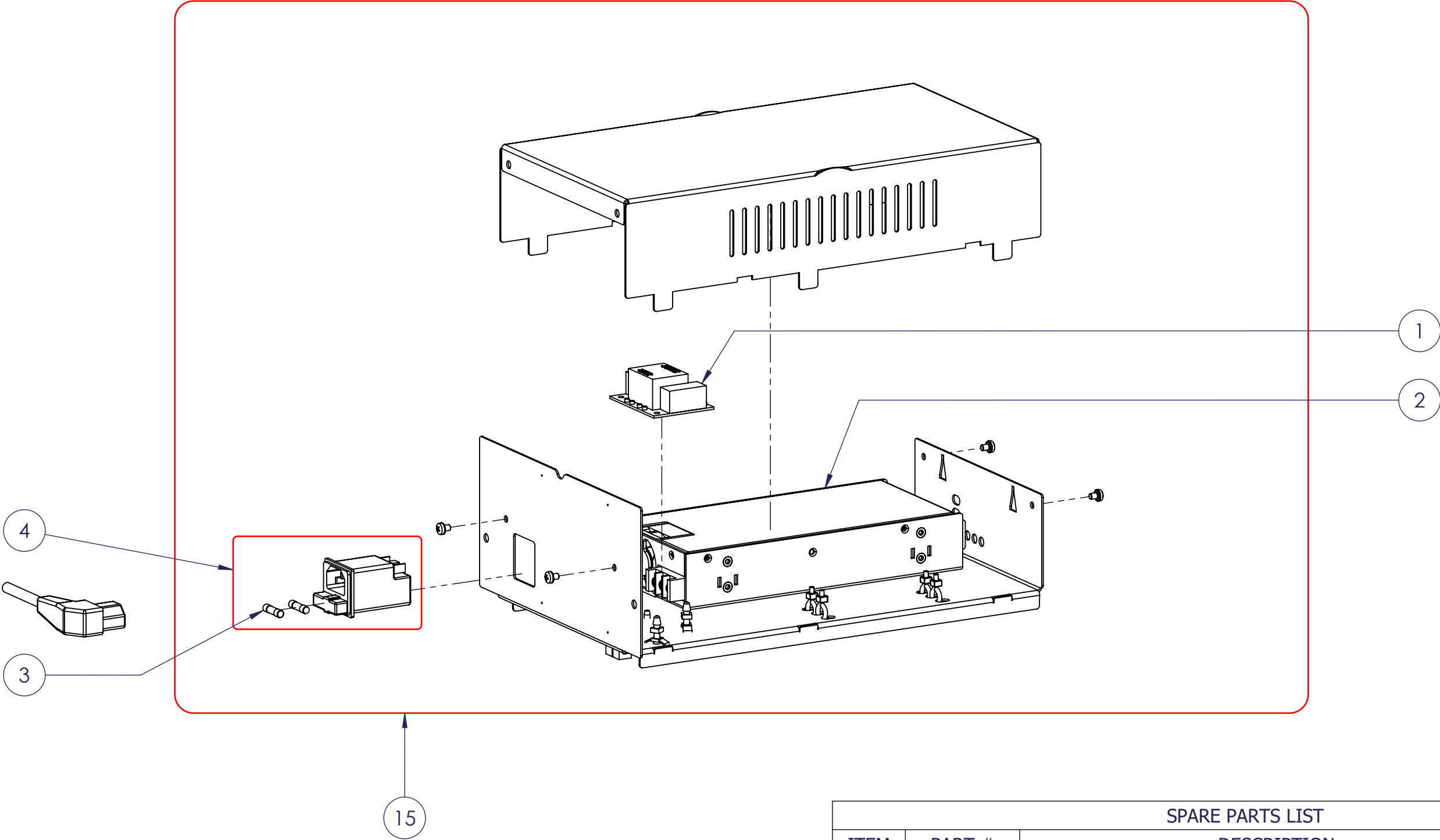
7234-A Power module 1818222-SP



| PARTS LIST |                   |                      |         |
|------------|-------------------|----------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION          | REMARKS |
| 2          | 1819172-SP        | Relais, Power Supply |         |
| 5          | 1818326-SP        | Netentry with filter |         |
| 14         | 1819171-SP        | Power supply,48VDC   |         |

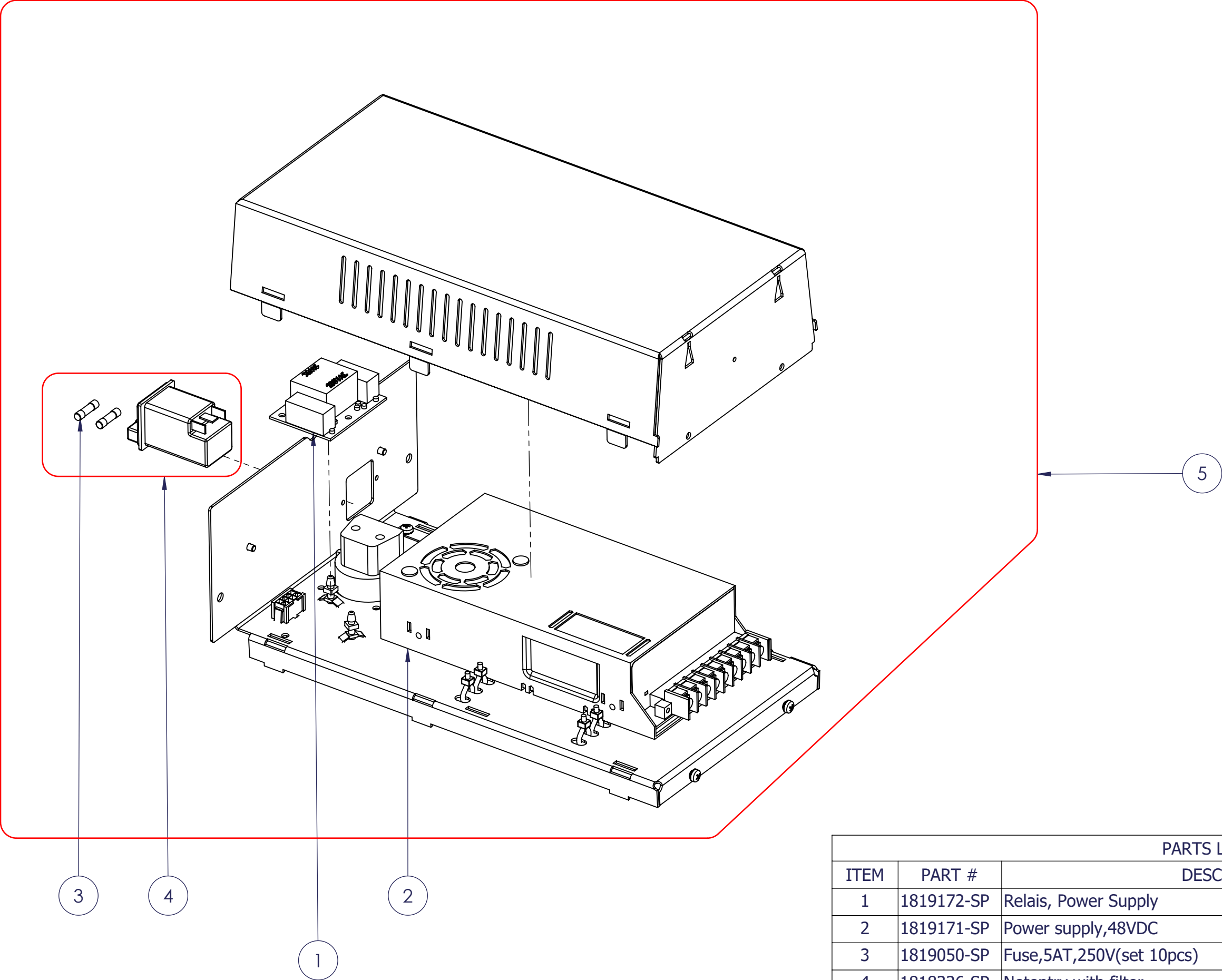
7234-B UL HAxx Power module (1820083)

UL approved models only



| SPARE PARTS LIST |            |                          |        |
|------------------|------------|--------------------------|--------|
| ITEM             | PART #     | DESCRIPTION              | REMARK |
| 1                | 1819172-SP | Relais, Power Supply     |        |
| 2                | 1865758-SP | Power supply MPS-450-48  |        |
| 3                | 1819050-SP | Fuse,5AT,250V(set 10pcs) |        |
| 4                | 1818326-SP | Netentry with filter     |        |
| 15               | 1820083-SP | Power module             |        |

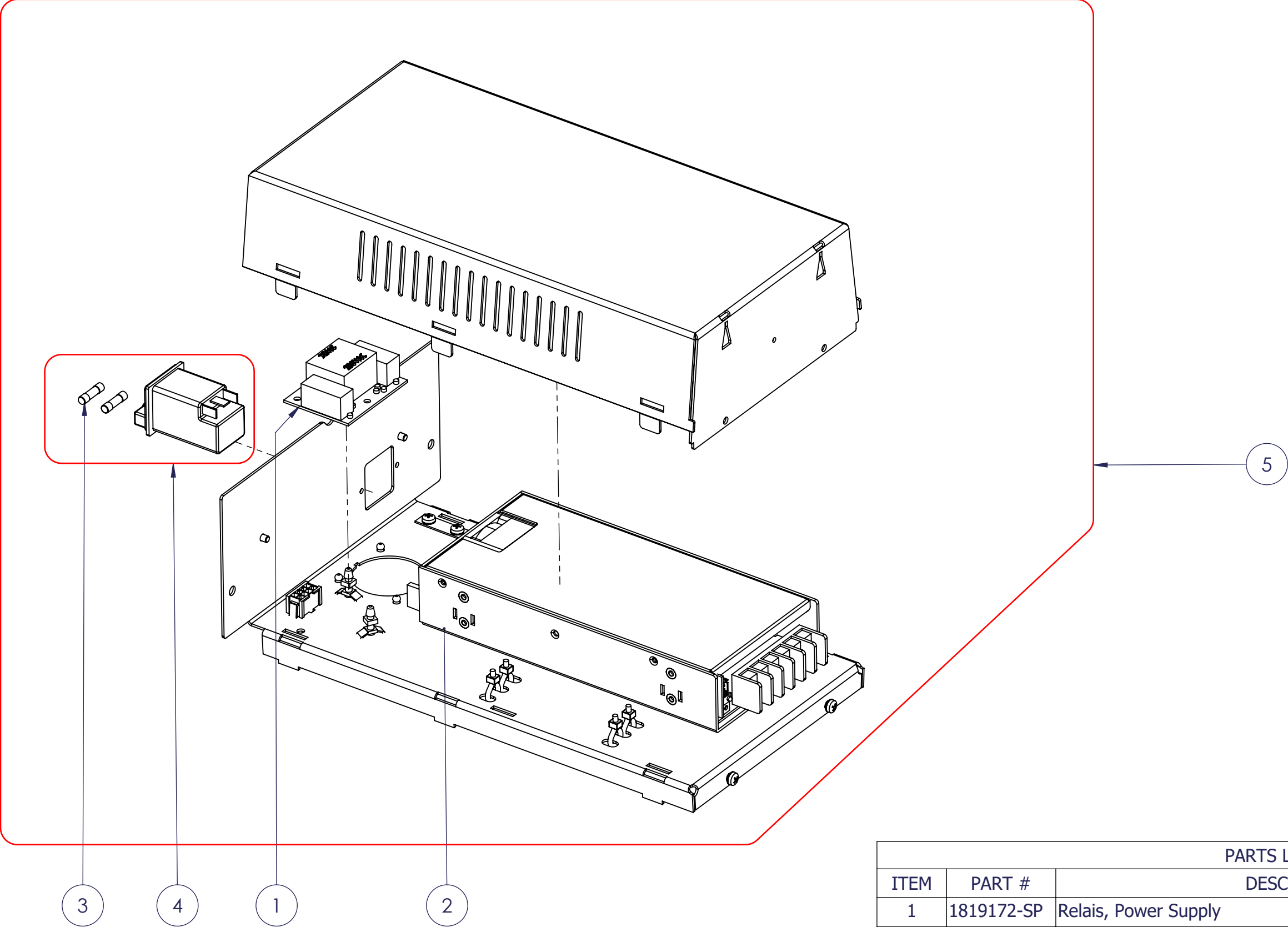
7234-C HAxX Power module (1820013-SP) From 17-12-2020



| PARTS LIST |            |                          |        |
|------------|------------|--------------------------|--------|
| ITEM       | PART #     | DESCRIPTION              | REMARK |
| 1          | 1819172-SP | Relais, Power Supply     |        |
| 2          | 1819171-SP | Power supply,48VDC       |        |
| 3          | 1819050-SP | Fuse,5AT,250V(set 10pcs) |        |
| 4          | 1818326-SP | Netentry with filter     |        |
| 5          | 1820013-SP | Power module             |        |

7234-D UL HAxx Power module (1820083-SP) From 17-12-2020

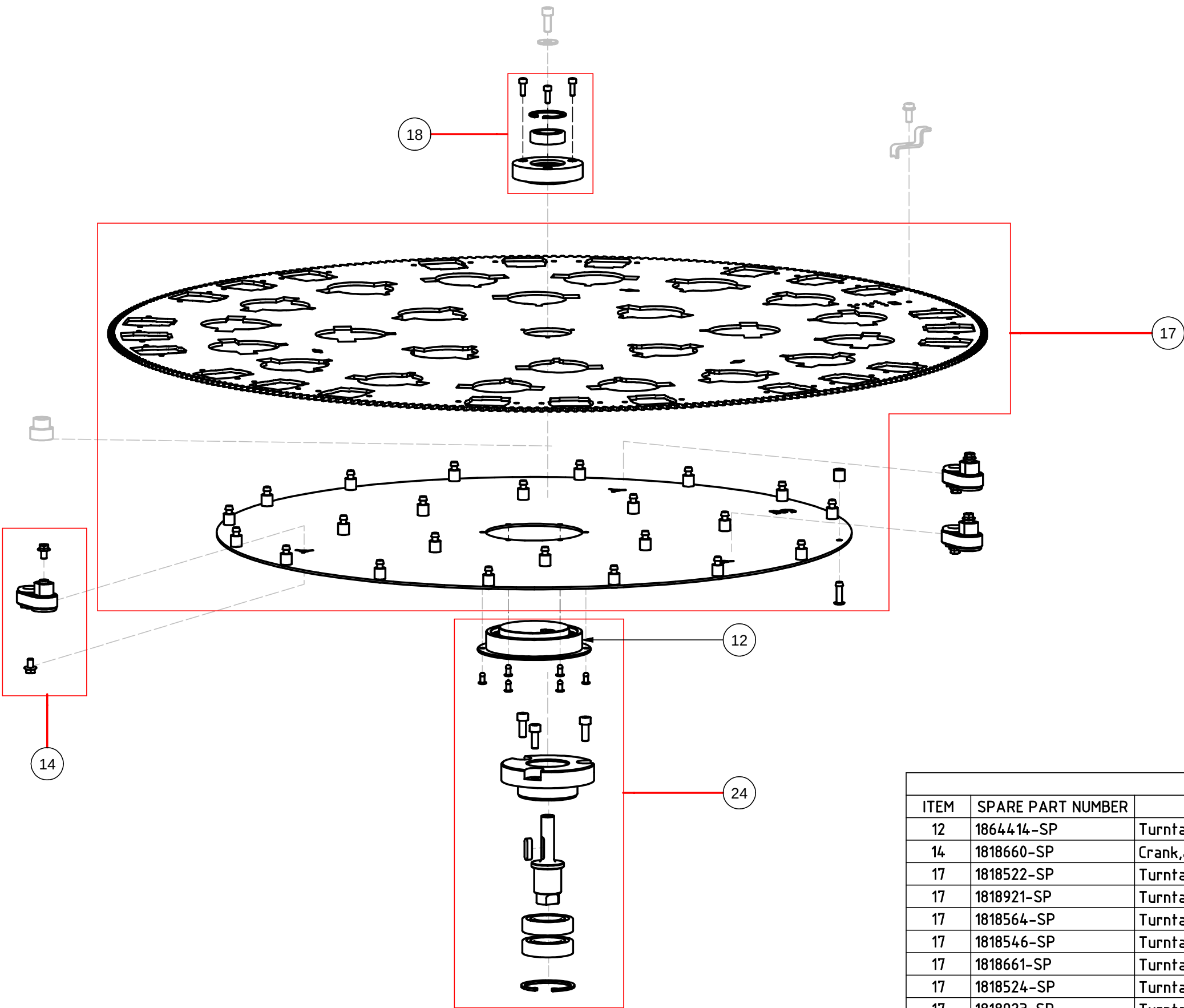
UL approved models only



| PARTS LIST |            |                          |        |
|------------|------------|--------------------------|--------|
| ITEM       | PART #     | DESCRIPTION              | REMARK |
| 1          | 1819172-SP | Relais, Power Supply     |        |
| 2          | 1865758-SP | Power supply MPS-450-48  |        |
| 3          | 1819050-SP | Fuse,5AT,250V(set 10pcs) |        |
| 4          | 1818326-SP | Netentry with filter     |        |
| 5          | 1820083-SP | Power module             |        |

7235

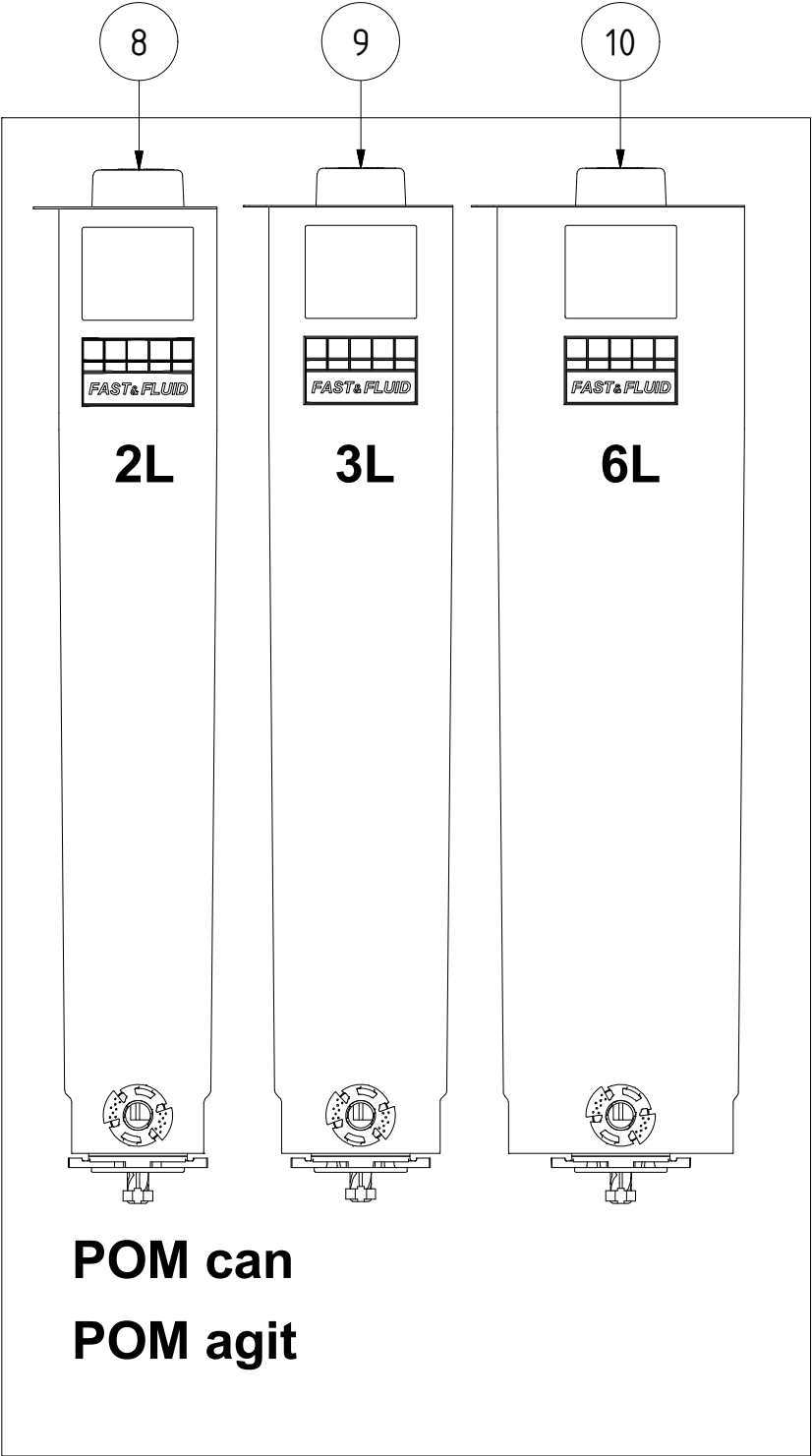
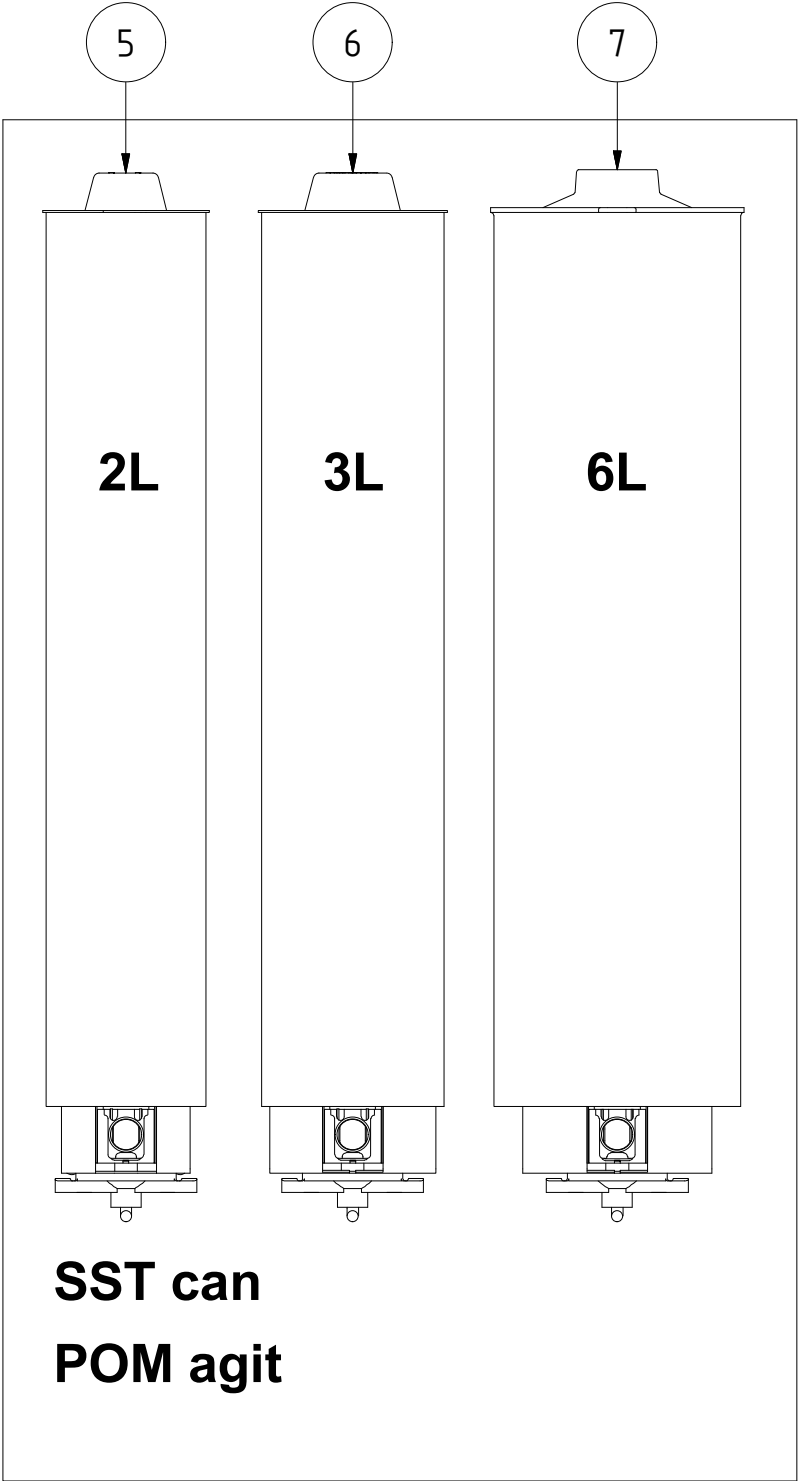
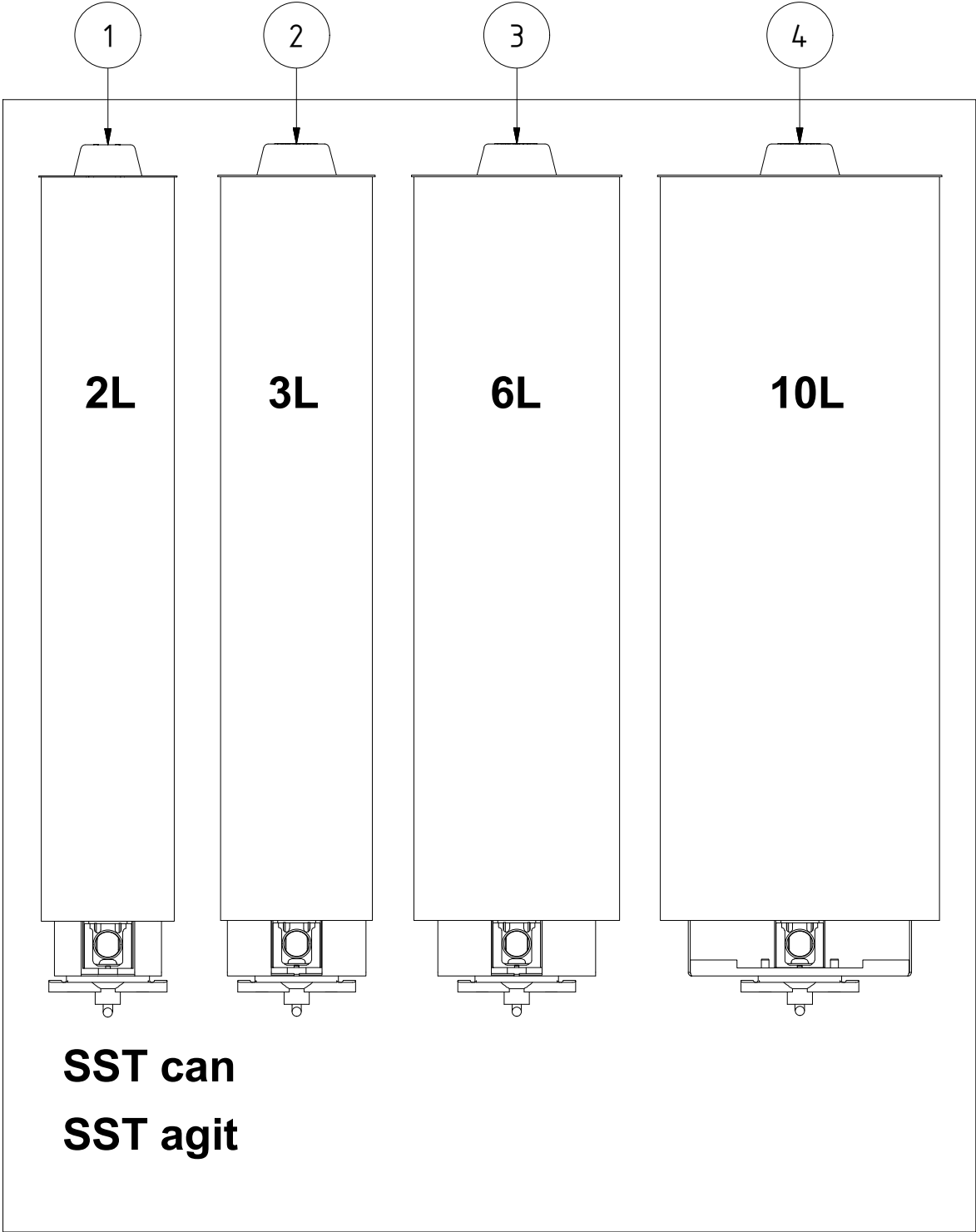
Canister plates



| PARTS LIST |                   |                                  |         |
|------------|-------------------|----------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                      | REMARKS |
| 12         | 1864414-SP        | Turntable bearing assembly       |         |
| 14         | 1818660-SP        | Crank,assy (set 3pcs)            |         |
| 17         | 1818522-SP        | Turntable,(03)+agit.plate,NGH    |         |
| 17         | 1818921-SP        | Turntable,(05)+agit.plate,NGH    |         |
| 17         | 1818564-SP        | Turntable,(09)+agit.plate,NGH    |         |
| 17         | 1818546-SP        | Turntable,(10)+agit.plate,NGH    |         |
| 17         | 1818661-SP        | Turntable,(12)+agit.plate,NGH    |         |
| 17         | 1818524-SP        | Turntable,(13)+agit.plate,NGH    |         |
| 17         | 1818923-SP        | Turntable,(16)+agit.plate,NGH    |         |
| 17         | 1819952-SP        | Turntable,(17)+agit.plate,NGH    |         |
| 18         | 1818753-SP        | Bearing,hous,agitation crank,NGH |         |
| 24         | 1819170-SP        | Crank,turntable,compl(set 1pc)   |         |

7240

Canisters

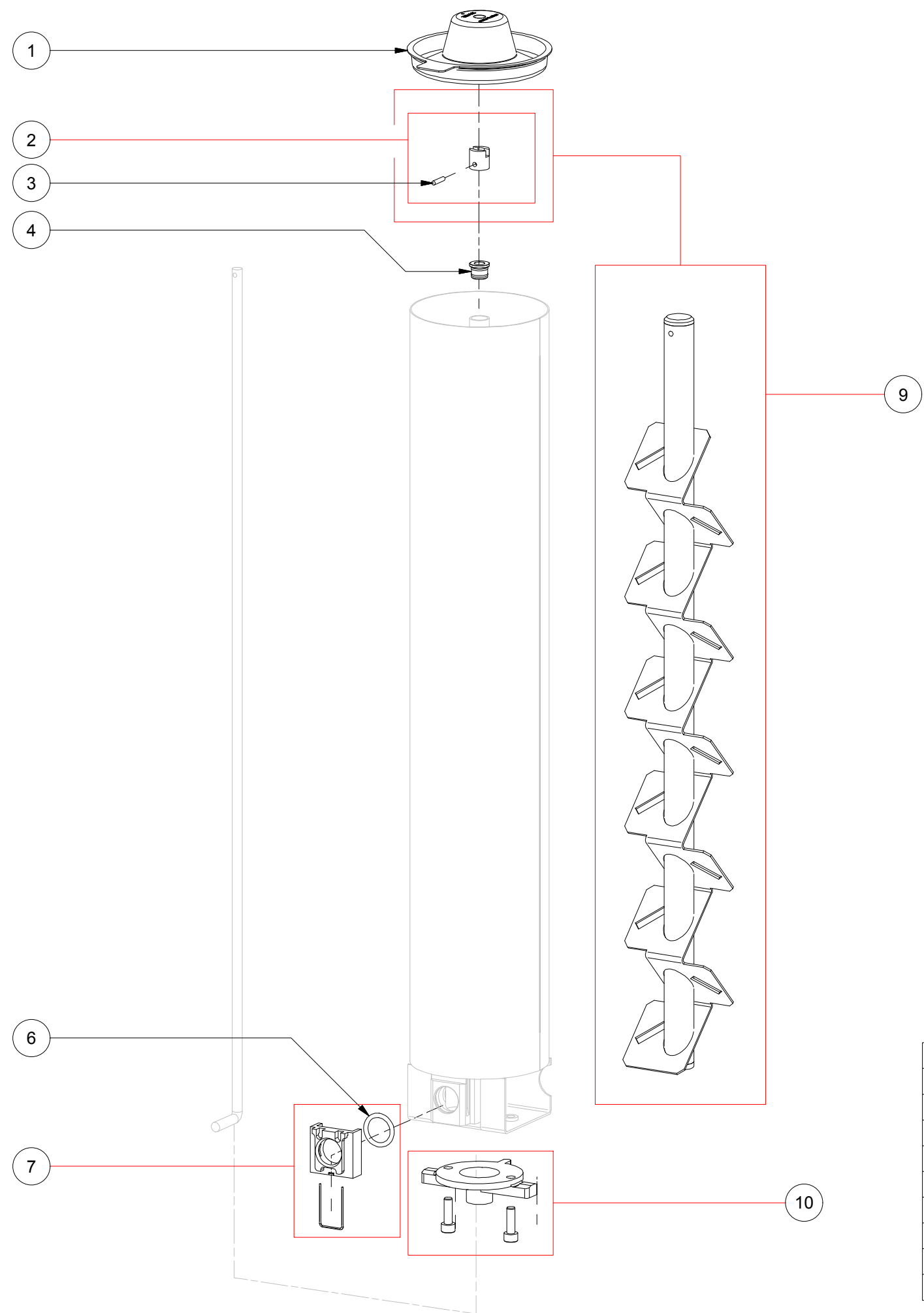


| PARTS LIST |                   |                              |           |
|------------|-------------------|------------------------------|-----------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                  | REMARKS   |
| 1          | 1814147-SP        | 2L,SST can,std,1ex,SST agit  | Page 7241 |
| 2          | 1863215-SP        | 3L,SST can,std,1ex,SST agit  | Page 7242 |
| 3          | 1863216-SP        | 6L,SST can,std,1ex,SST agit  | Page 7243 |
| 4          | 1810599-SP        | 10L,SST can,std,1ex,SST agit | Page 7244 |
| 5          | 1814988-SP        | 2L,SST can,std,1ex,POM agit  | Page 7245 |
| 6          | 1809888-SP        | 3L,SST can,std,1ex,POM agit  | Page 7246 |
| 7          | 1810596-SP        | 6L,SST can,std,1ex,POM agit  | Page 7247 |
| 8          | 1865010-SP        | 2L,POM can,std,1ex,POM agit  | Page 7248 |
| 9          | 1865011-SP        | 3L,POM can,std,1ex,POM agit  | Page 7249 |
| 10         | 1865012-SP        | 6L,POM can,std,1ex,POM agit  | Page 7250 |



7241

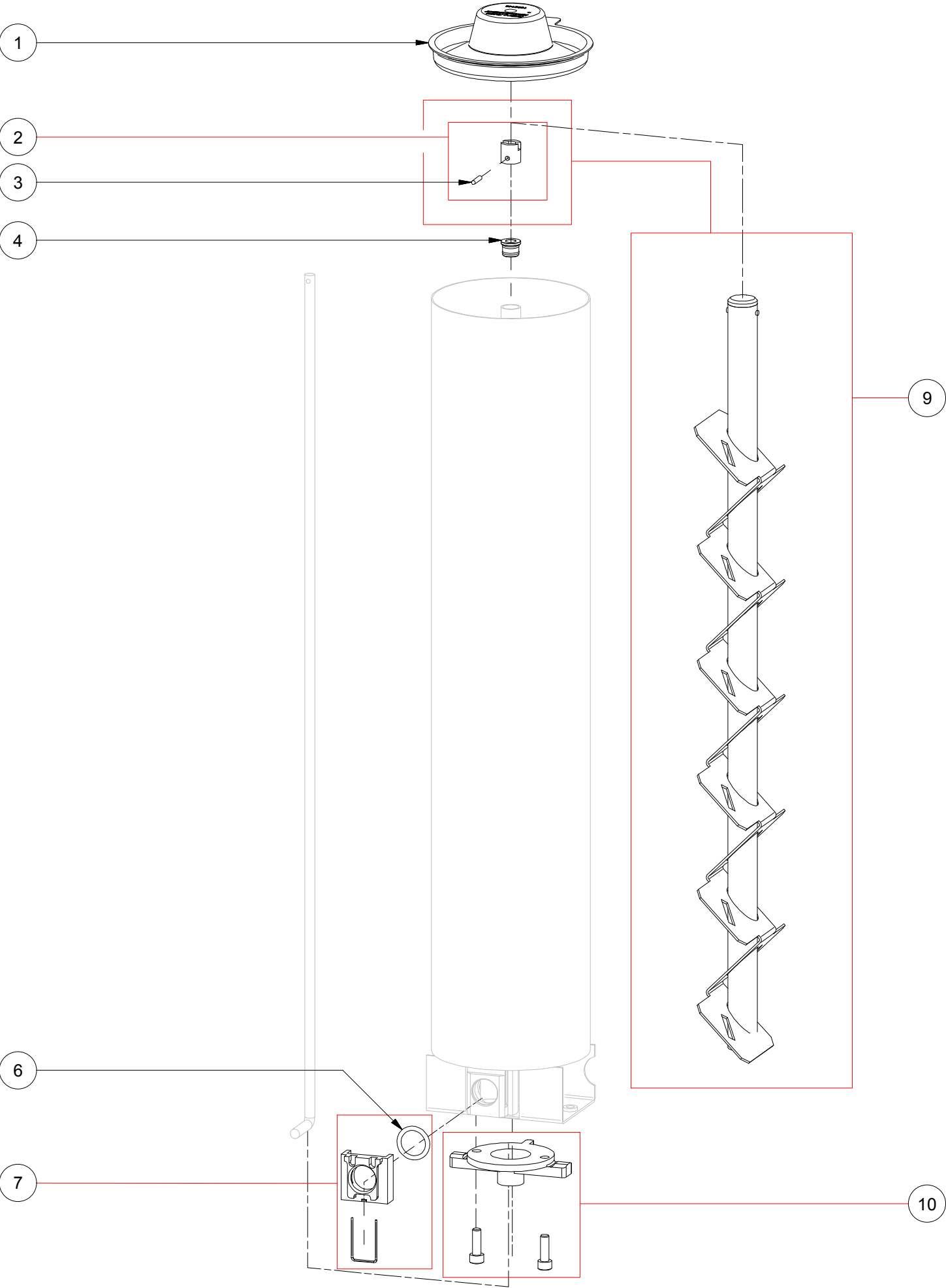
2L,SST can,1ex,SST agit 1814147-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802502-SP        | Lid POM,2L can,5pcs            |         |
| 2          | 1801798-SP        | Bush,center,agit.shaft,HA      |         |
| 3          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 4          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 6          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 7          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 9          | 1814153-SP        | Agit SST, 2L SST can           |         |
| 10         | 1816106-SP        | Cap,bottom,sst can with screws |         |

7242

3L,SST can,1ex,SST agit 1863215-SP

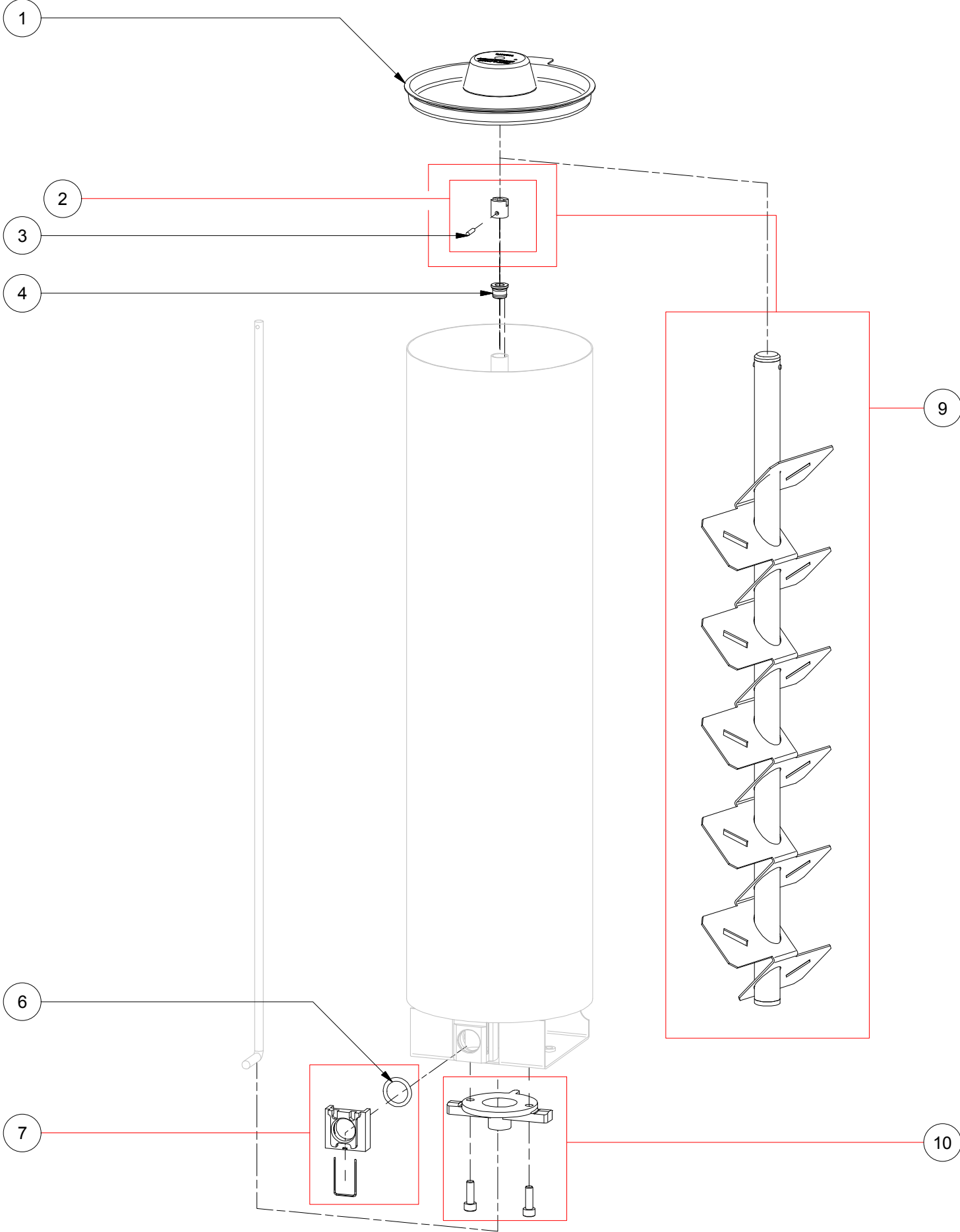


| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802503-SP        | Lid POM,3L can,5pcs            |         |
| 2          | 1801798-SP        | Bush,center,agit.shaft,HA      |         |
| 3          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 4          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 6          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 7          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 9          | 1803439-SP        | Agit SST, 3L SST can           |         |
| 10         | 1816106-SP        | Cap,bottom,sst can with screws |         |



7243

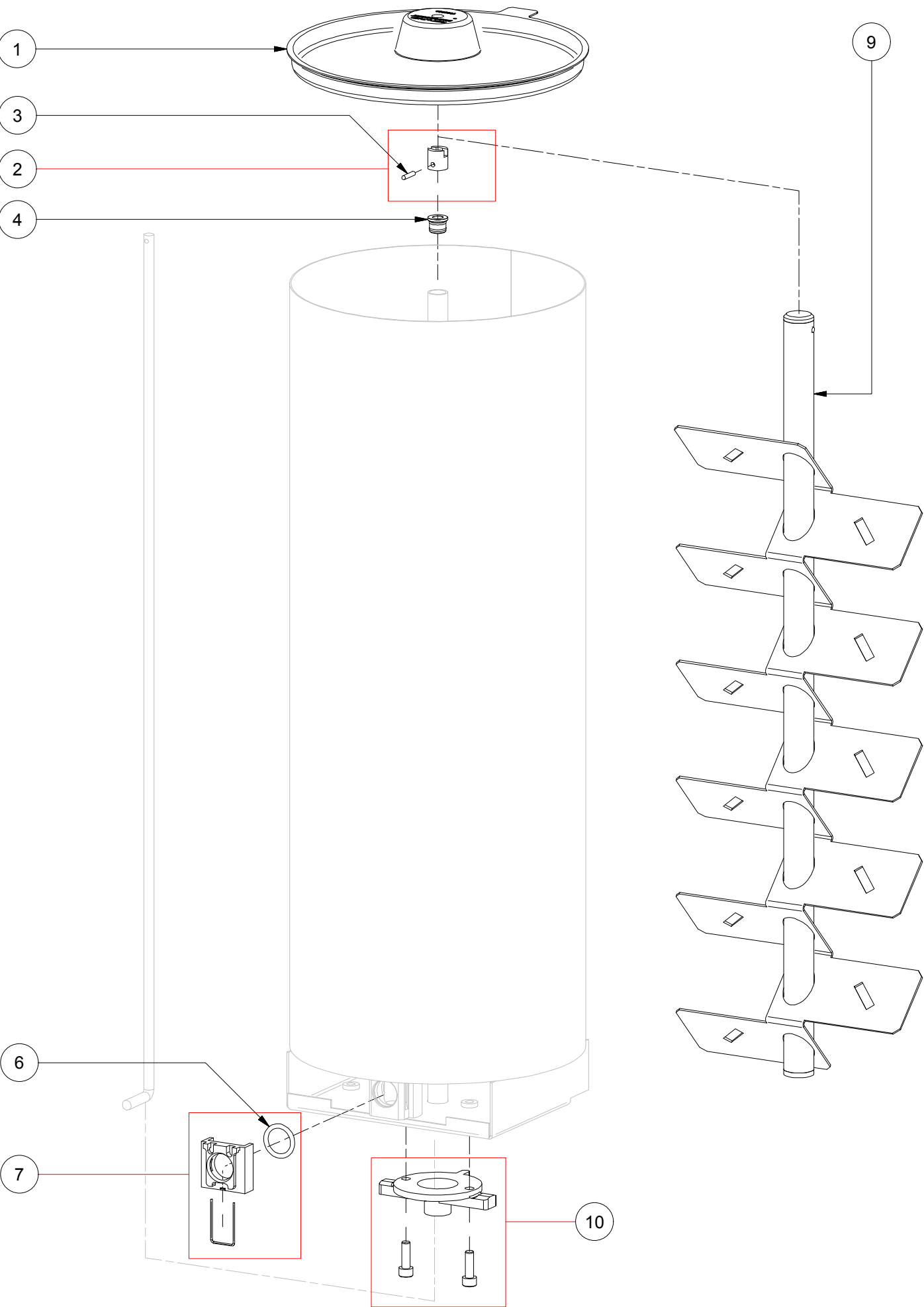
6L,SST can,1ex,SST agit 1863216-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802504-SP        | Lid POM,4.5/6L can,5pcs        |         |
| 2          | 1801798-SP        | Bush,center,agit.shaft,HA      |         |
| 3          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 4          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 6          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 7          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 9          | 1803441-SP        | Agit SST, 6L SST can           |         |
| 10         | 1816106-SP        | Cap,bottom,sst can with screws |         |

7244

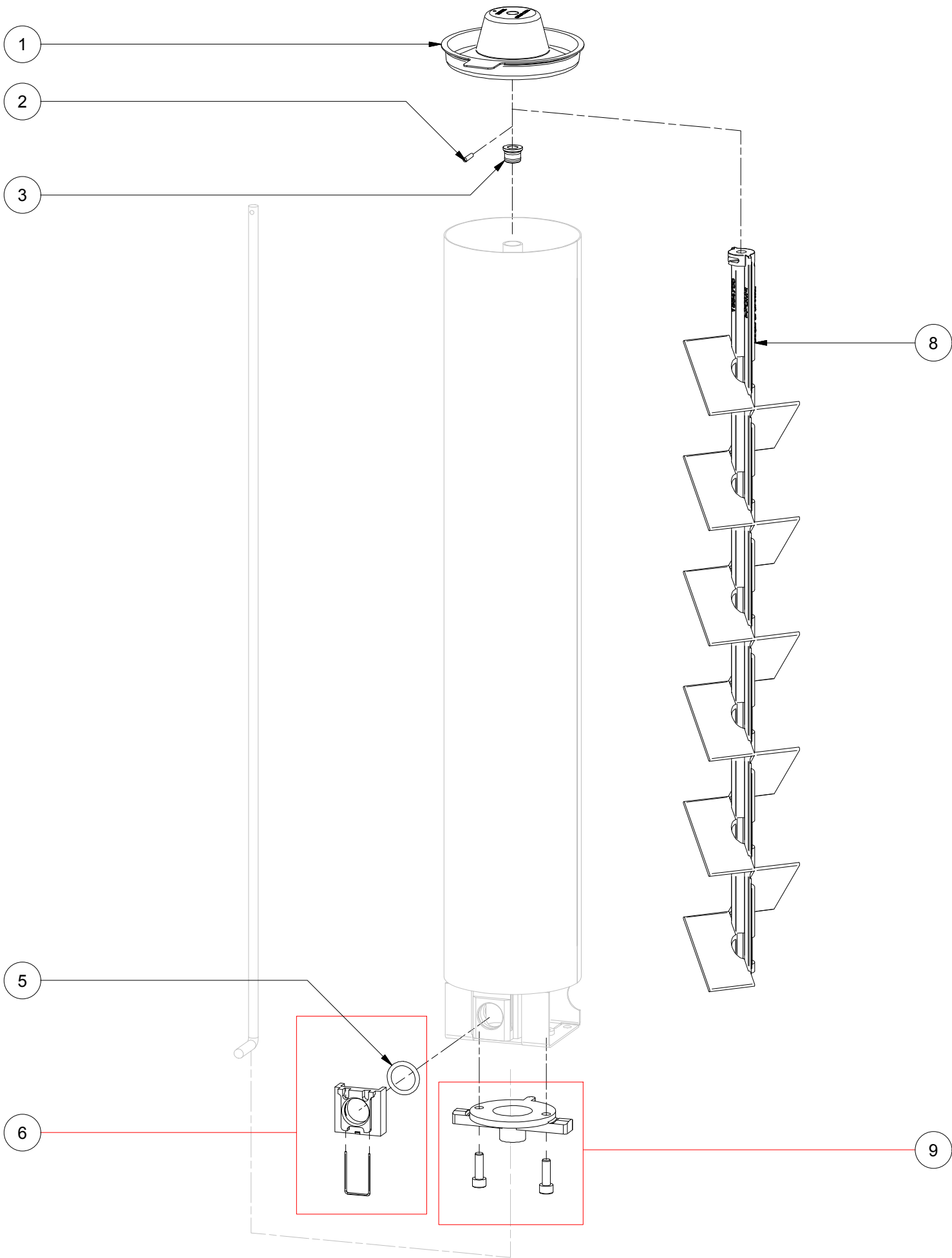
10L,SST can,1ex,SST agit 1810599-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802505-SP        | Lid POM,10L can,5pcs           |         |
| 2          | 1801798-SP        | Bush,center,agit.shaft,HA      |         |
| 3          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 4          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 6          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 7          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 9          | 1803443-SP        | Agit SST, 10L SST can          |         |
| 10         | 1816106-SP        | Cap,bottom,sst can with screws |         |

7245

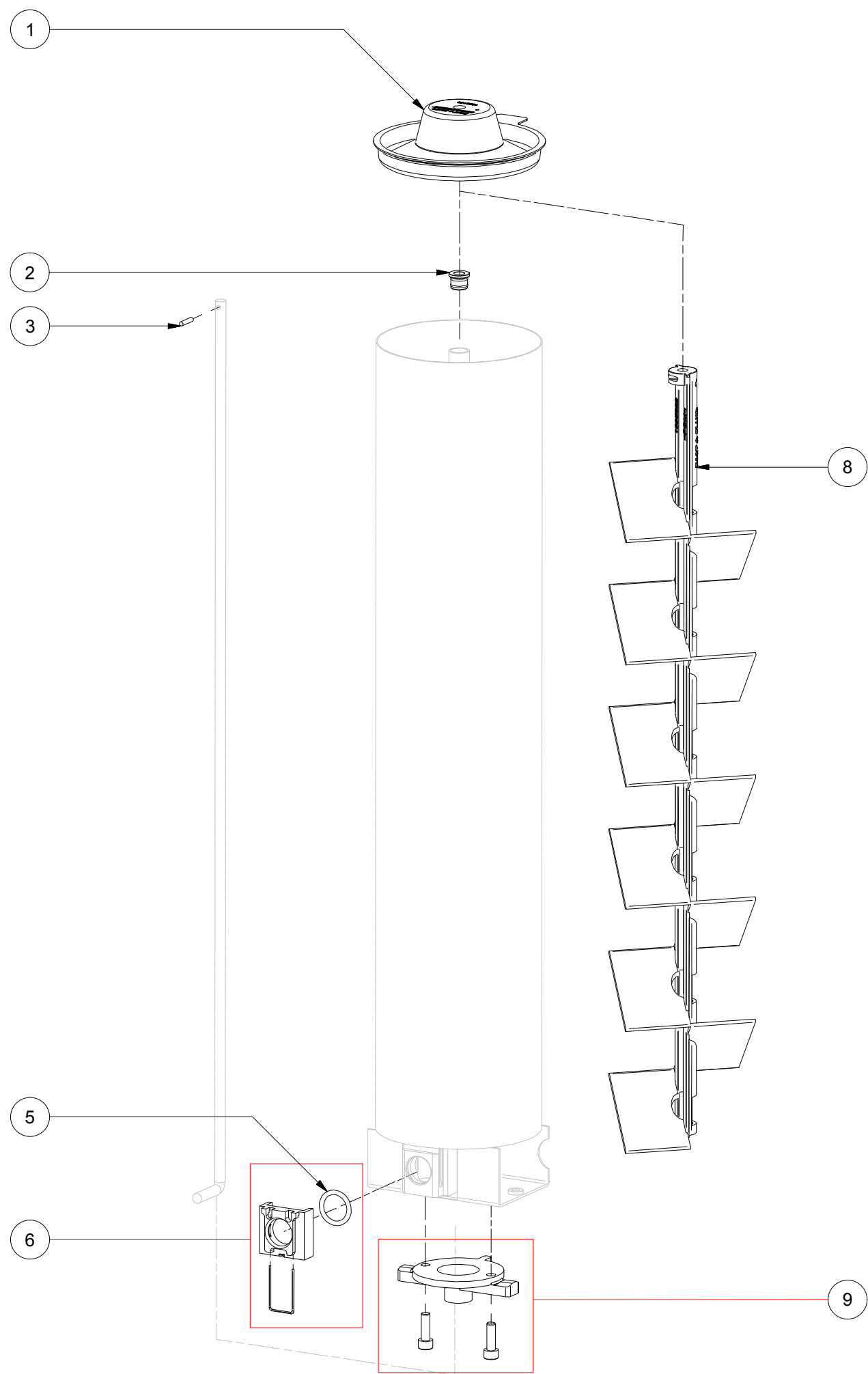
2L,SST can,1ex,POM agit 1814988-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802502-SP        | Lid POM,2L can,5pcs            |         |
| 2          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 3          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 5          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 6          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 8          | 1864700-SP        | Agit POM, 2L SST can, 5pcs     |         |
| 9          | 1816106-SP        | Cap,bottom,sst can with screws |         |

7246

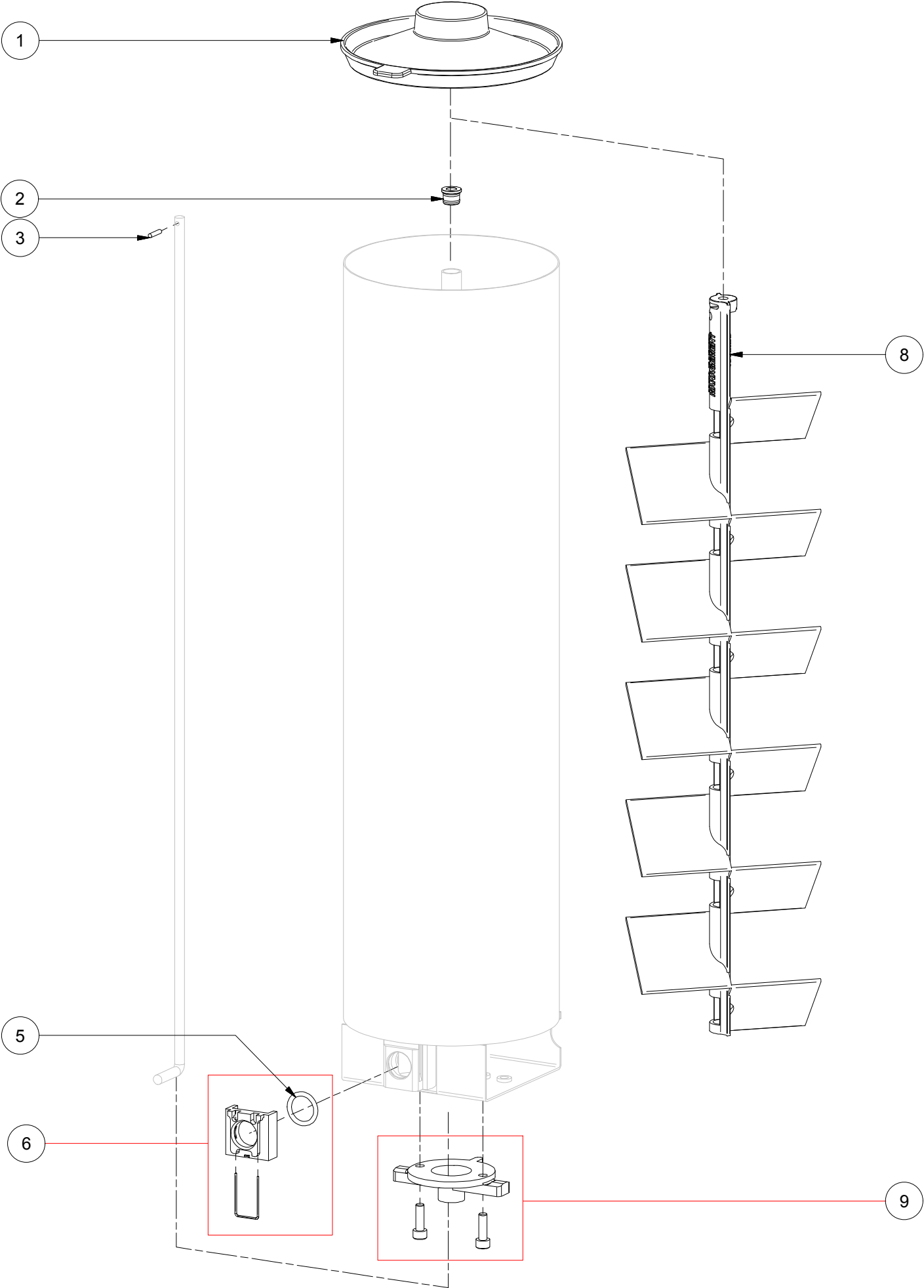
3L,SST can,1ex,POM agit 1809888-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802503-SP        | Lid POM,3L can,5pcs            |         |
| 2          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 3          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 5          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 6          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 8          | 1860394-SP        | Agit POM,3L Sst can,5pcs       |         |
| 9          | 1816106-SP        | Cap,bottom,sst can with screws |         |

7247

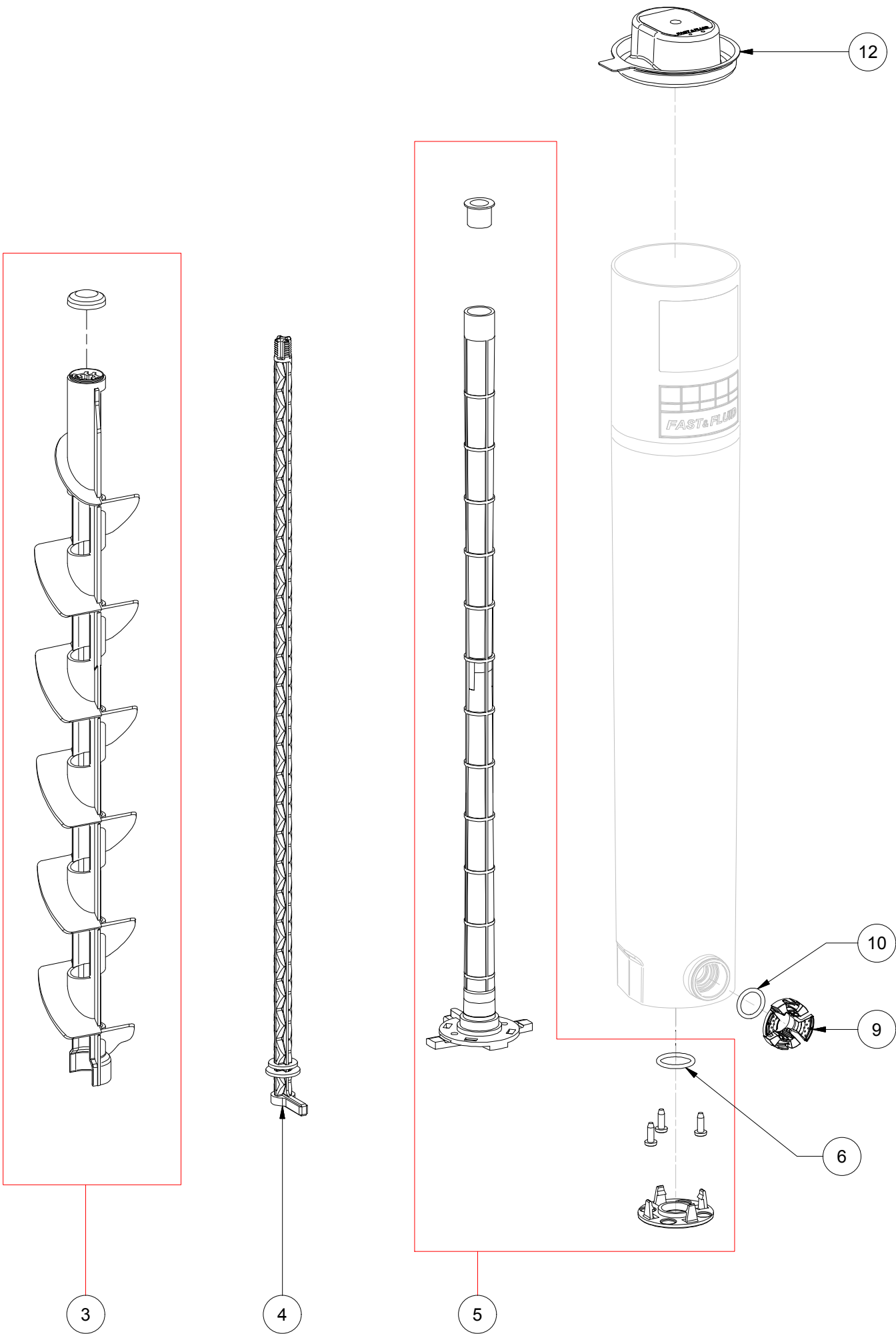
6L,SST can,1ex,POM agit 1810596-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 1          | 1802504-SP        | Lid POM,4.5/6L can,5pcs        |         |
| 2          | 1801447-SP        | Bush,shaft-pipe,set,HA,10pcs   |         |
| 3          | 1860110-SP        | Pin,spirol,f2.5x12,Sst,25pcs.  |         |
| 5          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 6          | 1810767-SP        | Clip,spring,tube,(Set 5pcs)    |         |
| 8          | 1860395-SP        | Agit POM,6L Sst can,5pcs       |         |
| 9          | 1816106-SP        | Cap,bottom,sst can with screws |         |

7248

2L,POM can,1ex,POM agit 1865010-SP

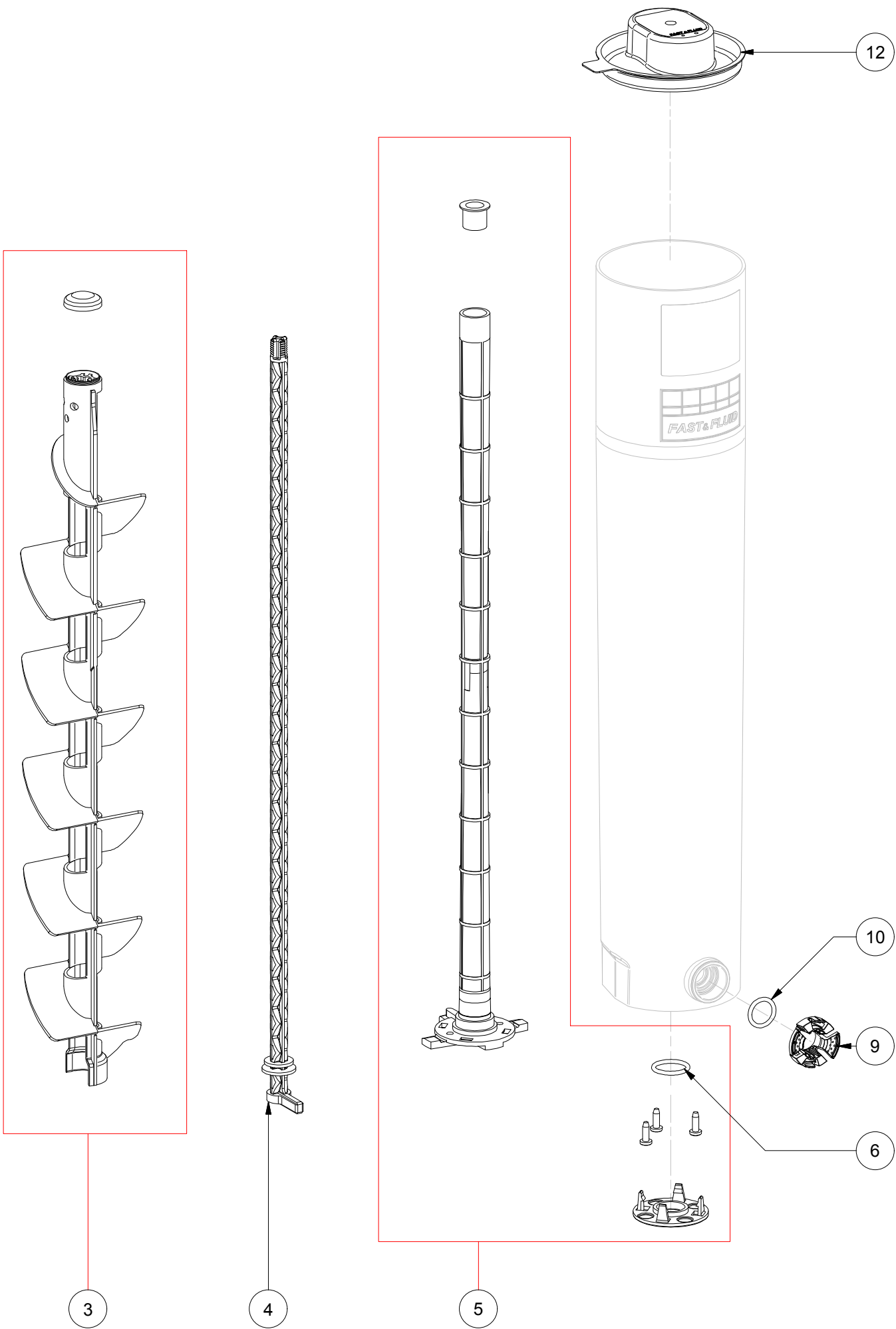


| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 3          | 1817911 -SP       | Agitator,2L,POM,2014,5pcs      |         |
| 4          | 1817917-SP        | Shaft,canister,HA,5pcs         |         |
| 6          | 1362231-SP        | O-ring,cann.vit.20.29 set 10pc |         |
| 5          | 1817427-SP        | Inner tube,canister,kit        |         |
| 9          | 1817841-SP        | Clip,pump,canister,HA,5pcs     |         |
| 10         | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 12         | 1817421-SP        | Lid POM,2L can,5pcs            |         |



7249

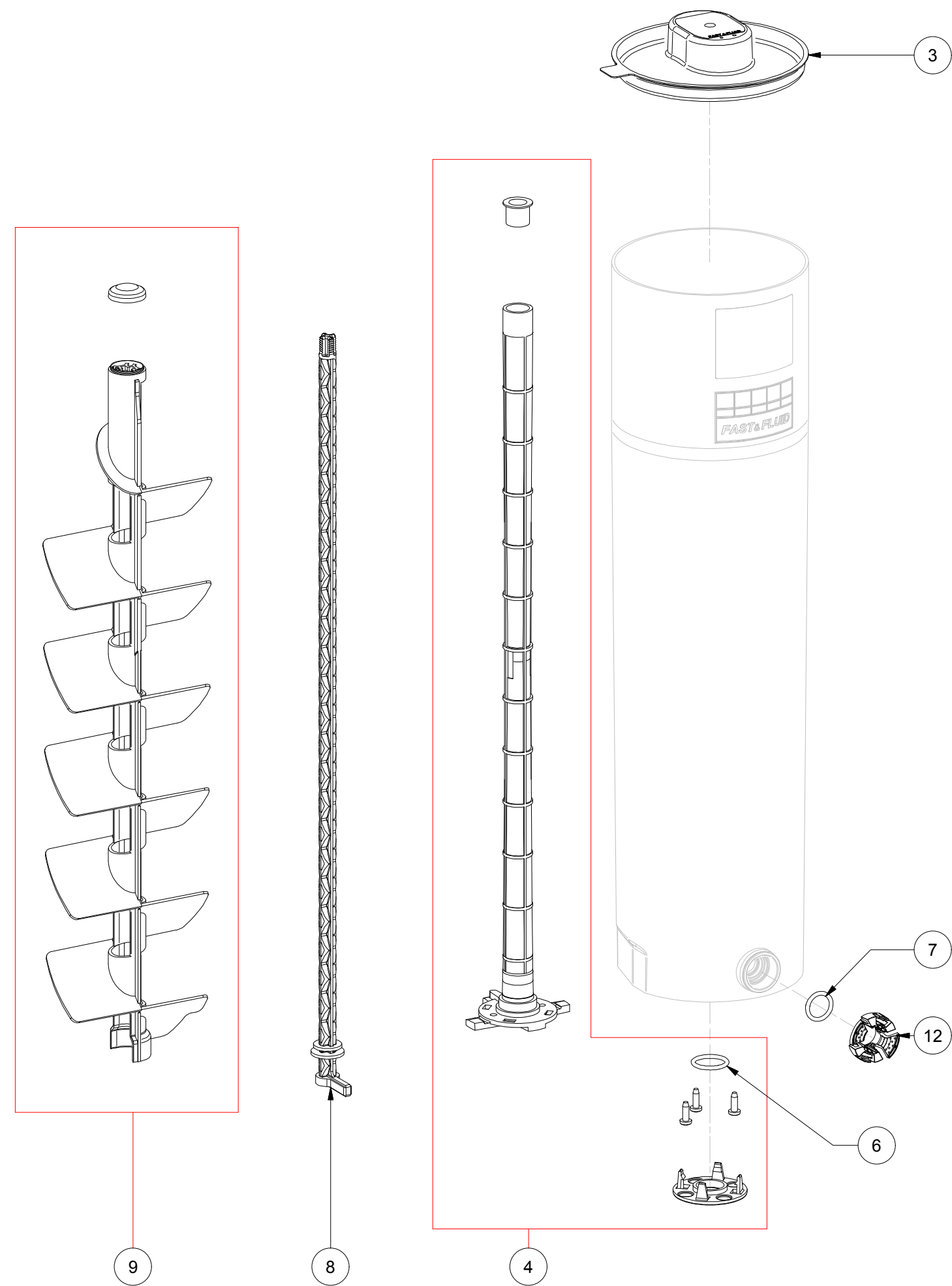
3L,POM can,1ex,POM agit 1865011-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 3          | 1817910-SP        | Agitator,3L,POM,2014,5pcs      |         |
| 4          | 1817917-SP        | Shaft,canister,HA,5pcs         |         |
| 5          | 1817427-SP        | Inner tube,canister,kit        |         |
| 6          | 1362231-SP        | O-ring,cann.vit.20.29 set 10pc |         |
| 9          | 1817841-SP        | Clip,pump,canister,HA,5pcs     |         |
| 10         | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 12         | 1817422-SP        | Lid POM,2.5/3L can,5pcs        |         |

7250

6L,POM can,1ex,POM agit 1865012-SP

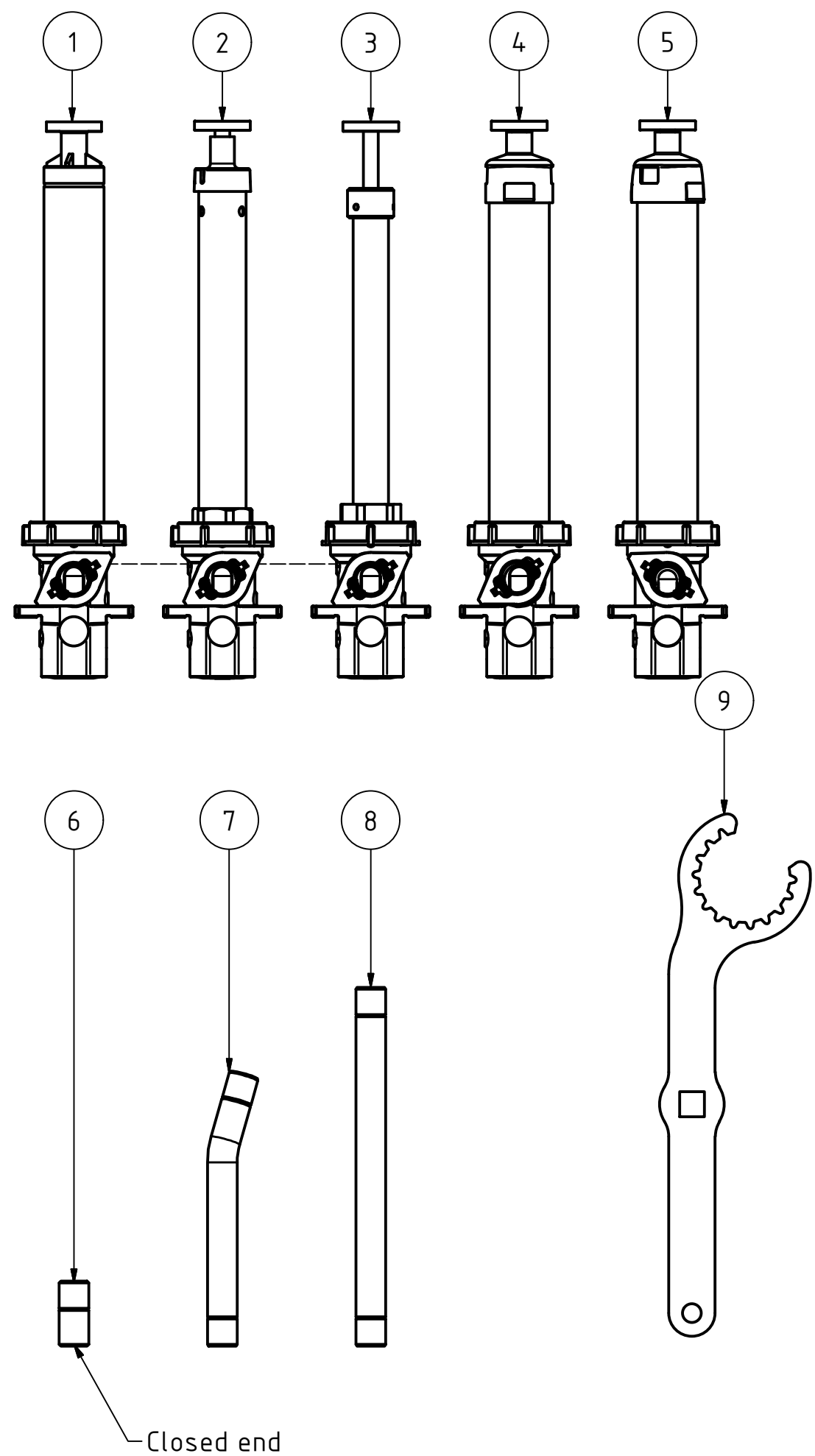


| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 3          | 1817423-SP        | Lid POM,5/6L can,5pcs          |         |
| 4          | 1817427-SP        | Inner tube,canister,kit        |         |
| 6          | 1362231-SP        | O-ring,cann.vit.20.29 set 10pc |         |
| 7          | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 8          | 1817917-SP        | Shaft,canister,HA,5pcs         |         |
| 9          | 1817912-SP        | Agitator,6L,POM,2014           |         |
| 12         | 1817841-SP        | Clip,pump,canister,HA,5pcs     |         |



7260

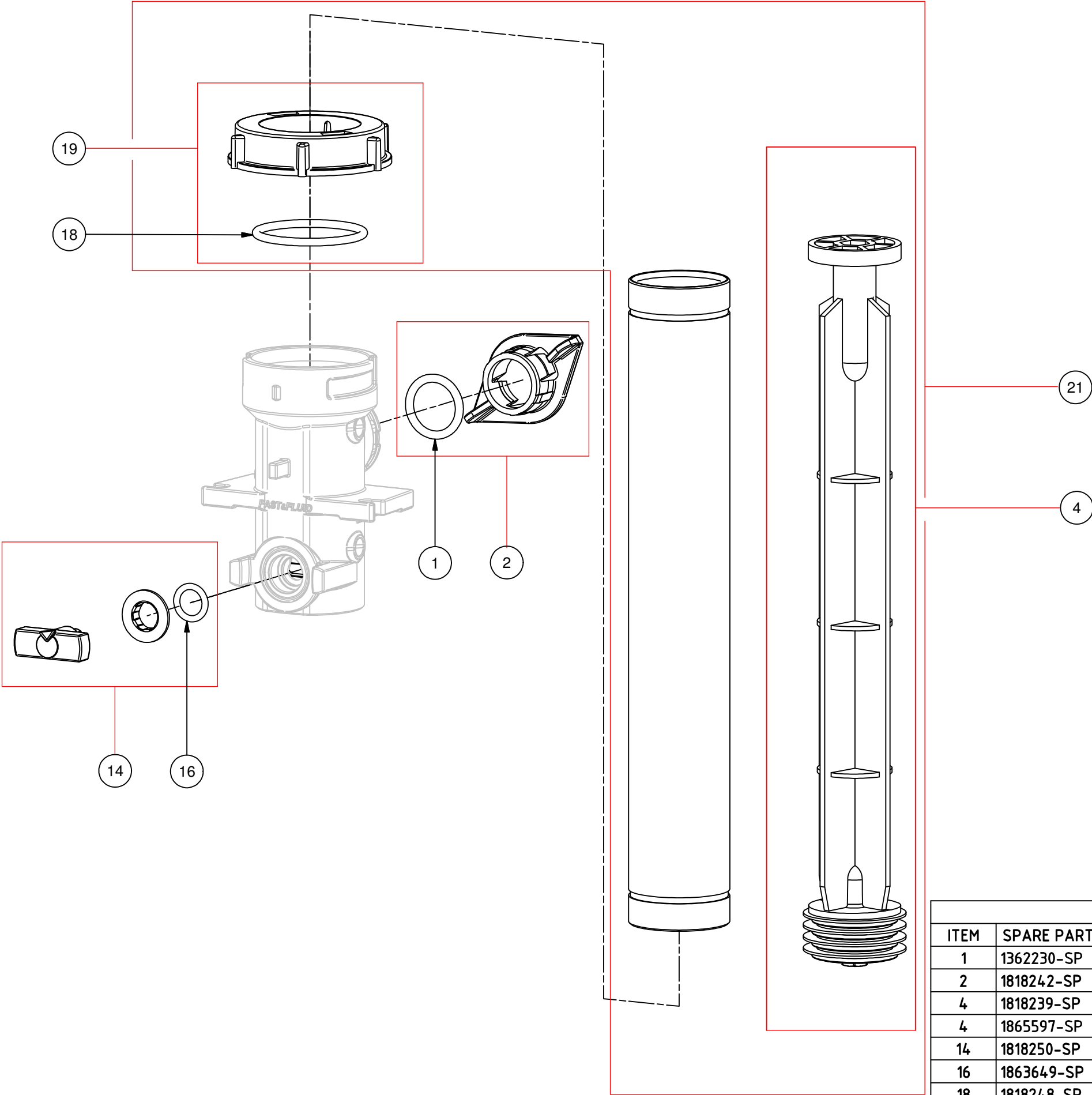
Pumps



| PARTS LIST |                   |                                |                                 |
|------------|-------------------|--------------------------------|---------------------------------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS                         |
| 1          | 1818238-SP        | Pump,Ballvalve,100ml           | Page 7261                       |
| 2          | 1819612-SP        | Pump,Ballvalve,55ml,Sample     | Page 7263                       |
| 3          | 1819671-SP        | Pump,Ballvalve,29ml            | Page 7266                       |
| 4          | 1830356-SP        | Pump,Ballvalve,100ml,Hybrid    | Page 7264 ; Replaces 1819922-SP |
| 5          | 1820345-SP        | Pump,Ballvalve,100ml,HP        | Page 7265                       |
| 6          | 1810605-SP        | Plug,canister,16x35mm,set 5pcs |                                 |
| 7          | 1814138-SP        | Tube,ø16x139,angle 16deg,HA    |                                 |
| 7          | 1810592-SP        | Tube,ø16x139.8,angle 7deg,HA   |                                 |
| 7          | 1814135-SP        | Tube,ø16x148.2,angle 27deg,HA  |                                 |
| 7          | 1814136-SP        | Tube,ø16x193.7,angle 10deg,HA  |                                 |
| 7          | 1814139-SP        | Tube,ø16x216,angle 4.5,HA      |                                 |
| 8          | 1810574-SP        | Tube,ø 16x 42.3,HA             |                                 |
| 8          | 1805202-SP        | Tube,ø16x 48.5,HA              |                                 |
| 8          | 1810577-SP        | Tube,ø16x 59.3,HA              |                                 |
| 8          | 1810584-SP        | Tube,ø16x 74.3,HA              |                                 |
| 8          | 1810585-SP        | Tube,ø16x 91.3,HA              |                                 |
| 8          | 1810582-SP        | Tube,ø16x117.3,HA              |                                 |
| 8          | 1804333-SP        | Tube,ø16x127,HA                |                                 |
| 8          | 1810575-SP        | Tube,ø16x134.3,HA              |                                 |
| 8          | 1810576-SP        | Tube,ø16x151.3,HA              |                                 |
| 8          | 1810578-SP        | Tube,ø16x173.3,HA              |                                 |
| 8          | 1810580-SP        | Tube,ø16x180.3,HA              |                                 |
| 8          | 1810579-SP        | Tube,ø16x190.3,HA              |                                 |
| 8          | 1864579-SP        | Tube,ø16x193.3,HA              |                                 |
| 8          | 1810583-SP        | Tube,ø16x232.3 HA              |                                 |
| 8          | 1810589-SP        | Tube,ø16x237.3,HA              |                                 |
| 8          | 1810590-SP        | Tube,ø16x254.3,HA              |                                 |
| 8          | 1810586-SP        | Tube,ø16x263.3,HA              |                                 |
| 8          | 1810588-SP        | Tube,ø16x316.3,HA              |                                 |
| 8          | 1810591-SP        | Tube,ø16x333.3,HA              |                                 |
| 9          | 1818742-SP        | Key,ring,pump                  |                                 |

7261

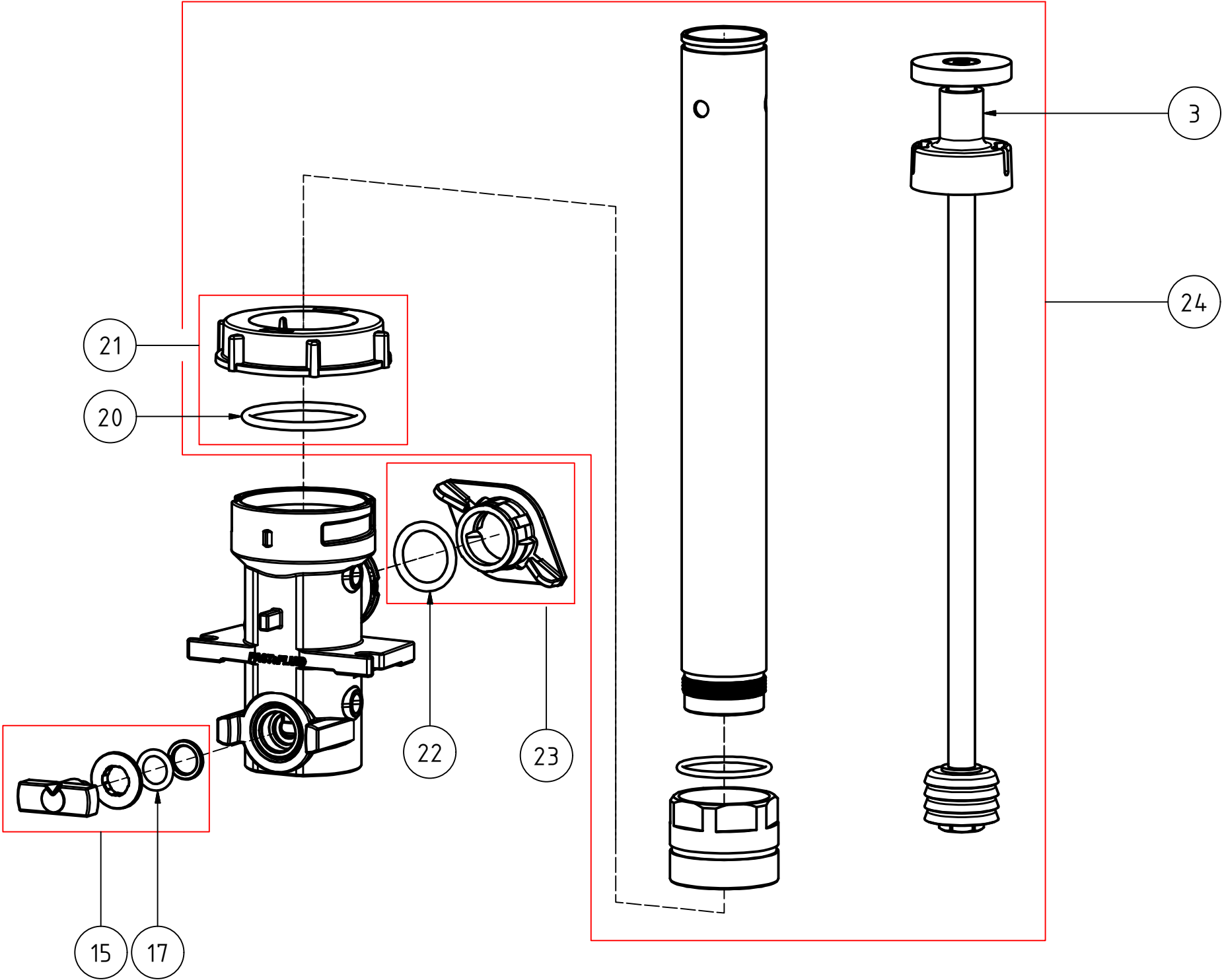
Pump,Ballvalve,100ml 1818238



| PARTS LIST |                   |                                      |         |
|------------|-------------------|--------------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                          | REMARKS |
| 1          | 1362230-SP        | O-ring,can,vit,15.88x2.62 10st       |         |
| 2          | 1818242-SP        | Tube clip, 16mm (set 5pcs)           |         |
| 4          | 1818239-SP        | Pistonrod, incl. teflon (set 10pcs)  |         |
| 4          | 1865597-SP        | Pistonrod, incl. teflon (set 100pcs) |         |
| 14         | 1818250-SP        | lever, valve (set 5pcs)              |         |
| 16         | 1863649-SP        | O-ring,8,5x2,lever,ballv,10pcs       |         |
| 18         | 1818248-SP        | O-ring,32x2.5 (10 pcs)               |         |
| 19         | 1818240-SP        | Ring,tube,100ml, (set 5pcs)          |         |
| 21         | 1819166-SP        | Pumptube,100ml,compl.(set 1pc)       |         |

7263

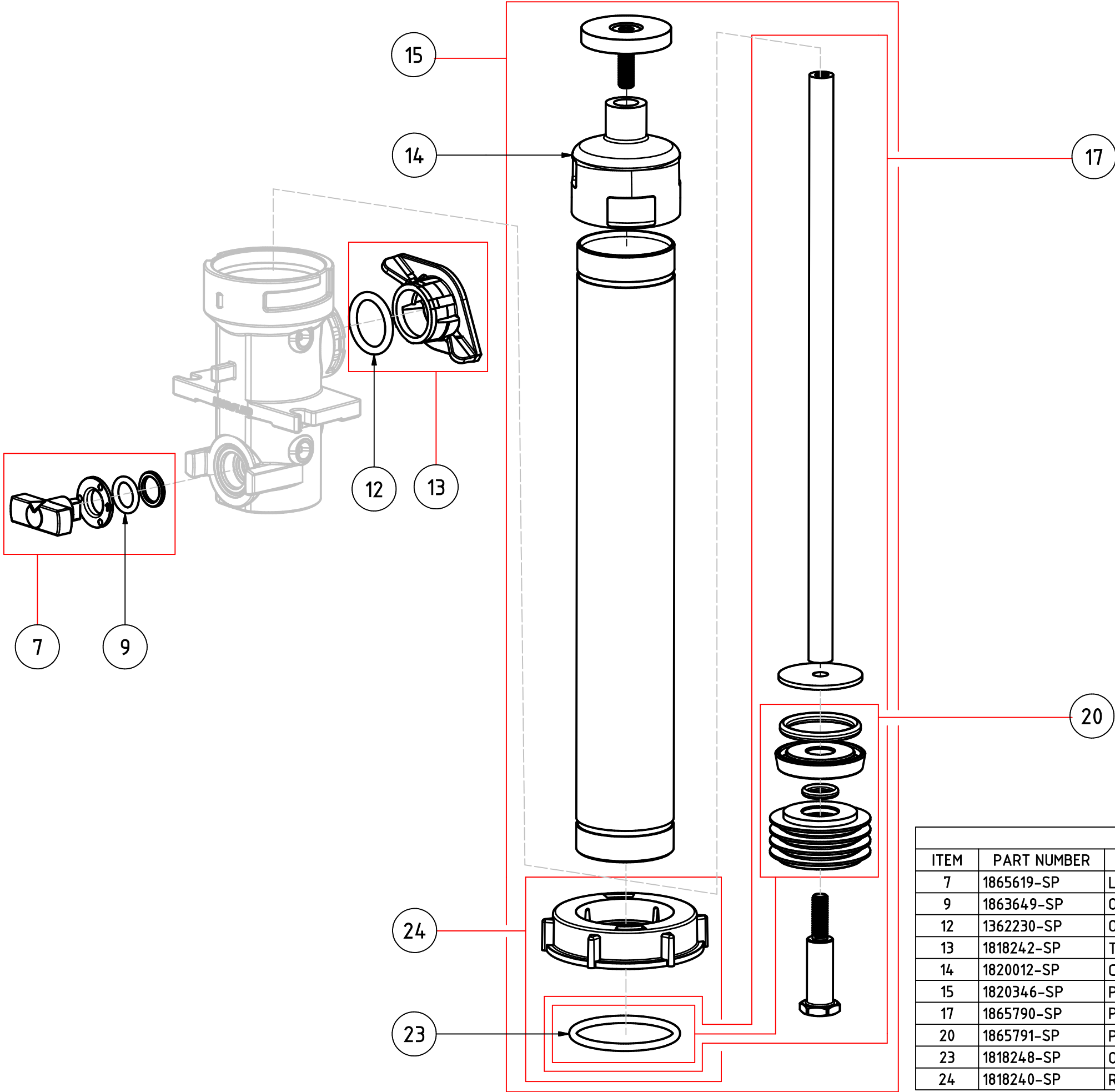
Pump,Ballvalve,55ml,Sample 1819612-SP



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 3          | 1813428-SP        | cap,tube,2-oz,5pcs             |         |
| 15         | 1865619-SP        | lever,valve (set 5pcs)         |         |
| 17         | 1863649-SP        | O-ring,8,5x2,lever,ballv,10pcs |         |
| 20         | 1818248-SP        | O-ring,32x2.5 (10 pcs)         |         |
| 21         | 1818240-SP        | Ring,tube,100ml, (set 5pcs)    |         |
| 22         | 1362230-SP        | O-ring,can,vit,15.88x2.62 10st |         |
| 23         | 1818242-SP        | Tube clip, 16mm (set 5pcs)     |         |
| 24         | 1865739-SP        | Pumptube,assy,55ml,sample disp |         |

7264

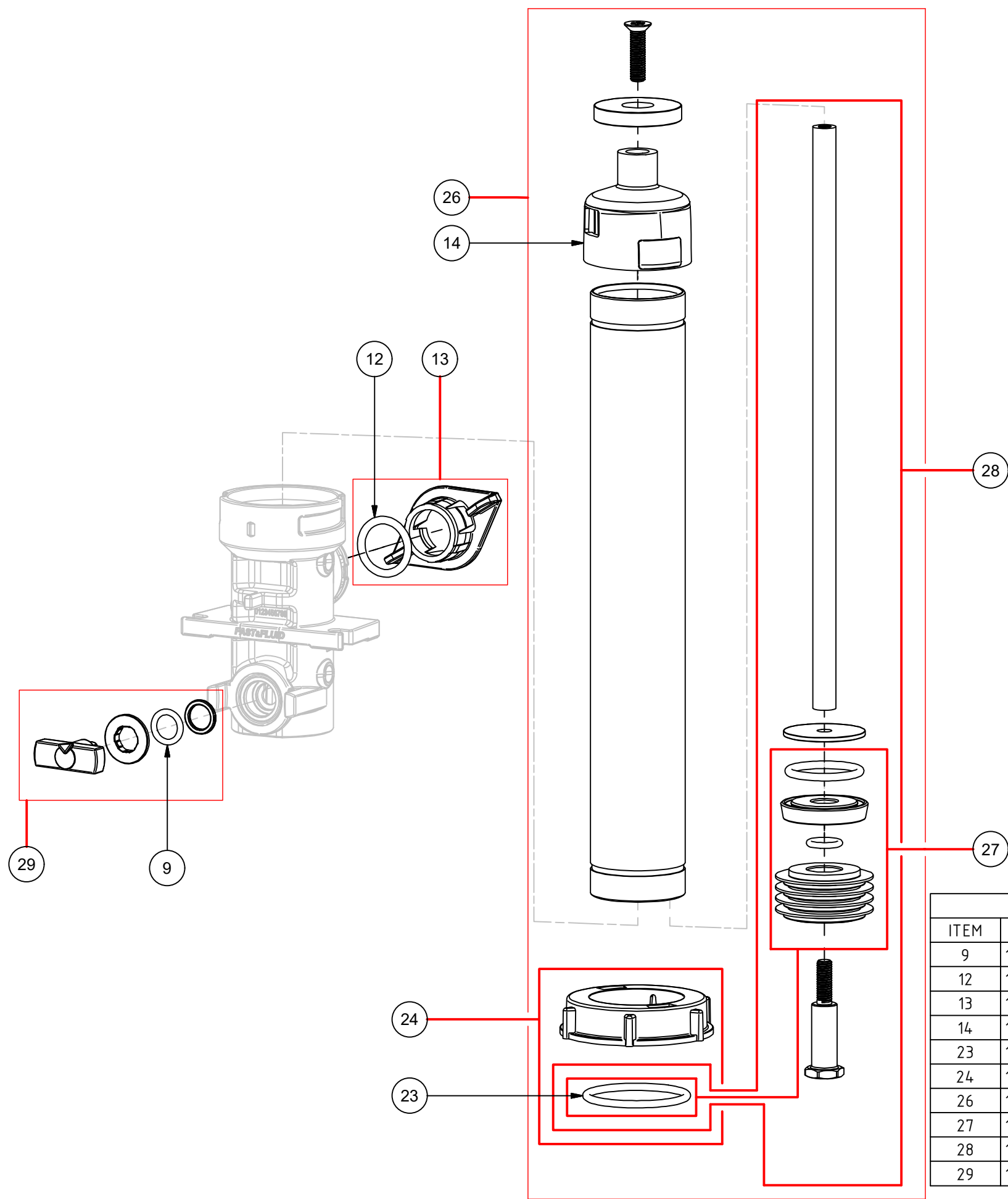
Pump,Ballvalve,100ml hybrid 1830356 -SP



| PARTS LIST |             |                                       |         |     |
|------------|-------------|---------------------------------------|---------|-----|
| ITEM       | PART NUMBER | DESCRIPTION                           | REMARKS | QTY |
| 7          | 1865619-SP  | Lever, valve, industr (set 5 pcs)     |         | 1   |
| 9          | 1863649-SP  | O-ring, 8.5x2, lever, ballv, 10pcs    |         | 1   |
| 12         | 1362230-SP  | O-ring, can, vit, 15.88x2.62, 10pcs   |         | 1   |
| 13         | 1818242-SP  | Tube clip, 16mm (set 5pcs)            |         | 1   |
| 14         | 1820012-SP  | Cap, tube, industrial (set 5pcs)      |         | 1   |
| 15         | 1820346-SP  | Pumptube, 100ml, HPP, compl (set 1pc) |         | 1   |
| 17         | 1865790-SP  | Piston, rod, assy, 100ml, HPP         |         | 1   |
| 20         | 1865791-SP  | Piston, 100ml, HPP (set 5pcs)         |         | 1   |
| 23         | 1818248-SP  | O-ring, 32x2.5 (10pcs)                |         | 1   |
| 24         | 1818240-SP  | Ring, tube, 100ml (set 5pcs)          |         | 1   |

7265

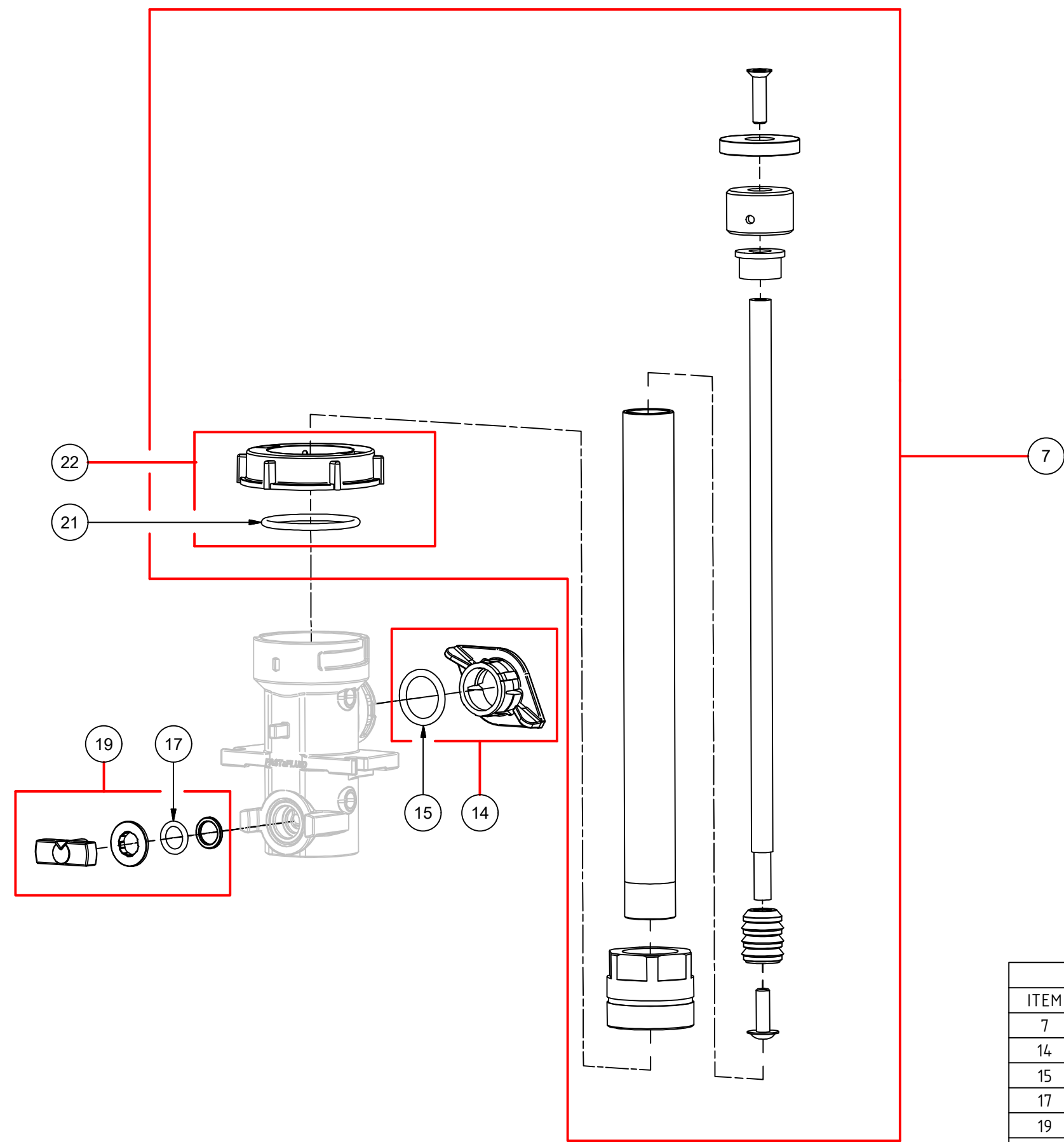
Pump,Ballvalve,100ml high performance 1820345-SP



| PARTS LIST |                   |                                    |         |
|------------|-------------------|------------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                        | REMARKS |
| 9          | 1863649-SP        | O-ring,8,5x2,lever,ballv,10pcs     |         |
| 12         | 1362230-SP        | O-ring,can,vit,15.88x2.62 10st     |         |
| 13         | 1818242-SP        | Tube clip, 16mm (set 5pcs)         |         |
| 14         | 1820012-SP        | Cap,tube,industrial (set 5pcs)     |         |
| 23         | 1818248-SP        | O-ring,32x2.5 (10 pcs)             |         |
| 24         | 1818240-SP        | Ring,tube,100ml, (set 5pcs)        |         |
| 26         | 1820346-SP        | Pumptube,100ml,HPP,compl.(set 1pc) |         |
| 27         | 1865791-SP        | Piston,100ml,HPP (set 5pcs)        |         |
| 28         | 1865790-SP        | Piston,rod,assy,100ml,HPP          |         |
| 29         | 1865619-SP        | Lever,valve,industr(set 5 pcs)     |         |

7266

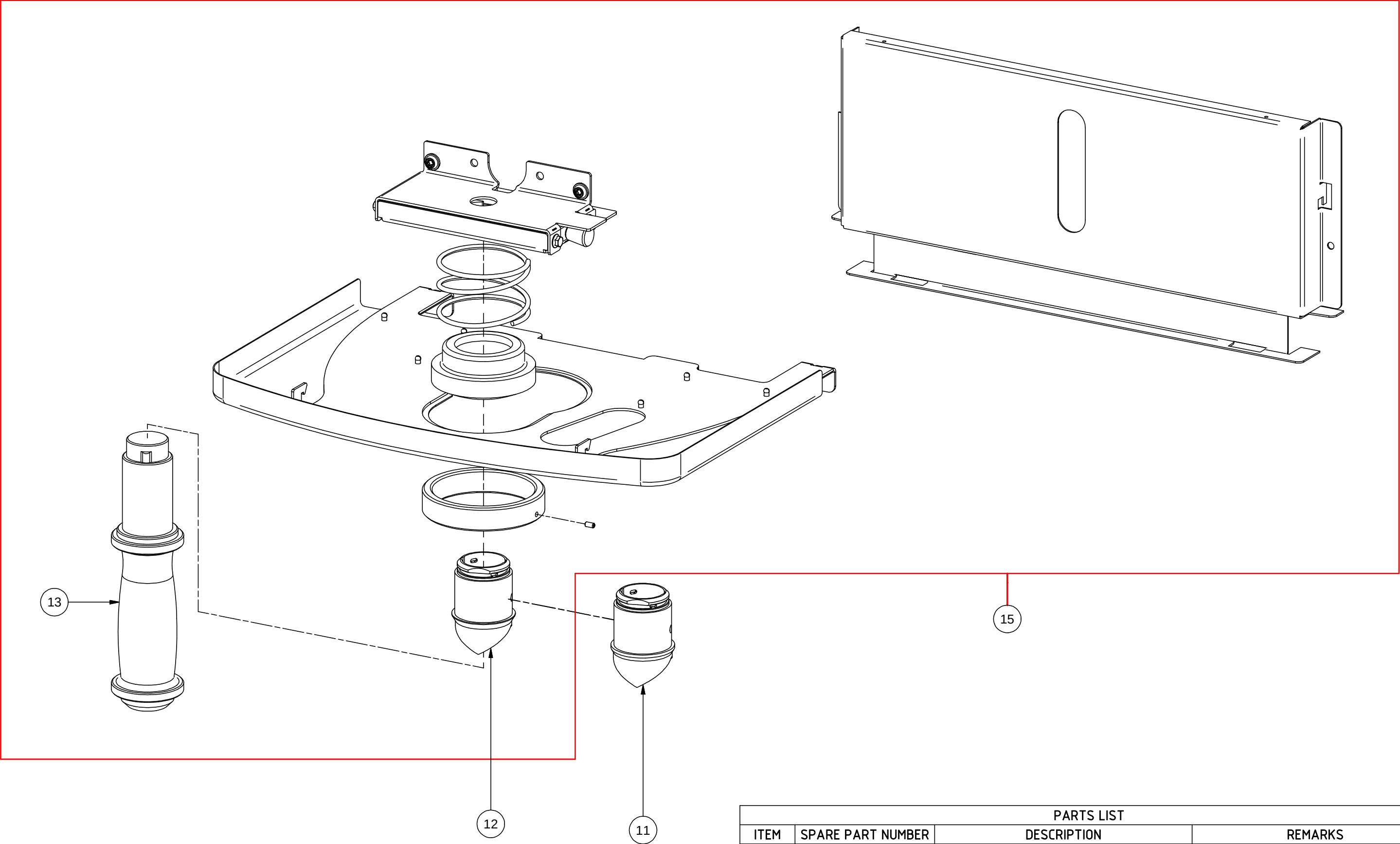
Pump,Ballvalve,29ml,Sample 1819671



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 7          | 1819668-SP        | Pumptube,29ml,compl.(set 1pc)  |         |
| 14         | 1818242-SP        | Tube clip, 16mm (set 5pcs)     |         |
| 15         | 1362230-SP        | O-ring,viton,15.88x2.62,10pcs  |         |
| 17         | 186364-9-SP       | O-ring,8,5x2,lever,ballv,10pcs |         |
| 19         | 1865619-SP        | lever, valve (set 5pcs)        |         |
| 21         | 1818248-SP        | O-ring,32x2.5 (10 pcs)         |         |
| 22         | 1818240-SP        | Ring,tube,100ml, (set 5pcs)    |         |



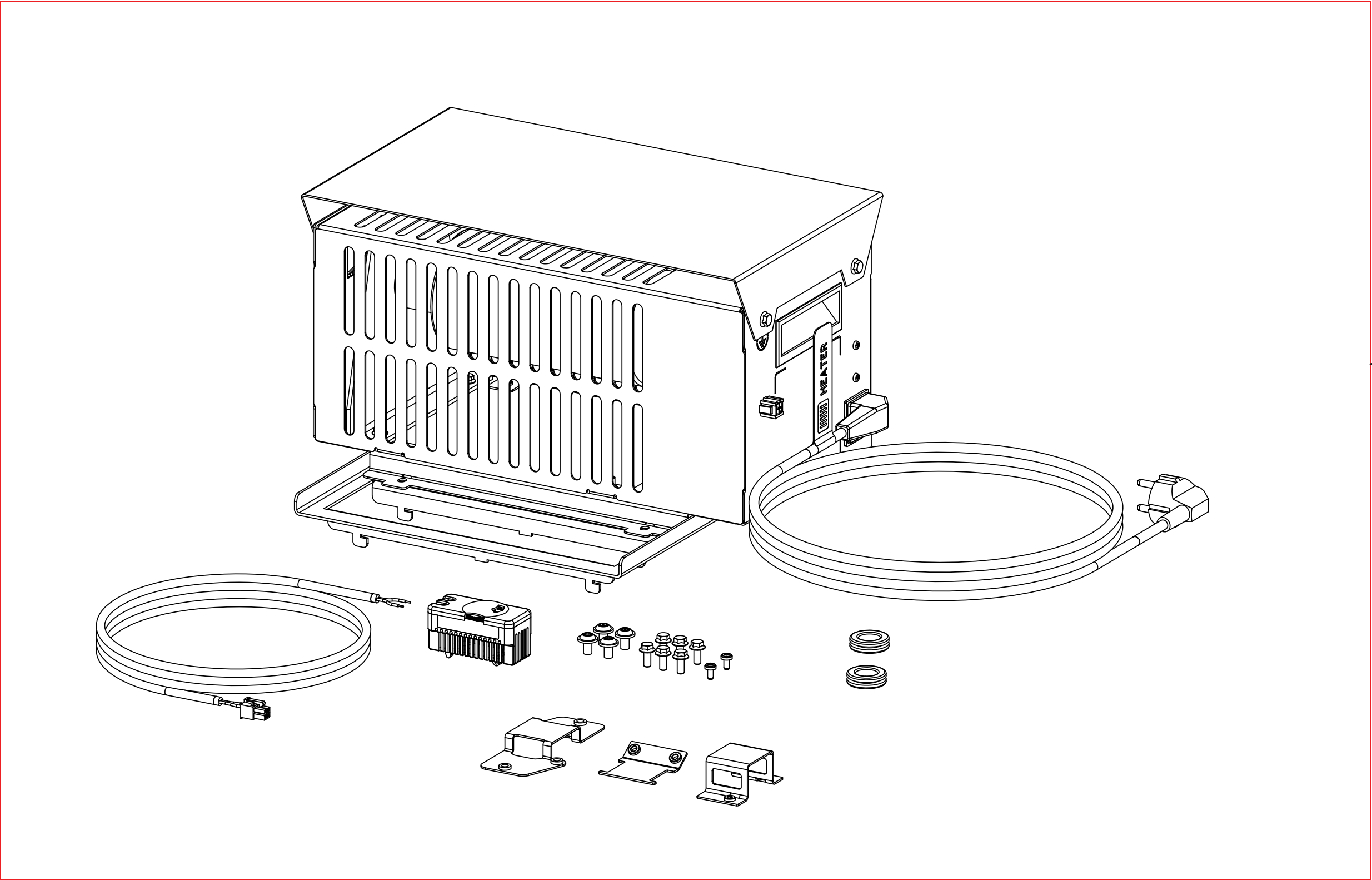
7271-B Punch



| PARTS LIST |                   |                                |         |
|------------|-------------------|--------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                    | REMARKS |
| 11         | 1819639-SP        | Blade,punch,48mm,2pcs          |         |
| 12         | 1819370-SP        | Blade,punch,46mm,2pcs          |         |
| 13         | 1819362-SP        | tool,punch,HA,HP               |         |
| 15         | 1819009-SP        | Electric punch HA480, complete |         |

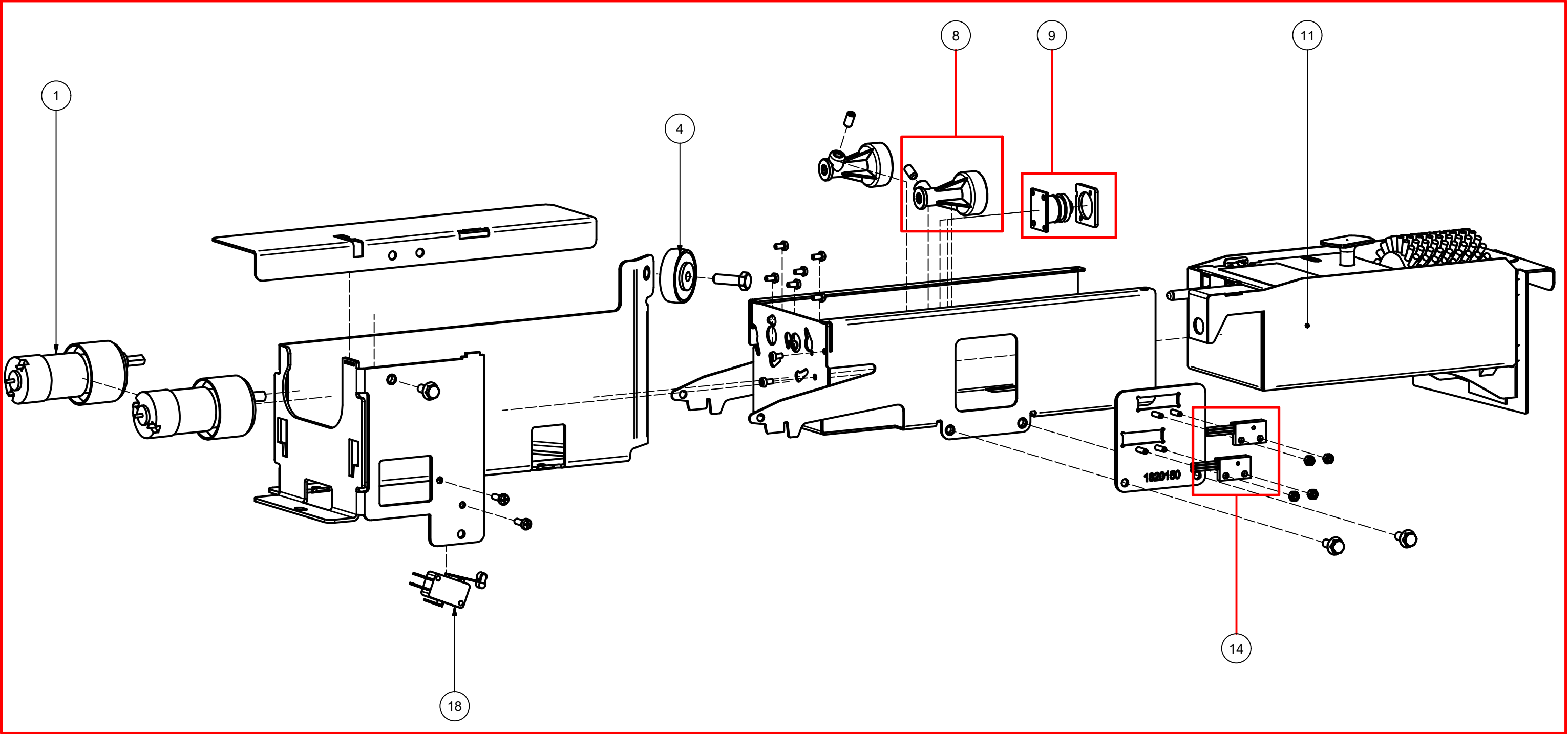
7275

Heating module 1819274-SP



| PARTS LIST |                   |                |         |
|------------|-------------------|----------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION    | REMARKS |
| 12         | 1819274-SP        | Heating module |         |

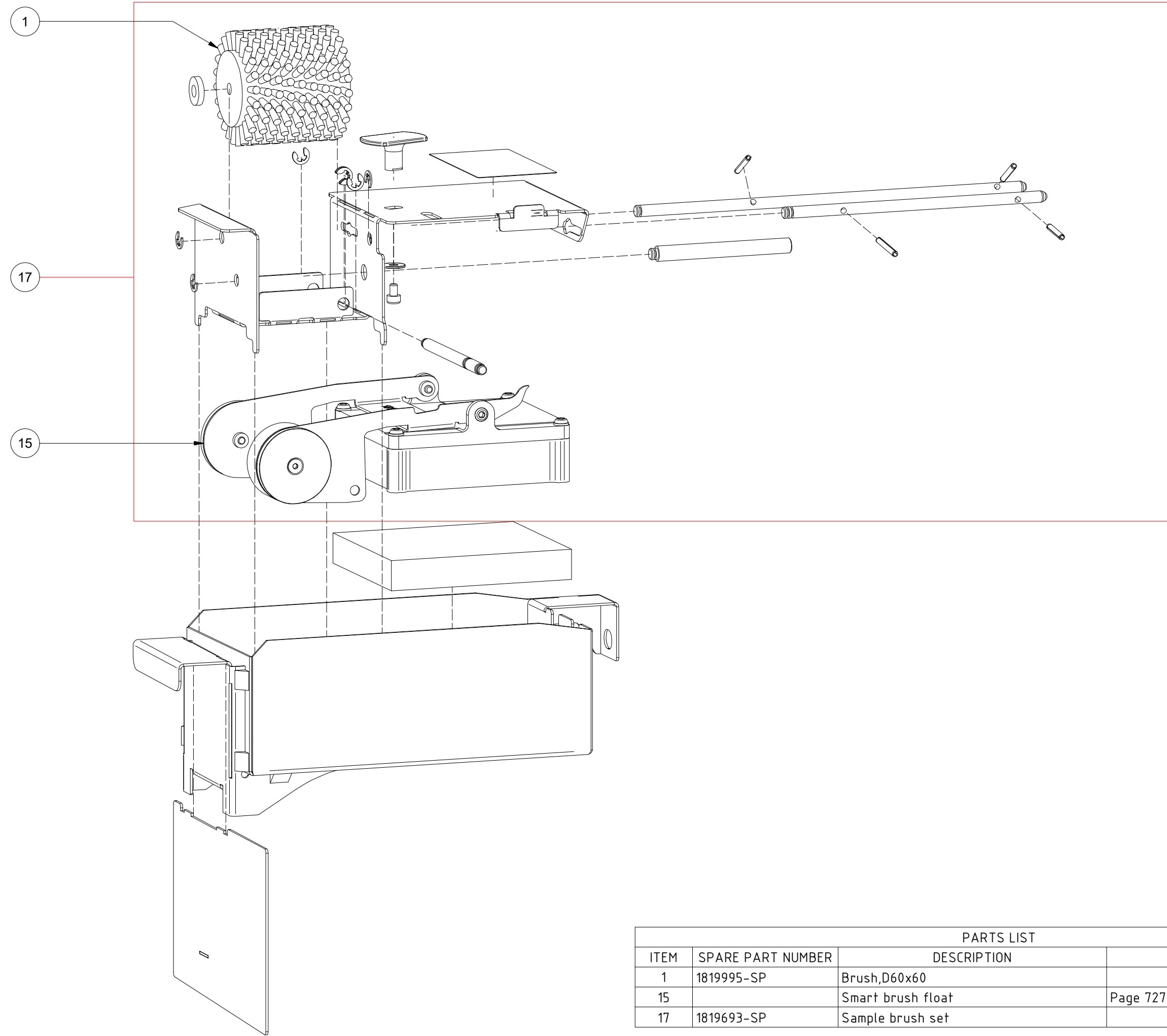




| PARTS LIST |                   |                               |           |
|------------|-------------------|-------------------------------|-----------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                   | REMARKS   |
| 1          | 1862721-SP        | Motor,micro,158-24-100        |           |
| 4          | 1862422-SP        | Wheel,traversing,centric,35mm |           |
| 8          | 1818735-SP        | Coupling,fork,brush(set 1pc)  |           |
| 9          | 1818541-SP        | Latch,push-in/out             |           |
| 11         |                   | Smart brush container         | Page 7278 |
| 14         | 1820152-SP        | Sensors set (2pcs)            |           |
| 18         | 1160200-SP        | Switch,micro,V-166-105(R)     |           |
| 19         | 1819942-SP        | Brush,Sample Dispenser        |           |

7278

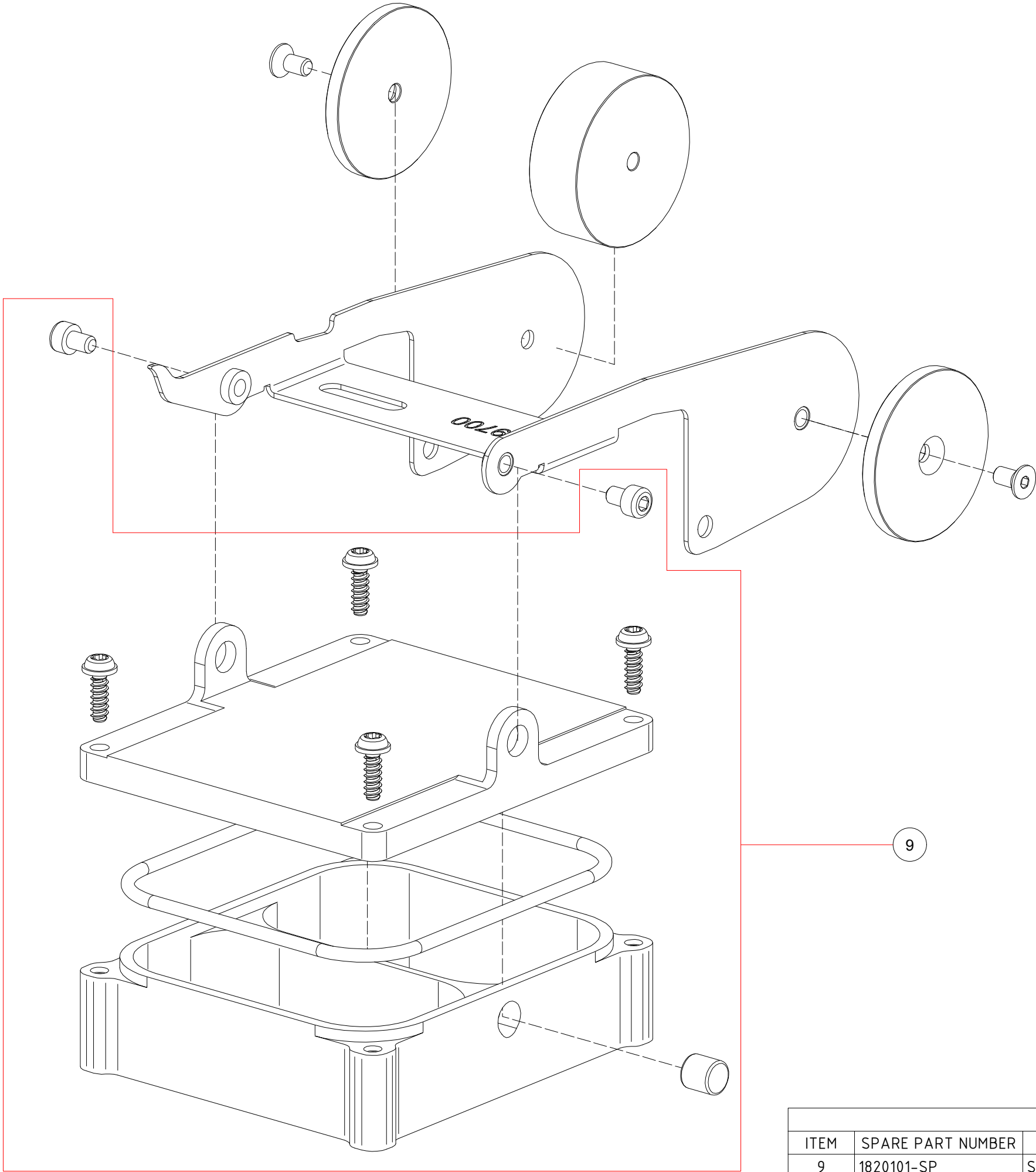
Sample brush container



| PARTS LIST |                   |                   |           |
|------------|-------------------|-------------------|-----------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION       | REMARKS   |
| 1          | 1819995-SP        | Brush,D60x60      | Page 7279 |
| 15         |                   | Smart brush float |           |
| 17         | 1819693-SP        | Sample brush set  |           |

7279

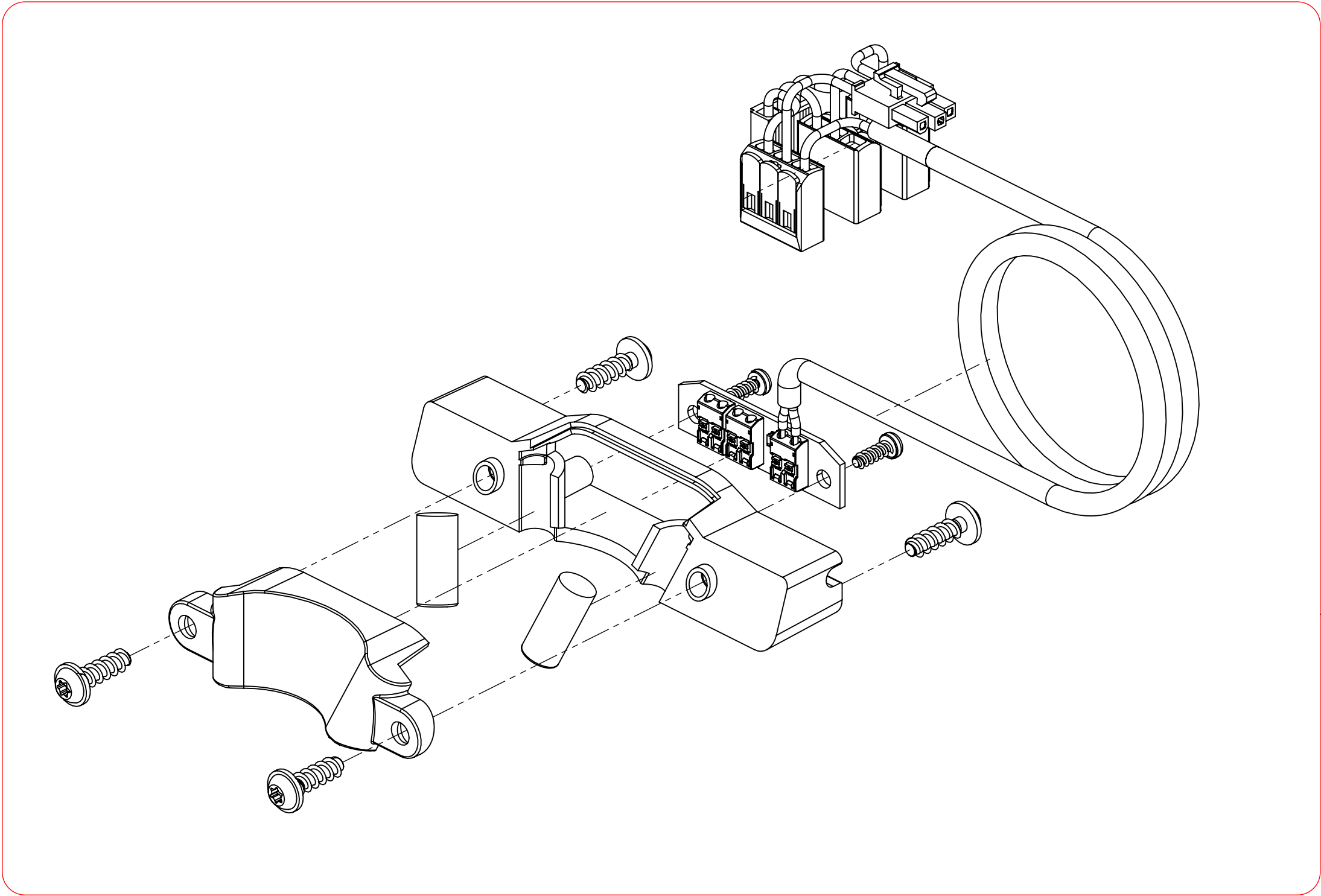
Sample brush float



| PARTS LIST |                   |                        |         |
|------------|-------------------|------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION            | REMARKS |
| 9          | 1820101-SP        | Sample brush float set |         |

7280

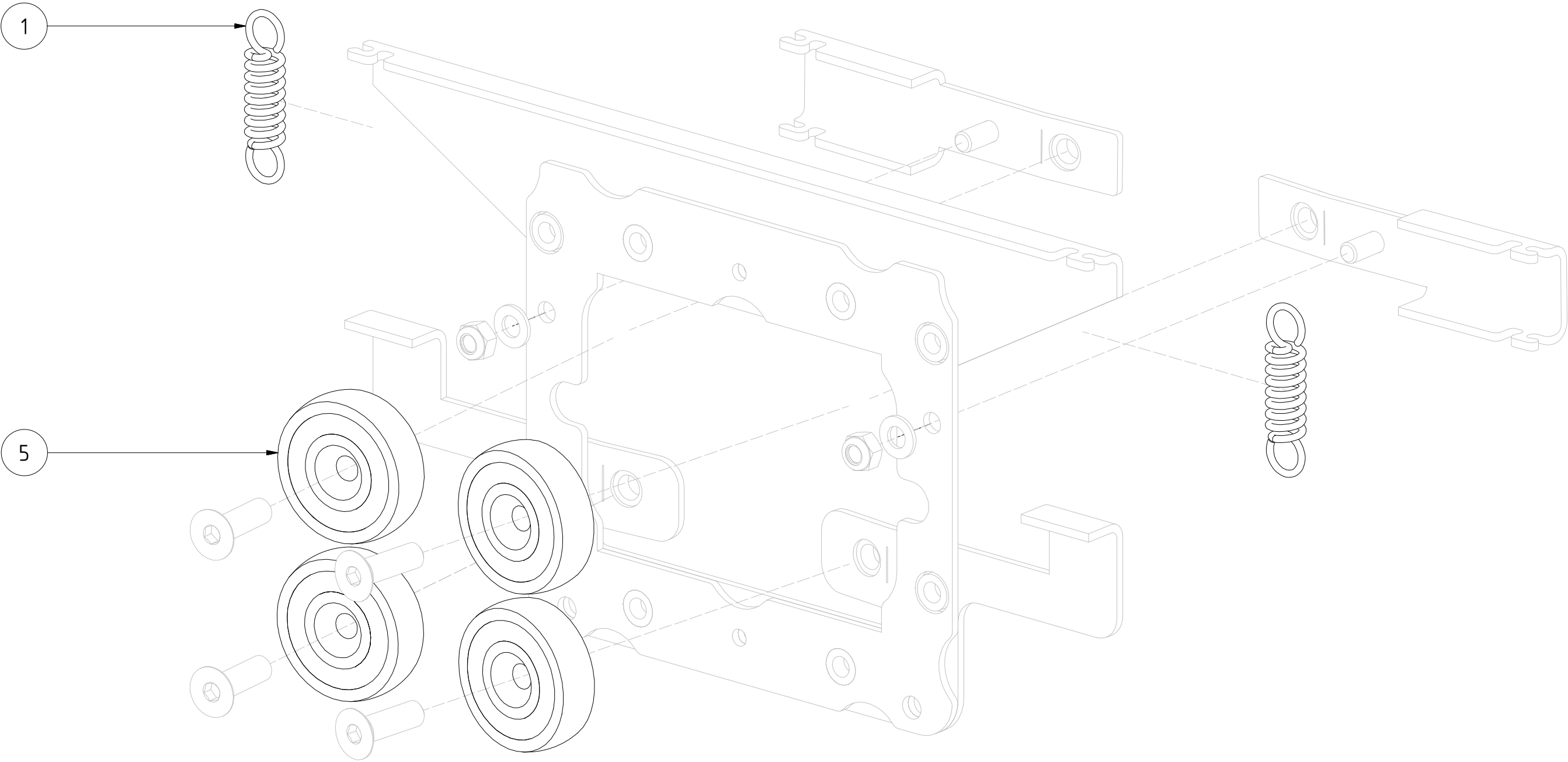
Can Positioning Light



| SPARE PARTS LIST |            |             |        |
|------------------|------------|-------------|--------|
| ITEM             | PART #     | DESCRIPTION | REMARK |
| 1                | 1820312-SP | CPL, HAx80  |        |

7281

Sample, bearing plate, valve motor



| PARTS LIST |                   |                                 |         |
|------------|-------------------|---------------------------------|---------|
| ITEM       | SPARE PART NUMBER | DESCRIPTION                     | REMARKS |
| 1          | 1820536-SP        | Spring (set 2pcs)               |         |
| 5          | 1818698-SP        | Wheel,asymmetric,35mm(set 4pcs) |         |