

A-dec 311/411/511 Dental Chairs

Service Reference

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Regulatory Information

For required regulatory information and the A-dec warranty, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at www.a-dec.com.

Product Service

Product service is available through your local authorized A-dec dealer. For service information, or to locate an authorized dealer, contact A-dec at 1.800.547.1883 in the USA and Canada or 1.503.538.7478 worldwide, or visit www.a-dec.com.

Contact Information and Other Resources

See page 2.

Product Models and Versions Covered in This Document

A-dec uses product versions to indicate significant changes to a product model. Modifications identified by a change to the product version include, but are not limited to, significant changes to features and options, and product compatibility.

Models	Versions	Description
311	A, B	Dental Chairs
411	A	Dental Chairs
511	A, B	Dental Chairs
521/522	A	Stool

Customer Service Information

For questions not addressed in this document, contact A-dec Customer Service using contact information for your region.

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A-dec Service Documents

Service Reference documents contain illustrated parts breakdown content and are companions to Service Guides, which contain information for product service, maintenance, and troubleshooting including circuit board components and flow diagrams. To access service documents, Service documents are available in the Resource Center at www.a-dec.com.

Genuine A-dec Parts Catalog

The *Genuine A-dec Service Parts Catalog*, p/n 85.5000.00, provides part number and ordering information for A-dec service parts. This catalog details parts for current products and products which are no longer manufactured but are still supported. Refer to this catalog for additional details on parts found in the service document.

Electronic Documentation

The latest versions of A-dec service documents, product installation guides, and instructions for use are available as electronic documents available in the Resource Center at www.a-dec.com.

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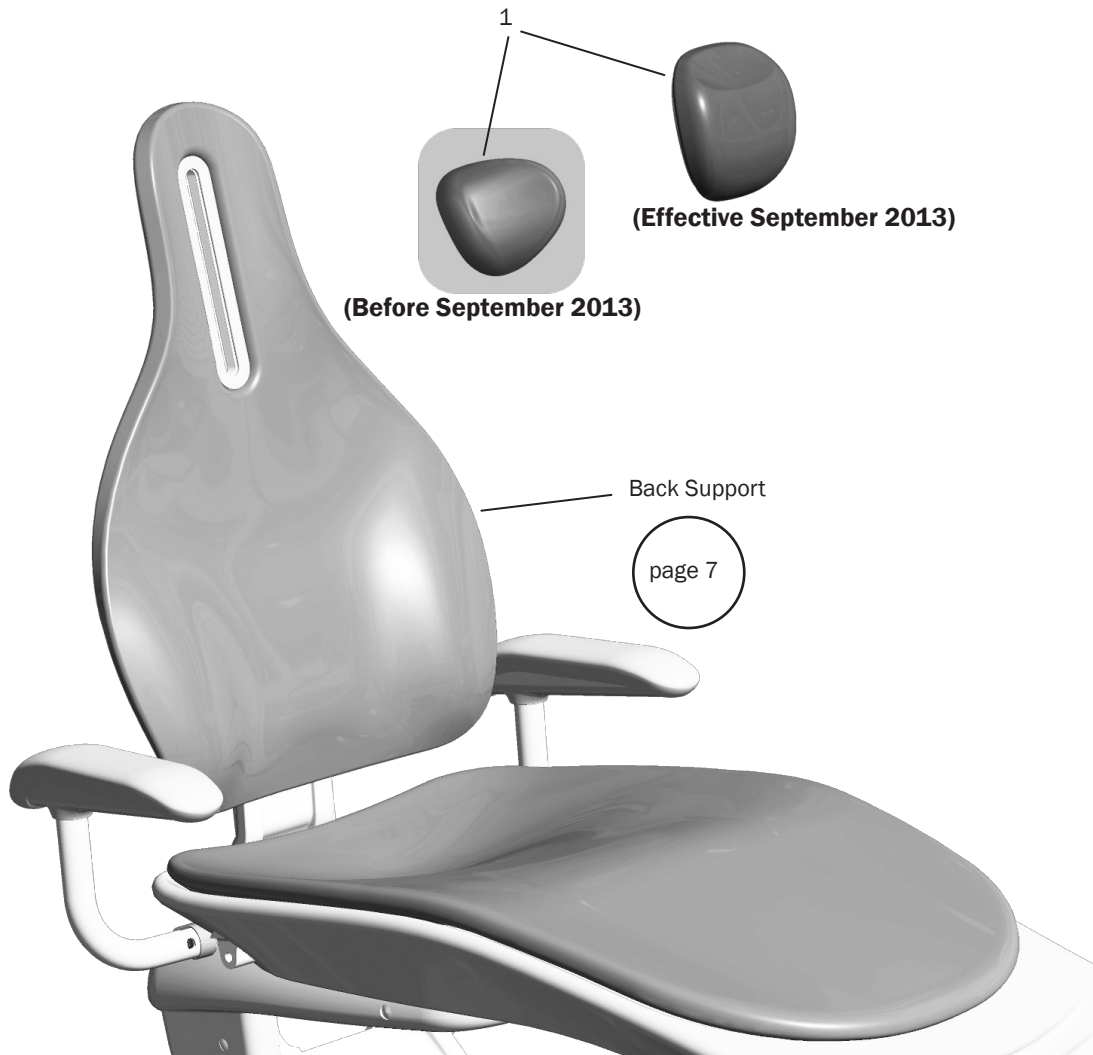
Stools 521/522



Footswitch



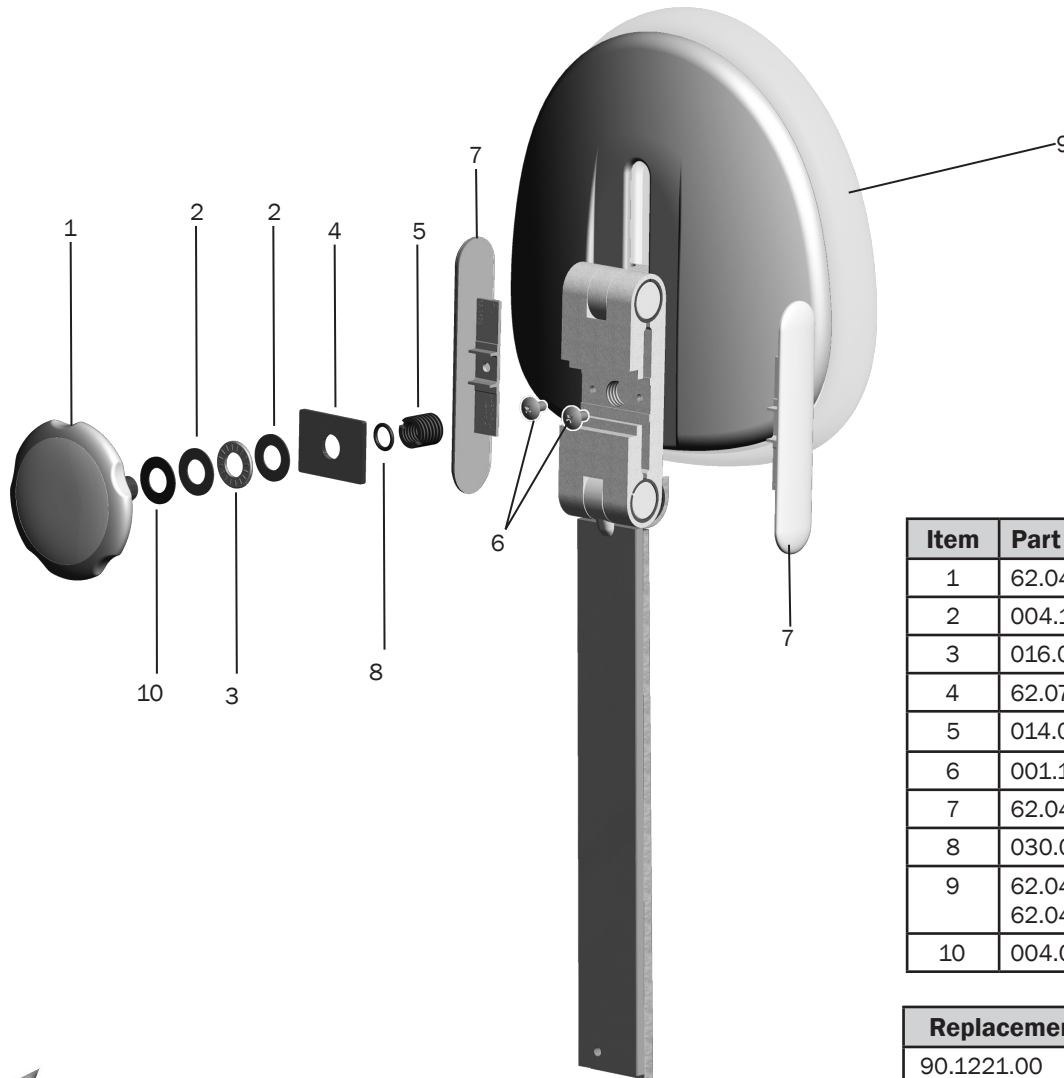
Adjustable Neck Support Headrest 311A



Item	Part Number	Description
1	62.0405.00	Neckrest assembly

Dual-Articulating Headrest with Locking Knob 311/411

p/n: 62.0631.01 – 311A/ 62. 0853.00 – 311B/411



Item	Part Number	Description
1	62.0427.00	Knob assembly
2	004.136.00	Washer, thrust, bearing .0500" ID
3	016.033.00	Bearing, thrust needle, 0.500" ID x 0.937" OD x 0.78" long
4	62.0749.00	Clamp plate
5	014.015.00	HeliCoil, 1/2 - 13" x 50"
6	001.191.01	Screw, Truss Head Phillips, 10-32 x 3/8", patch, steel, zinc
7	62.0429.00	Side cap
8	030.012.02	O-ring, AS568-12, pkg of 10
9	62.0417.01 62.0417.00	Cover, 300 headrest, white2 (311 B/411) Cover, 300 headrest, gray3 (311 A)
10	004.061.00	Nylatron washer, .503 ID

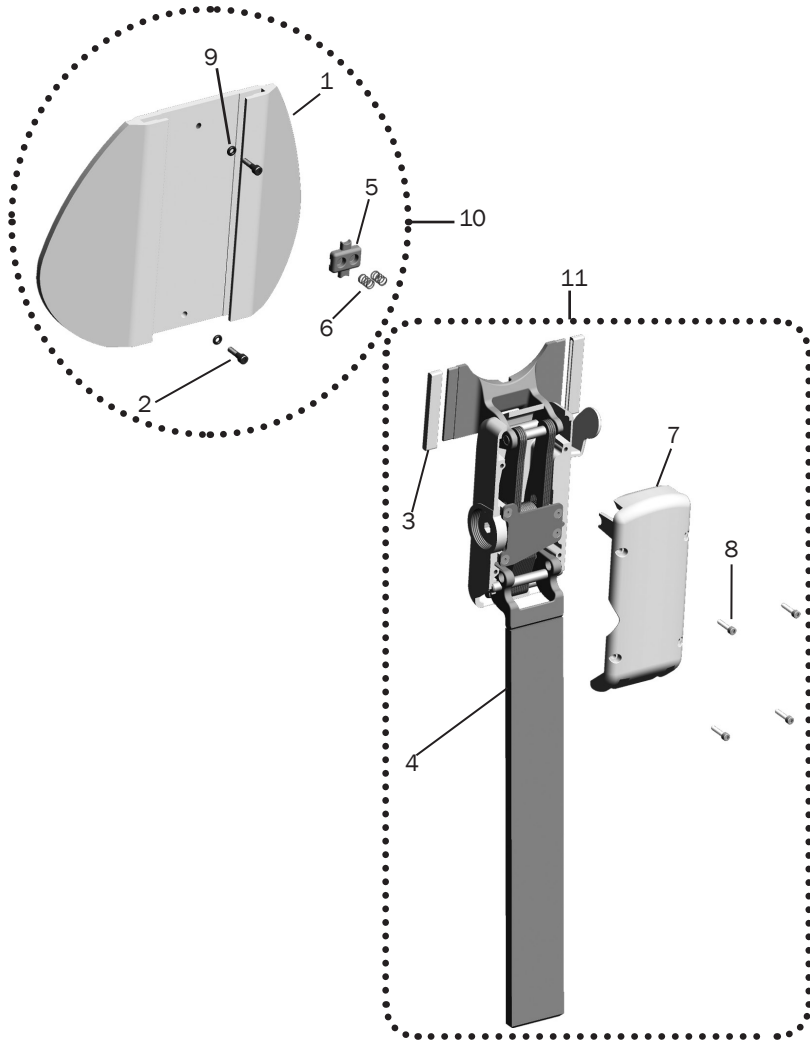
Replacement Kit	Item	Description
90.1221.00	1 - 4, 8	Knob kit

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Dual-Articulating Lever Release Headrest 411/511

p/n: 90.1091.00 (surf 4)/90.1091.01 (white 2)



Item	Part Number	Description
1	62.0023.01	Headrest cushion cover - part of 90.1092.01
2	001.042.01	Screw, socket head, 6-32 x 1/2", stainless steel, patch
3	62.0021.00	Bearing, slider, headrest cushion
4	62.0018.00	Glidebar weldment - part of 90.1091.01
5	62.0094.00	Bearing, slider, brake, headrest
6	013.005.00	Spring, compression, 0.240" OD x 0.38 free length, stainless steel
7	62.0141.01 62.0141.00	Cap, headrest, white Cap, headrest, surf
8	001.021.00	Screw, socket head, 4-40 x 1/2", stainless steel
9	035.049.01	O-ring, E127-70, 0.176" ID x 0.040" wall, pkg of 10
10	90.1092.01 90.1092.00	Cover, headrest cushion, white2 Cover, headrest cushion, surf
11	90.1091.01 90.1091.00	Headrest assembly, white * Headrest assembly, surf *

* glidebar included but not available as a standalone item

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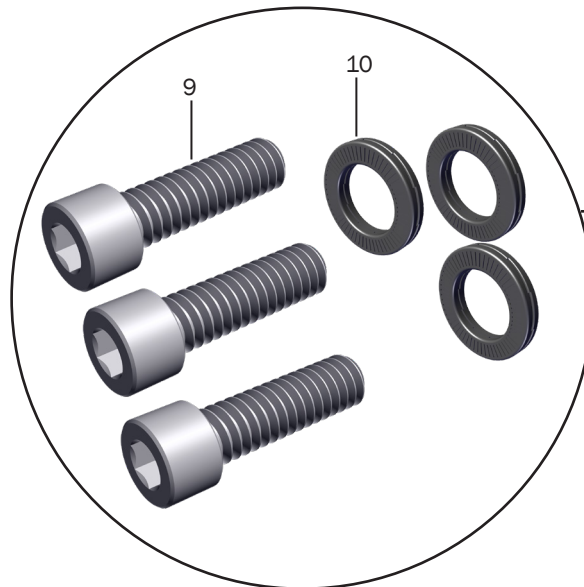
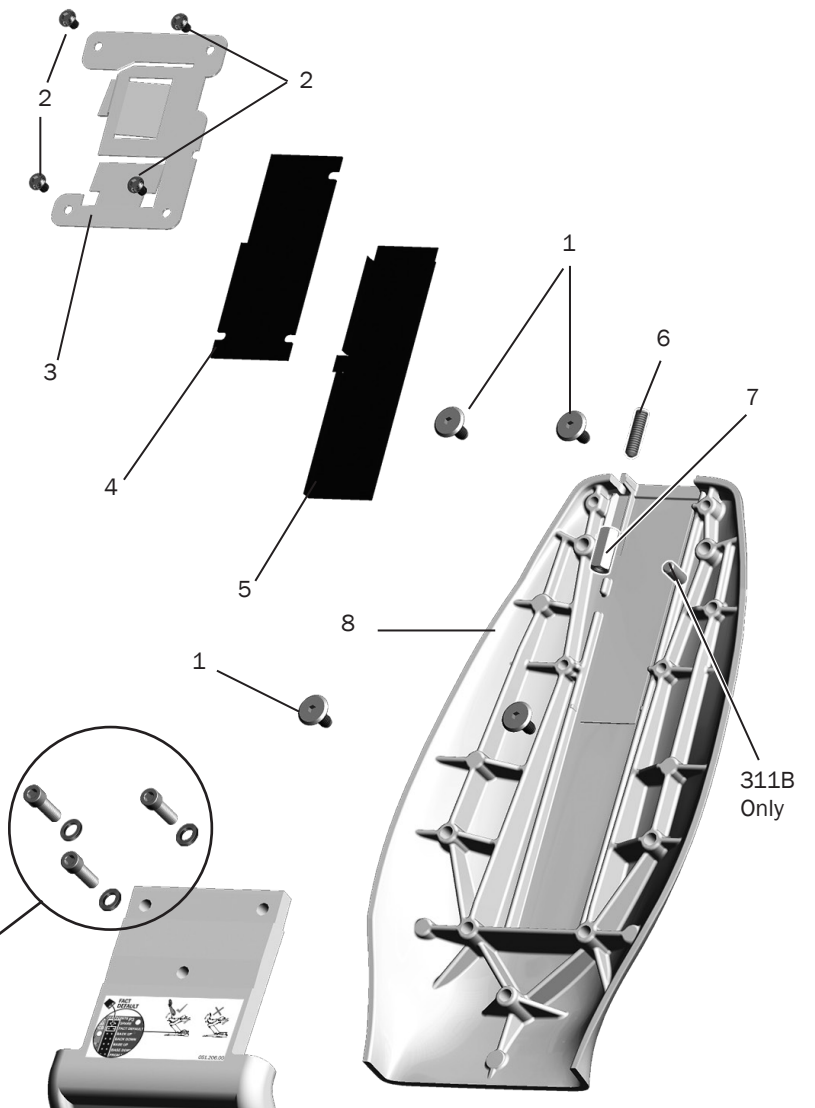
Upper Chair 511B
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Back Support 311/411/511

p/n: 90.1099.00 Surf 4/90.1099.01 White 2

Item	Part Number	Description
1	001.244.00	Screw, socket head, JCB, 1/4-20 x 15 mm, steel zinc
2	005.138.01	Screw, button head socket, 10-32 x 5/16
3	99.0719.00	Bracket, glidebar brake, kit
4	62.0103.00	Wear pad, upper headrest brake
5	62.0102.00	Wear pad, lower headrest brake
6	007.158.00	Set screw, cone point, 1/4" - 20 x 1", patch, stainless steel
7	006.144.00	Nut, coupling, 1/ 4- 20, steel zinc
8	62.0048.00 62.0944.00 90.1099.00 90.1099.01	Back support, gray, 311 (A) Back support, 311 (B) Back support, surf, 511 Back support, white, 411/511
9	001.286.00	Socket head screw, 1/4-20 x 7/8", patch, steel zn coat
10	004.267.00	Washer, lock, SPCL, serrated, 1/4-20

Replacement Kit	Items	Description
90.1649.00	9, 10	Lock washer kit



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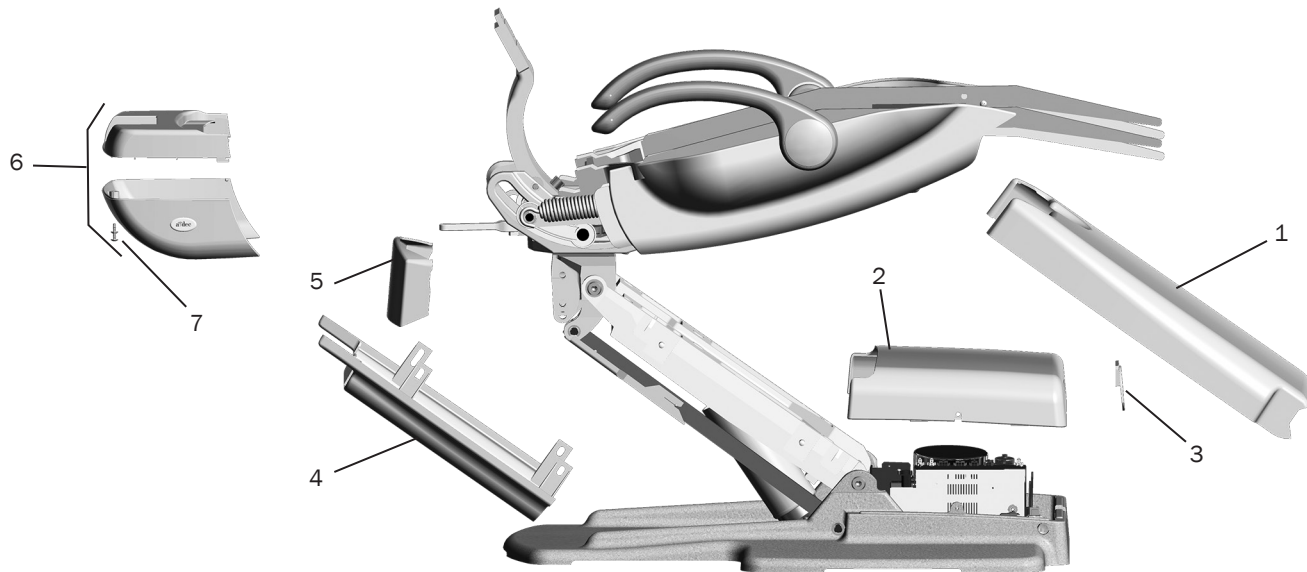
Upper Chair 511B
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Lower Chair Covers 311B/411



Item	Part Number	Description	Replacement Kit
1	62.0081.01	Lift arm cover	
2	62.0080.01	Motor pump cover	
3	62.0101.01	Pump cover plug	
4	62.0084.01	Stop plate cover	
5	62.0765.00 77.1241.00	Swivel cover (without 351 assistant's system) Swivel cover (with 351 assistant's system)	
6	62.0786.00	Rear cover assembly	90.1417.00 Upper structure cover kit
7	62.0910.00	Cover, upper, str, rear, intl (311 B)	
8	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst (2)	

Lower Chair Covers 511A

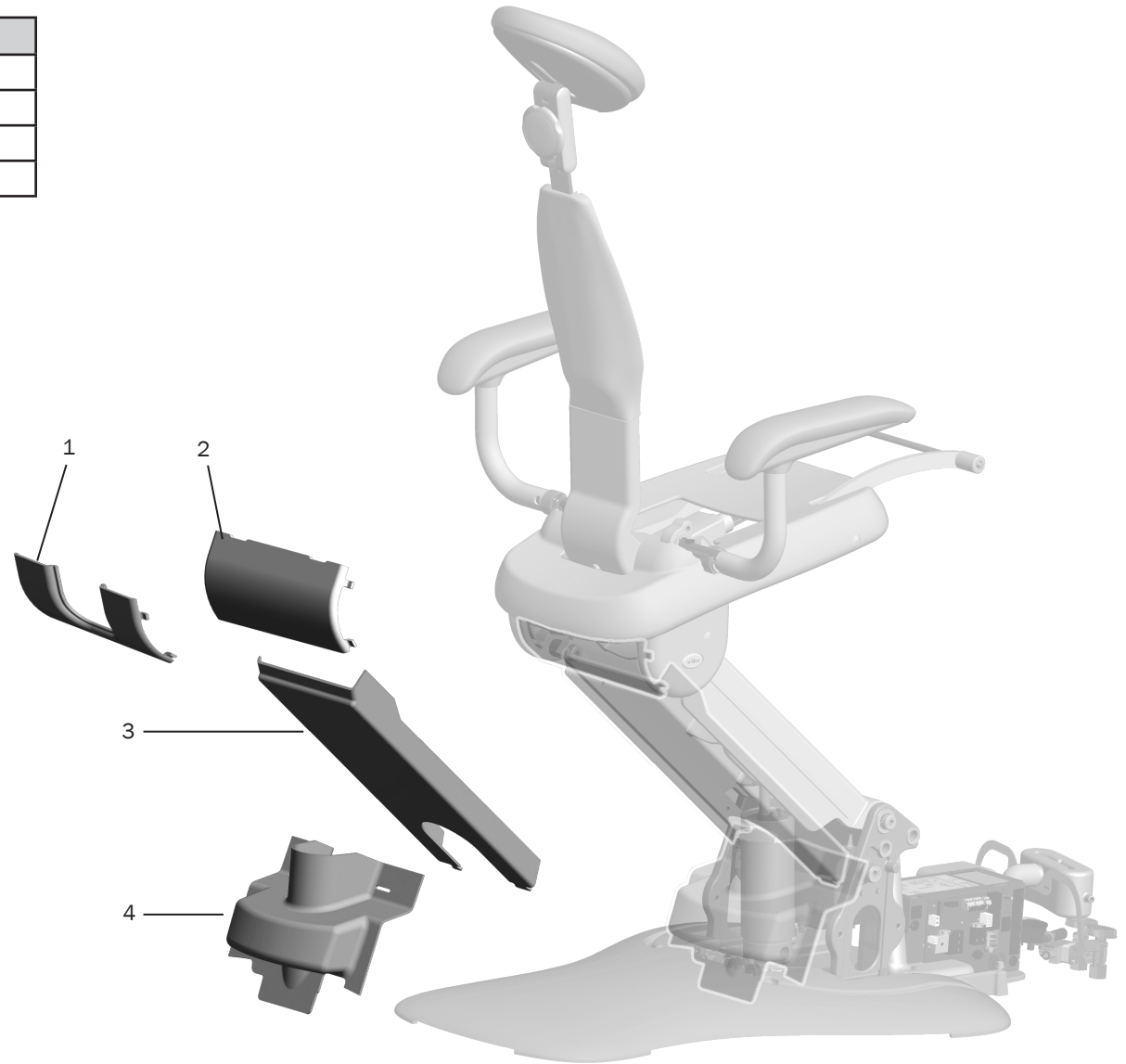


Item	Part Number	Description
1	62.0081.01 62.0081.00	Lift arm cover, white Lift arm cover, surf
2	62.0080.01 62.0080.00	Motor pump cover, white Motor pump cover, surf
3	62.0101.01 62.0101.00	Pump cover plug, white Pump cover plug, surf
4	62.0084.01 62.0084.00	Stop plate cover, white Stop plate cover, surf
5	62.0133.01 62.0133.00	Swivel cover, white Swivel cover, surf
6	62.0122.01 62.0122.00	Upper structure cover kit, white Upper structure cover kit, surf
7	001.245.00	Socket head patch screw, 1/4-20 x 3/4 stainless steel

Lift Arm Covers 311A

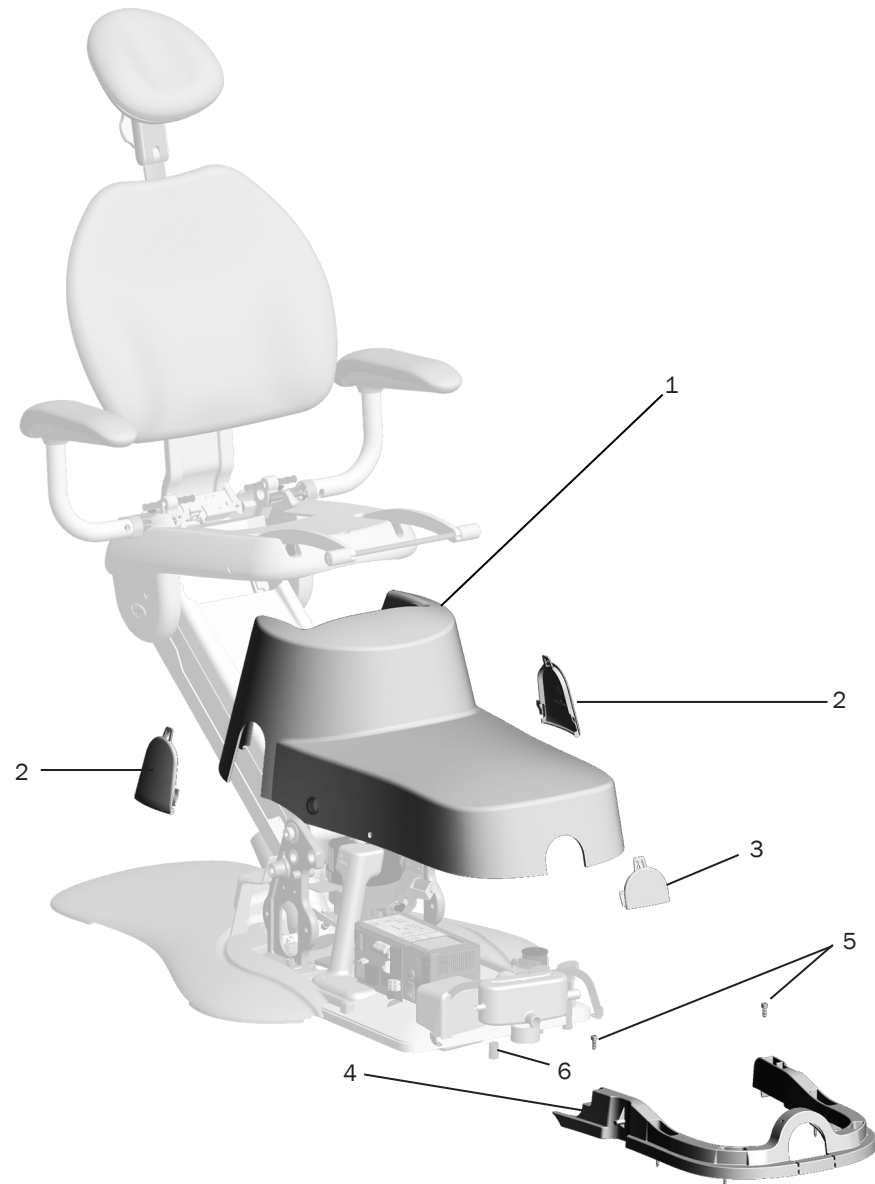
p/n: 90.1266.00

Item	Part Number	Description
1	62.0651.00	Upper assistant's lift arm cover
2	62.0662.00	Upper lift arm cover
3	62.0652.00	Lift arm cover
4	62.0653.00	Lower lift arm cover

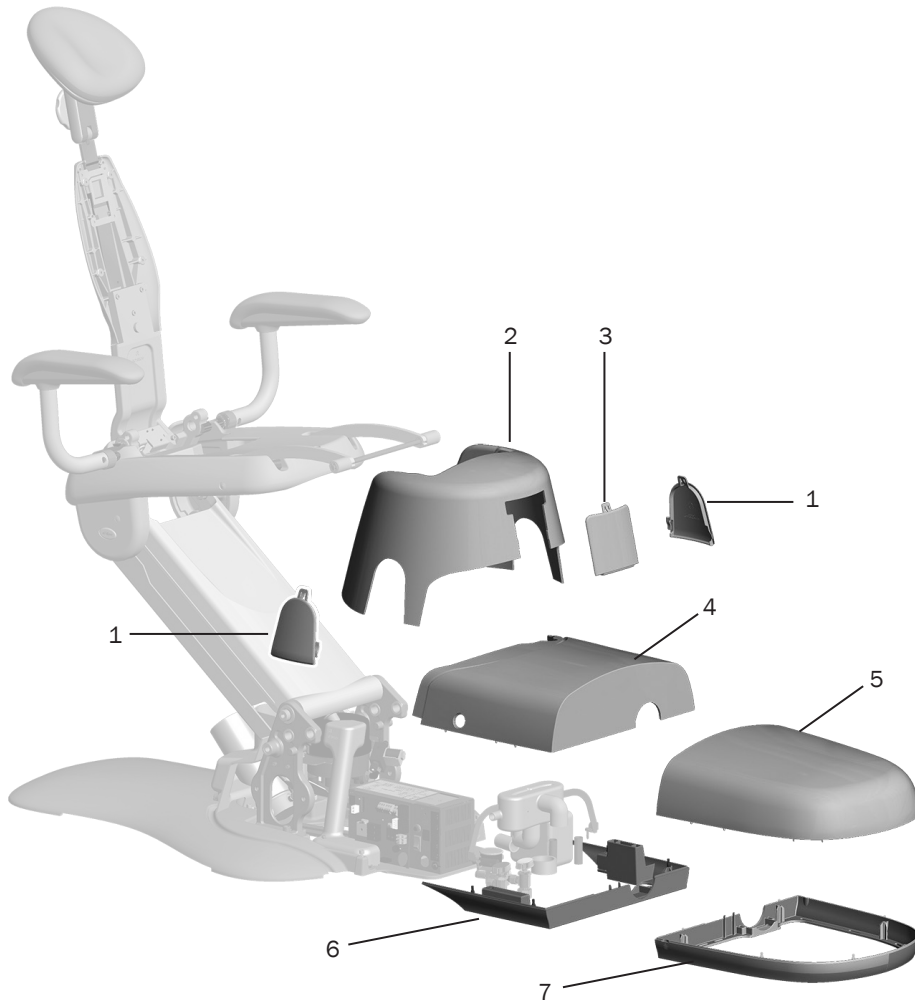


One Piece Utility Cover 311A

Item	Part Number	Description
1	62.0296.00	Utility cover
2	62.0347.00	Plug cover
3	62.0348.00	Umbilical plug cover
4	62.0300.00	Utility cover stiffener
5	001.089.00	Socket head screw, 1/ 4 x 20 x 5/8
6	004.043.00	Washer, flat, steel zinc, .281 ID



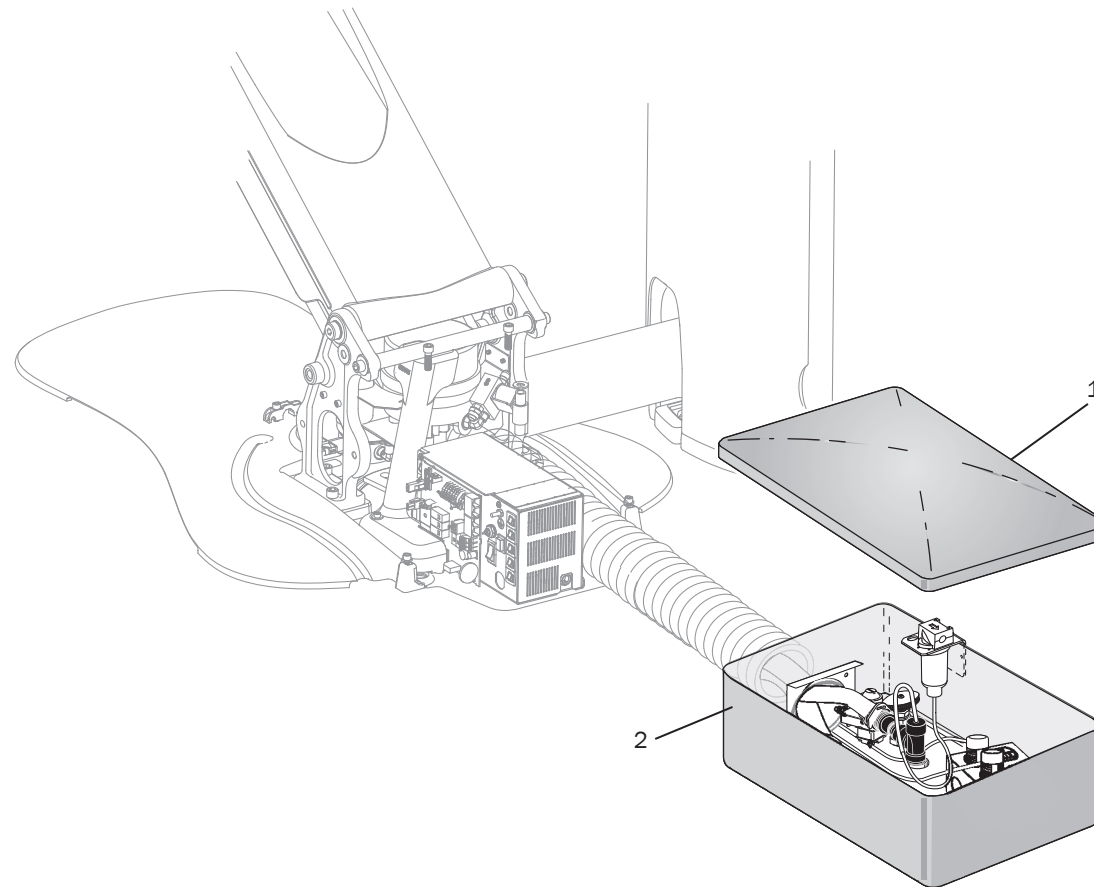
Three Piece Utility Covers 311A



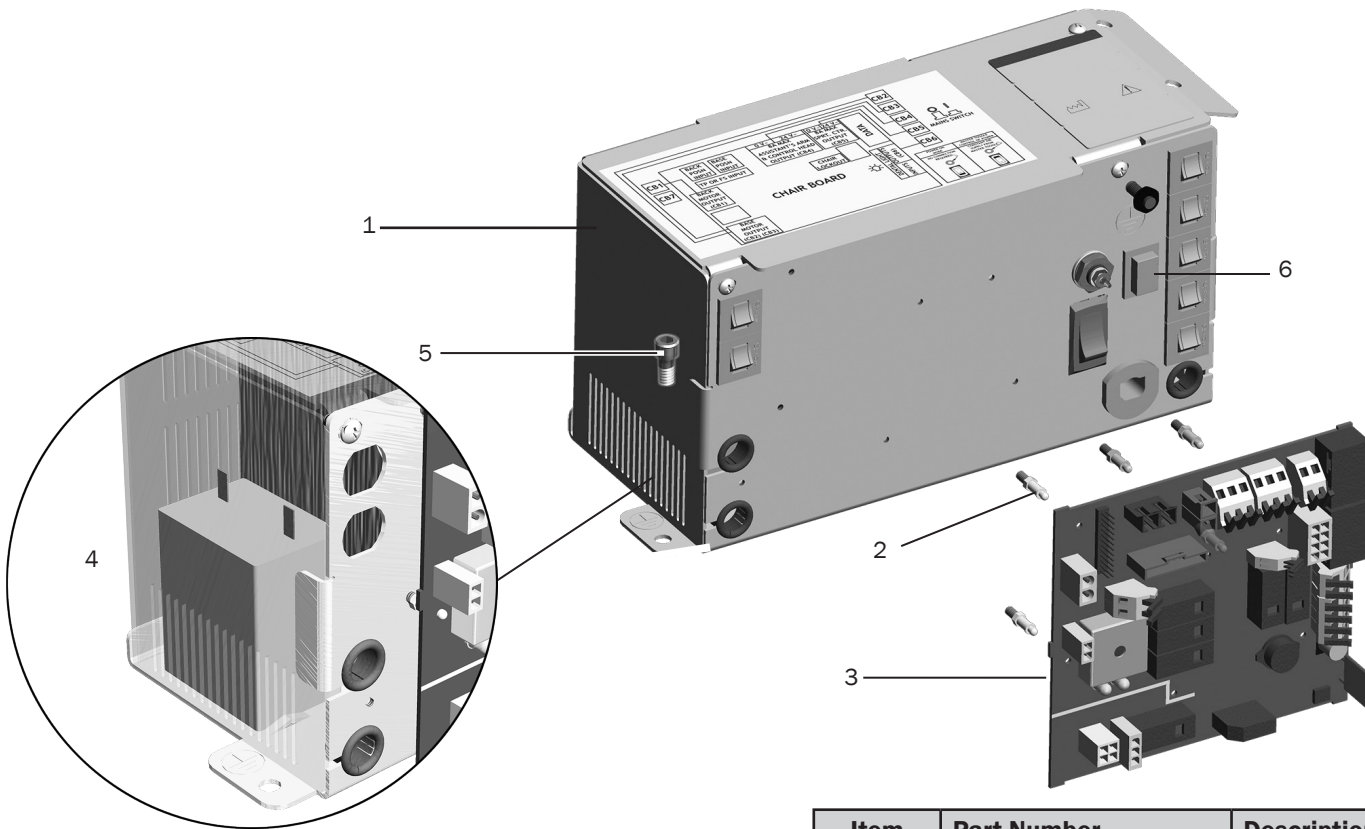
Item	Part Number	Description
1	62.0347.00	Plug cover
2	62.0657.00	Chair pump cover
3	62.0663.00	Radius mount plug cover
4	62.0656.00	Power supply cover
5	62.0655.00	Floor box cover
6	62.0659.00	Power supply frame
7	62.0658.00	Floor box frame

Remote Floor Box Covers 311A

Item	Part Number	Description
1	41.0413.01	Cover, Gray
2	41.1507.00	Box



Power Supply 311/411



Item	Part Number	Description
1	43.0266.00	300 W 120 V Power supply assembly
	43.0267.00	300 W 240 V Power supply assembly
2	90.1082.00	Standoff, package of 5
3	90.1177.00	Chair circuit board kit
4	90.1199.00	Motor capacitor, 110-120 V kit
	90.1200.00	Motor capacitor, 220-240 V kit
5	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
6	041.640.00	Power button

Replacement Kit	Part Number	Description
90.1179.00	1, 2, 5	120 V Power supply kit
90.1180.00		240 V Power supply kit

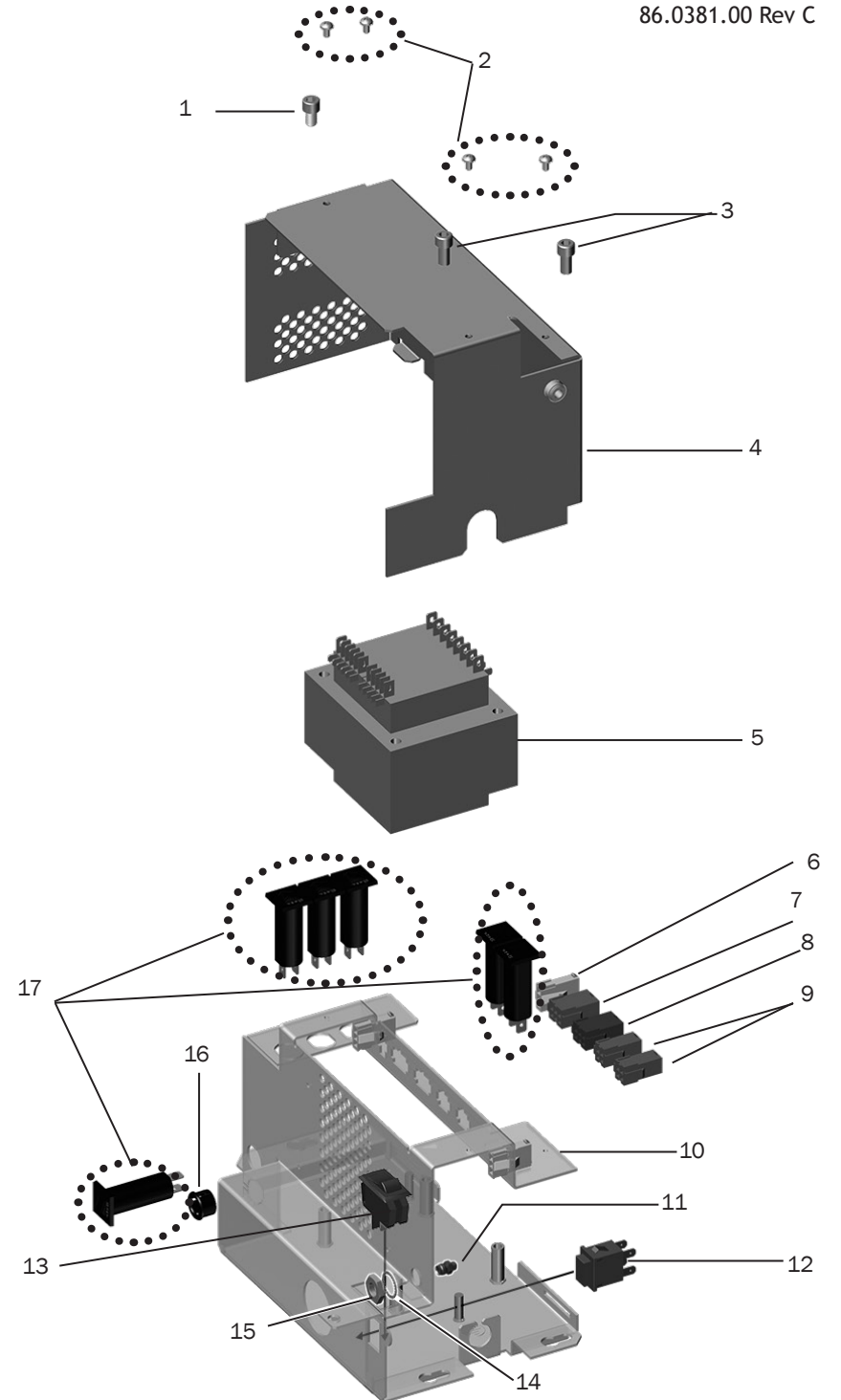
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Power Supply 511

p/n: 43.0262.00 100 V/43.0263.00 120 V/43.0246.00 240 V

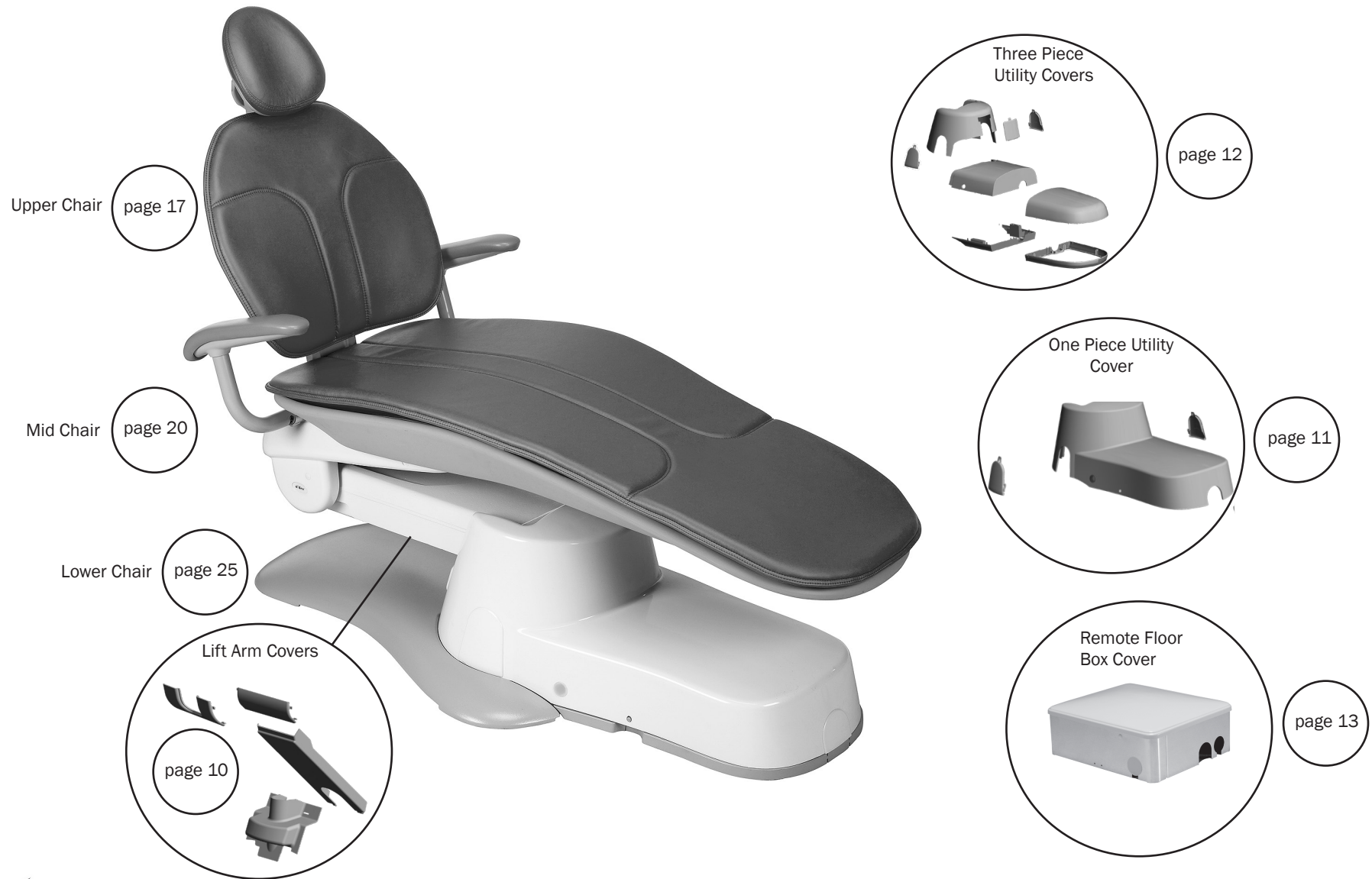
Item	Part Number	Description
1	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
2	001.073.00	Screw, pan head, Phillips, SEMS, 6-32 x 1/4, sst
3	005.008.01	Screw, socket head, 1/4-20 x 1/2, patch, sst
4	43.0060.01	Cover
5	041.749.00	Transformer 300W 100/120/240V
6	041.652.00	CONN housing, 1x3, FEM, mini-mt-N-lk, white
7	041.286.01	CONN housing, 6x1, FEM, mini-mt-N-lk, white
8	041.286.02	CONN housing, 6x1, FEM, mini-mt-N-lk, red
9	041.492.01	CONN housing, 4x2, FEM, mini-mt-N-lk, black
10	43.0270.00	Chassis, power supply, 300 W, Isolation
11	023.089.00	QD, 1/8 FEM to 10-32
12	041.640.00	Switch, push, 2P1T, 12A, 250V, latching
13	041.300.00	Switch, rocker, 1P1T, 20 Amp, 125V, red
14	80.2401.00	Washer, lock, internal, steel, .468 ID
15	006.031.00	Nut, hex, 1/8 - 27 NPT x 9/16 x 1/8, steel zinc
16	041.663.00	Bushing, cable, 7/16 ID
17	046.162.00	Strain relief, 10 posn conn




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Dental Chair 311A



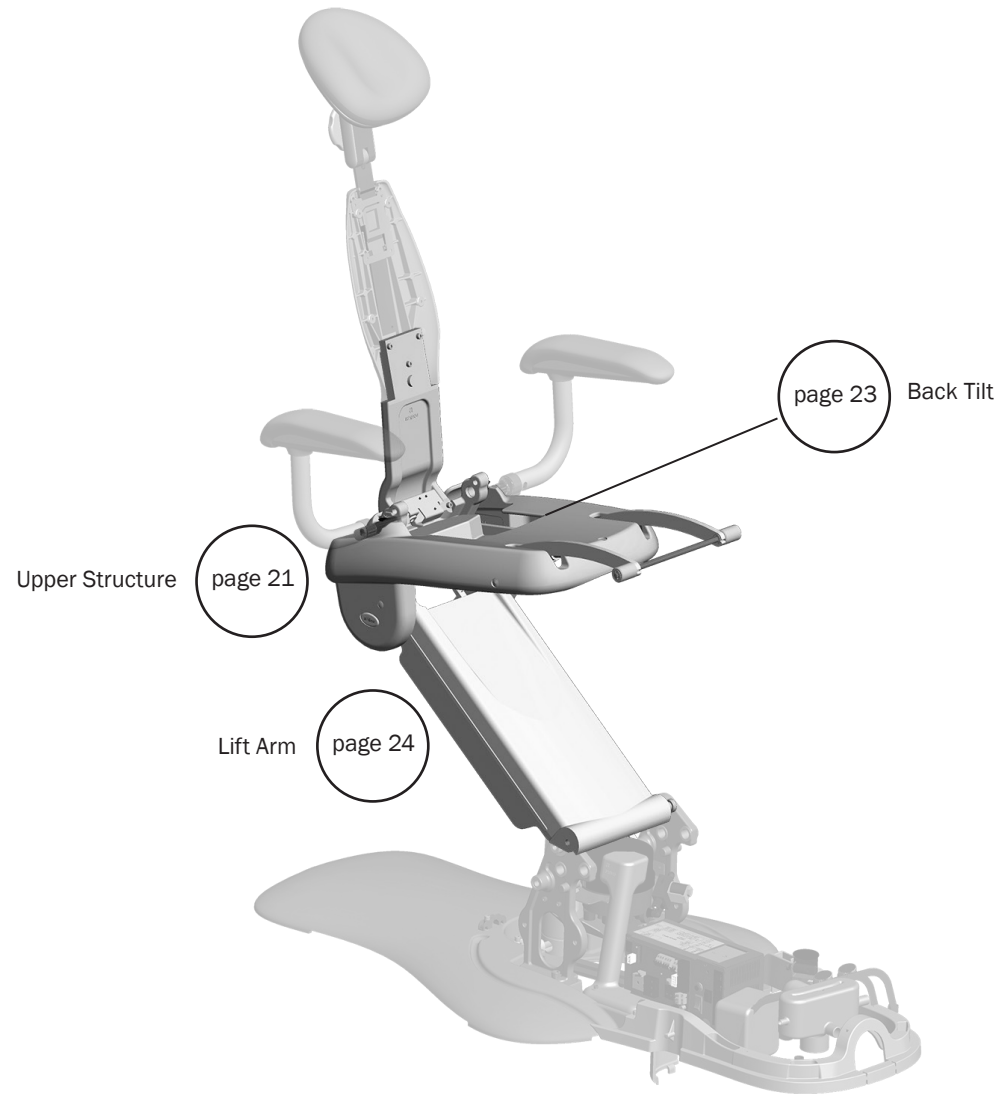
Upper Chair 311A



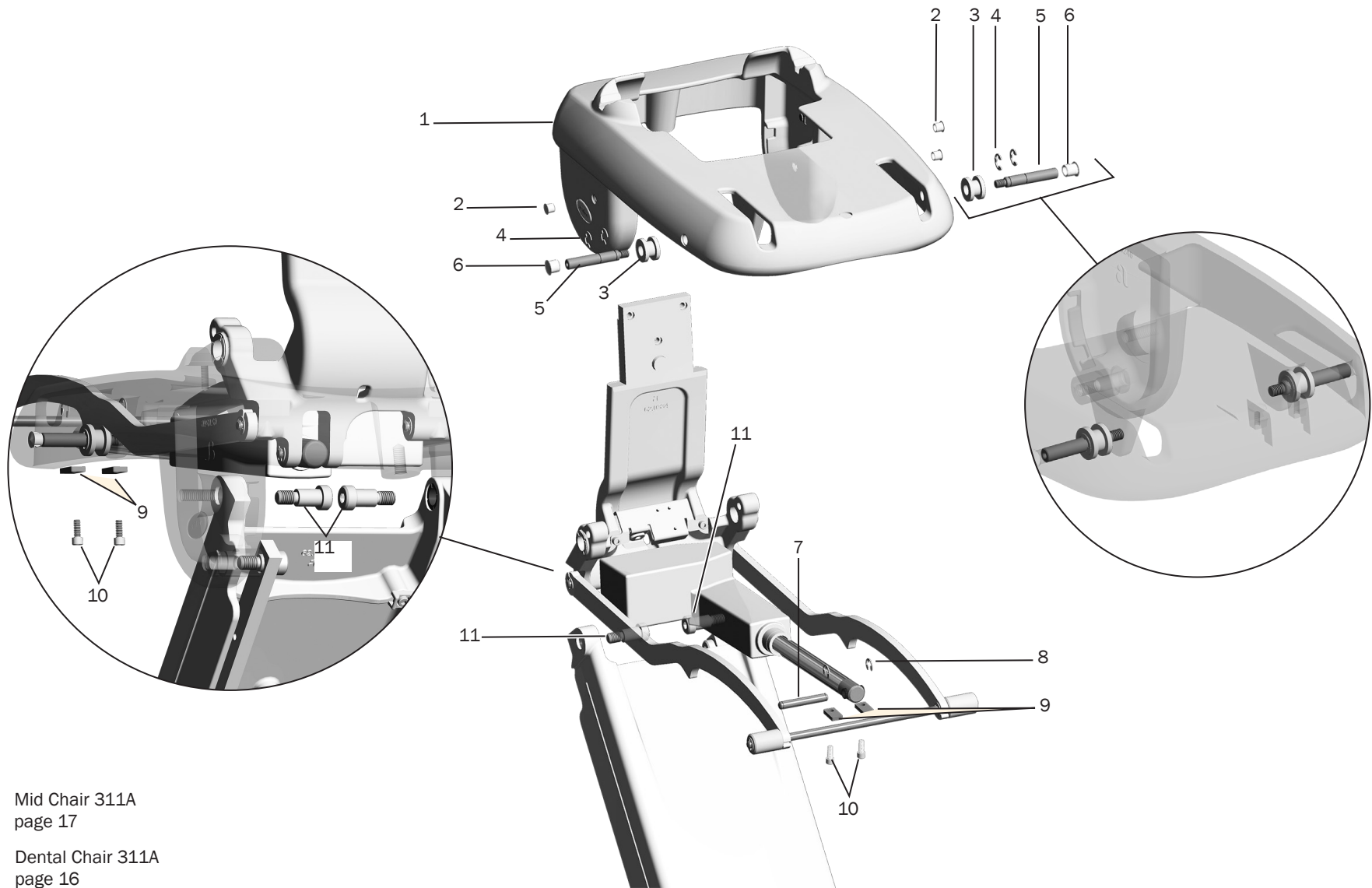
Armrest 311A

Item	Part Number	Description
1	001.309.00	Socket head screw, 5/16-18x1-1/4 black oxide (1 per side)
2	016.047.00	Flanged bearing
3	62.1096.00	Collar
4	001.310.00	Socket head screw, 1/4-28x3/8, alloy black oxide (1 per side)
5	007.056.00	Set screw, socket cup point, 1/4-28 x 1/4"
6	61.3903.00	311/200 Armrest cap assembly
7	61.2630.00	Spacer tube, 0.25" OD x 0.20" long, brass
8	005.110.00	Screw, button head socket, 10-32 x 1/2", patch, stainless steel
9	62.0815.00	RH armrest weldment
10	62.0812.00	Pivot, armrest
11	62.0813.00	Lower cover
12	90.1434.00	Armrest kit, 311, Santoprene, pair
13	62.0814.00	LH armrest weldment
14	016.146.00	Split bearing, 1" ID x 1.125" OD x 3/4" long, steel PTFE
15	62.0834.00	Armrest assembly, Left
16	62.0835.00	Armrest assembly, Right
17	90.1389.00	Armrest replacement kit (Effective January 2019) includes items 15, 16 10
18	90.1434.00	OTC Armrest kit (for original 311A armrest replacement)

Mid Chair 311A



Upper Structure 311A



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Upper Structure 311A

Item	Part Number	Description
1	62.0247.01	Upper structure
2	018.050.00	Plug, hole, 7/16 DIA, white
3	62.0311.00	Roller cam
4	010.031.01	Retaining ring, external, E-ring ID, sst
5	62.0309.00	Bolt, linak, short
6	018.002.06	Plug, hole, 1/2 DIA, white2
7	62.0315.00	Toe board pin
8	010.040.01	Retaining ring, external, E-ring, .375 ID, sst
9	62.0367.00	Retainer, pin, linak
10	005.008.01	Screw, socket shoulder, 1/2-13 X 5/8 X 7/8, patch, steel black
11	90.1666.00	Bolt upgrade kit

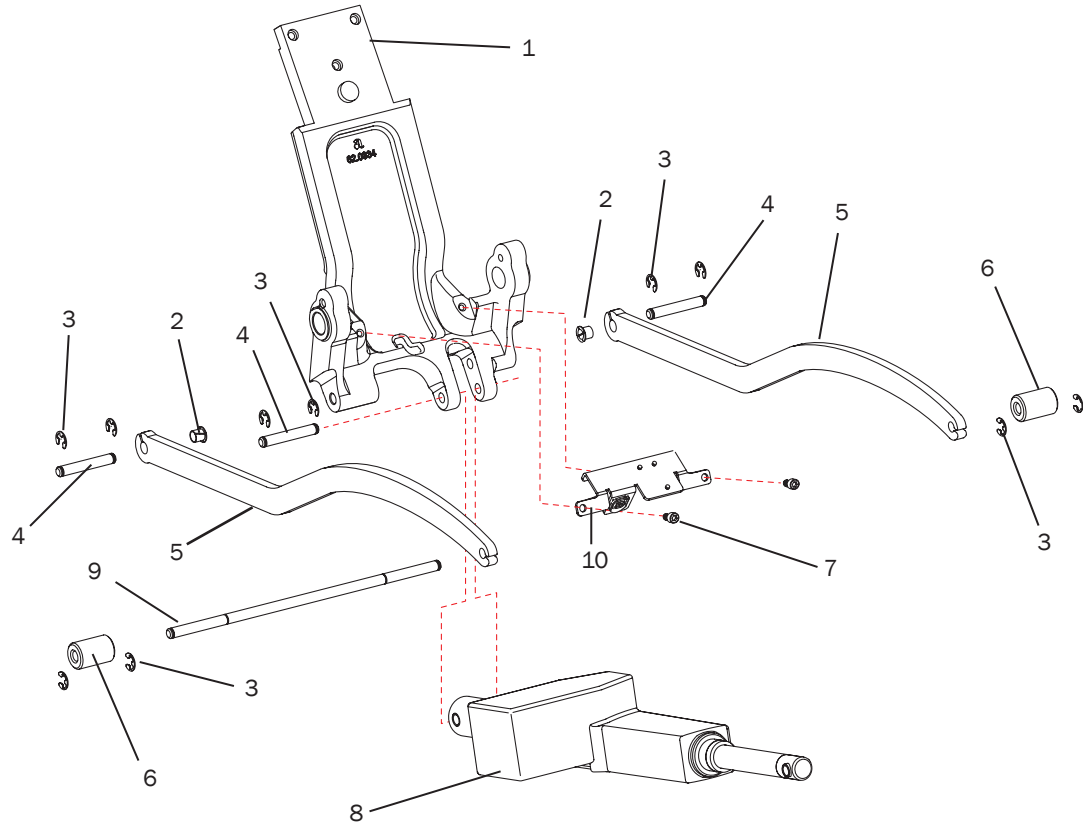


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Back Tilt 311A



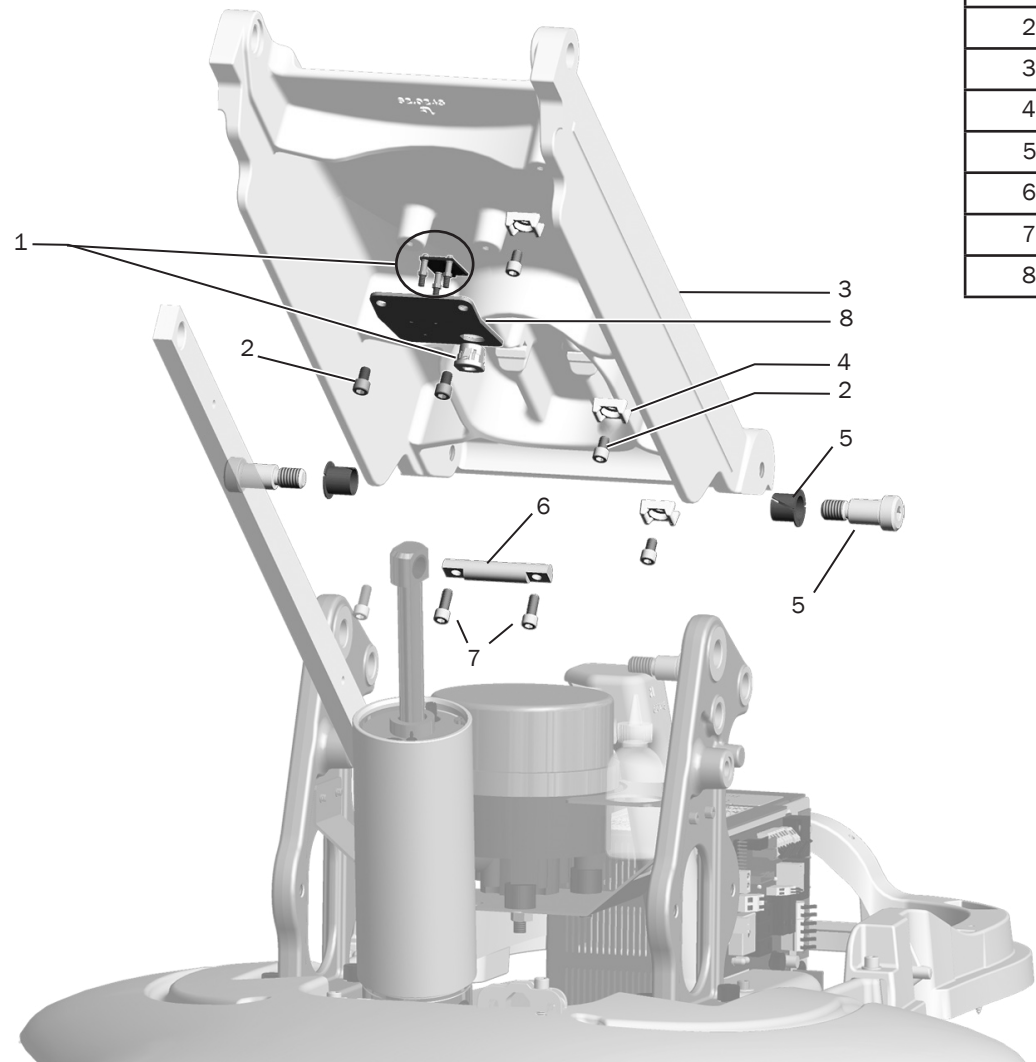
Item	Part Number	Description	Replacement Kit
1	62.0352.00	Back pivot	
2	016.162.00	Bearing, flange	
3	010.040.01	Retaining ring, external, E-ring, .375 ID, sst	
4	62.0315.00	Pin, toeboard, short	
5	62.0290.00	Seat lift cam	
6	62.0351.00	Roller	
7	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
8	62.0226.00	Tilt actuator assembly	Part of 90.1228.00 Tilt actuator assembly kit
9	62.0263.00	Trolley pin, long	
10	90.1183.00	Tilt position sensor	

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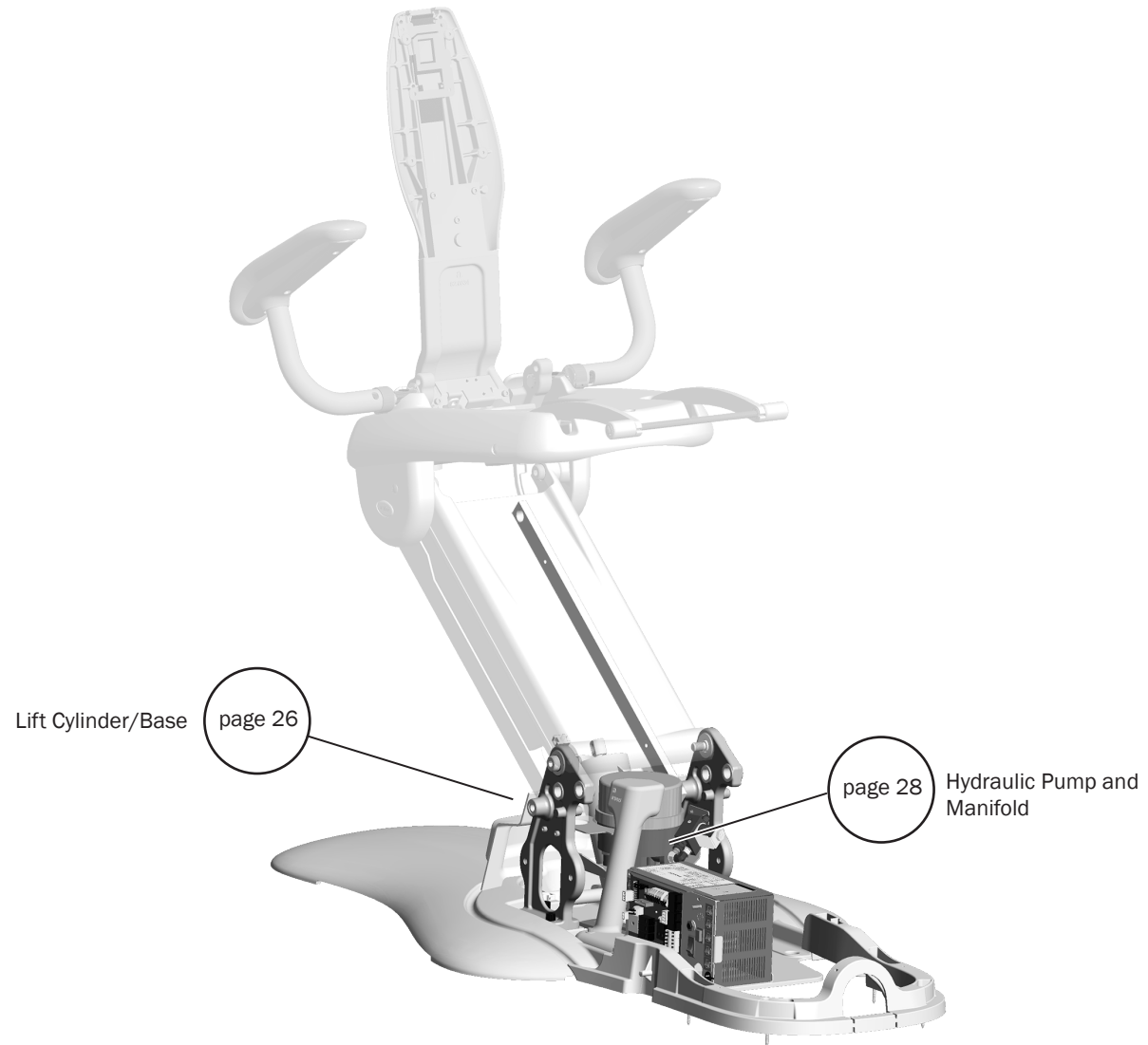
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Lift Arm 311A

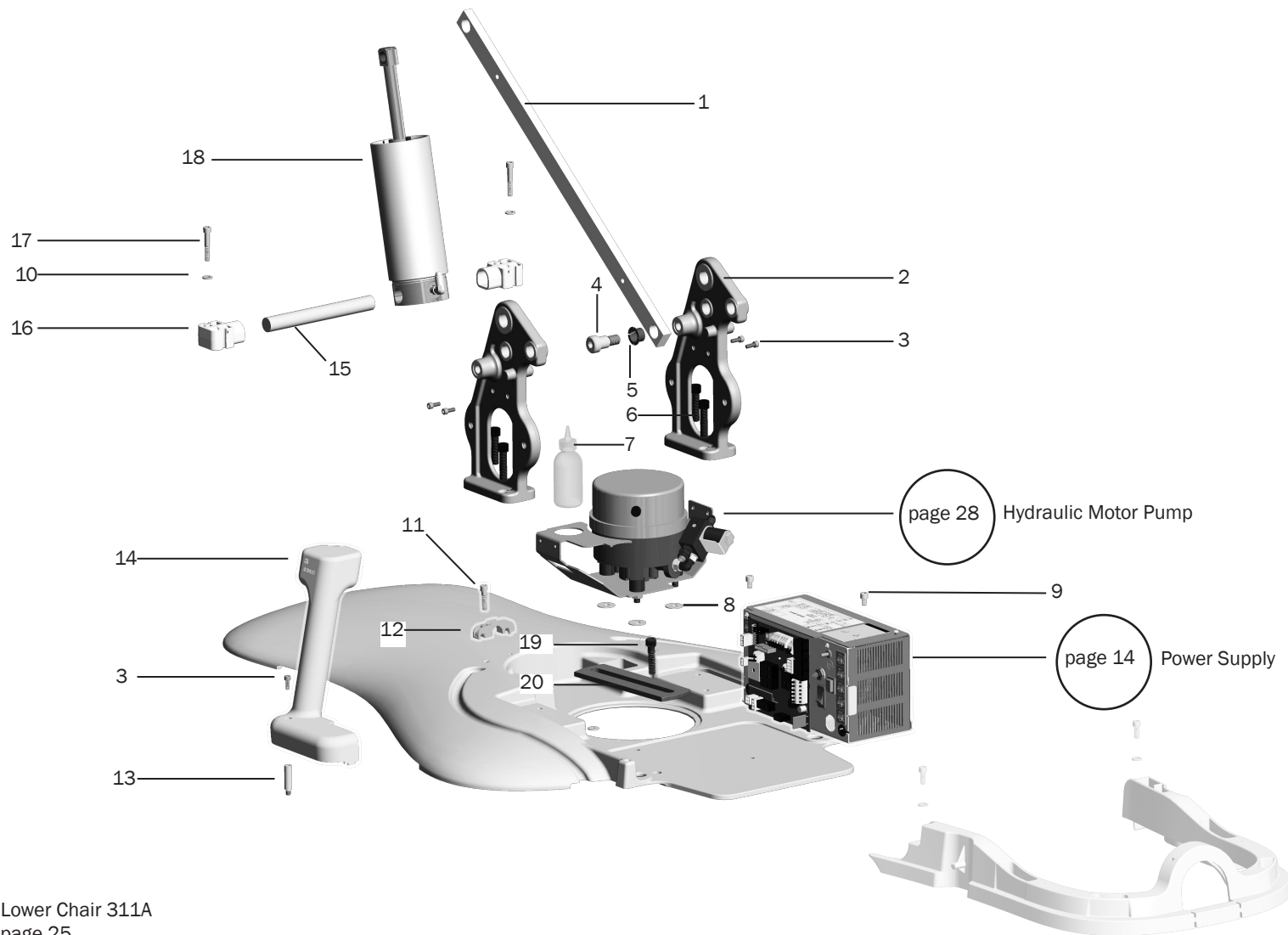
Item	Part Number	Description
1	90.1183.00	Position sensor kit
2	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
3	62.0244.00	Lift arm
4	025.072.00	Cable tie mounting block
5	90.1666.00	Bolt upgrade kit
6	62.0350.00	Pin, lift actuator
7	001.089.00	Socket head 1/4-20 x 5/8 screw
8	62.0312.00	Bracket



Lower Chair 311A



Lift Cylinder and Chair Base 311A





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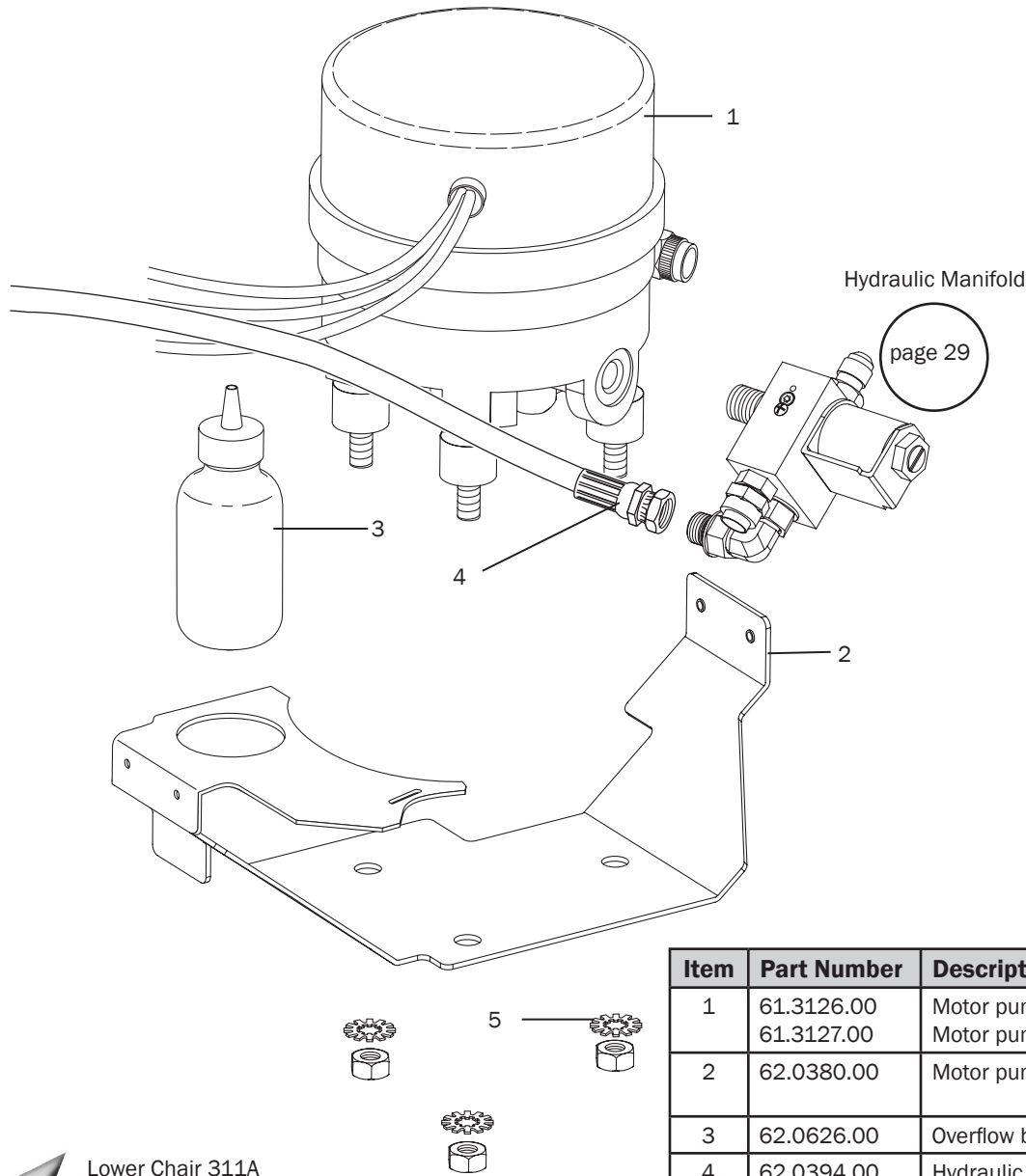
Lift Cylinder and Chair Base 311A

Item	Part Number	Description	Replacement Kit
1	62.0249.00	Link	
2	62.0271.00	Tower	
3	002.135.01	Socket head patch screw, 10-32 x 1/2	
4	001.164.00	Socket shoulder bolt, 1/2-13 x 5/8 x 5/8	
5	016.164.00	Flanged bearing	
6	002.042.01	Socket head screw, 3/8-16 x 1/2	
7	62.0626.00	Overflow bottle	
8	004.091.00	Washer, lock, steel zinc, internal/external tooth 5/16	
9	001.089.00	Socket head screw, 1/4-20 x 5/8	
10	004.043.00	Washer, flat, steel zinc, .281 ID	
11	002.120.00	Socket head patch screw	
12	62.0131.00	Strain relief	
13	037.046.00	Stand off pin	
14	62.0415.00	Motor wires cover	
15	62.0377.00	Lower lift cylinder pin	
16	62.0376.00	Bearing block	
17	002.082.03	Socket head screw, 1/4-20 x 1-1/2	
18	62.0368.00	Lift cylinder	90.1267.00 Lift cylinder kit
19	001.231.00 003.101.00	Hex head anchor bolt, 1/2 x 3-3/4 Lag bolt, 1/2	90.1161.00 Mounting kit, floor, 300
20	62.0285.00	Cleat, floor bolt	

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Hydraulic Pump and Manifold 311A



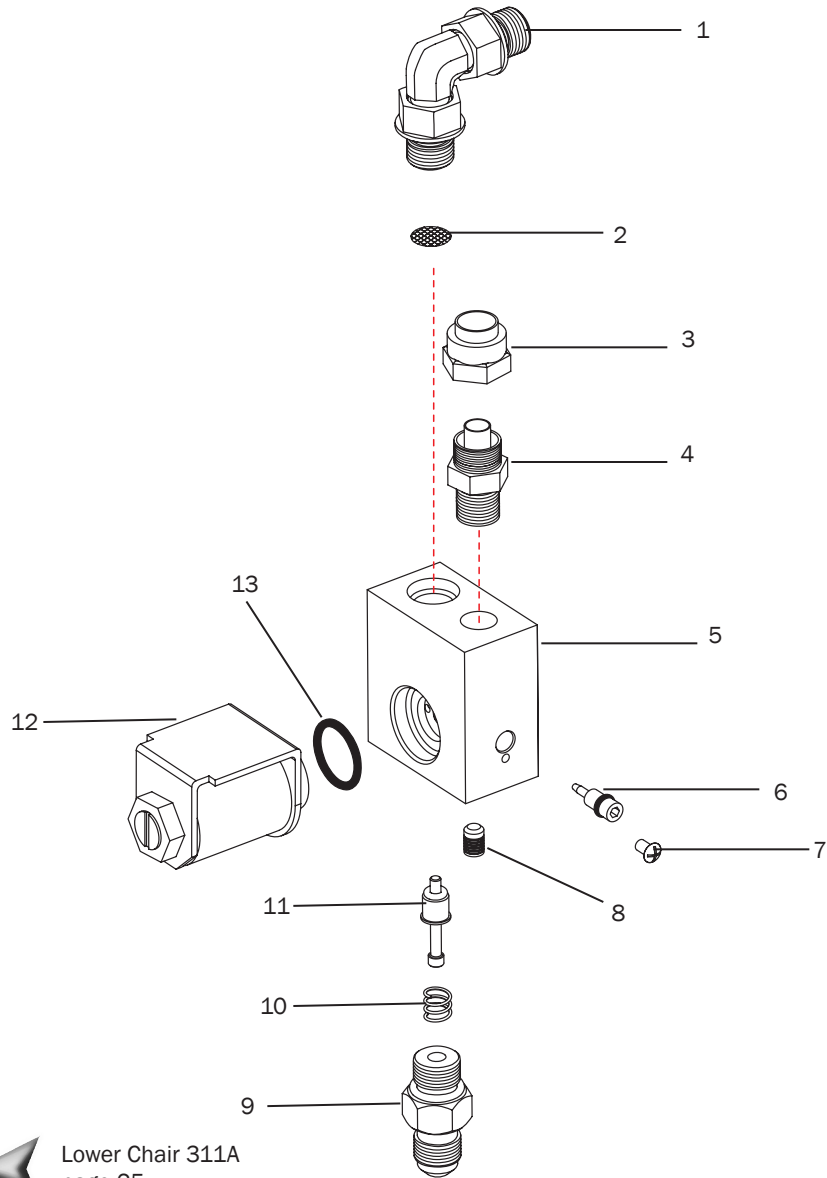
Item	Part Number	Description	Kit Replacement
1	61.3126.00 61.3127.00	Motor pump assembly (100/115 V) Motor pump assembly (240 V)	90.1429.00 120 V Hydraulic pump kit 90.1430.00 240 V Hydraulic pump kit
2	62.0380.00	Motor pump tray	90.1429.00 120 V Hydraulic pump kit 90.1430.00 240 V Hydraulic pump kit
3	62.0626.00	Overflow bottle	
4	62.0394.00	Hydraulic hose assembly, straight 90°, 13" long	
5	004.091.00	Washer, lock, steel zinc, internal/external tooth 5/16	

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Hydraulic Manifold 311A

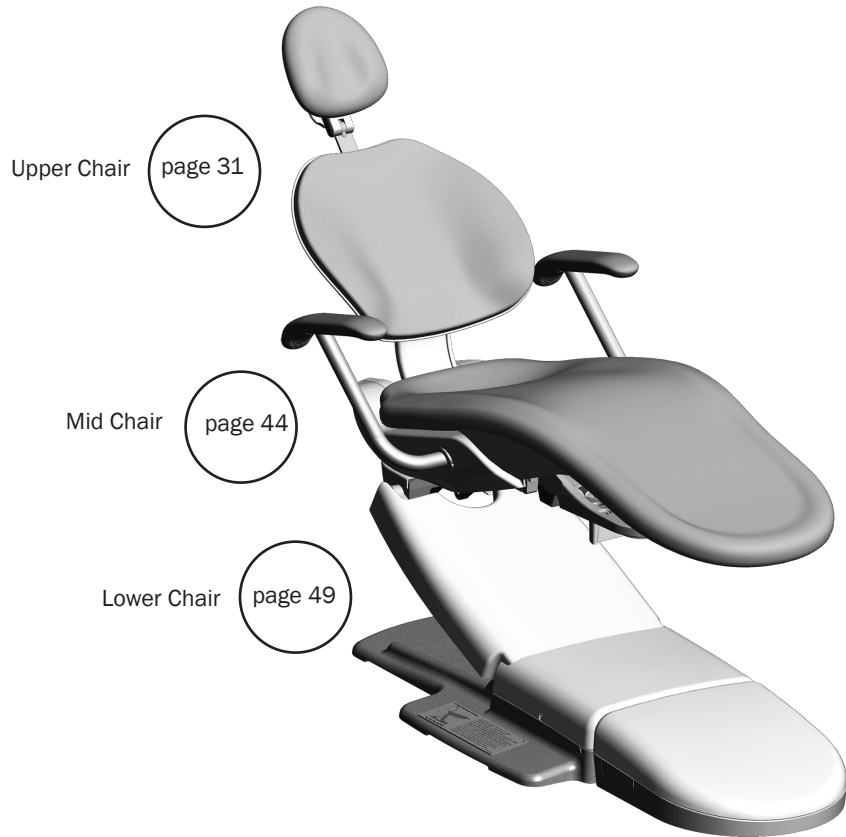
p/n: 62.0402.01 (part of 90.1429.00 100-120 V / 90.1430.00 240 V hydraulic pump kit)



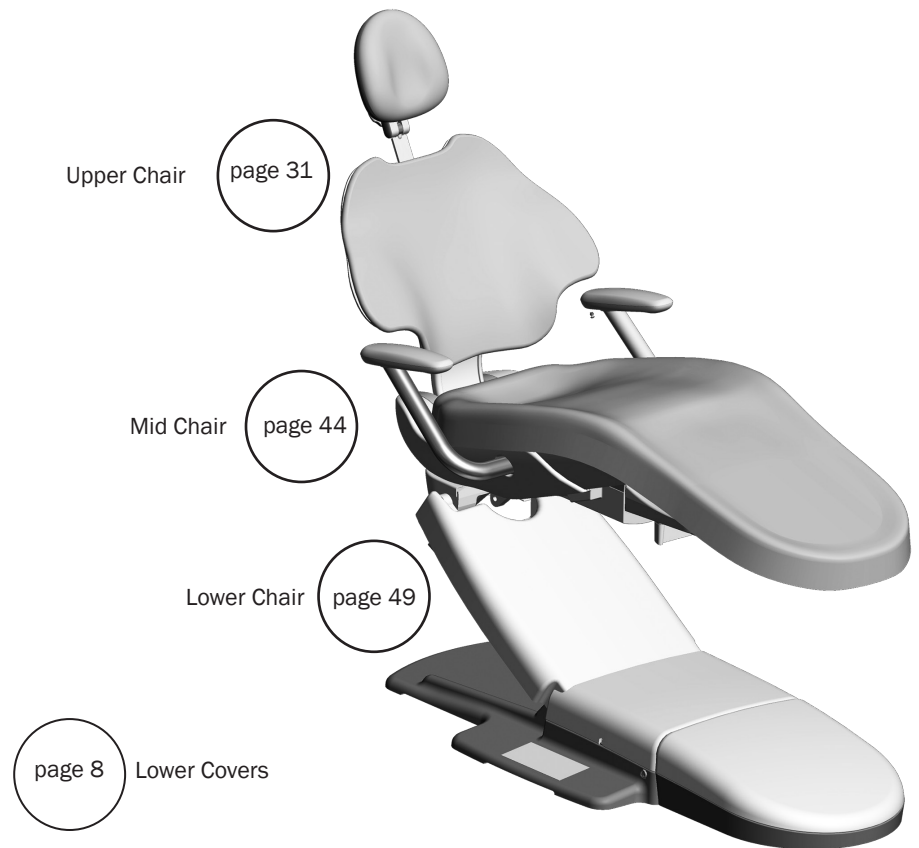
Item	Part Number	Description
1	021.111.00	Elbow with O-rings, 7/16"
2	61.0464.00	Manifold screen, inlet
3	022.014.01	Nut, with sleeve, 3/8" poly
4	022.065.00	Adaptor, 3/8" poly x 1/8" MPT
5	62.0389.00	Manifold
6	61.0460.00	Flow adjustment screw, with O-ring
7	002.118.02	Screw, button head socket, patch, 4-40 x 3/16", package of 5
8	018.057.00	Plug, 3/16" expanding
9	022.049.00	Fitting w/O-ring
10	013.044.00	Spring, compression, .250 OD x .40 FL
11	61.0461.01	Stem, with O-rings, check valve
12	62.0317.00	Solenoid assembly
13	030.015.02	O-ring AS568-015, .551ID X.070W, package of 10

Dental Chairs 311B/411

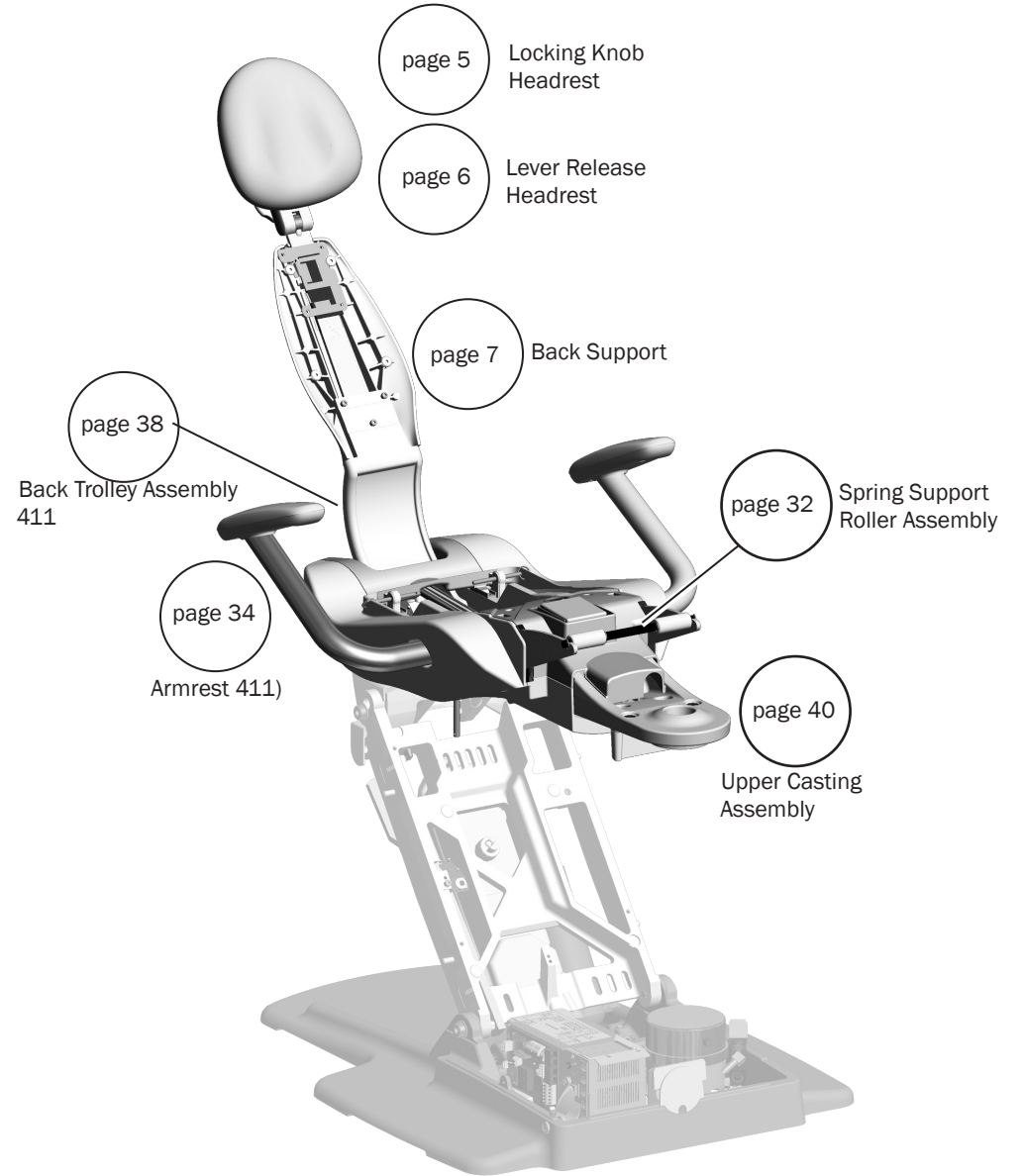
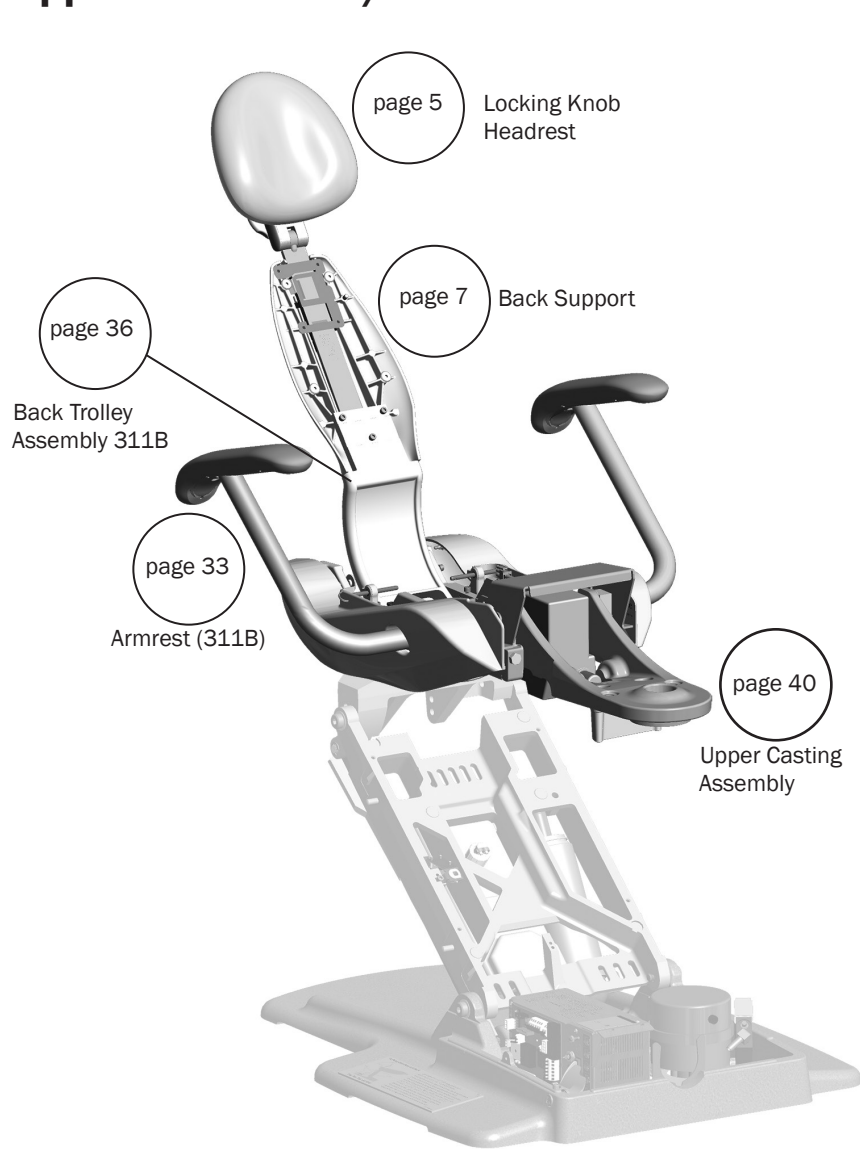
311B



411

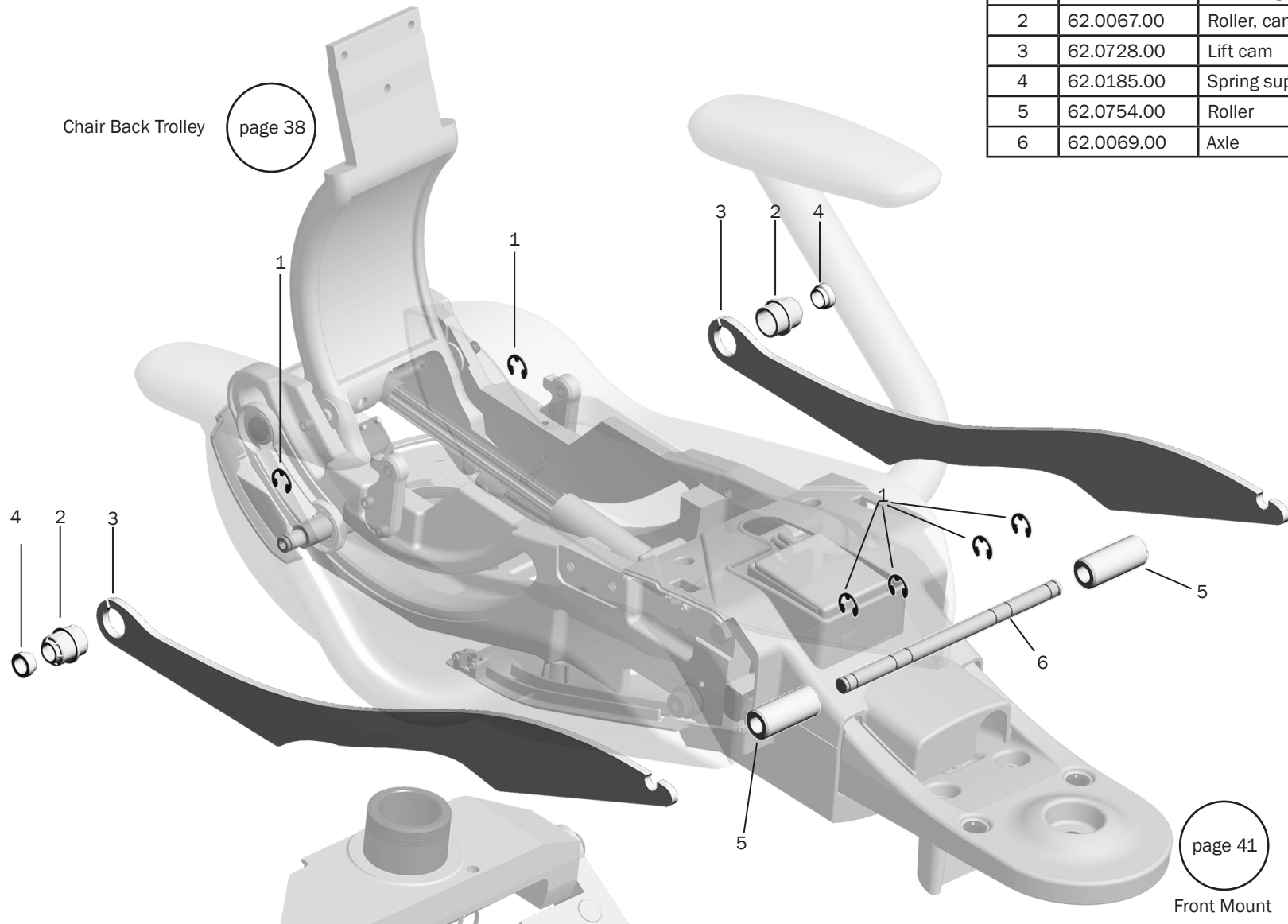


Upper Chair 311B/411



Spring Support Roller Assembly 411

Item	Part Number	Description
1	010.031.01	Retaining ring, external, E-ring ID, sst
2	62.0067.00	Roller, cam, natural
3	62.0728.00	Lift cam
4	62.0185.00	Spring support
5	62.0754.00	Roller
6	62.0069.00	Axle

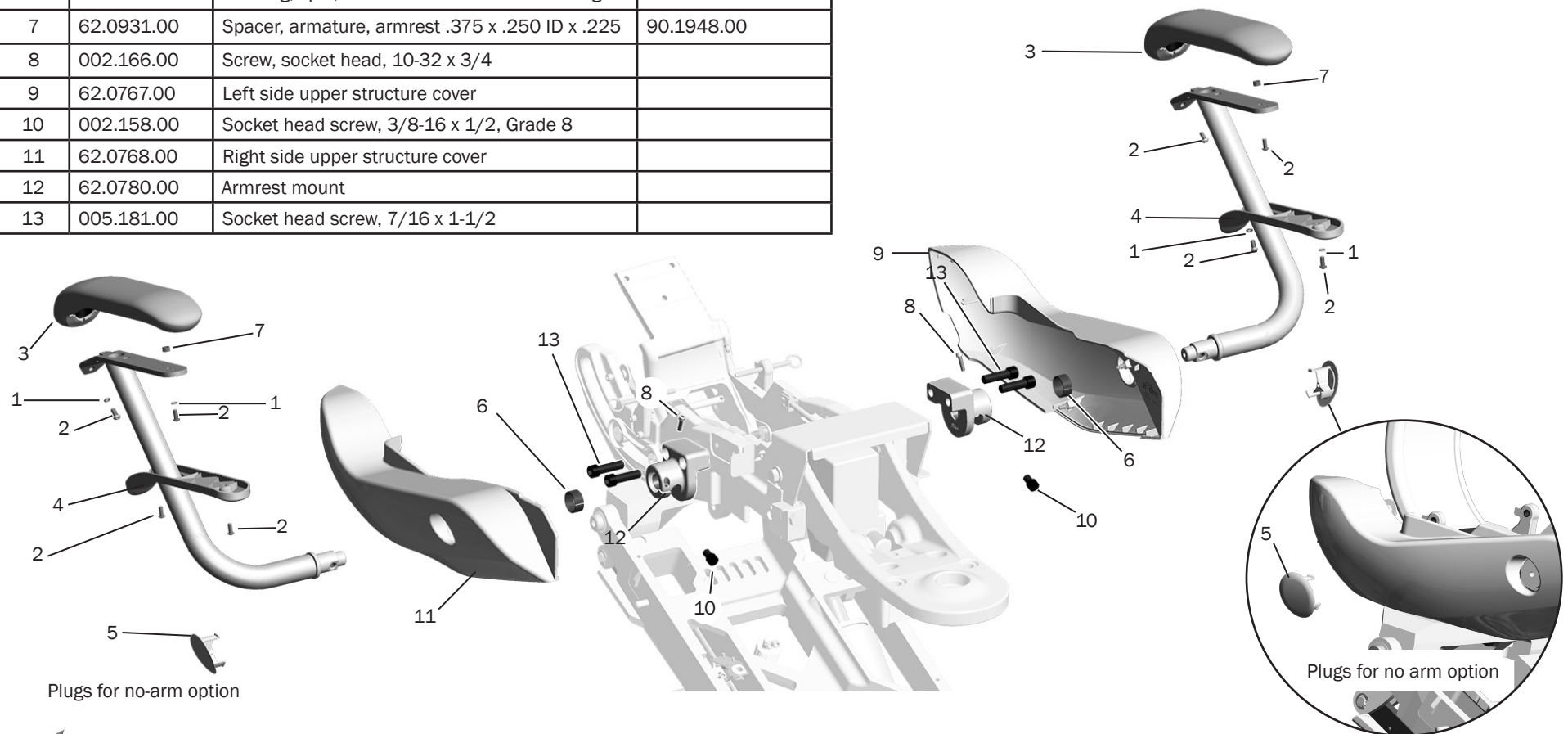


- ▶ Upper Chair 311B/411 page 31
- ▶ Dental Chairs 311B/411 page 30

Armrests 311B

p/n: 90.1499.00 (Left armrest kit, with mount) / 90.1500.00 (Right armrest kit, with mount)

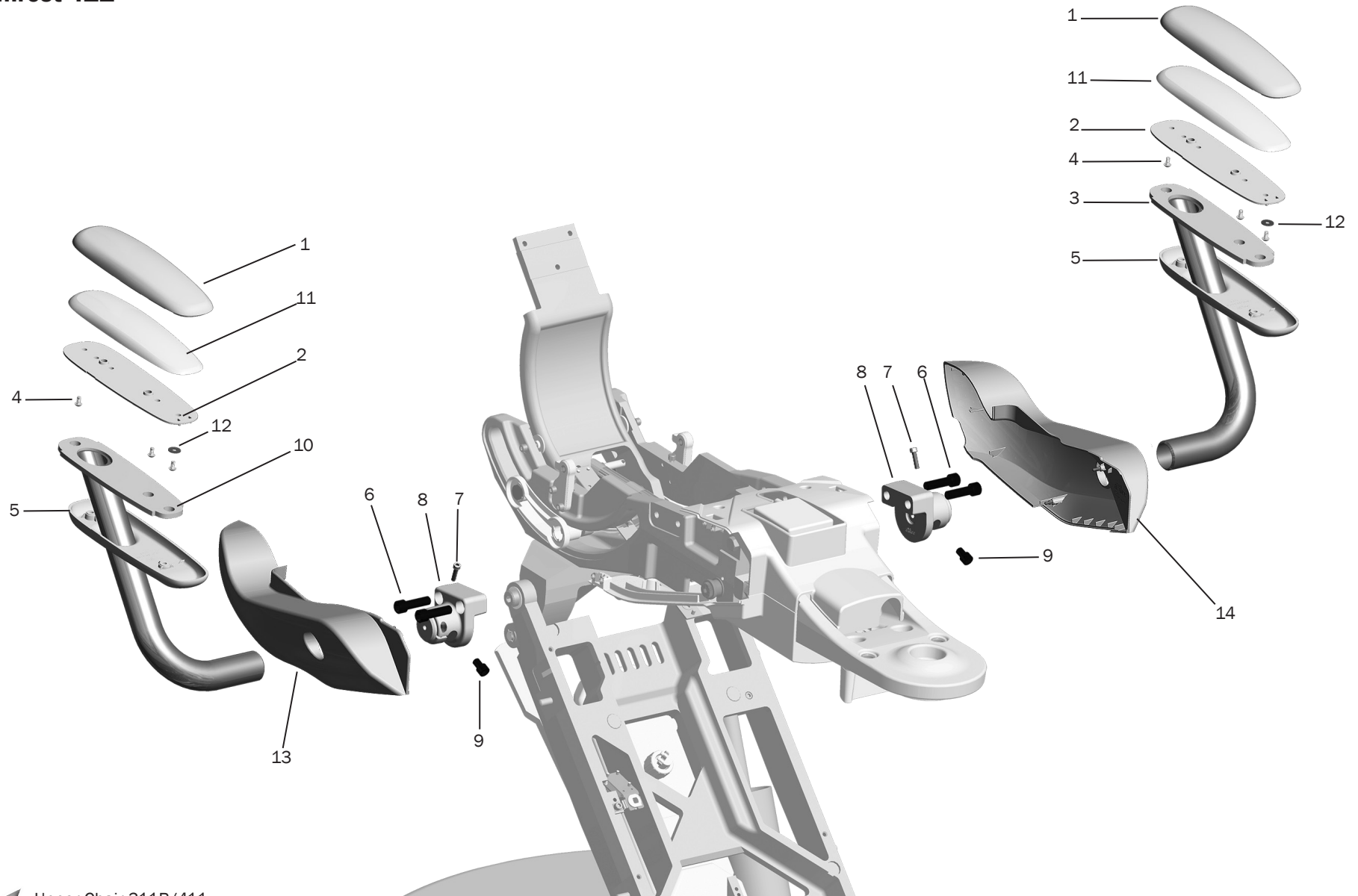
Item	Part Number	Description	Replacement Kit
1	004.113.00	Split washer	90.1498.00
2	005.110.00	Screw, button head, socket, 10-32, patch, sst	
3	61.3928.00	Armrest assembly	
4	62.0903.00	Left lower cover	90.1498.00
5	62.0922.00	Armrest cover plug	
6	016.177.00	Bushing, split, 1.00 ID x 1.128 OD x .500 long	
7	62.0931.00	Spacer, armature, armrest .375 x .250 ID x .225	90.1948.00
8	002.166.00	Screw, socket head, 10-32 x 3/4	
9	62.0767.00	Left side upper structure cover	
10	002.158.00	Socket head screw, 3/8-16 x 1/2, Grade 8	
11	62.0768.00	Right side upper structure cover	
12	62.0780.00	Armrest mount	
13	005.181.00	Socket head screw, 7/16 x 1-1/2	



Plugs for no-arm option

- ▶ Upper Chair 311B/411
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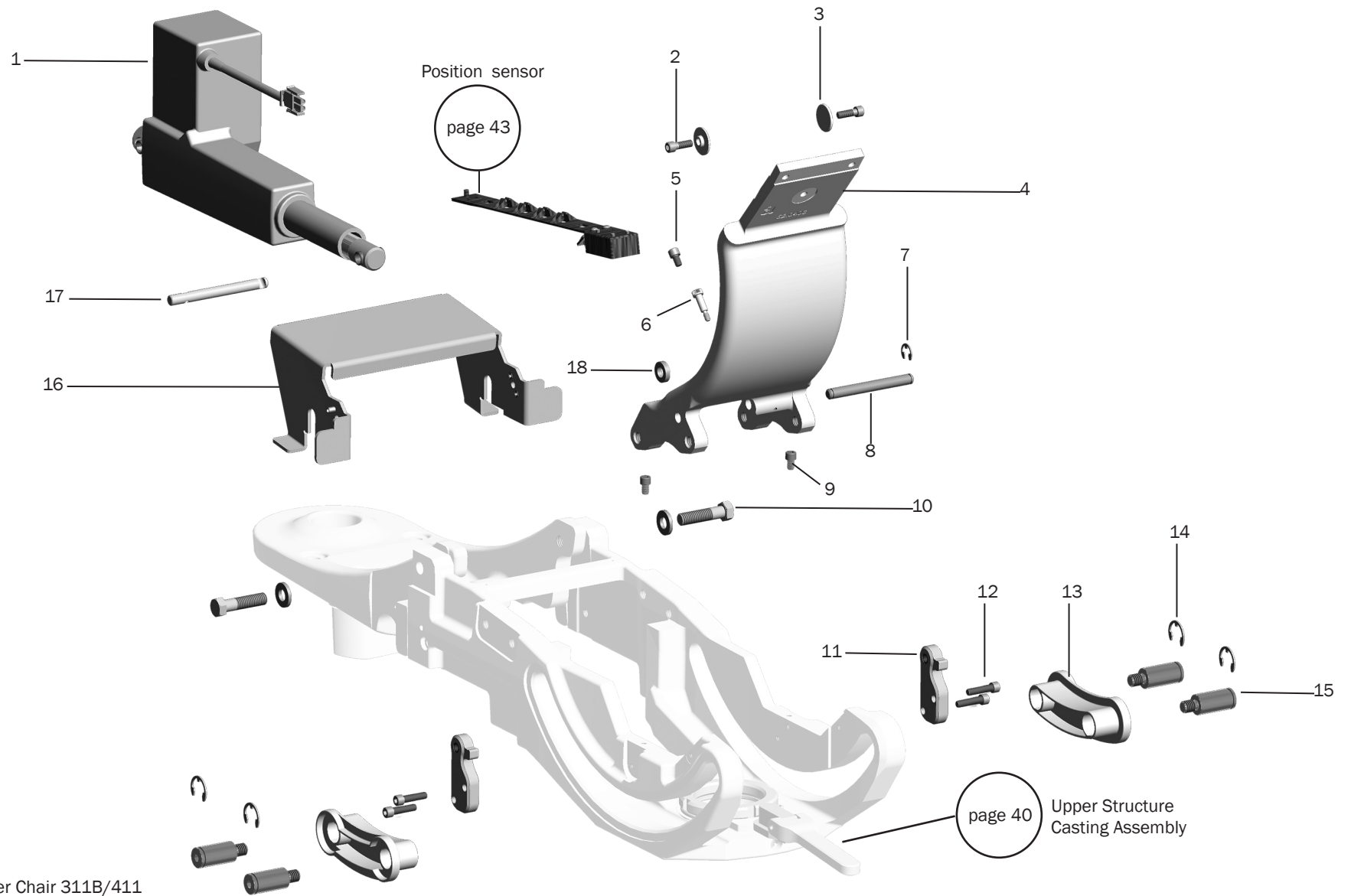
Armrest 411



Armrest 411

Item	Part Number	Description	Replacement Kit
1	62.0828.00	Upper armrest cover	90.1401.00, Armrest cover kit (effective January 2015) 90.1491.00, Armrest cover kit (before January 2015)
2	62.0830.00	Armature	90.1401.00, Armrest cover kit (effective January 2015) 90.1491.00, Armrest cover kit (before January 2015)
3	62.0785.00	Armrest, weldment, left	90.1401.00, Armrest cover kit (effective January 2015) 90.1491.00, Armrest cover kit (before January 2015)
4	005.012.03	Button, socket head, patch screw, 10-32 x 3/8	90.1401.00, Armrest cover kit (effective January 2015) 90.1491.00, Armrest cover kit (before January 2015)
5	62.0829.00	Lower armrest cover	90.1401.00, Armrest cover kit (effective January 2015) 90.1491.00, Armrest cover kit (before January 2015)
6	005.181.00	Socket head cap screw, 7/16-14 x 1-1/2	
7	002.166.00	Screw, socket head, 10-32 x 3/4	
8	62.0780.00	Mount	90.1400.00 Armrest mount kit
9	002.158.00	Socket head screw, 3/8-16 x 1/2, GR8	
10	62.0784.00	Armrest, weldment, right	90.1403.00 Right armrest kit
11	62.0831.00	Foam	
12	004.230.00	Washer	90.1401.00, Armrest cover kit (effective January 2015) 90.1491.00, Armrest cover kit (before January 2015)
13	62.0768.00	Right hand upper side cover	90.1398.00 Kit, side cover, right
14	62.0767.00	Left hand upper side cover	90.1397.00 Kit, side cover, left

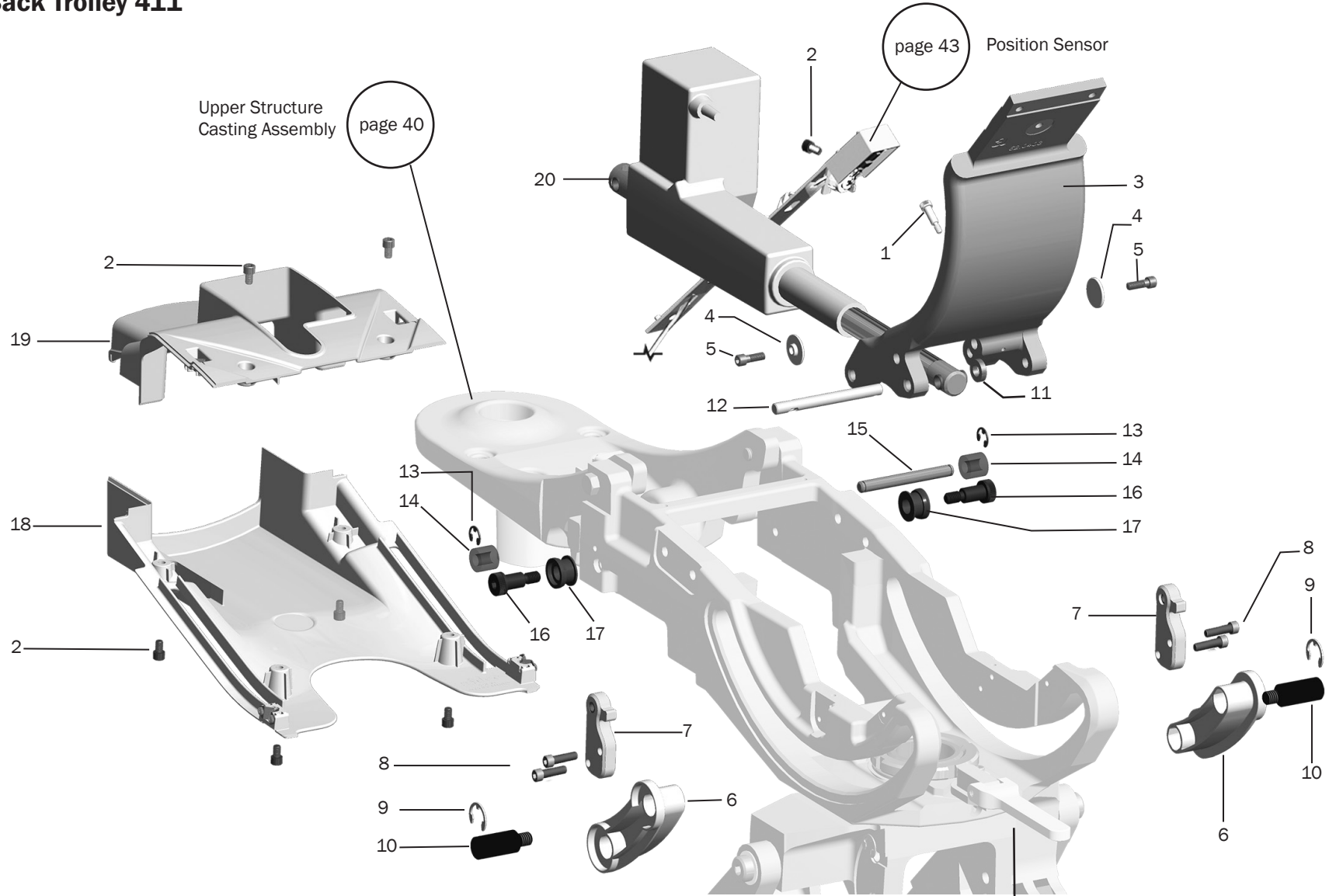
Chair Back Trolley 311B



Chair Back Trolley 311B

Item	Part Number	Description	Replacement Kit
1	62.0907.00	311B Tilt actuator	90.1511.00 311B Tilt actuator assembly kit
2	001.245.00	Socket head cap screw, 1/4-20 x 3/4	
3	62.0070.00	Guide, lateral, back	
4	62.0846.00	Chair back trolley assembly	
5	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
6	001.138.00	1/4-20 X 1/2 Pan head Phillips screw	
7	010.040.00	Retaining ring, external, E-ring, .375 ID, sst	
8	62.0761.00	Pin, Linak, front mt	
9	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
10	001.292.00	Hex screw, 7/16 -14 x 1.75	
11	62.0775.00 62.0774.00	Seat attach bracket kit (includes items 8 and 9)	90.1404.00 Seat attach bracket kit
12	001.286.00	Socket head screw, 1/4-20 x 7/8, steel zinc coat	90.1404.00 Seat attach bracket kit
13	62.0061.00	Guide	
14	010.083.00	Retaining ring, E-ring .750	
15	62.0202.00	Slider shoulder bolt	
16	62.0906.00	Bracket	
17	62.0858.00	Bolt, Linak	
18	62.0189.00	Spacer, tilt rod end	

Chair Back Trolley 411

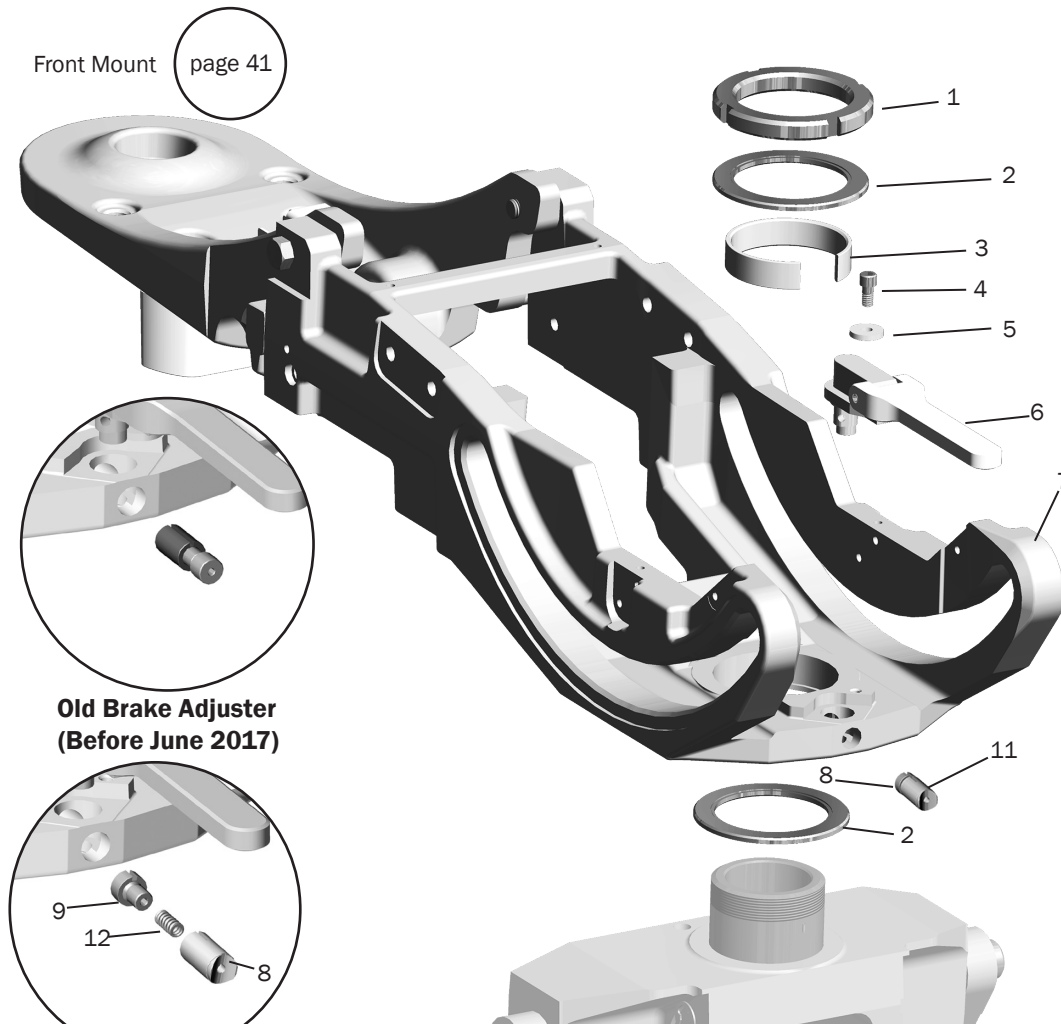


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- Dental Chairs 311B/411 page 30

Chair Back Trolley 411

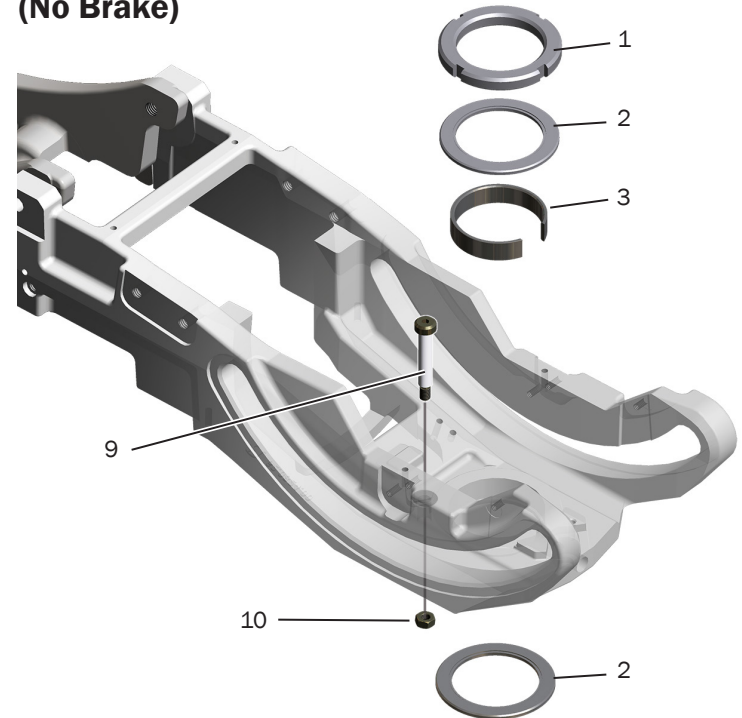
Item	Part Number	Description	Replacement Kit
1	001.138.00	1/4-20 X 1/2 Pan head Phillips screw	
2	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
3	62.0846.00	Chair back trolley assembly	
4	62.0070.00	Guide, lateral, back	
5	001.245.00	Screw, socket head, 1/4-20 x 3/4, patch, sst	
6	62.0061.00	Guide	
7	62.0775.00 62.0774.00	Seat attach bracket kit (includes items 8 and 9)	90.1404.00 Seat attach bracket kit
8	001.286.00	Socket head screw, 1/4-20 x 7/8, steel zinc coat	90.1404.00 Seat attach bracket kit
9	010.083.00	Retaining ring, E-ring .750	
10	62.0202.00	Slider shoulder bolt	
11	62.0189.00	Spacer, tilt rod end	
12	62.0858.00	Bolt, Linak	
13	010.040.00	Retaining ring, external, E-ring, .375 ID, sst	
14	62.0760.00	Compression spring	
15	62.0761.00	Pin, Linak, front mt	
16	001.277.00	Socket shoulder screw, 3/8-16 X 1/2 X 3/4	
17	62.0844.00	Flange bushing	
18	62.0771.00	Upper cover bottom	
19	62.0772.00	Upper cover top	
20	62.0726.00	411 Tilt actuator	90.1406.00 411 Tilt actuator assembly kit

Upper Structure Casting Assembly 311B/411



Item	Part Number	Description
1	61.2051.00	Spanner nut
2	016.133.00	Bearing, thrust, enclosed, 63 mm ID x 86 mm OD, steel
3	62.0237.00	Wear ring
4	005.008.01	Screw, socket head, 1/4-20 x 1/2, patch, sst
5	004.170.00	Washer, flat, nylon, .260 ID
6	90.1637.00	Swivel brake kit, gray 3, includes 8, 11
7	62.0727.00	Upper structure casting
8	62.1038.00	Adjuster, effective June 2017
9	001.289.00	Shoulder bolt
10	006.410.00	Nut, hex, 8 mm x 1.25 mm, steel zinc
11	62.1037.00	Plunger, effective June 2017
12	013.145.00	Spring

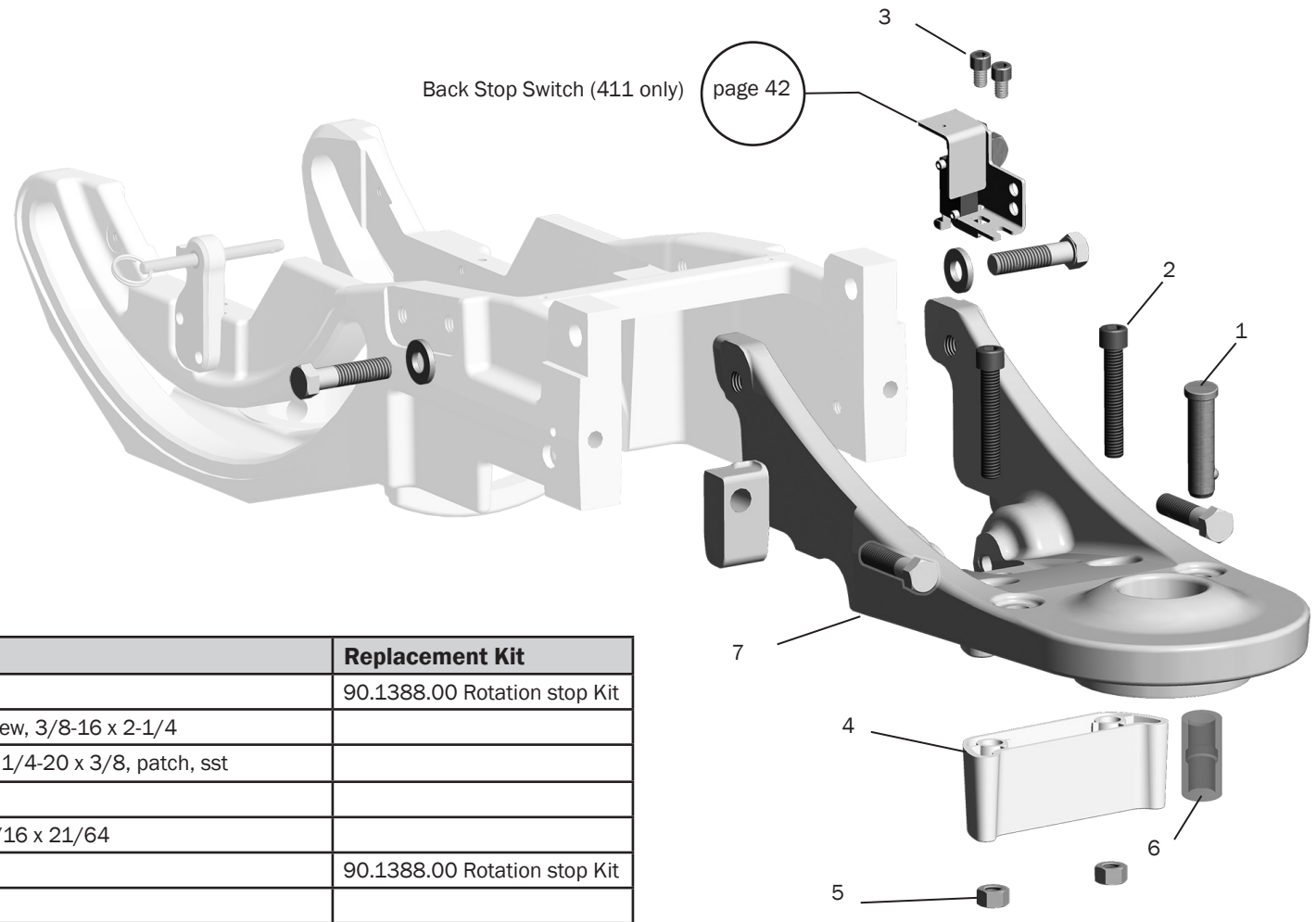
International Casting 311B (No Brake)



Upper Chair 311B/411
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Dental Chairs 311B/411
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Front Mount 311B/411

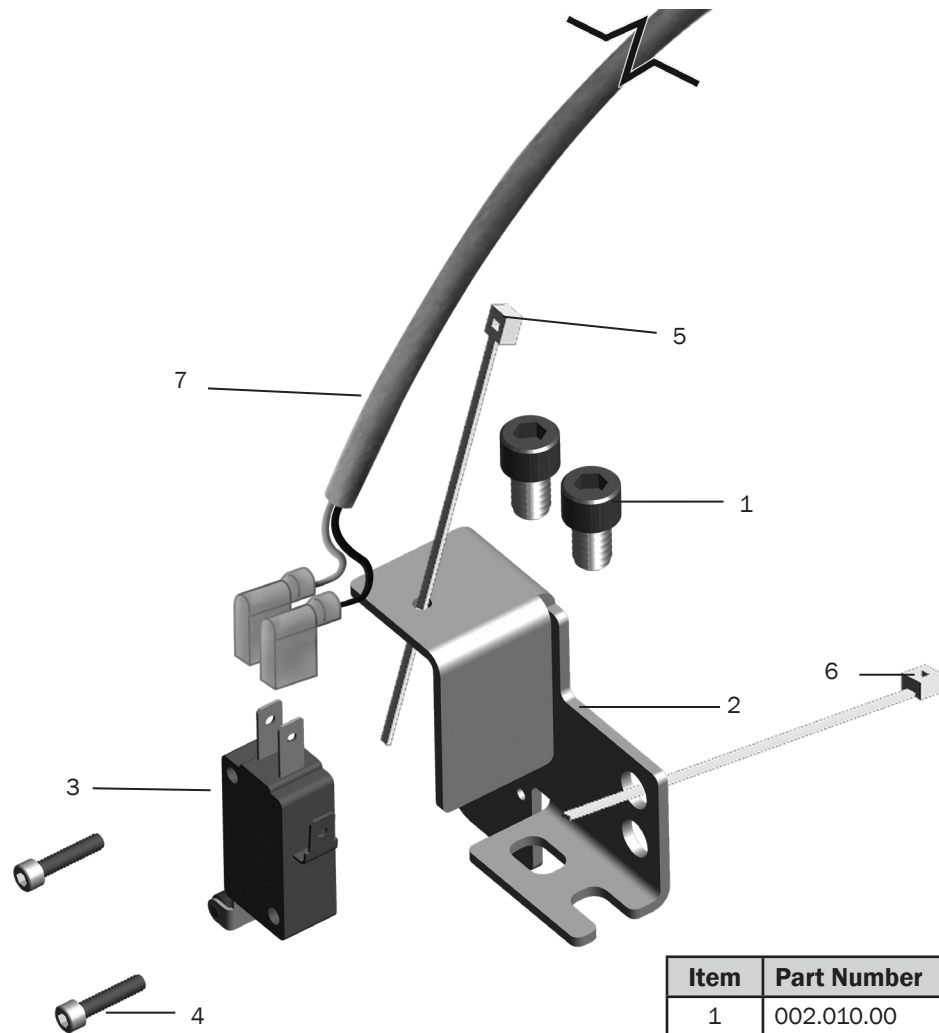


Item	Part Number	Description	Replacement Kit
1	011.140.00	Detent pin	90.1388.00 Rotation stop Kit
2	005.154.00	Socket head cap screw, 3/8-16 x 2-1/4	
3	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
4	77.1170.00	Stop	
5	006.130.00	Hex nut, 3/8-16 x 9/16 x 21/64	
6	77.1258.00	Rotation stop sleeve	90.1388.00 Rotation stop Kit
7	62.0764.00 *	Front mount	

* Item is factory installed and is not removable

- 
Upper Chair 311B/411
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Dental Chairs 311B/411
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Back Stop Switch 311B/411



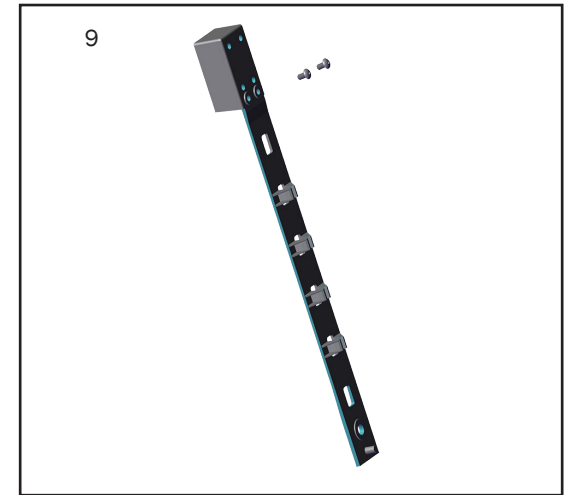
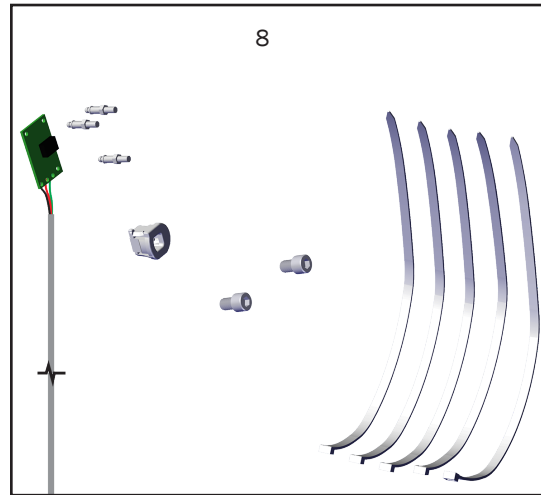
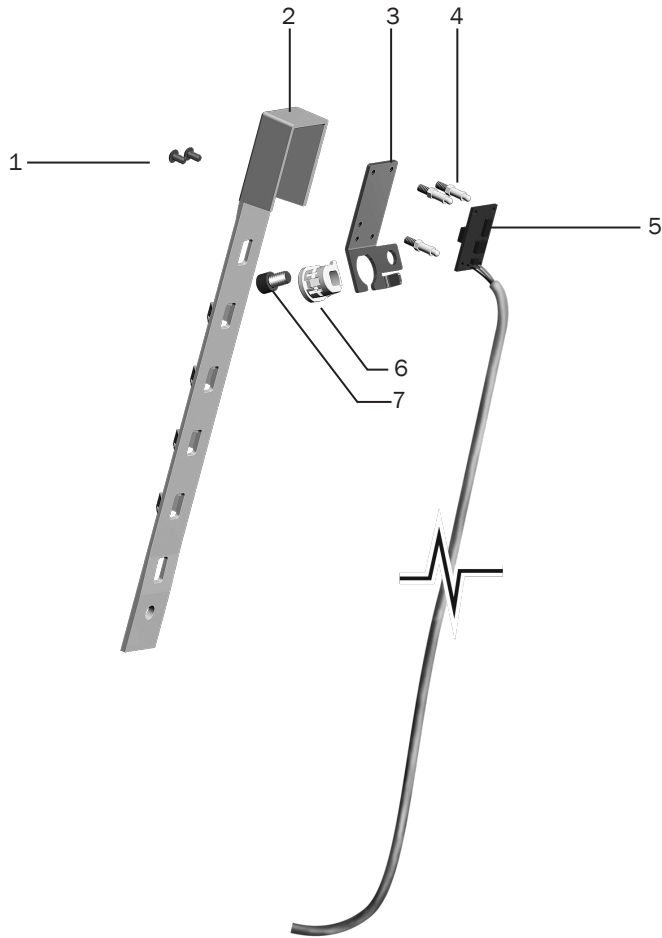
Item	Part Number	Description	Replacement Kit
1	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	90.1426.00 Back stop switch kit
2	62.0759.00	Bracket	
3	044.204.00	Micro-switch	90.1426.00 Back stop switch kit
4	001.021.00	Socket head screw, 4-40 x 1/2 stainless steel	90.1426.00 Back stop switch kit
5	025.036.01	Cable tie, package of 10	
6	025.002.01	Cable tie, package of 10	
7	43.0330.00	Electric cable	

Upper Chair 311B/411
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Dental Chairs 311B/411
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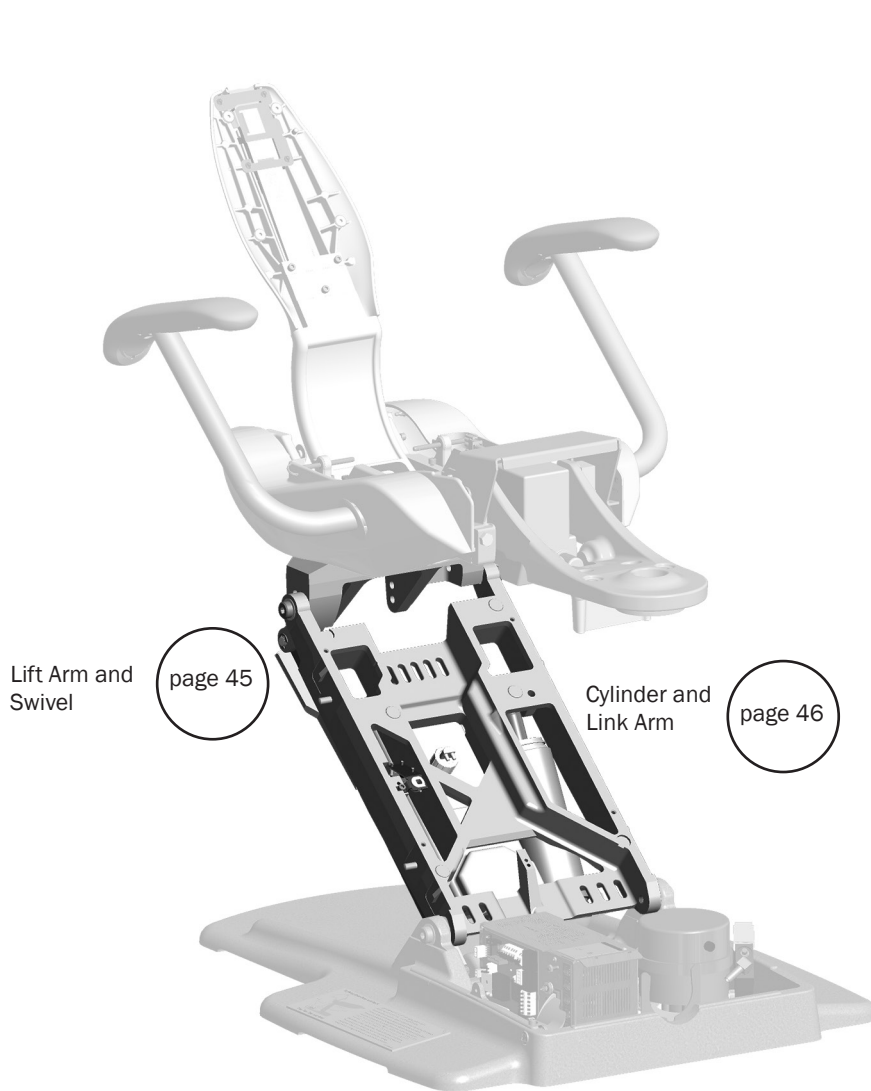
Position Sensor 311B/411/511

p/n: 90.1639.00



Item	Part Number	Description	Replacement Kit
1	002.140.00	1/4-20 Special shoulder screw	90.1399.00 Tilt retain cable kit
2	62.0773.00	Retain, cable, tilt inclinometer	90.1399.00 Tilt retain cable kit
3	62.0335.00	Bracket	
4	90.1082.00	Standoff, package of 5	Included in 90.1183.00 Lift Cylinder Kit
5	43.0102.00	Position sensor circuit board	Included in 90.1183.00 Lift Cylinder Kit
6	018.112.00	Bushing strain relief	Included in 90.1183.00 Lift Cylinder Kit
7	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	Included in 90.1183.00 Lift Cylinder Kit
8	90.1183.00	Inclinometer PCB assembly kit	
9	90.1399.00	Tilt retaining cable kit	

Mid Chair 311B/411



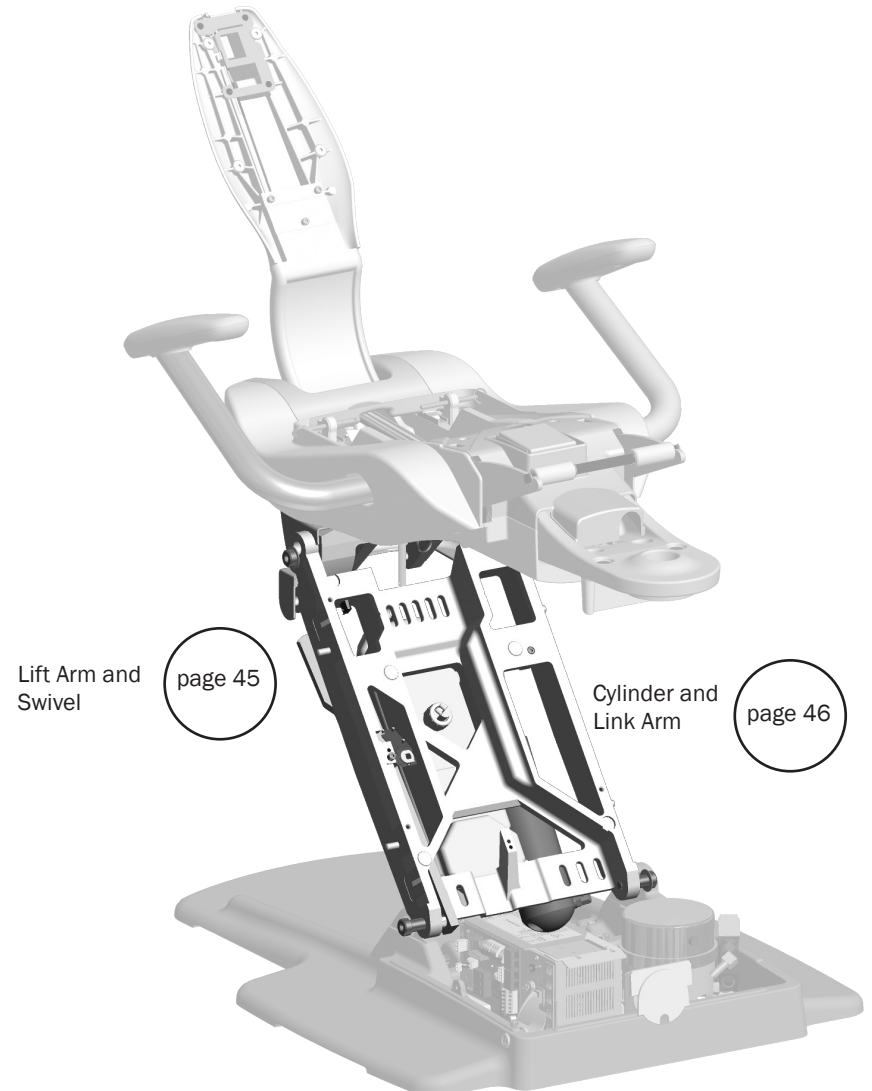
Lift Arm and Swivel

page 45

Cylinder and Link Arm

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311B Dental Chair



Lift Arm and Swivel

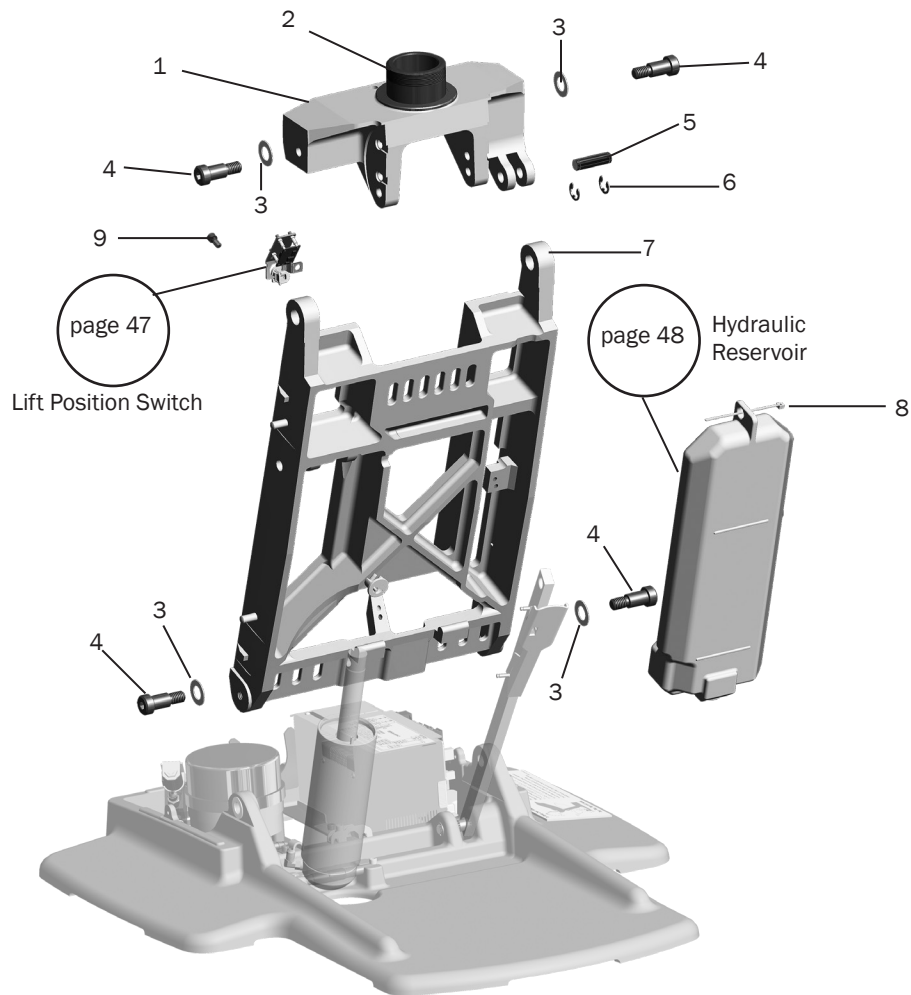
page 45

Cylinder and Link Arm

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411 Dental Chair

Lift Arm and Swivel 311B/411

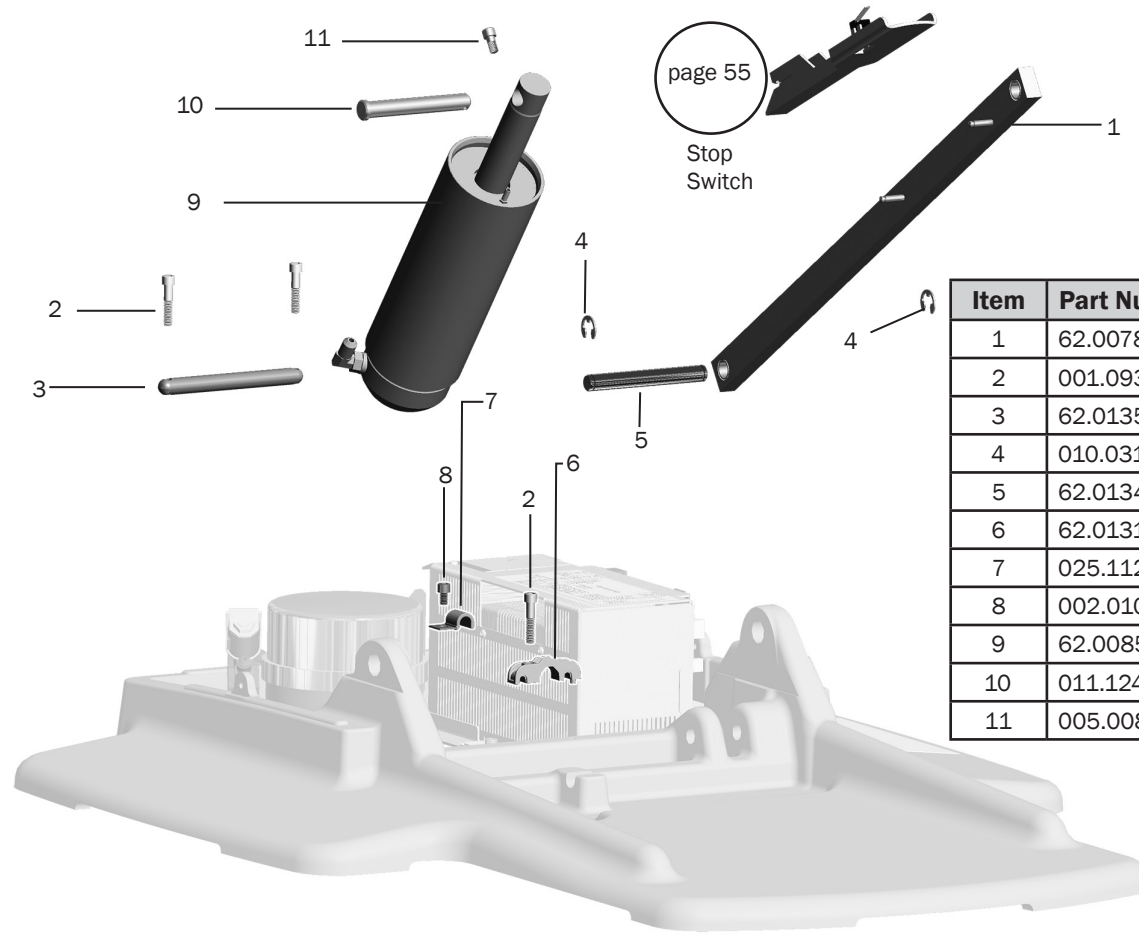


Item	Part Number	Description
1 /	62.0729.00	Swivel mount
2	62.0045.00	Swivel
3	004.148.00	Washer, flat, Nylatron, .630 ID
4	001.165.00	Screw, socket shoulder, 1/2 - 13 x 5/8 x 7/8, patch
5	62.0077.00	Pin, link arm, swivel
6	010.031.01	Retaining ring, external, E-ring ID, sst
7	62.0089.01	Lift arm
8	025.036.01	Cable tie, package of 10
9	005.008.01	Screw, socket head, 1/4-20 x 1/2, patch, sst

Mid Chair 311B/411
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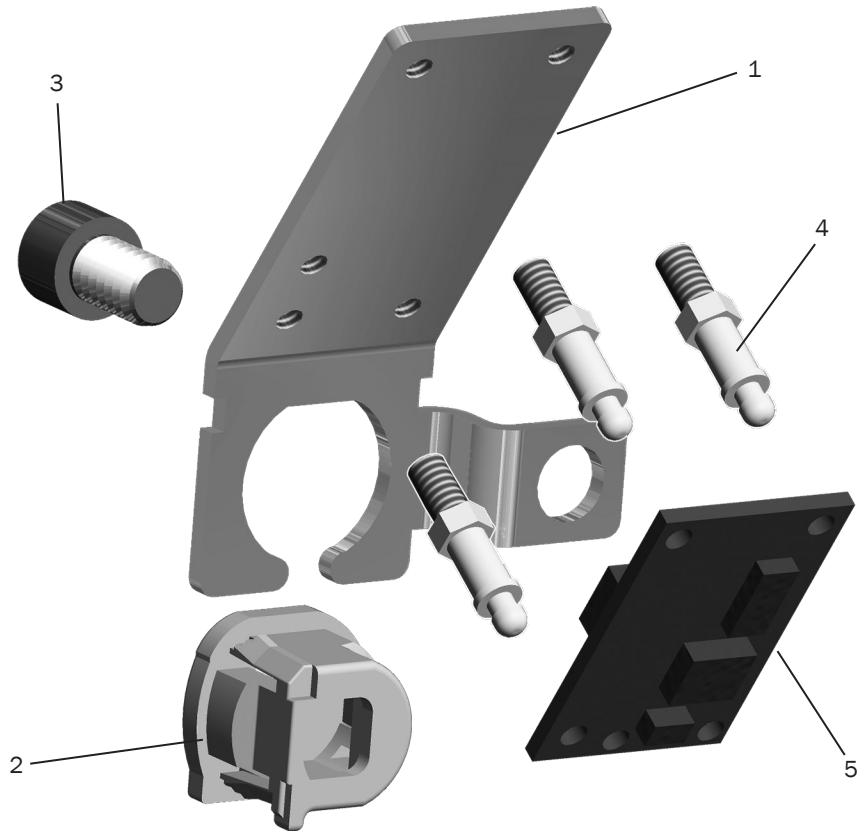
Dental Chairs 311B/411
page 30

Cylinder and Link Arm 311B/411



Item	Part Number	Description	Replacement Kit
1	62.0078.00	Link arm	62.0078.01
2	001.093.01	Screw, socket head, 1/4 - 20 x 1 -1/4, patch, sst	
3	62.0135.00	Pin, baseplate, lift cylinder	
4	010.031.00	Retaining ring, external, E-ring ID, sst	
5	62.0134.00	Pin, link arm, baseplate	
6	62.0131.00	Strain relief	
7	025.112.00	Clamp, half type, 3/8 ID	
8	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
9	62.0085.02	Lift cylinder	90.1083.01
10	011.124.00	Pin, clevis, .500 DIA x 3.50 long, steel	90.1083.01
11	005.008.01	Screw, socket head, 1/4-20 x 1/2, patch, sst	

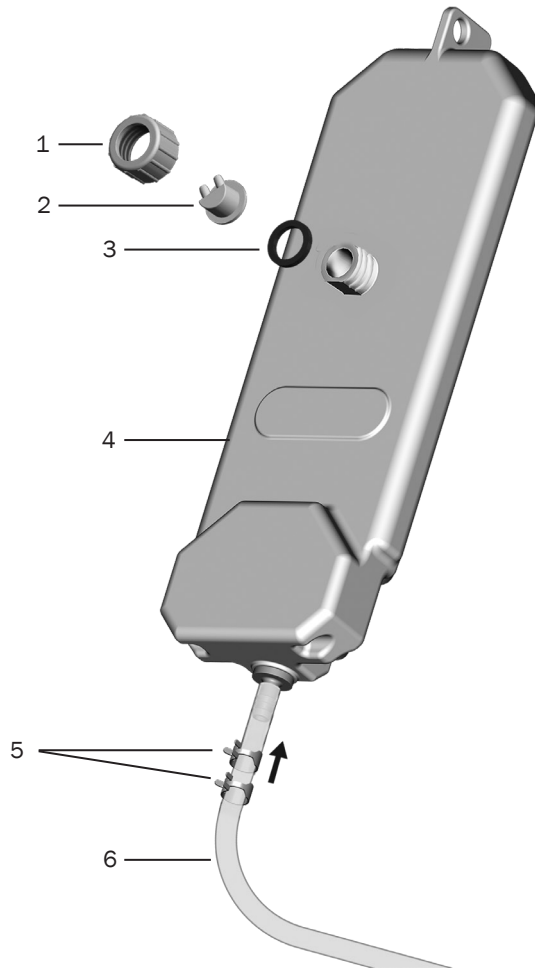
Lift Position Switch 311B/411



Item	Part Number	Description	Replacement Kit
1	62.0335.00	Bracket	
2	018.112.00	Strain relief	90.1183.00 Position sensor
3	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	
4	041.662.00	Standoff	
5	43.0102.00	Position sensor circuit board	90.1183.00 Position sensor

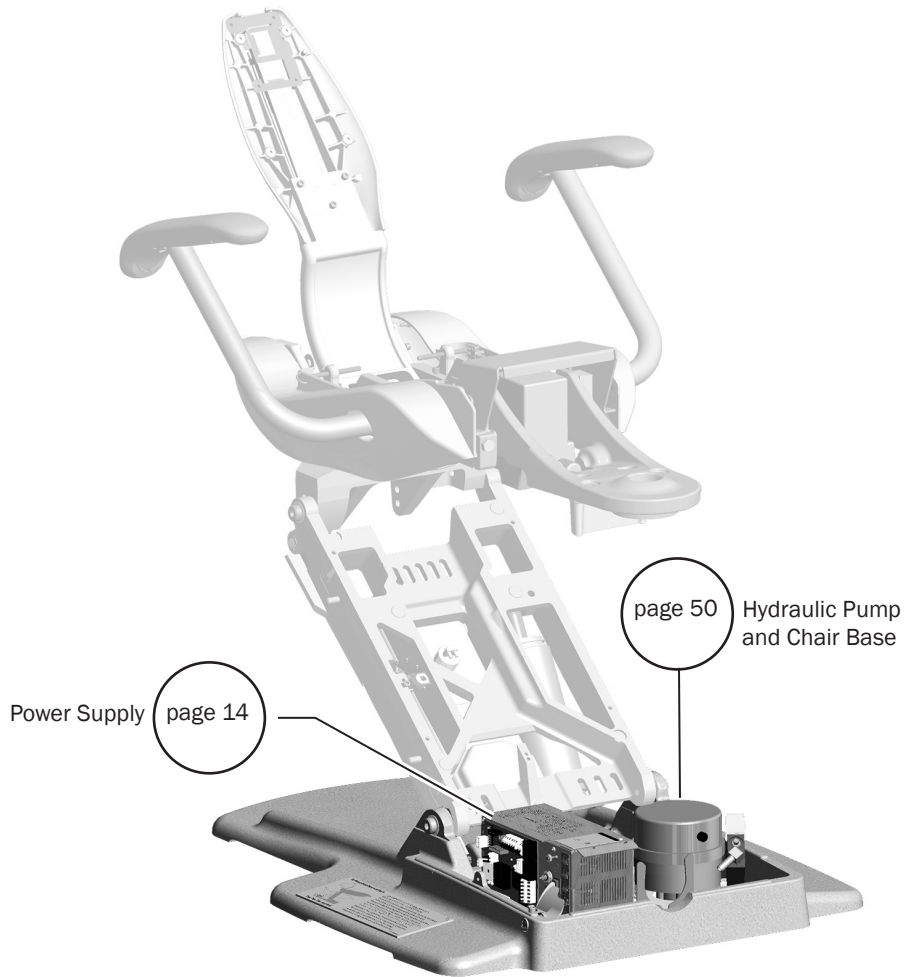
Hydraulic Reservoir 311B/411/511A

p/n: 90.1094.00 (311B/411)/90.1093.00 (511A)

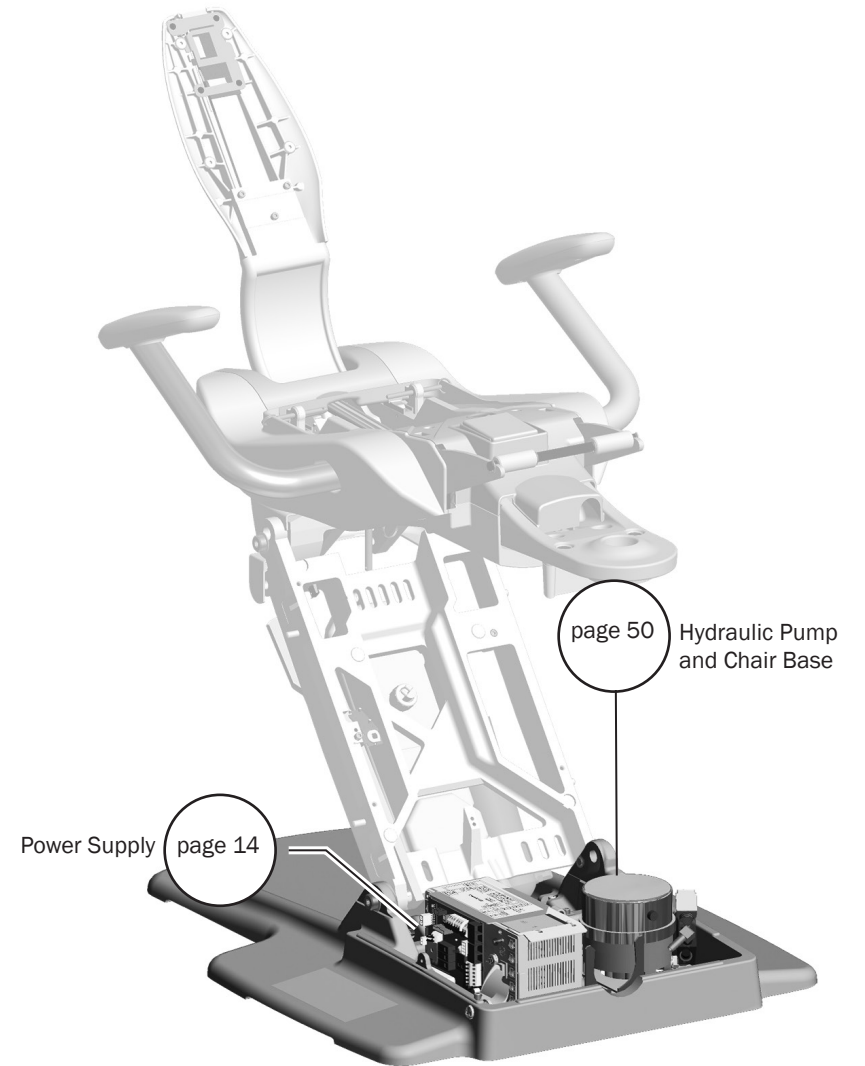


Item	Part Number	Description
1	006.112.00	Nut, retainer, 3/4 garden hose thread, nylon
2	62.0195.00	Vent barb
3	004.161.00	Washer, flat, Buna-N, .75 ID
4	62.0030.00	Hydraulic oil reservoir
5	025.123.00	Hose clamp
6	036.117.00	Clear tubing, 27"

Lower Chair 311B/411

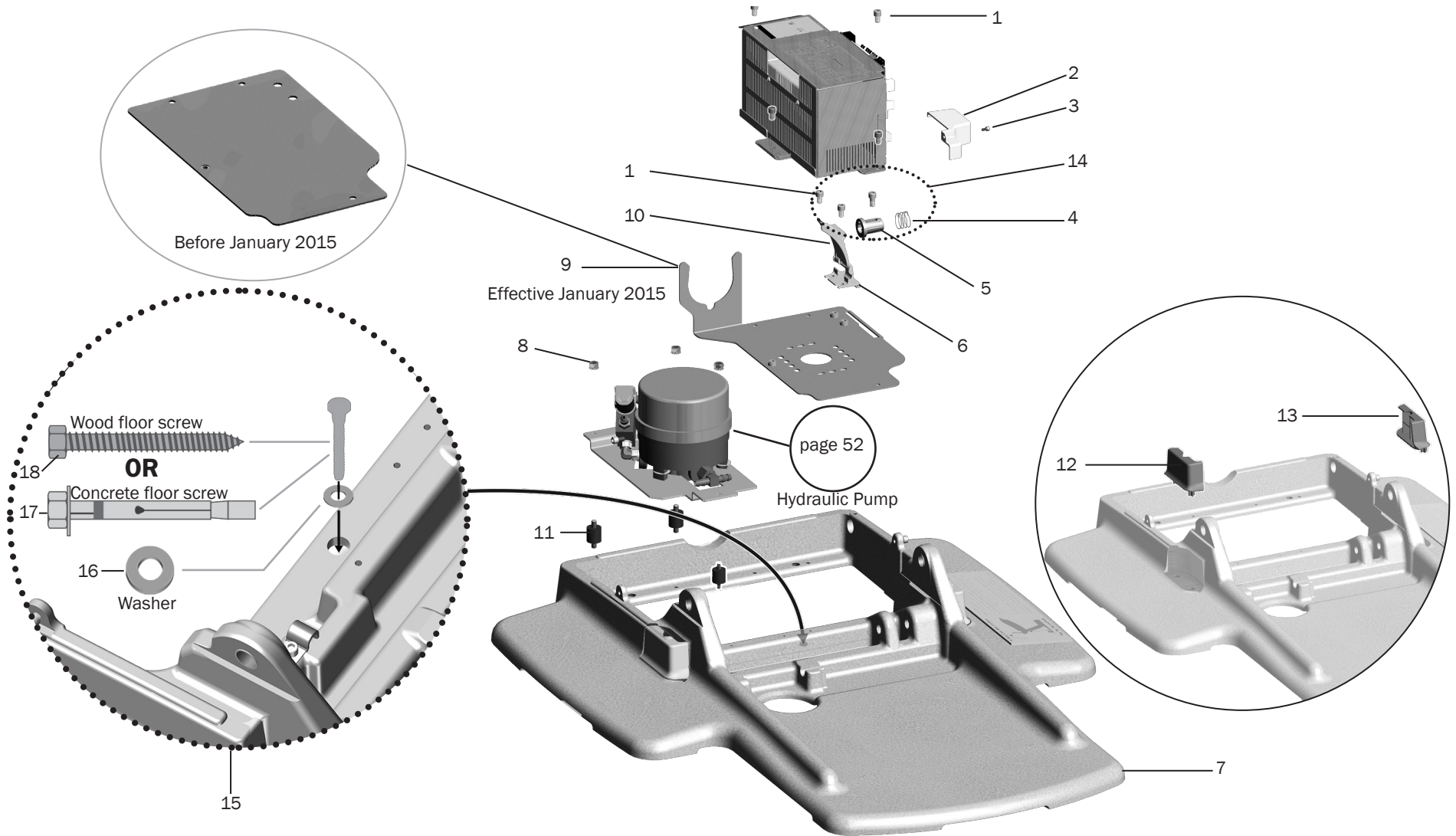


311B Dental Chair



411 Dental Chair

Hydraulic Pump and Chair Base 311B/411



Lower Chair 311B/411
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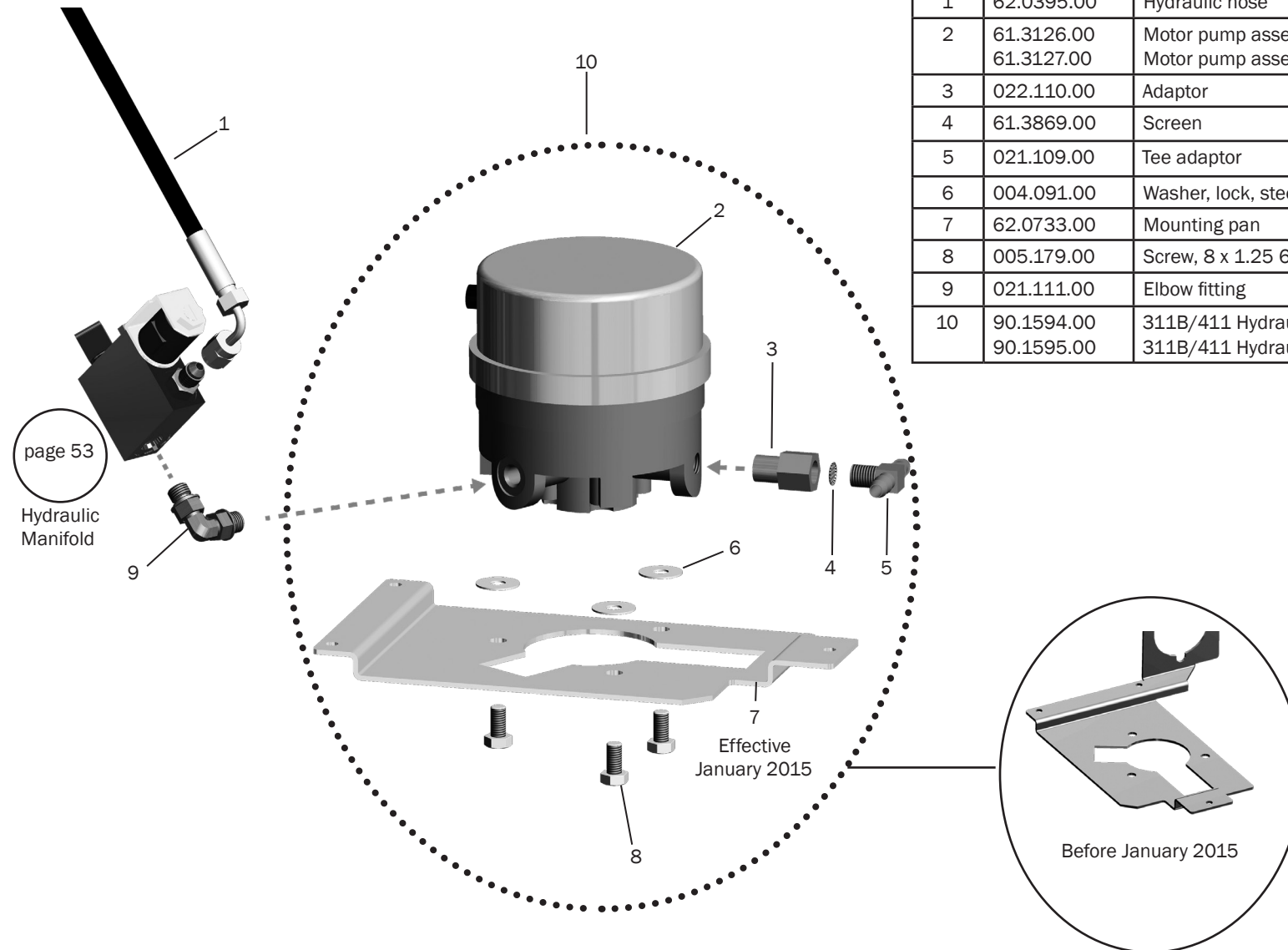
Dental Chairs 311B/411
page 30

Hydraulic Pump and Chair Base 311B/411

Item	Part Number	Description
1	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
2	62.0827.00	Wire connector cover
3	001.034.00	Screw, socket head, 6-32 x 1/4, sst
4	90.1405.00	Switch kit, main on/off, 411/311B, gray 3
5	62.0148.00 62.0148.01	Power button, surf6 Power button, gray3
6	62.0832.00	Power button bracket
7	62.0029.01 62.0896.00	Baseplate, gray3 International baseplate
8	006.141.00	Nut, hex, Keps, 1/4 - 20, steel zinc
9	62.0742.00	Power supply mounting pan
10	62.0753.00	Power button adaptor
11	037.040.00	Isolator, rubber, 3/4 dia, 1/4 - 20 thread
12	62.0909.00	Left hand plug (International baseplate only)
13	62.0924.00	Right hand plug (International baseplate only)
14	90.1405.00	Main on/off switch kit, 411/311B, gray
15	90.1161.00	Mount kit, floor, 300
16	004.240.00	Washer, flat, steel zinc, .53 ID x 1.062 OD x .095
17	001.231.00	Bolt, hex head, anchor, 1/2 - 13 x 3/4, Grade 5, steel zinc
18	003.048.00	Screw, hex head, lag

Hydraulic Pump Assembly 311B/411

p/n: 90.1594.00 100 - 120 V / 90.1595.00 240 V

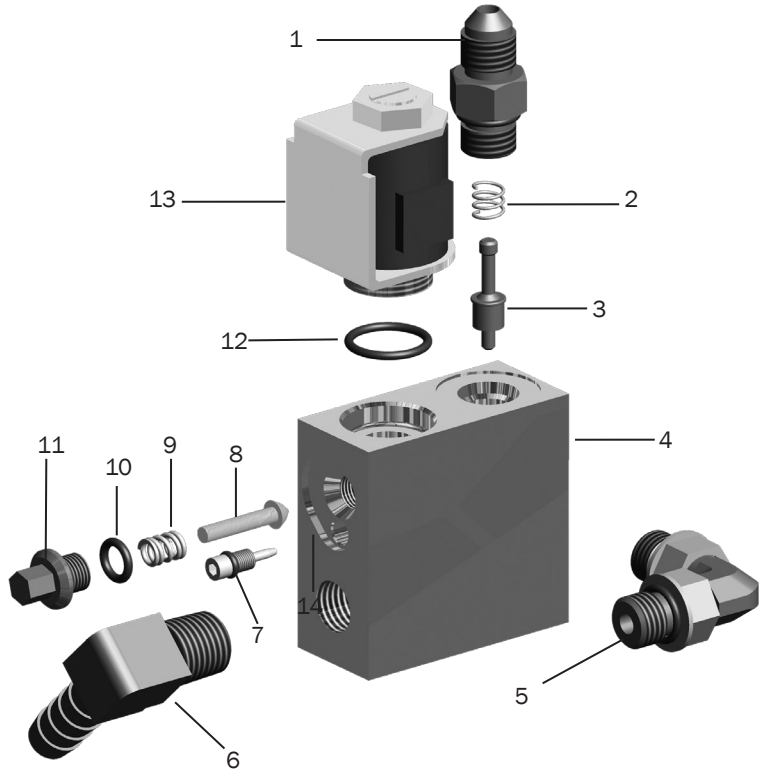


Item	Part Number	Description
1	62.0395.00	Hydraulic hose
2	61.3126.00 61.3127.00	Motor pump assembly, 120V Motor pump assembly, 240V
3	022.110.00	Adaptor
4	61.3869.00	Screen
5	021.109.00	Tee adaptor
6	004.091.00	Washer, lock, steel zinc, internal/external tooth 5/16
7	62.0733.00	Mounting pan
8	005.179.00	Screw, 8 x 1.25 6 mm
9	021.111.00	Elbow fitting
10	90.1594.00 90.1595.00	311B/411 Hydraulic pump replacement kit, 100V-120V 311B/411 Hydraulic pump replacement kit, 240V

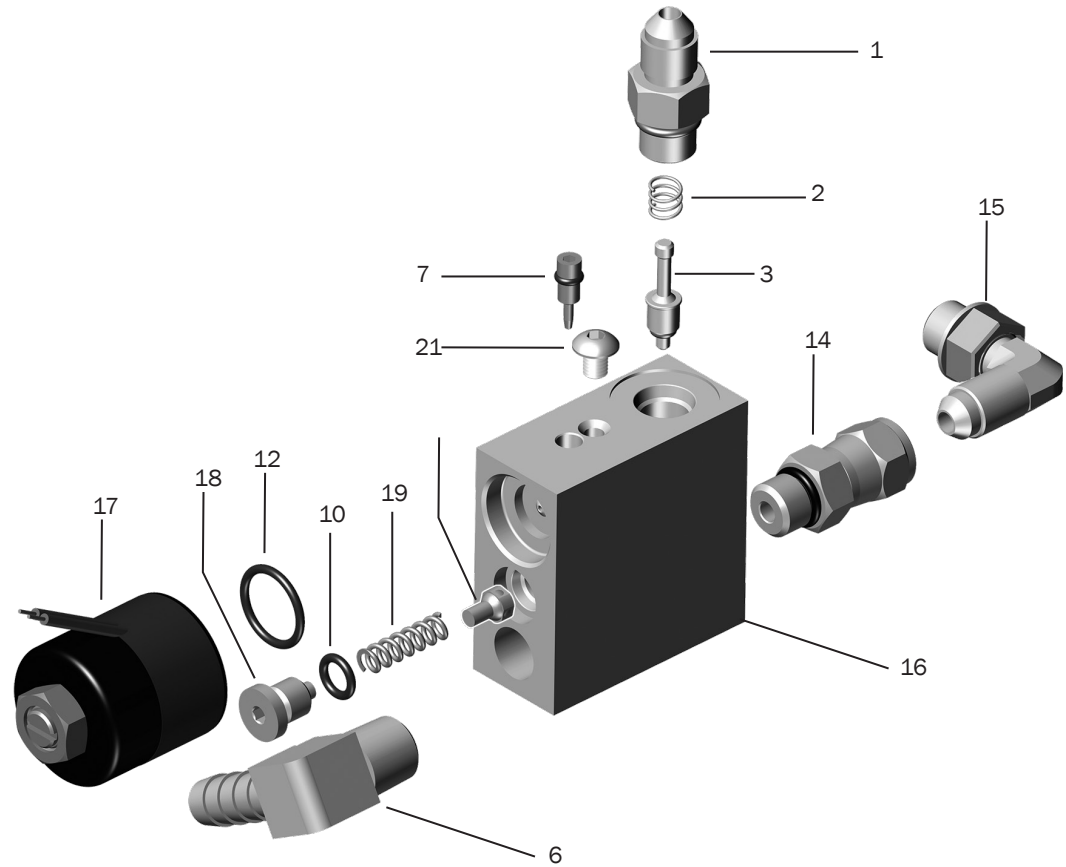
Chair Lift Hydraulic Manifold 311B/411

p/n: 62.1019.00 (replaces 62.0776.00)

62.0776.00 (OBS)
Before October 2016



62.1019.00
Effective October 2016



Lower Chair 311B/411
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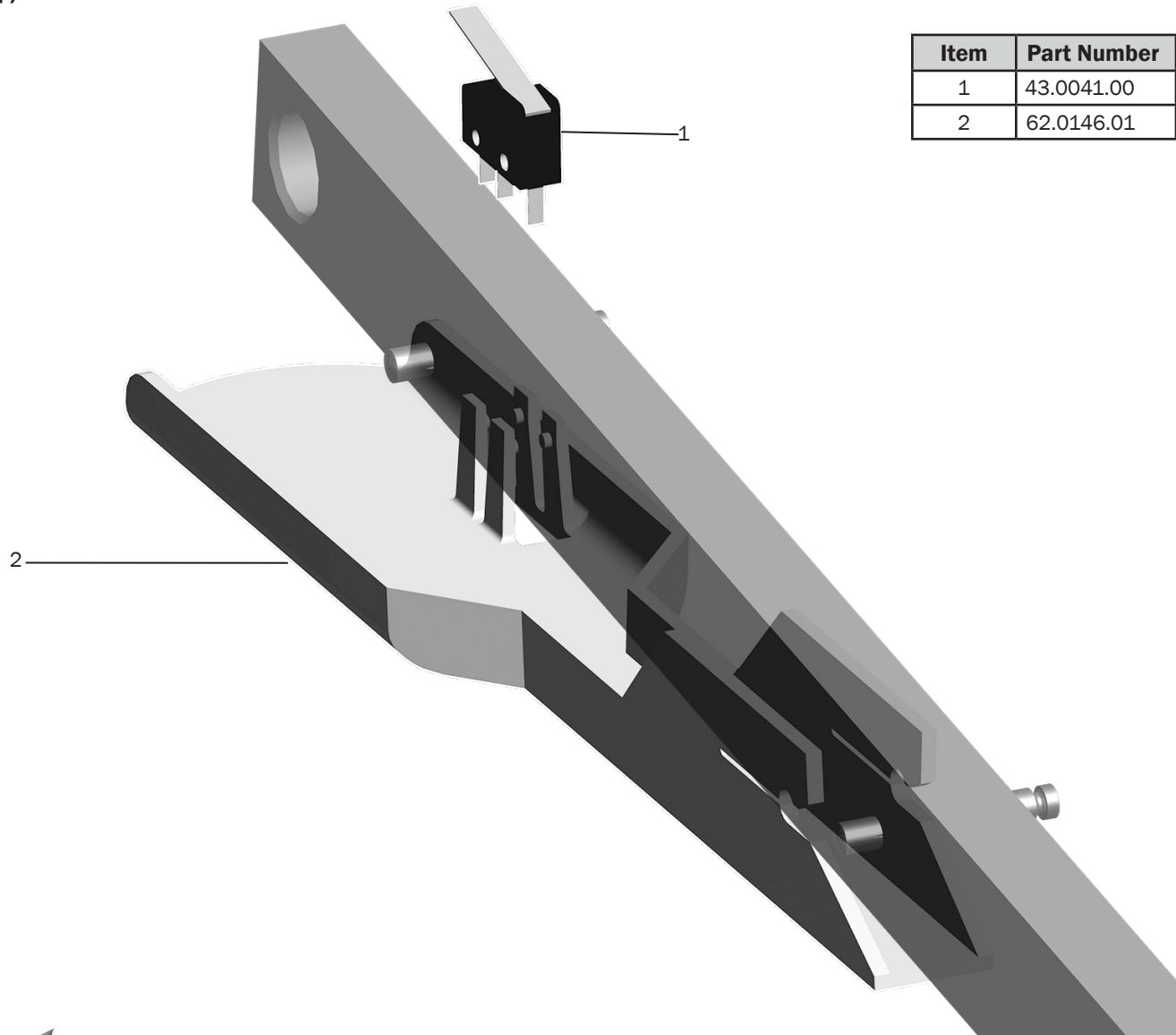
Dental Chairs 311B/411
page 30

Hydraulic Pump and Chair Base 311B/411

Item	Part Number	Description	Replacement Kit
1	022.049.00	Fitting w/O-ring	
2	013.044.00	Conical compression spring	90.1392.00 -- Hydraulic Manifold Rebuild kit
3	61.0461.00	Check valve stem	90.1392.00 -- Hydraulic Manifold Rebuild kit
4	62.0748.00	Hydraulic manifold block	
5	021.111.00	90 Degree elbow	
6	022.106.00	Adapter, 1/2 Poly x 1/4 NPT x 90 degree, brass	
7	61.0460.00	Flow adjustment screw	
8	62.0757.00	Poppet	
9	013.136.00	Lock release spring	90.1392.00 -- Hydraulic Manifold Rebuild kit
10	030.010.02	O-ring, package of 10	90.1392.00 -- Hydraulic Manifold Rebuild kit
11	62.0758.00	Lock release retainer	
12	030.015.02	O-ring, package of 10	90.1392.00 -- Hydraulic Manifold Rebuild kit
13	62.0317.00	Solenoid assembly	
14	022.118.00	Straight fitting, swivel adaptor, 6402	
15	021.071.00	Elbow fitting with O-ring, 7/16 x 3/8 degree flare	
16	62.0981.00	Hydraulic manifold block	
17	62.0980.00	Solenoid assembly	
18	62.0983.00	Plug	
19	013.141.00	Compression spring, .240 OD x .7833 FL	
20	62.0982.00	Spring guide	
21	002.094.02	Button head socket screw, 10-32 x 1/4 stainless steel	

Stop Switch 311B/411
p/n: 90.1095.01

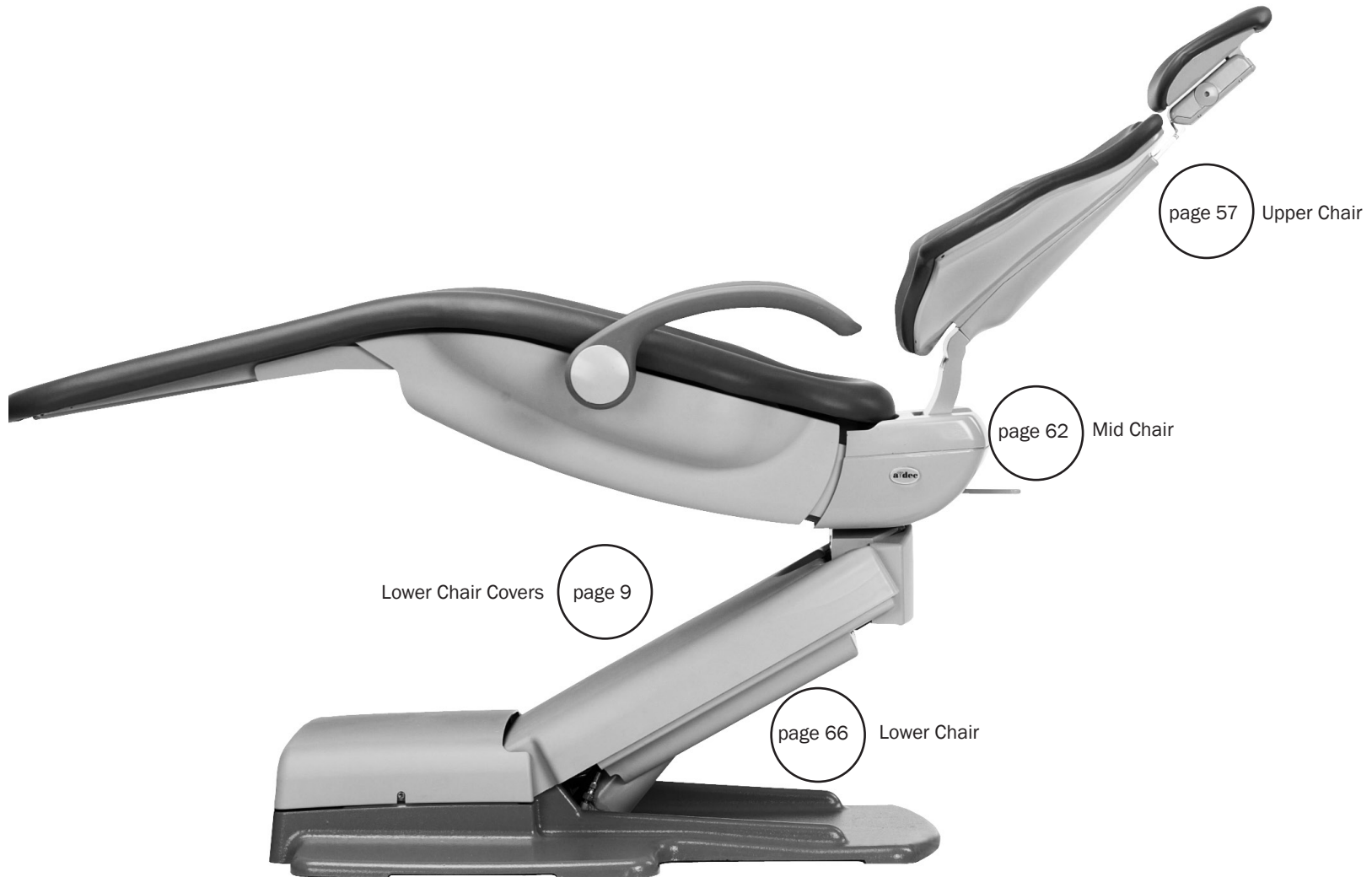
Item	Part Number	Description	Replacement Kit
1	43.0041.00	Stop Switch	90.1095.01
2	62.0146.01	Stop plate swivel knuckle, gray 3	90.1095.01



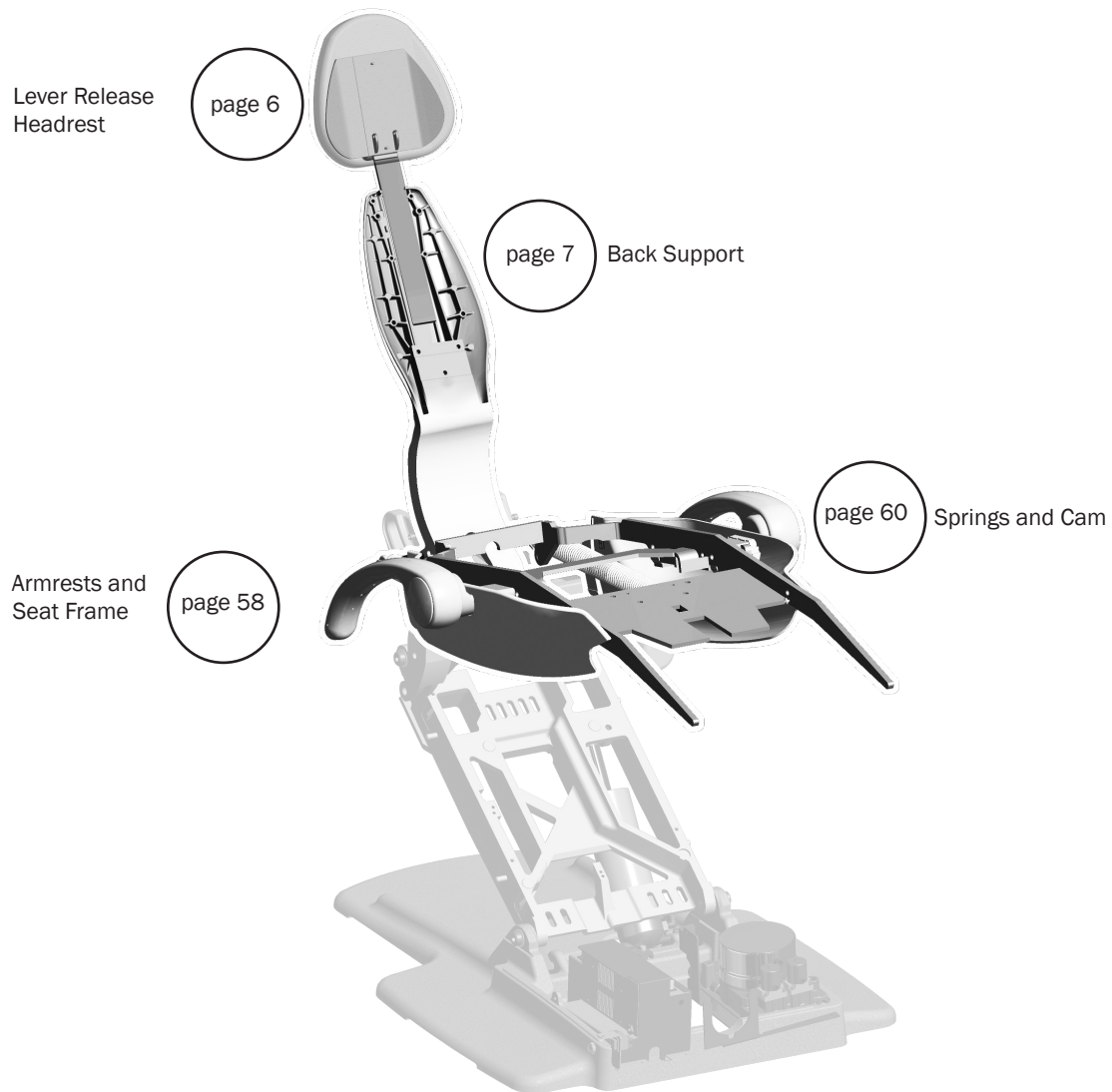
Lower Chair 311B/411
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Dental Chairs 311B/411
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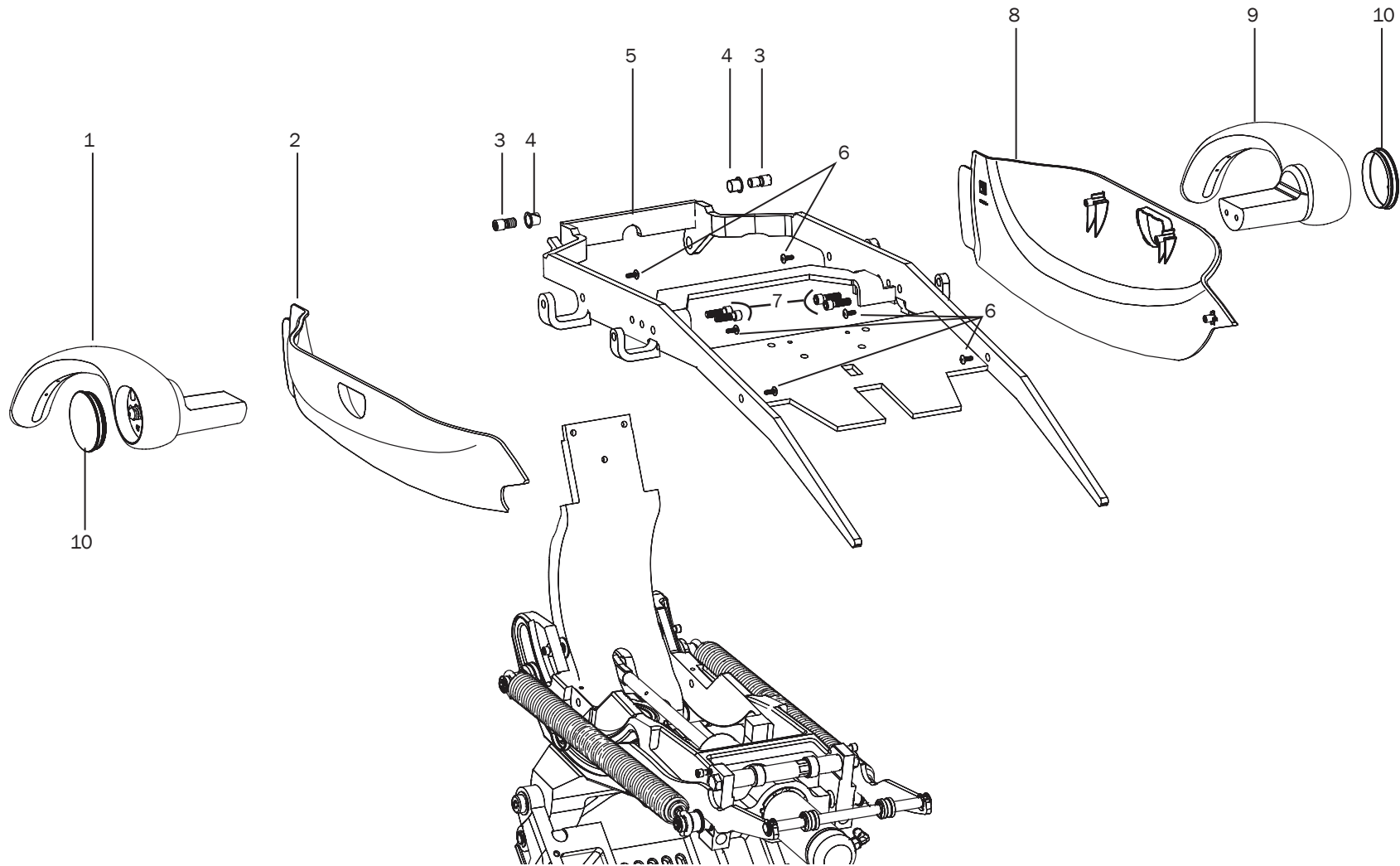
Dental Chair 511A



Upper Chair 511A



Armrest and Seat Frame Assemblies 511A



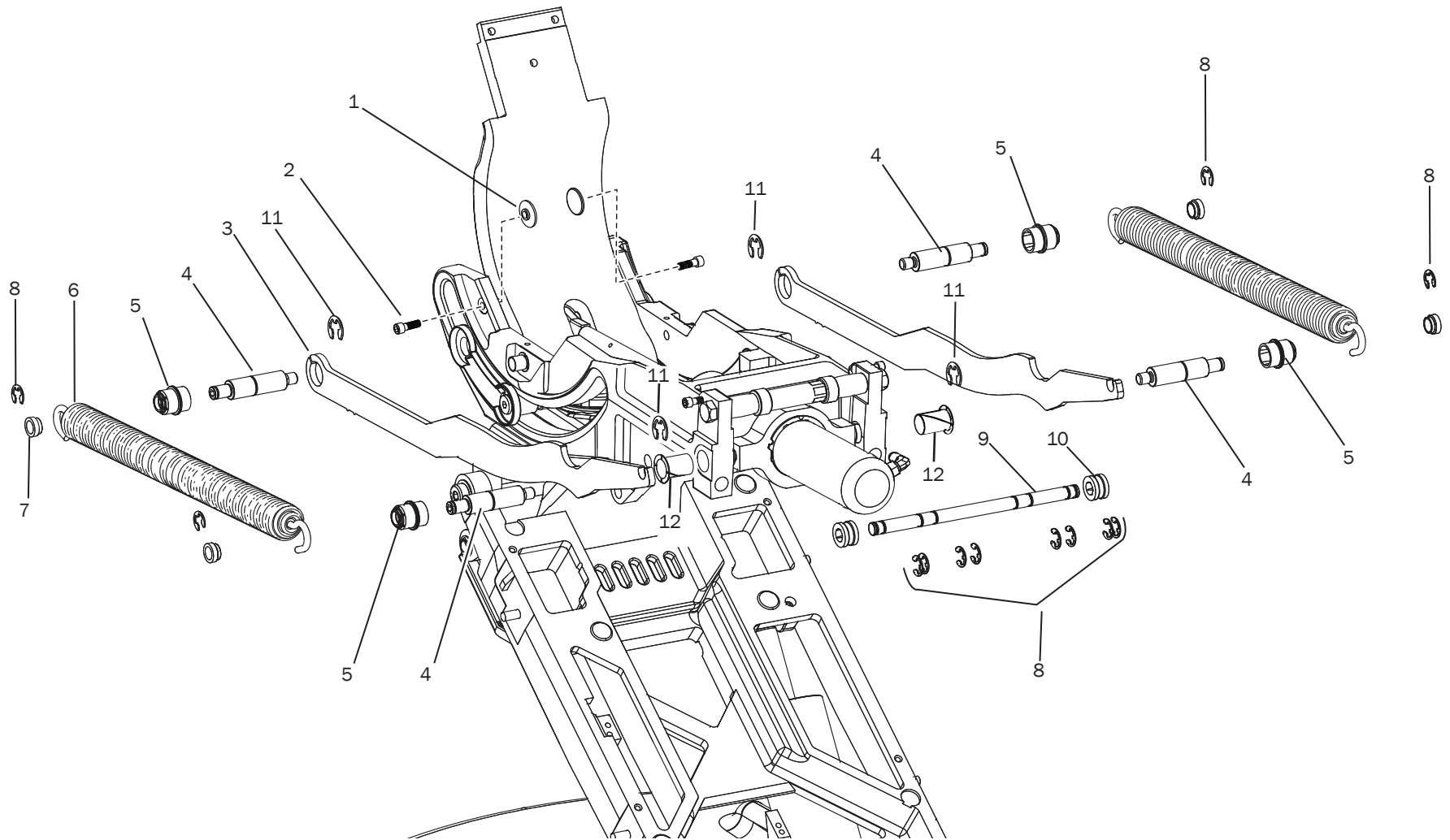
Upper Chair 511A
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Dental Chair 511A
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Armrest and Seat Frame 511A

Item	Part Number	Description	Replacement Kit
1	62.0107.01 62.0107.00	Right armrest assembly, gray Right armrest assembly, surf	Part of 90.1181.00 Armrest kit, gray Part of 90.1181.00 Armrest kit, surf
2	62.0106.01 62.0106.00	Right seat frame cover, white Right seat frame cover, surf	
3	62.0196.00	Mounting stud	62.0039.01, Seat frame, white 62.0039.00, Seat frame, surf
4	016.065.00	Flanged bearing	62.0039.01, Seat frame, white 62.0039.00, Seat frame, surf
5	62.0039.01 62.0039.00	Seat frame assembly, white Seat frame assembly, surf	90.1103.01 Seat frame replacement kit, white 90.1103.00 Seat frame replacement kit, surf
6	003.116.00	Phillips truss head screw, 10 x 1/2	
7	002.149.00	Socket head screw, 3/8-24 x 1-3/4	
8	62.0105.00 62.0105.01	Left seat frame cover, surf Left seat frame cover, white	
9	62.0108.01 62.0108.00	Left armrest assembly, gray Left armrest assembly, surf	Part of 90.1181.01 Armrest kit, gray Part of 90.1181.00 Armrest kit, surf
10	62.0110.01 62.0110.00	Armrest cover, white Armrest cover, surf	

Springs and Cam 511A




Upper Chair 511A
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Dental Chair 511A
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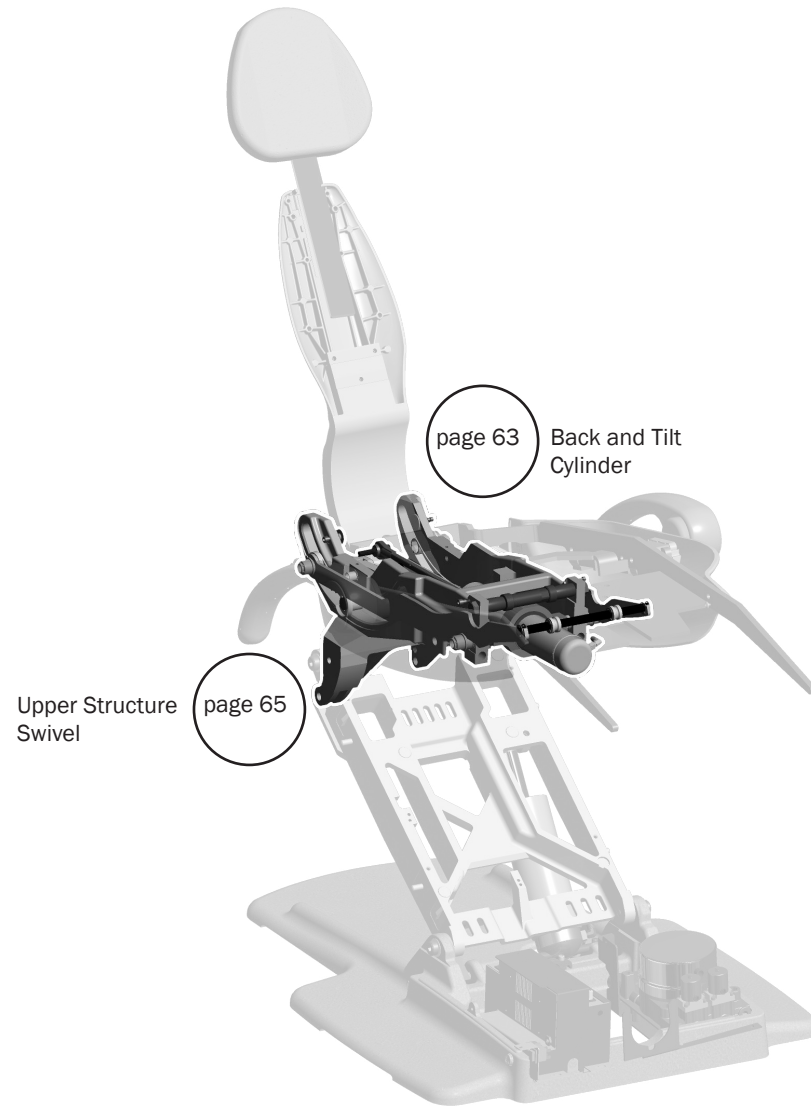
Springs and Cam 511A

Item	Part Number	Description	Replacement Kit
1	62.0070.00	Guide, lateral, back	
2	001.245.00	Screw, socket head, 1/4-20 x 3/4, patch, sst	
3	62.0062.00	Seat lift cam	
4	62.0201.00	Bolt, spring support	
5	62.0067.00	Roller, cam, natural	
6	013.114.00	Spring, extension, seat return	90.1187.00 Replacement spring kit
7	62.0185.00	Spring, support	
8	010.031.01	Retaining ring, external, E-ring ID, sst	
9	62.0069.00	Lift bar	
10	62.0065.00	Seat frame roller	
11	010.083.00	Retaining ring, E-ring .750	
12	016.145.00	Bearing, flange, .750 ID x .8125 OD, nylon	

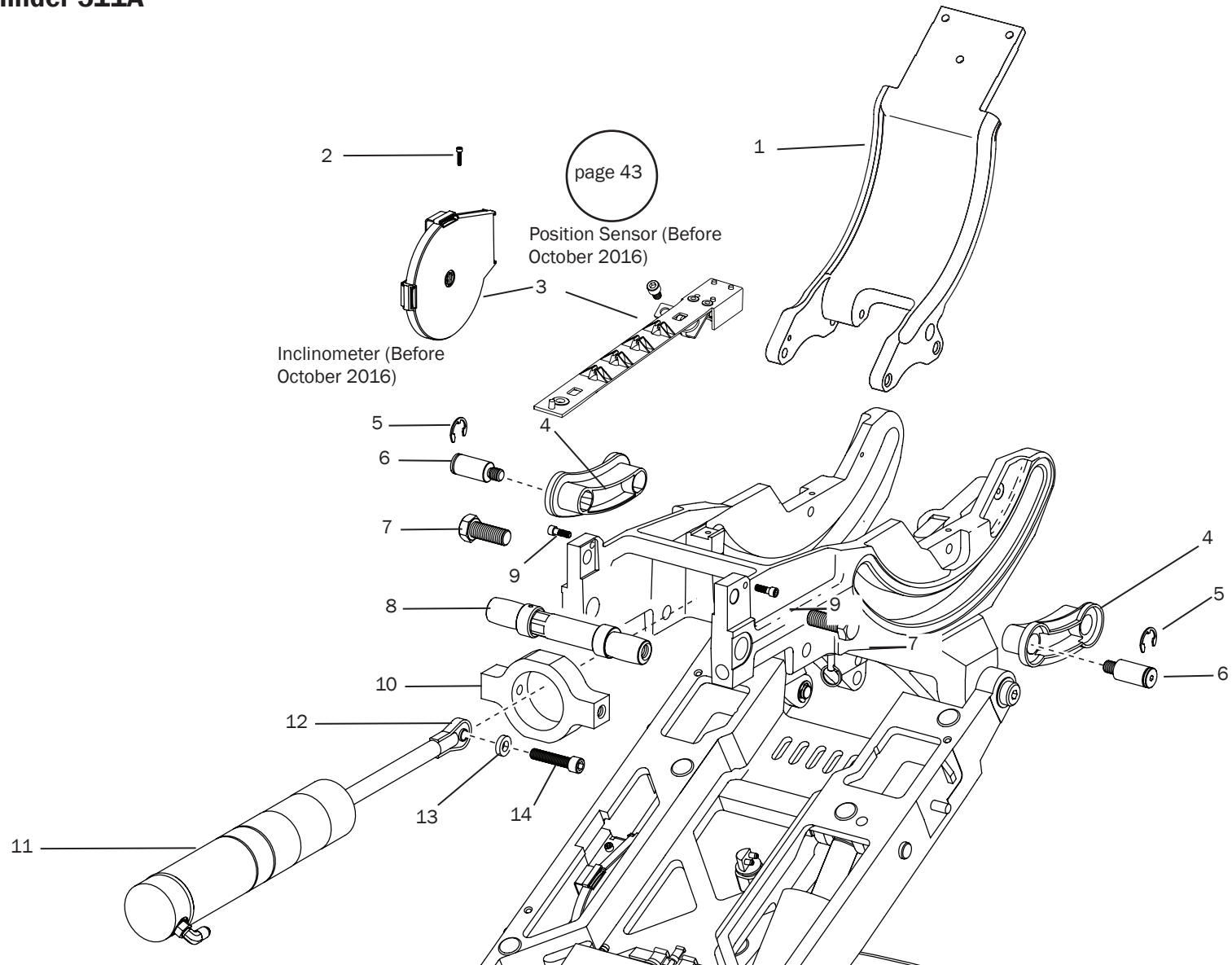
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Mid Chair 511A



Back and Tilt Cylinder 511A



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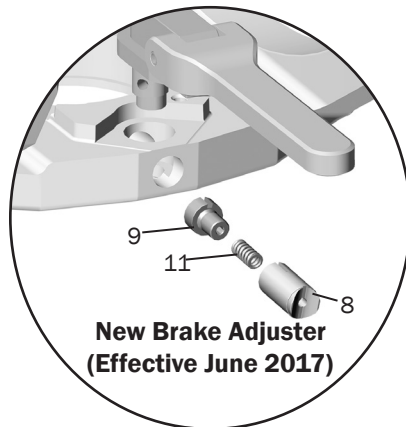
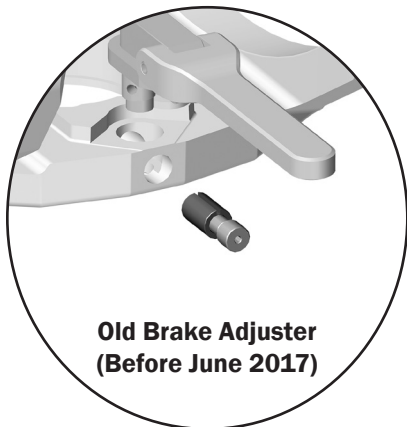
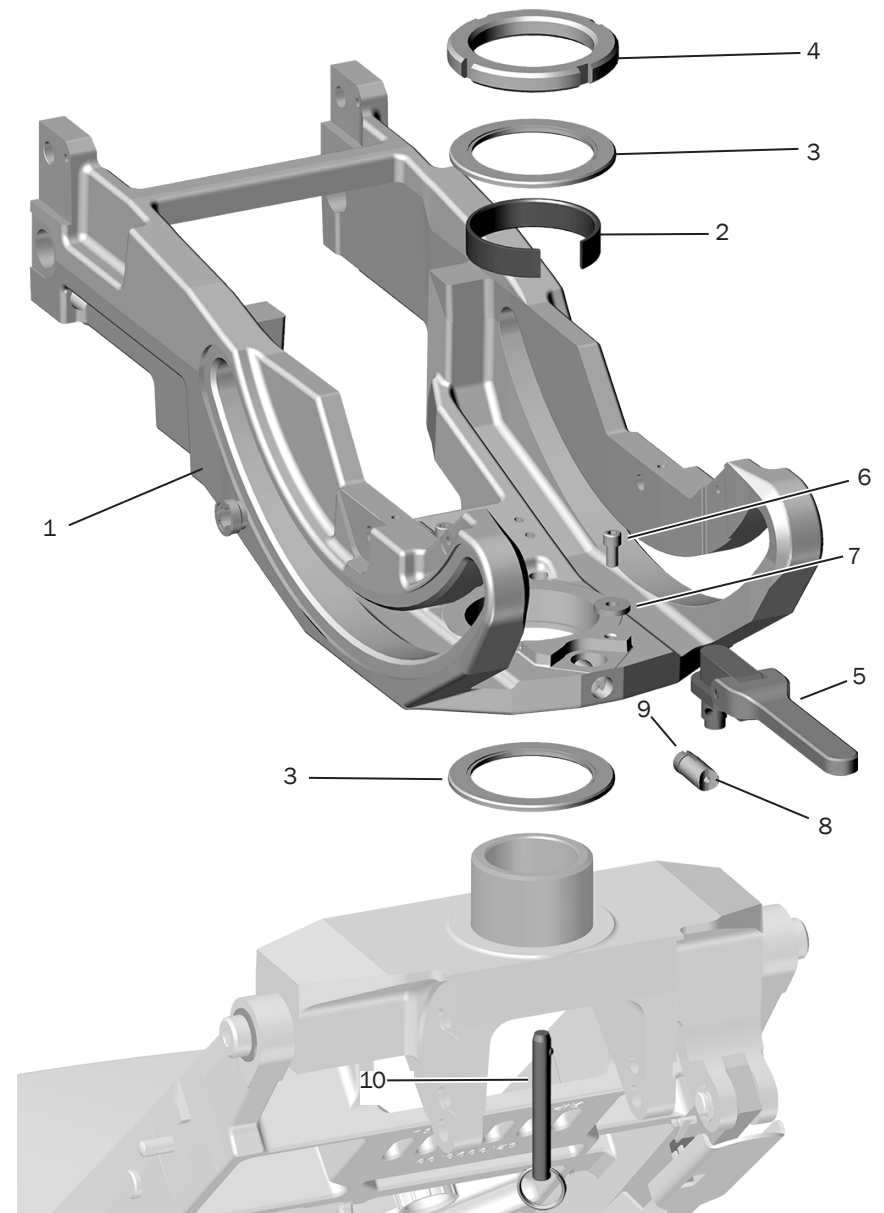
Back and Tilt Cylinder 511A

Item	Part Number	Description
1	62.0972.00	Trolley, chair back, white (Before October 2016 position sensor kit may not retrofit)
2	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
3	90.1183.00 90.1639.00	PCB assembly kit, position sensor (Effective October 2016) position sensor retrofit (Before October 2016)
4	62.0061.00	Back track slider
5	010.083.00	Retaining ring, E-ring .750
6	62.0202.00	Bolt, slider, shoulder
7	001.163.00	Hex head cap screw, 1/2-13 x 1-1/4
8	77.0206.00	Dual cam
9	002.120.00	Socket head patch screw, 1/4-20 x 1
10	62.0200.00	Trunnion, tilt, Cyl
11	90.1085.00	Tilt cylinder assembly
12	016.134.00	Bearing, spherical
13	62.0189.00	Spacer, tilt rod end
14	005.036.00	Screw, socket head, 3/8 -16 x 1-3/4, patch, steel zn coat

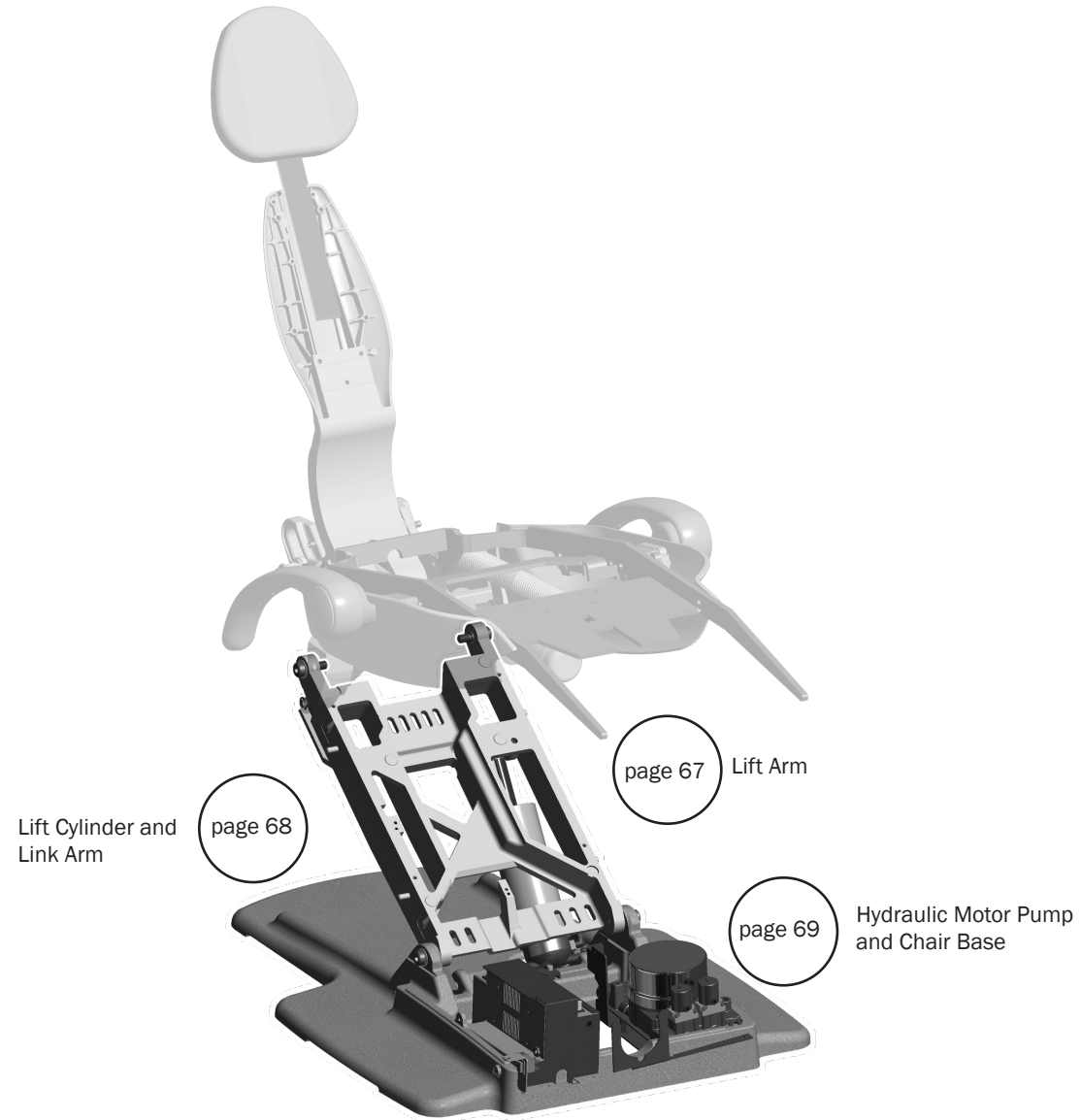
Upper Structure Swivel 511A

Item	Part Number	Description
1	62.0050.01 62.0701.00	Upper structure, white (before April 2011) Upper structure, white (effective April 2011)
2	62.0237.00	Wear ring, 2-3/4 OD x 5/8"
3	016.133.00	Bearing, thrust, enclosed, 63 mm ID x 86 mm OD, steel
4	61.2051.00	Locknut, spanner
5	90.1637.00 90.1638.00	Swivel brake kit, gray 3 Swivel brake kit, surf, includes 8, 9
6	005.008.01	Screw, socket head, 1/4-20 x 1/2, patch, sst
7	004.170.00	Washer, flat, nylon, .260 ID
8	62.1037.00	Plunger, brake, effective June 2017. *
9	62.1038.00	Adjuster brake, effective June 2017 *
10	011.097.00	Shipping pin
11	013.145.00	Spring

* Brake handles before June 2017 order swivel brake kit, Item 5

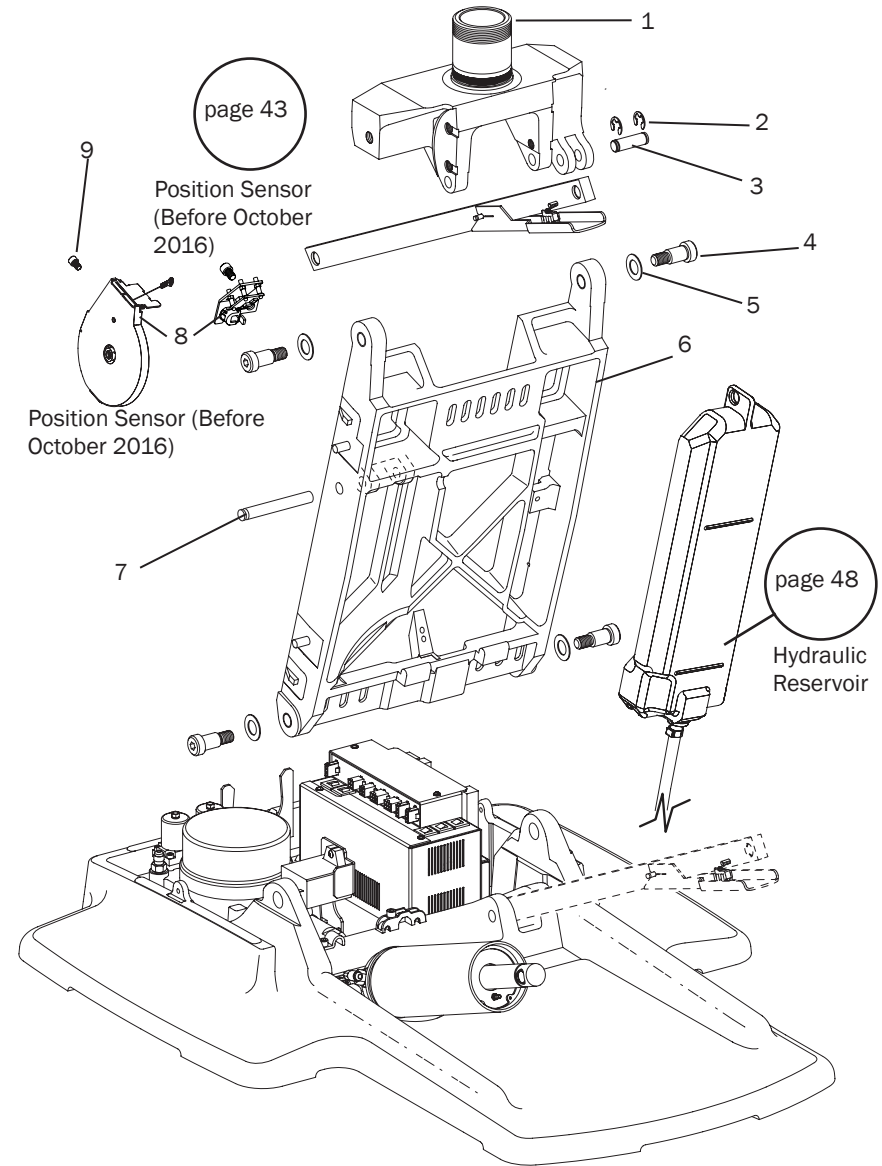


Lower Chair 511A



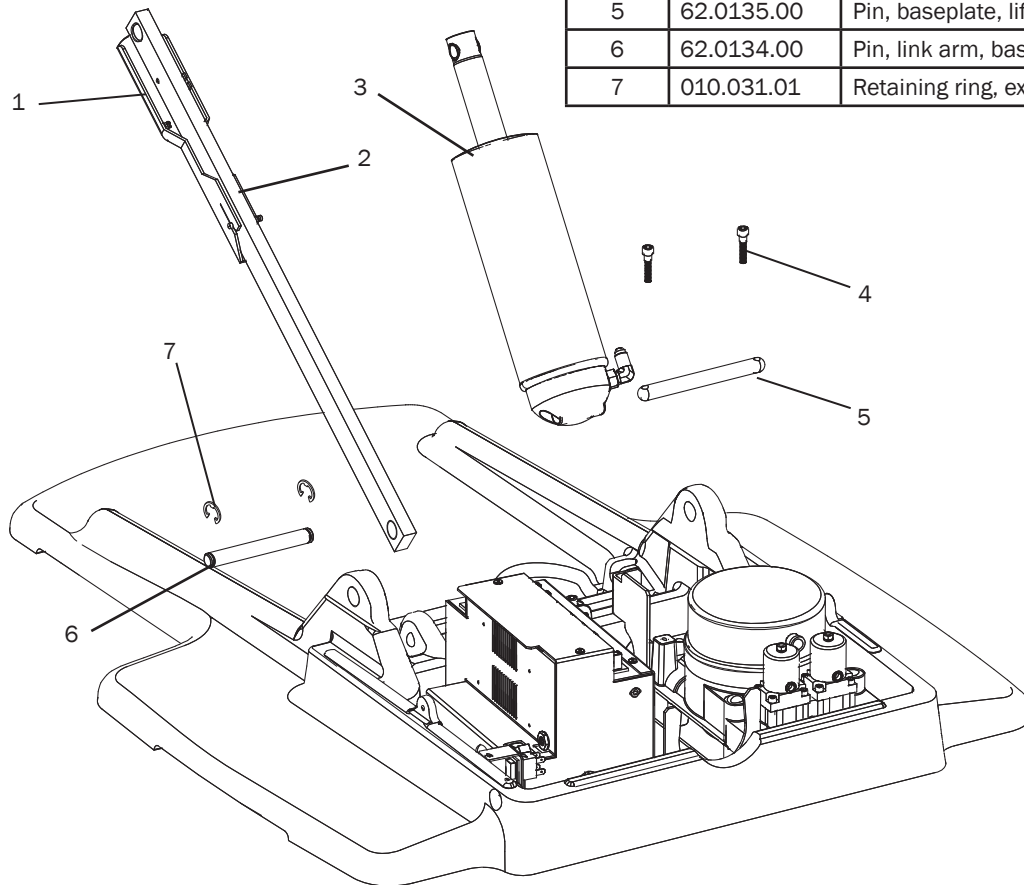
Lift Arm 511A

Item	Part Number	Description	Replacement Kit
1	62.0091.00 62.0091.01	Swivel mount, white Swivel mount, surf	
2	010.031.01	Retaining ring, external, E-ring ID, sst	
3	62.0077.00	Pin, link arm, swivel	
4	001.165.00	Screw, socket shoulder, 1/2 - 13 x 5/8 x 7/8, patch, steel black	
5	004.148.00	Washer, flat, Nylatron, .630 ID	
6	62.0089.01 62.0089.00	Lift arm, white Lift arm, surf	
7	011.124.00	Pin, clevis, .500 DIA x 3.50 long, steel	90.1083.01 Lift cylinder kit, white 90.1083.00 Lift cylinder kit, surf
8	90.1183.00 90.1639.00	Position Sensor (effective October 2016) Position Sensor (before October 2016)	
9	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst	



Lift Cylinder and Link Arm 511A

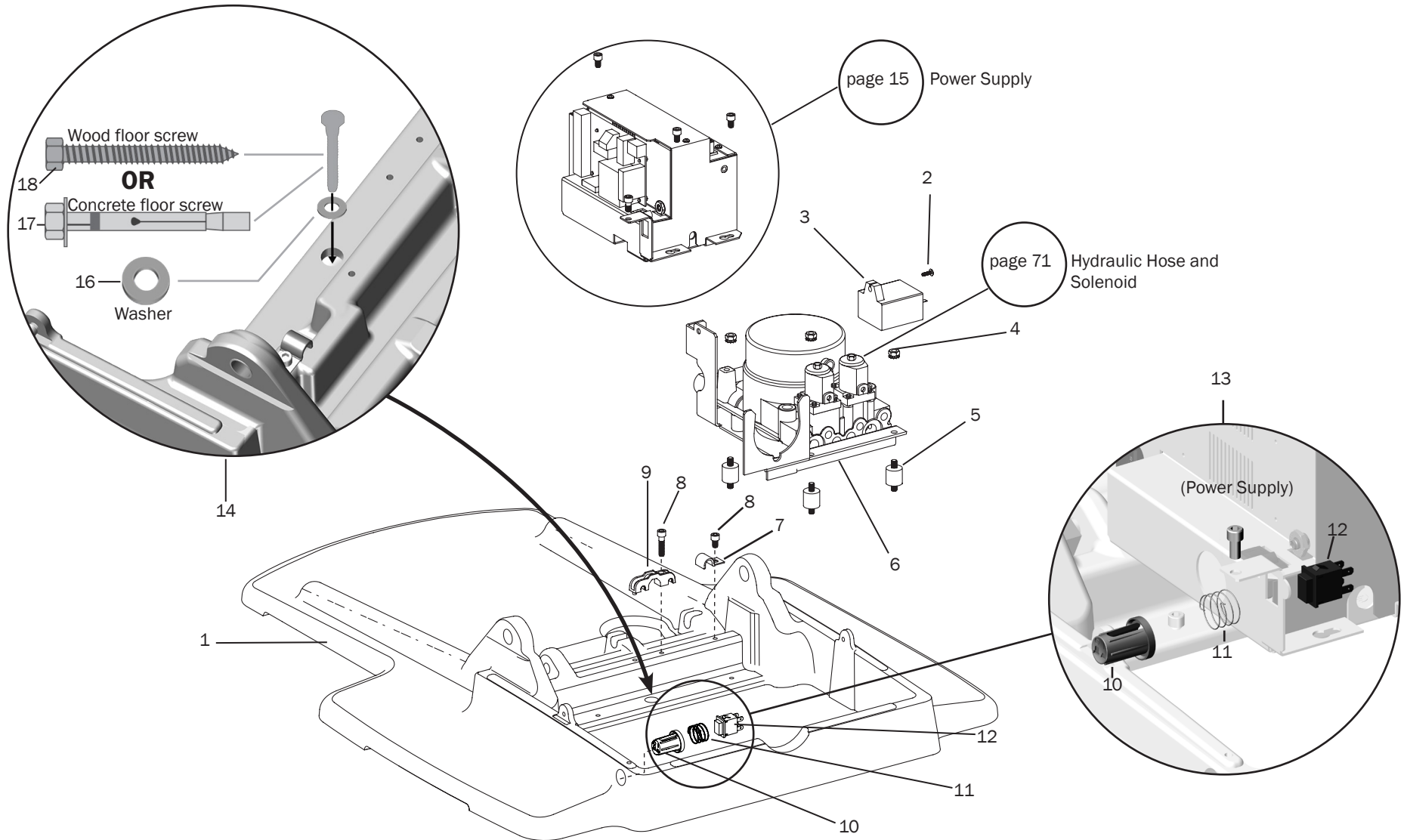
Item	Part Number	Description	Replacement Kit
1	62.0146.01 62.0146.00	Stop plate swivel knuckle, gray3 Plate, stop, swivel, knuckle, surf4	90.1095.01 Kit, Stop switch replacement, white 90.1095.00 Kit, Stop switch replacement, surf
2	62.0078.01	Link arm	
3	90.1083.01	Lift cylinder assembly, gray	
4	002.120.00	Screw, socket head patch, 1/4-20 x 1" sst	
5	62.0135.00	Pin, baseplate, lift cylinder	
6	62.0134.00	Pin, link arm, baseplate	
7	010.031.01	Retaining ring, external, E-ring ID, sst	



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Dental Chair 511A
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Hydraulic Pump and Chair Base 511A



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Hydraulic Pump and Chair Base 511A

Item	Part Number	Description
1	62.0029.01 62.0029.00	Baseplate, gray Baseplate, surf
2	001.229.00	Screw, truss head Phillips, 6-32 x 1/2, sst
3	041.642.00 041.643.00 041.644.00	Capacitor, 100 V Capacitor, 110-120 V Capacitor, 220-240 V
4	006.141.00	Nut, hex, Keps, 1/4 - 20, steel zinc
5	037.040.00	Isolator, rubber, 3/4 dia, 1/4 - 20 thread
6	90.1094.00 90.1094.01 90.1094.02	Hydraulic motor pump assembly, 100 V Hydraulic motor pump assembly, 120 V Hydraulic motor pump assembly, 240 V
7	025.112.00	Clamp, half type, 3/8 ID
8	002.120.00	Screw, socket head, patch, 1/4-20 x 1" stainless steel
9	62.0131.00	Strain relief
10	62.0148.01	On/Off Power button, gray 3
11	013.124.00	Compression spring
12	041.640.00	Push switch
13	90.1068.01 90.1068.00	Mains on/off switch kit, gray (includes button item 10 and 11) Mains on/off Switch Kit, surf 6 (includes button item 10 and 11)
14	62.0193.00	511 Floor mount kit

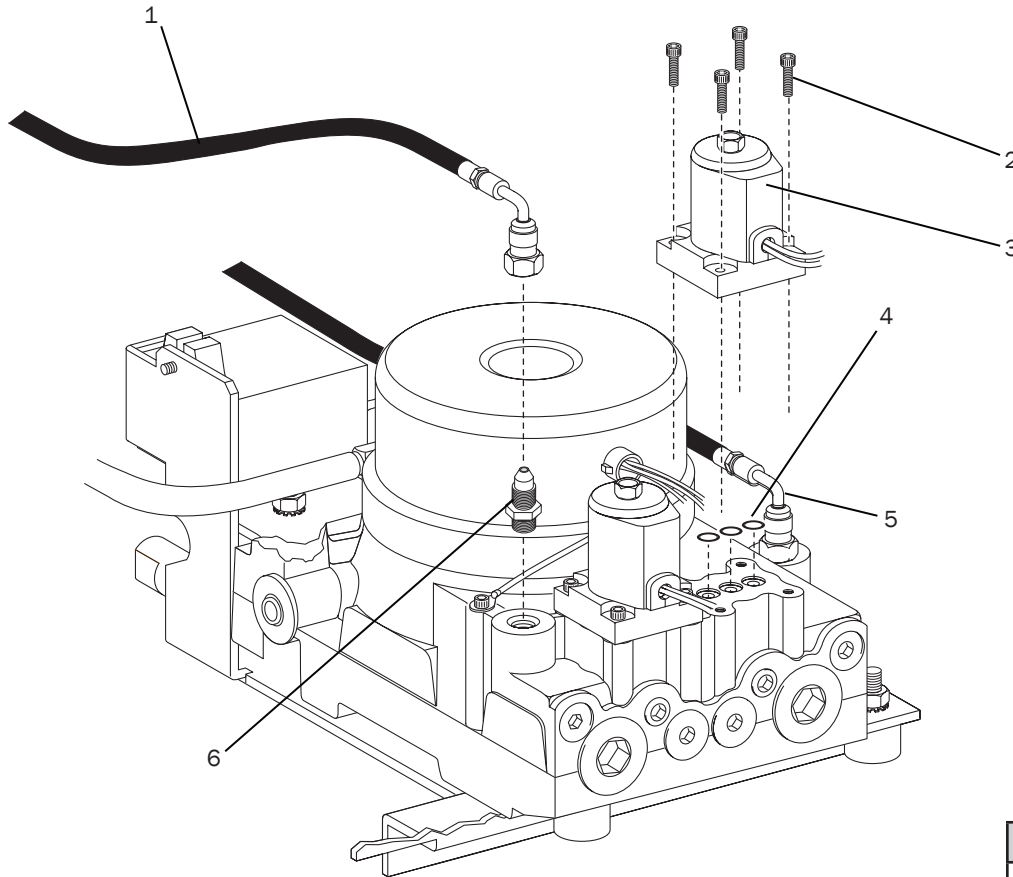


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Hydraulic Hose and Solenoid 511A



Item	Part Number	Description
1	62.0046.00	Hydraulic hose, lift
2	001.250.00	Screw, socket head cap, 8-32 x 5/8", black
3	90.1070.00 90.1071.00	Solenoid, 110-120 V, kit Solenoid, 220-240 V, kit
4	035.055.00	O-ring, 5.8 mm ID x 1.9 W, Buna
5	62.0047.00	Hydraulic hose, tilt
6	022.049.00	Filling with O-ring

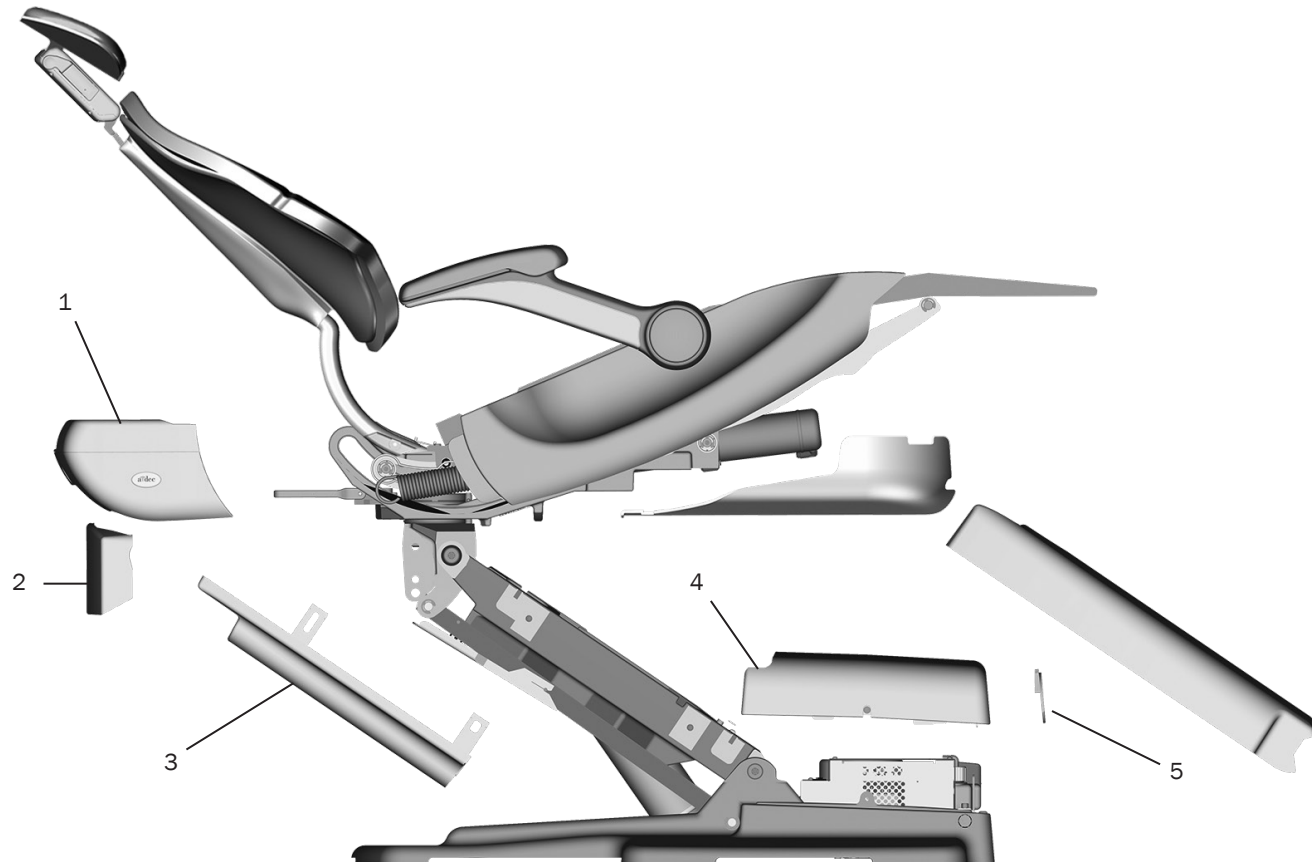
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Dental Chair 511B

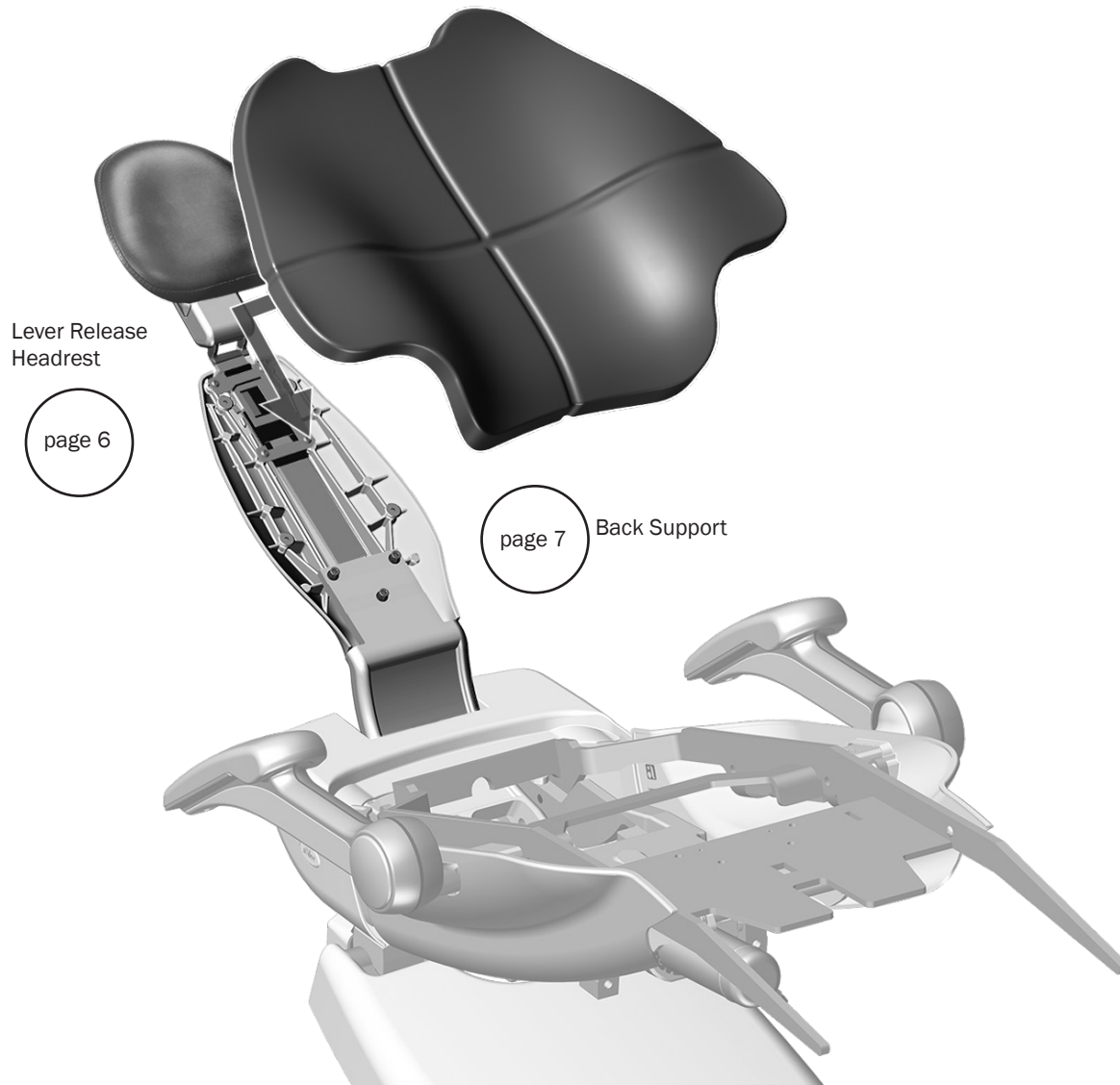


Chair Covers 511B

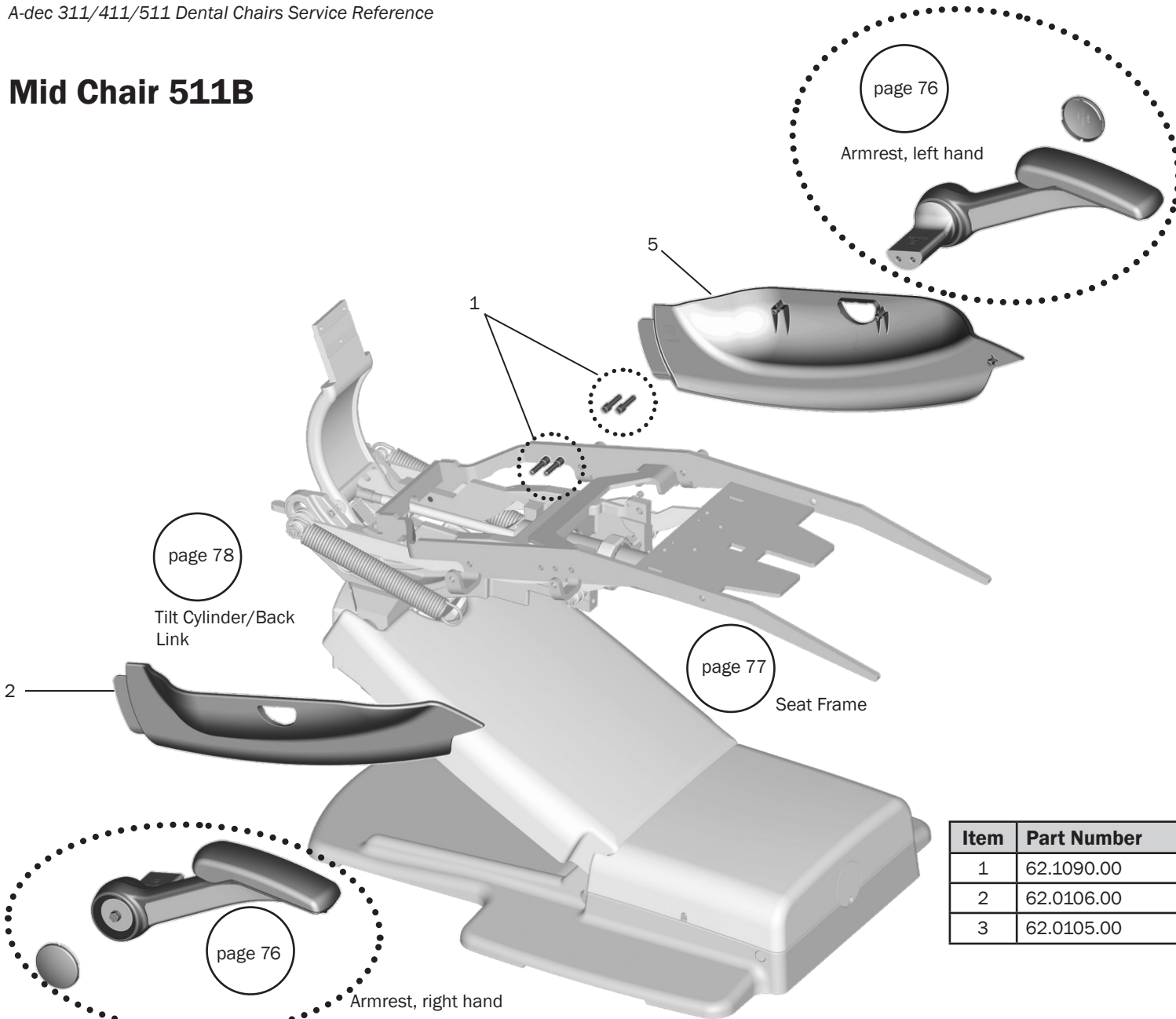


Item	Part Number	Description
1	62.0122.01	Rear cover assembly, white
2	62.0133.01	Swivel cover, white
3	62.0084.01	Stop plate cover, gray 3
4	62.0080.01	Motor pump cover, white
5	62.0101.01	Pump cover plug, white

Upper Chair 511B



Mid Chair 511B



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Tilt Cylinder/Back Link

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Seat Frame

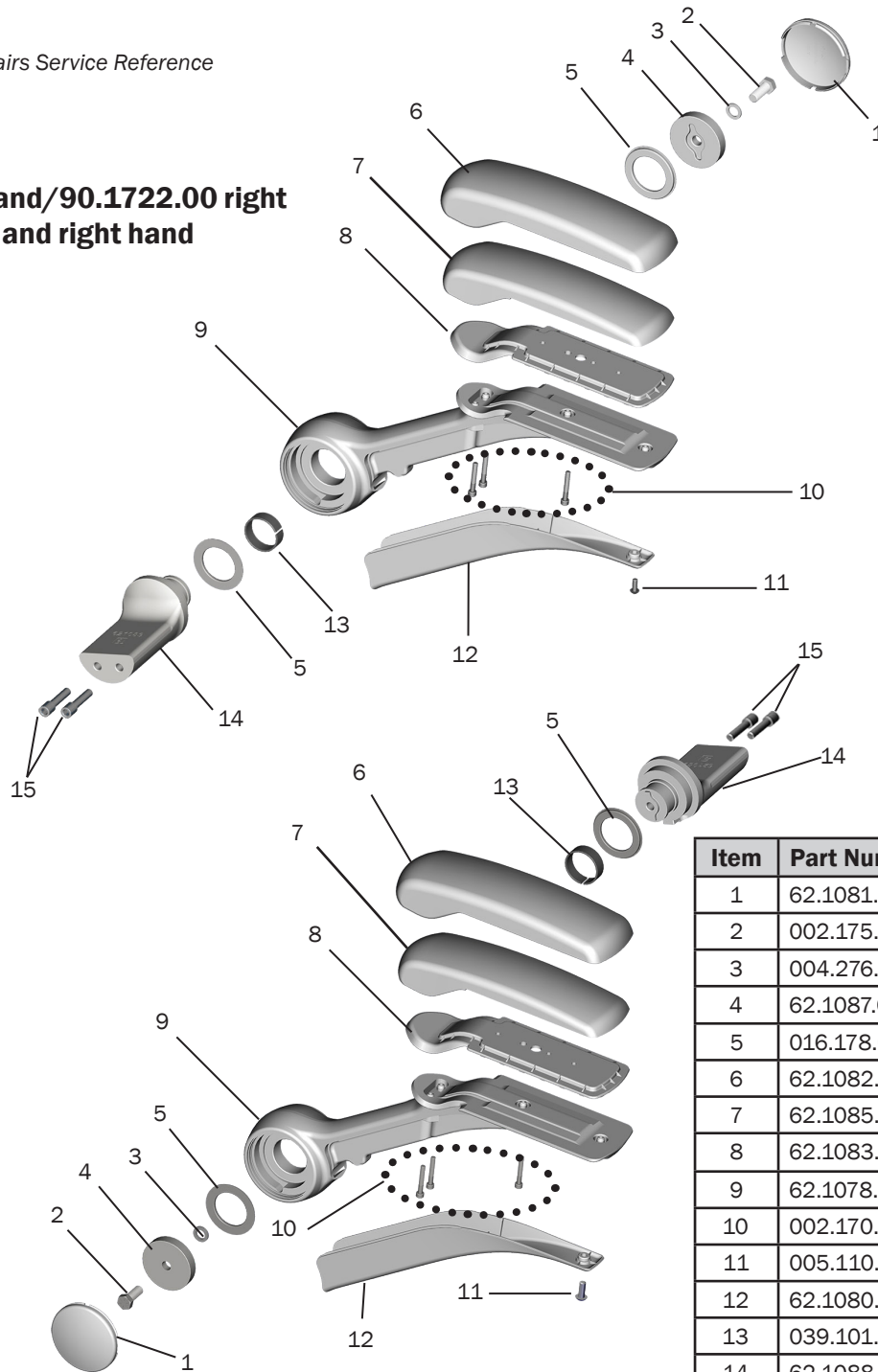
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Armrest, left hand

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Armrest, right hand

Item	Part Number	Description
1	62.1090.00	Armrest attachment shoulder bolts
2	62.0106.00	Side cover, RH
3	62.0105.00	Side cover, LH

Armrests 511B

p/n: 90.1721.00 left hand/90.1722.00 right hand/
90.1686.00 left and right hand



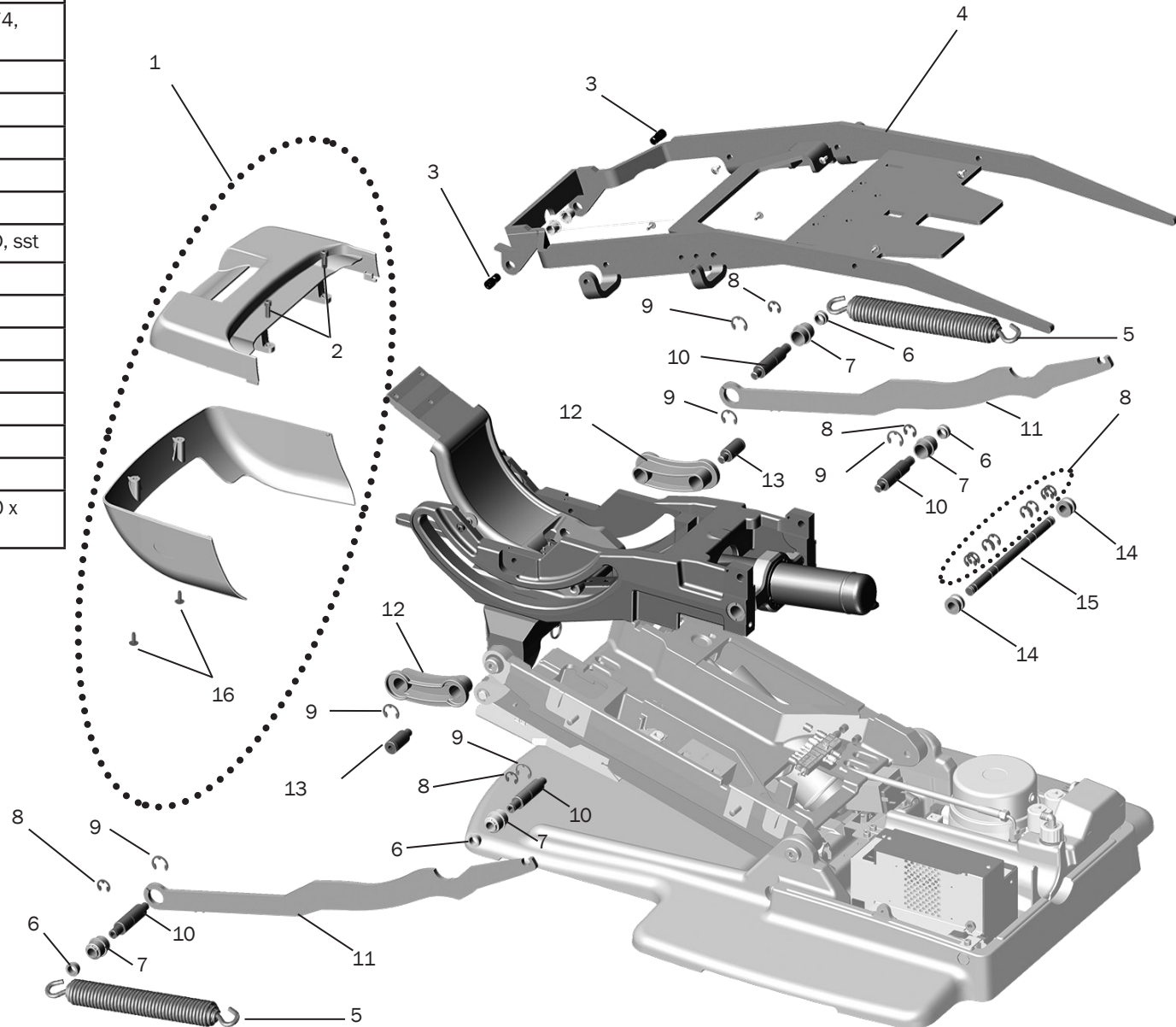
Item	Part Number	Description
1	62.1081.00	Cap, hub, armrest
2	002.175.00	Hex head screw, Grade 8, 3/8-24 x 1 zinc coat
3	004.276.00	Serrated lock washer, SPCL 3/8
4	62.1087.00	Bearing cap
5	016.178.00	Thrust bearing, 37 mm ID x 56 mm OD x 3.8 mm long, steel
6	62.1082.00	Upper armrest cover
7	62.1085.00	Armrest foam
8	62.1083.00	Armature
9	62.1078.00	Arm, armrest
10	002.170.00	Socket head patch screw, 10-32 x 1-1/4 stainless steel
11	005.110.00	Button head socket patch screw, 10-32 x 1/2 stainless steel
12	62.1080.00	Cover
13	039.101.00	Wear ring
14	62.1088.00	Mount
15	62.1090.00	Shoulder mount screw

Mid Chair 511B
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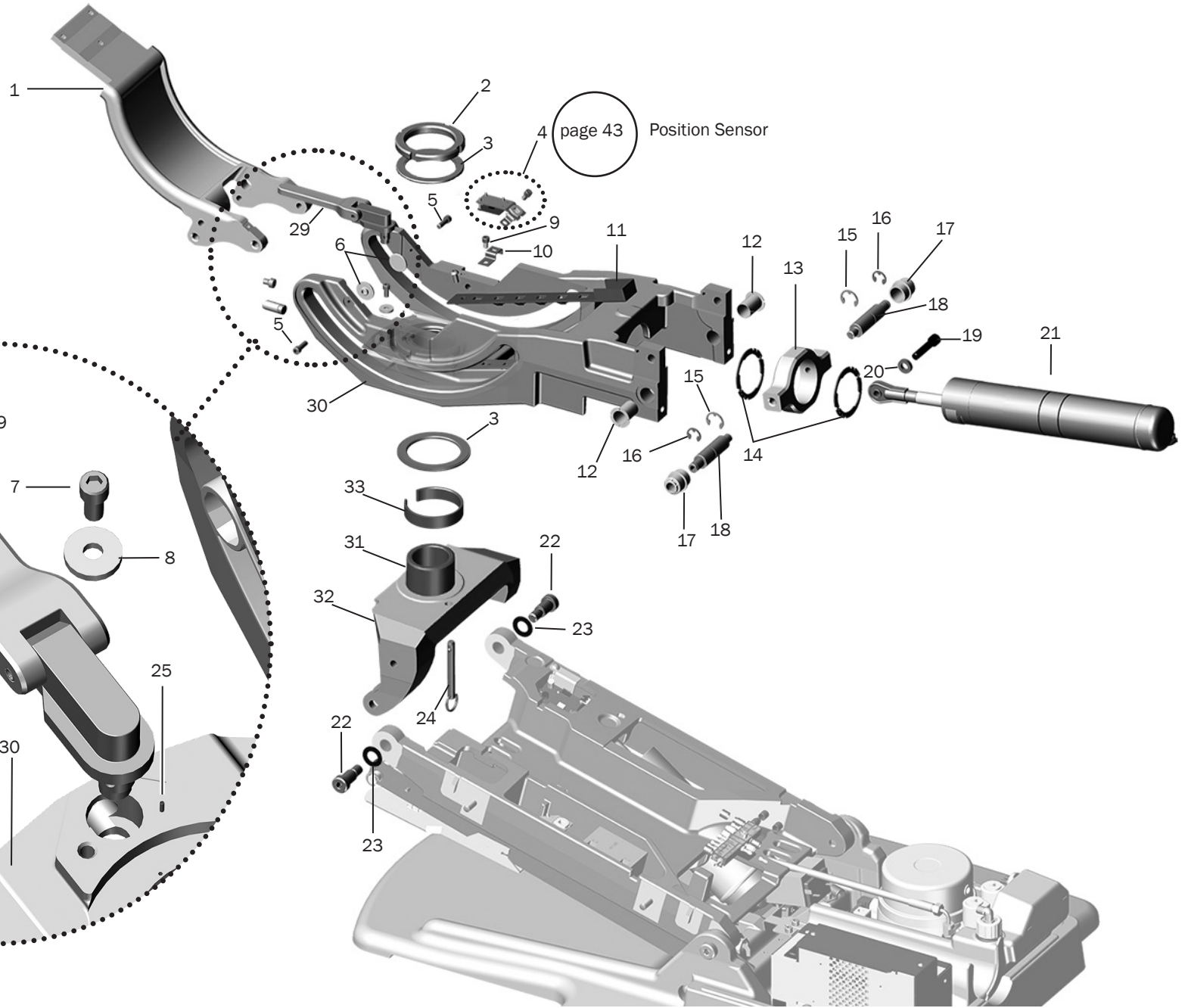
Dental Chair 511B
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Seat Frame Assembly 511B

Item	Part Number	Description
1	62.0122.01	Rear cover assembly
2	001.245.00	Screw, socket head, 1/4-20 x 3/4, patch, sst
3	62.0196.00	Shoulder stud, 7/16-14
4	62.0039.01	Seat frame
5	013.114.00	Spring, extension, seat return
6	62.0185.00	Spring support
7	62.0067.00	Roller, cam, natural
8	010.031.01	Retaining ring, external, E-ring ID, sst
9	010.083.00	Retaining ring, E-ring .750
10	62.0201.00	Bolt, spring support
11	62.0062.01	Cam
12	62.0061.00	Slider
13	62.0202.00	Slider bolt
14	62.0065.00	Roller
15	62.0069.00	Lift bar
16	003.116.00	Truss head Phillips screw, No. 10 x 1/2 sst



Tilt Cylinder/Back Link Assembly 511B



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Dental Chair 511B
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Tilt Cylinder/Back Link Assembly 511B

Item	Part Number	Description
1	62.0972.00	Trolley, chair back, white
2	61.2051.00	Spanner nut
3	016.133.00	Bearing, thrust, enclosed, 63 mm ID x 86 mm OD, steel
4	90.1183.00	Base inclinometer assembly
5	001.245.00	Screw, socket head, 1/4-20 x 3/4, patch, sst
6	62.0070.00	Guide, lateral, back
7	005.008.01	Screw, socket head, 1/4-20 x 1/2, patch, sst
8	004.170.00	Washer, flat, nylon, .260 ID
9	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
10	62.1023.00	Bracket, tubing only hold DN
11	62.0773.00	Retain, cable, tilt inclinometer
12	016.145.00	Bearing, flange, .750 ID x .8125 OD, nylon
13	62.0200.00	Trunnion, tilt, Cyl
14	010.084.00	Retaining ring, interlocking, 2.250
15	010.083.00	Retaining ring, E-ring .750
16	010.031.01	Retaining ring, external, E-ring ID, sst
17	62.0067.00	Roller, cam, natural

Item	Part Number	Description
18	62.0201.00	Bolt, spring support
19	005.036.00	Screw, socket head, 3/8 -16 x 1-3/4, patch, steel zn coat
20	62.0189.00	Spacer, tilt rod end
21	90.1085.01	Tilt cylinder kit, gray (includes item 14)
22	001.165.00	Screw, socket shoulder, 1/2 - 13 x 5/8 x 7/8, patch
23	004.148.00	Washer, flat, Nylatron, .630 ID
24	011.097.00	Pin, detent, 3/8 x 2.50 long, steel zinc
25	011.026.00	Spring pin, .062 DIA x .19 long, stainless steel
26	62.1038.00	Adjuster
27	62.1037.00	Plunger
28	013.145.00	Spring
29	62.1040.00	Brake assembly, gray3
30	62.1047.00	Upper structure
31	62.0045.00	Swivel tube
32	62.0091.00	Swivel mount, white2
33	62.0237.00	Wear ring



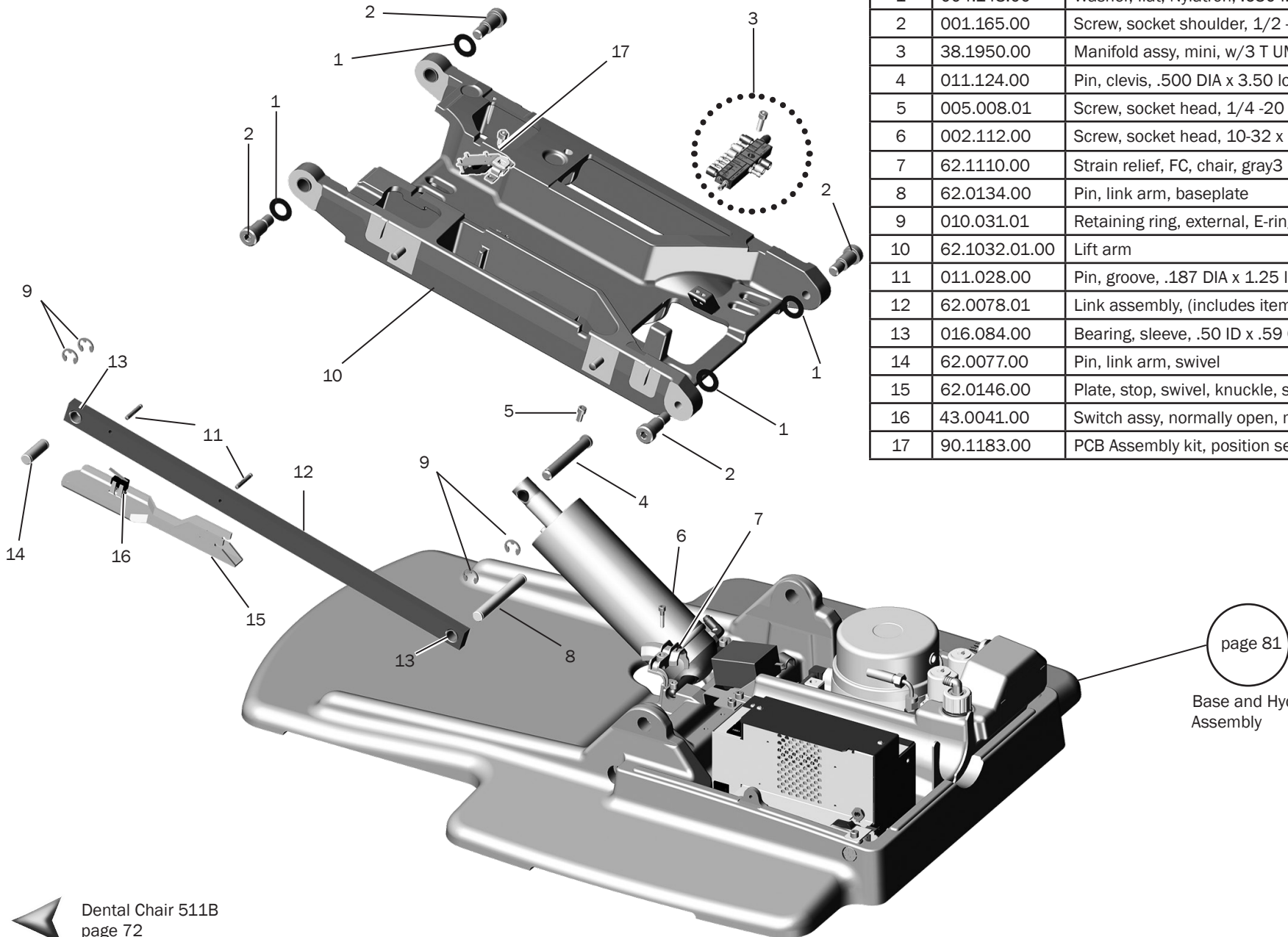
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Lower Chair 511B

Lower Chair Assembly 511B



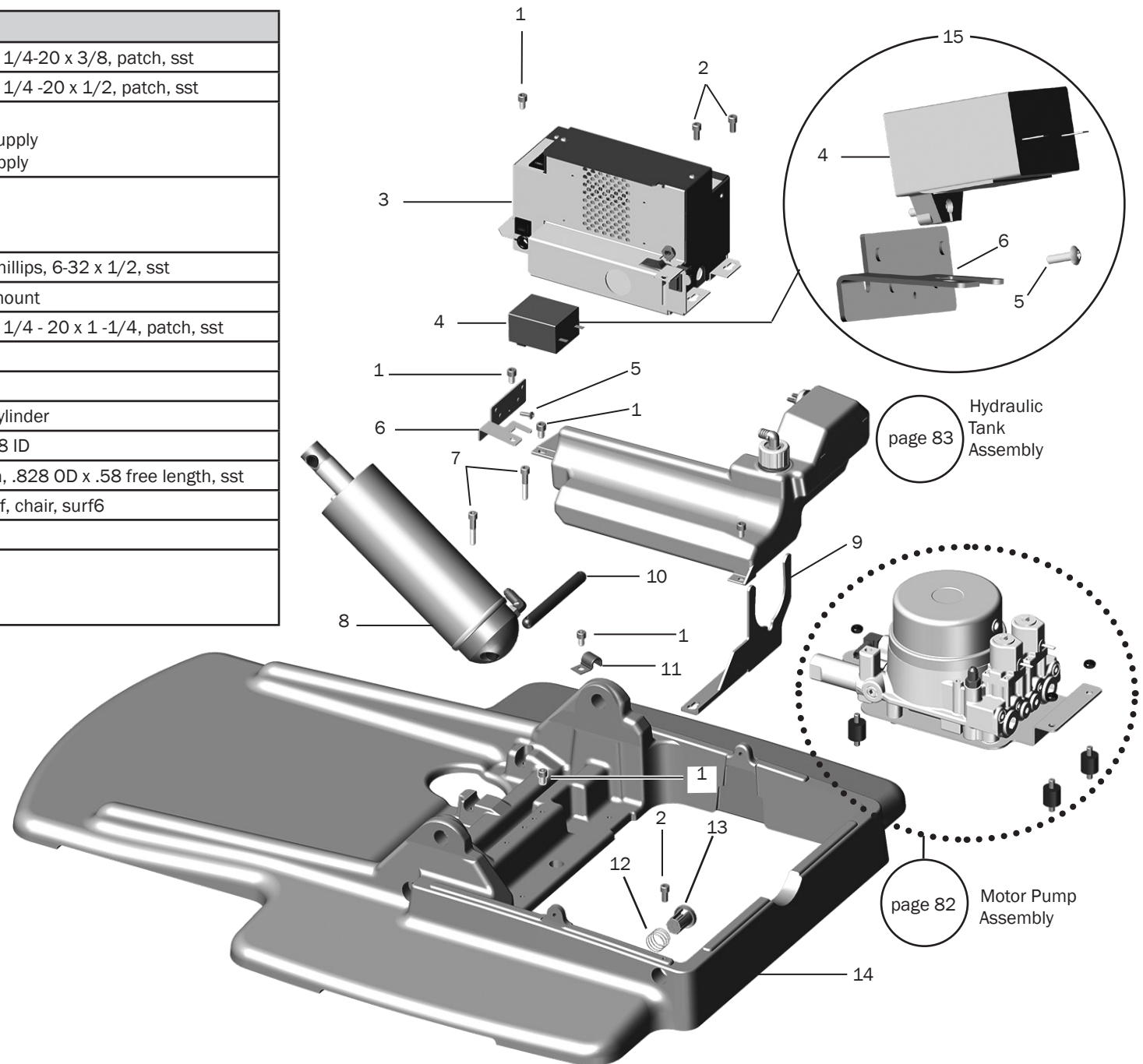
Item	Part Number	Description
1	004.148.00	Washer, flat, Nylatron, .630 ID
2	001.165.00	Screw, socket shoulder, 1/2 - 13 x 5/8 x 7/8, patch
3	38.1950.00	Manifold assy, mini, w/3 T UMB, 532B/533B
4	011.124.00	Pin, clevis, .500 DIA x 3.50 long, steel
5	005.008.01	Screw, socket head, 1/4 -20 x 1/2, patch, sst
6	002.112.00	Screw, socket head, 10-32 x 7/8, sst
7	62.1110.00	Strain relief, FC, chair, gray3
8	62.0134.00	Pin, link arm, baseplate
9	010.031.01	Retaining ring, external, E-ring ID, sst
10	62.1032.01.00	Lift arm
11	011.028.00	Pin, groove, .187 DIA x 1.25 long, steel zinc
12	62.0078.01	Link assembly, (includes items 11, 13)
13	016.084.00	Bearing, sleeve, .50 ID x .59 OD x .500 long
14	62.0077.00	Pin, link arm, swivel
15	62.0146.00	Plate, stop, swivel, knuckle, surf 4
16	43.0041.00	Switch assy, normally open, monetary, 34 in, 2-MTE
17	90.1183.00	PCB Assembly kit, position sensor



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Base and Hydraulic Assembly

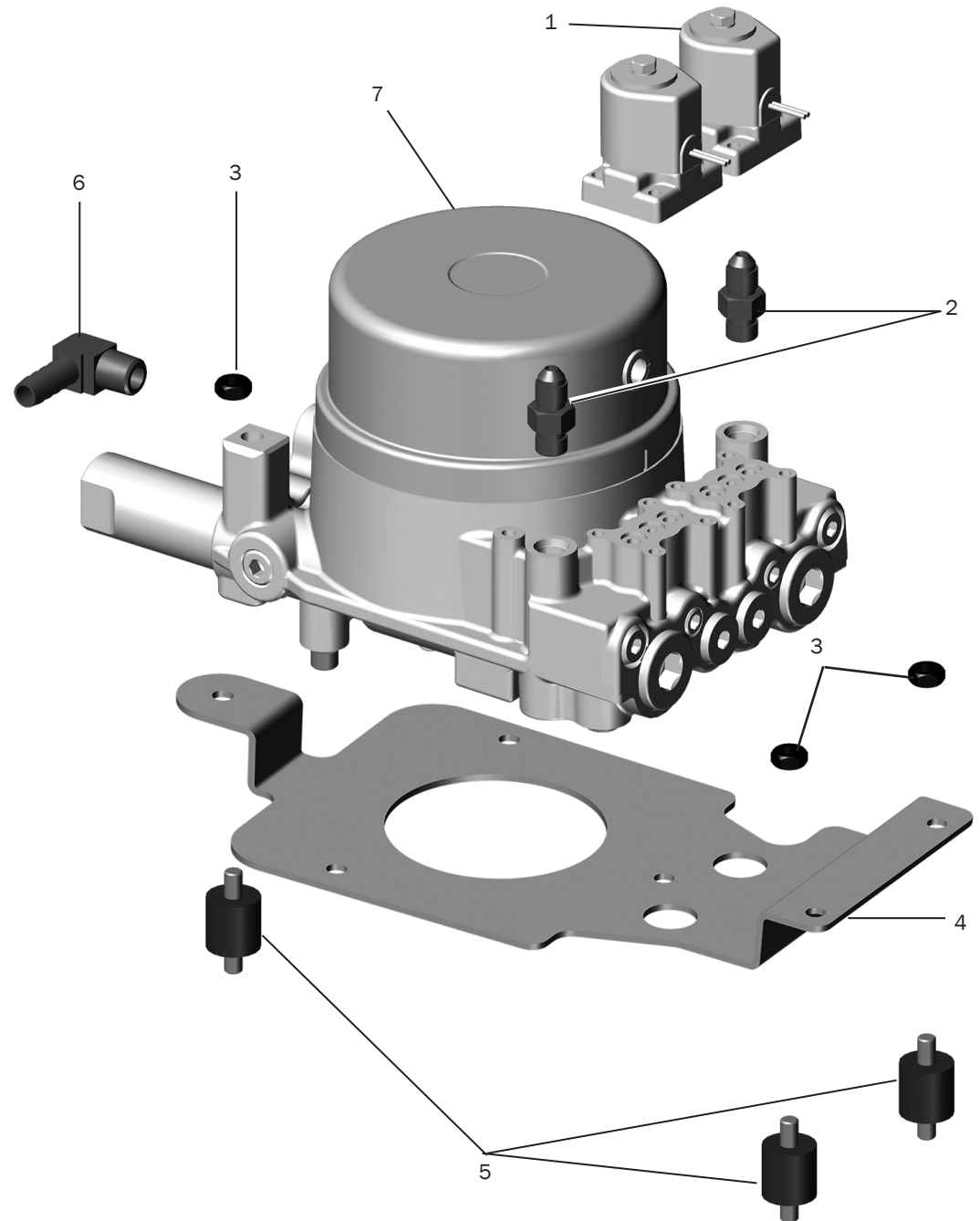
Base and Hydraulic Assemblies 511B

Item	Part Number	Description
1	002.010.00	Screw, socket head, 1/4-20 x 3/8, patch, sst
2	005.008.01	Screw, socket head, 1/4 -20 x 1/2, patch, sst
3	43.0262.00	100V power supply
	43.0263.00	110-1220V power supply
	43.0264.00	220-240V power supply
4	041.642.00	200V Capacitor
	041.643.00	220V Capacitor
	041.644.00	420V Capacitor
5	001.229.00	Screw, truss head Phillips, 6-32 x 1/2, sst
6	62.1097.00	Bracket, capacitor mount
7	001.093.01	Screw, socket head, 1/4 - 20 x 1 -1/4, patch, sst
8	90.1083.01	Lift cylinder kit, gray
9	61.0991.00	Adaptor bracket
10	62.0135.00	Pin, baseplate, lift cylinder
11	025.112.00	Clamp, half type, 3/8 ID
12	013.124.00	Spring, compression, .828 OD x .58 free length, sst
13	62.0148.00	Button, power on/off, chair, surf6
14	62.0029.01	Baseplate, gray
15	90.1703.00	60uF, for 100V
	90.1704.00	50uF for 120V
	90.1705.02	15uF for 240V



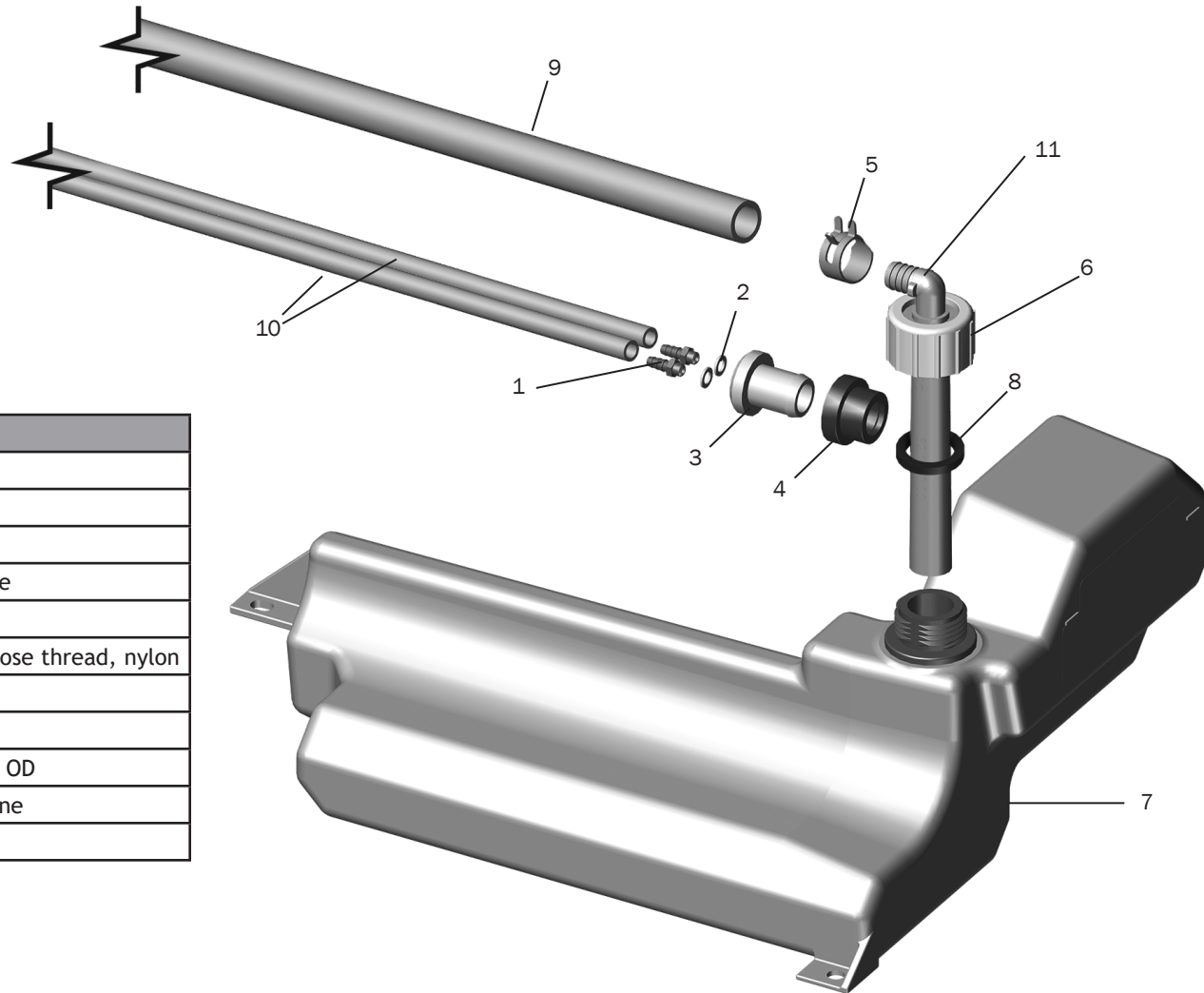
 Lower Chair 511B
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Motor Pump Assembly 511B



Item	Part Number	Description
1	90.1070.00 90.1071.00	Solenoid assembly kit, hydraulic, 100-120V Solenoid assembly kit, hydraulic, 220-240V
2	022.049.00	Fitting w/O-ring
3	006.141.00	Nut, hex, Keps, 1/4 - 20, steel zinc
4	62.1035.00	Pump tray
5	037.040.00	Isolator, rubber, 3/4 dia, 1/4 - 20 thread
6	022.106.00	Adapter, 1/2 Poly x 1/4 NPT x 90 degree, brass
7	62.0033.00 62.0032.00	Pump assembly, hydraulic, reversing 220-240V Pump assembly, hydraulic, reversing 100-120V

Hydraulic Tank Assembly 511B

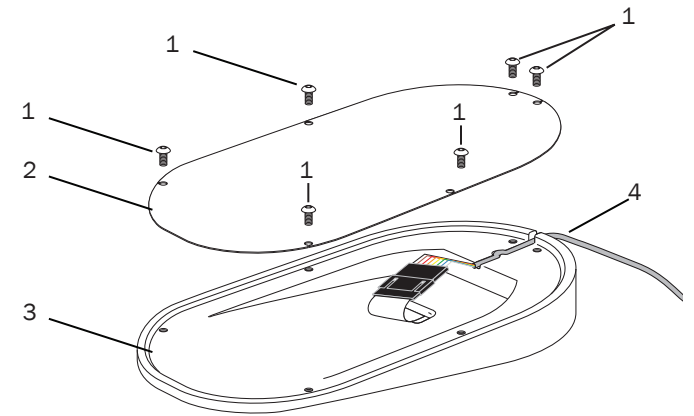


Item	Part Number	Description
1	023.001.00	1/4" Barb, 1/4 x 10-32
2	004.005.00	Flat nylatron washer
3	62.1033.00	Vent plug
4	62.1034.00	Grommet, .75 hole, .625 bore
5	025.123.00	Hose clamp
6	006.112.00	Retainer nut, 3/4" garden hose thread, nylon
7	62.1028.00	Hydraulic tank assembly
8	004.161.00	Flat Buna-N washer, .75 ID
9	036.117.00	Hydraulic fluid tubing, 1/2" OD
10	036.028.00	1/4 OD tubing, clear urethane
11	62.1030.00	Right angle fitting

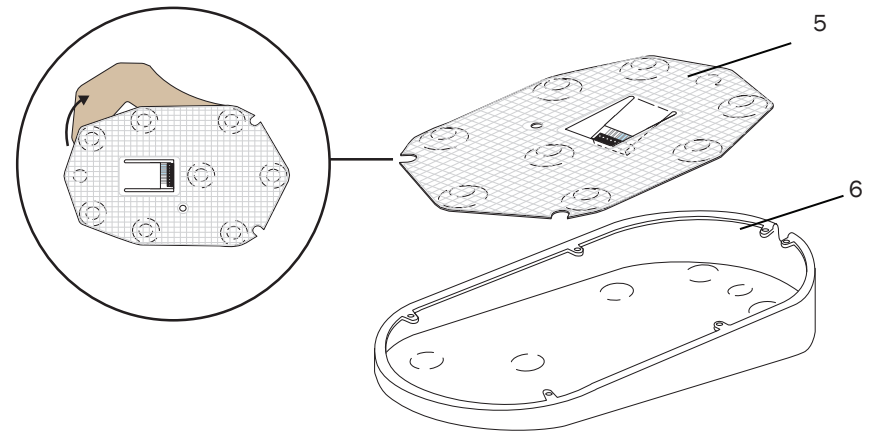
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Footswitch 311/411/511



Item	Part Number	Description
1	005.012.03	Button head socket screw
2	61.3042.00	Bottom plate
3	61.3042.00	Base
4	62.0186.01	Cable assembly, Gray3
5	61.3048.00	Membrane kit (includes item 1)
6	61.3049.00	Boot kit (includes item 1)



Stools 521/522

521 Doctor's Stool

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522 Assistant's Stool

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Doctor's Stool 521



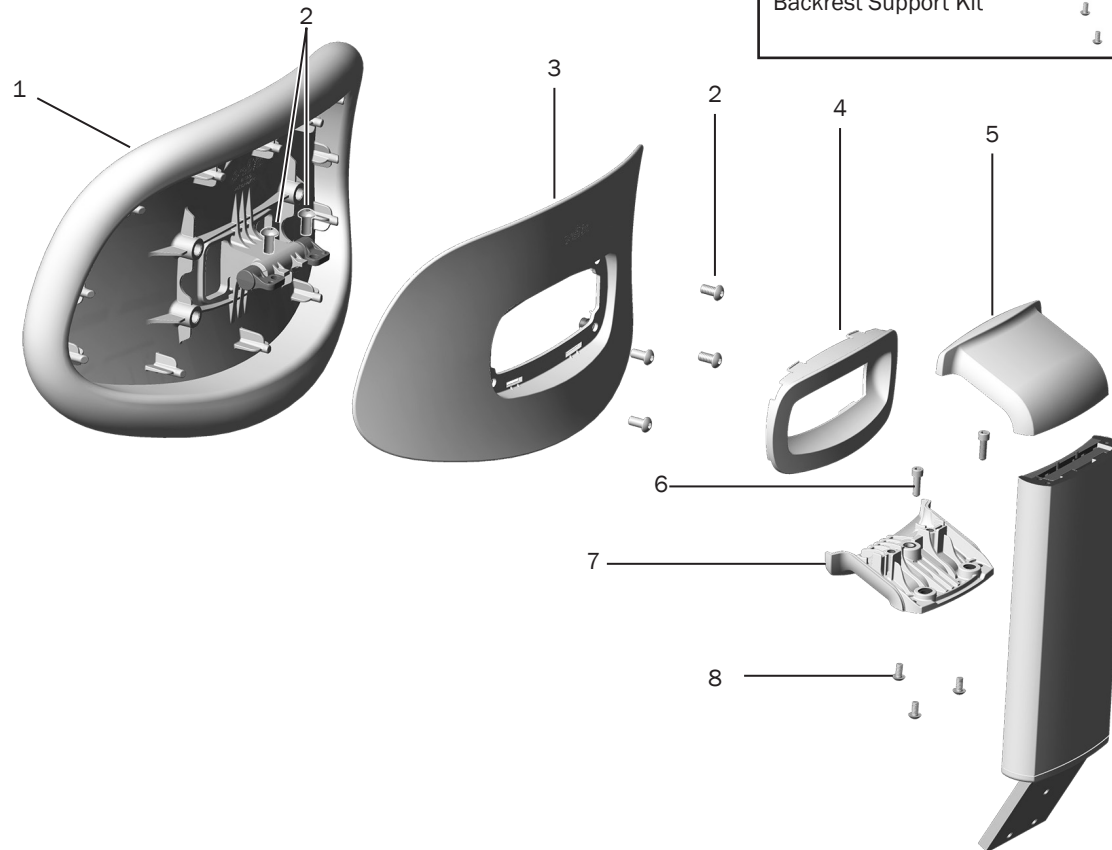
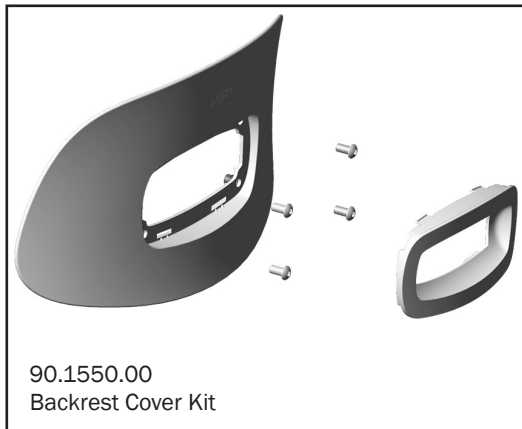
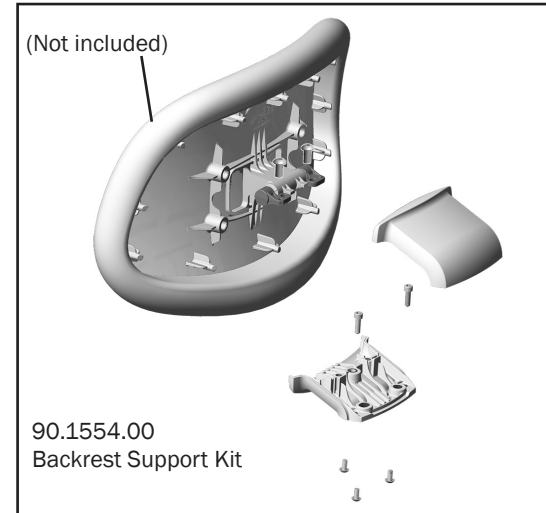
Doctor's Stool



Doctor's Stool with Arms

Back Assembly 521/522

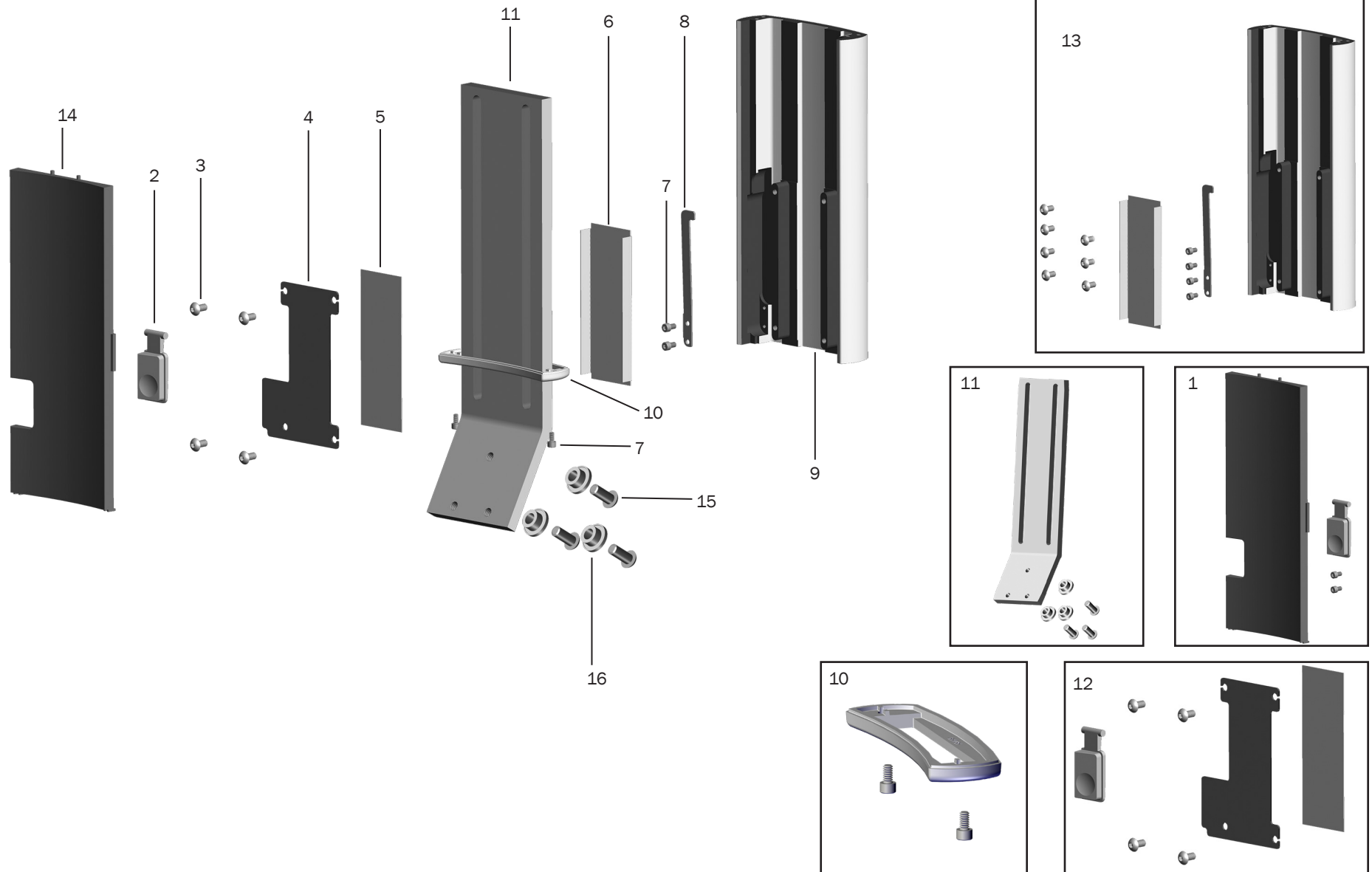
Item	Part Number	Description	Replacement Kit
1	--	Back upholstery assembly	
2	001.130.01	Button socket head patch screw, 1/4-20 x 1/2	90.1540.00
3	65.1868.00	Back cover	90.1540.00
4	65.1822.00	Screw cove	90.1540.00
5	90.1539.00	Upper backrest support	90.1539.00
6	002.168.00	Socket head patch screw, 1/4-20 x 1/2	90.1538.00
7	90.1538.00	Lower backrest support	90.1538.00
8	005.012.05	Button head socket patch screw, 10-32 x 3/8	90.1538.00
9	002.117.00	Button head socket screw, 5/16 - 18 x 3/4	
10	65.1773.00	Spacer, kit	



Backrest Height
Mechanism
Assembly 521/522

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Backrest Height Mechanism 521/522



▶ Doctor's Stool 521
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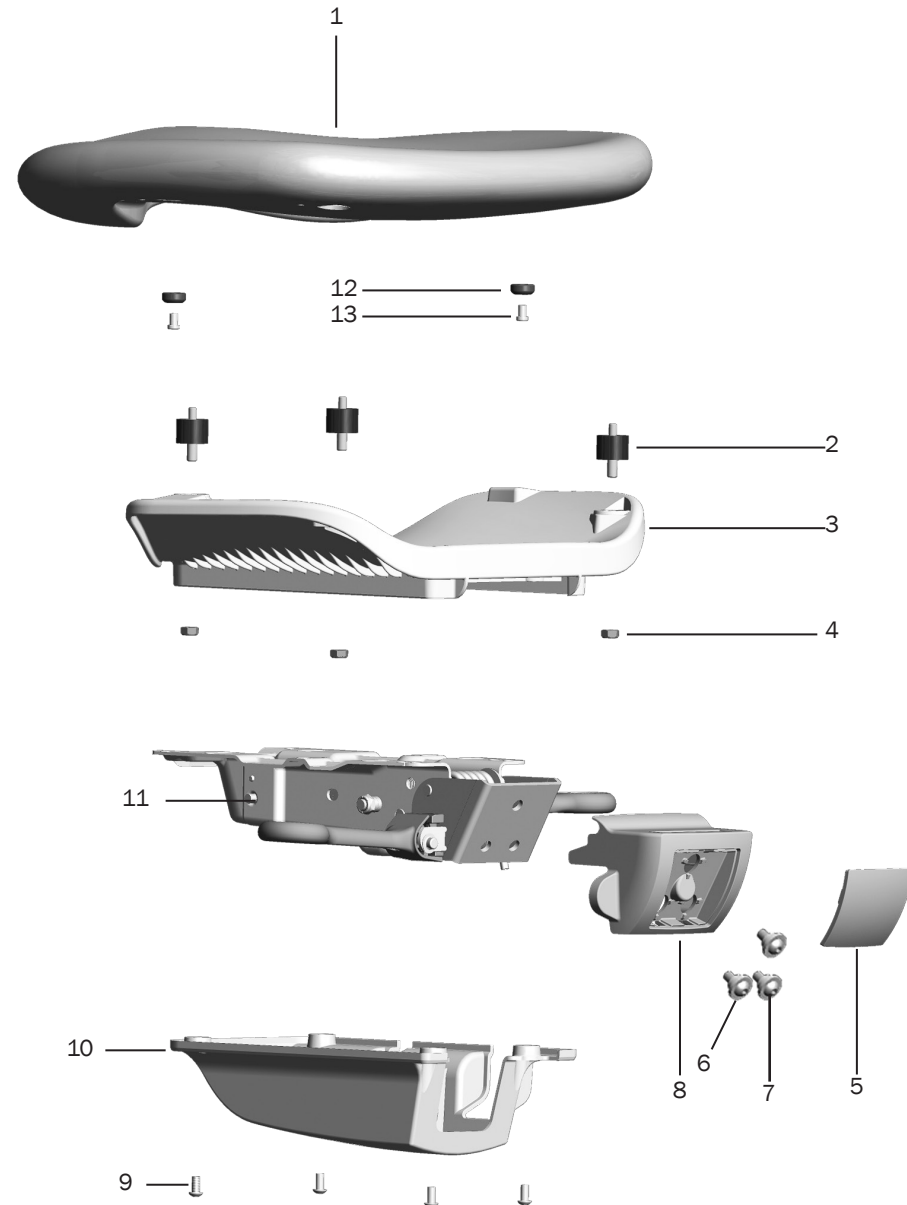
▶ Assistant's Stool 522
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Backrest Height Mechanism 521/522

Item	Part Number	Description	Replacement Kit
1	90.1556.00	Front cover kit, height mechanism, includes 2, 7,14	
2	65.1793.00	Button	90.1524.00, 90.1556.00
3	005.012.05	Button head socket patch screw, 10-32 x 3/8	
4	65.1827.00	Clamp plate	90.1524.00
5	65.1787.00	Wear pad upper	90.1524.00
6	65.1786.00	Wear pad lower	90.1521.00, 90.1522.00, 90.1524.00
7	001.034.00	Socket head screw, 6-32 x 1/4	
8	65.1792.00	Spring lock	90.1521.00, 90.1522.00
9	65.1807.00	Housing	
10	90.1523.00	Cap kit	
11	90.1526.00	Back height kit	90.1526.00
12	90.1524.00	Back clamp kit, includes items 2, 3, 4, 5, 6	
13	90.1522.00	Back cover kit, includes 3, 6,7, 8	
14	65.1826.00	Front cover	
15	002.117.00	Button head socket screw, 5/16 x 3/4 stainless steel	
16	65.1773.00	Spacer	

Tilt Seat Assembly 521/522

Item	Part Number	Description	Replacement Kit
1	-	Seat upholstery	
2	65.1816.00	Isolator	90.1533.00
3	65.1815.00	Seat support	90.1605.00
4	006.172.00	Hex nut with Nylon insert, 5/16-18	
5	65.1852.00	Tailpiece screw cover, kit	90.1529.00
6	65.1773.00	Spacer	90.1526.00
7	002.117.00	Button head socket screw, 5/16-18 x 3/4	
8	65.1851.00	Tailpiece cover, kit	90.1529.00
9	001.130.01	Button head socket patch screw, 1/4-20 x 1/2	
10	65.1850.00	Mechanism cover	90.1531.00
11	65.1763.00	Seat mechanism	90.1530.00
12	65.1905.00	Glide	90.1605.00
13	005.132.00	Low head socket screw, 1/4-20 x 3/8	



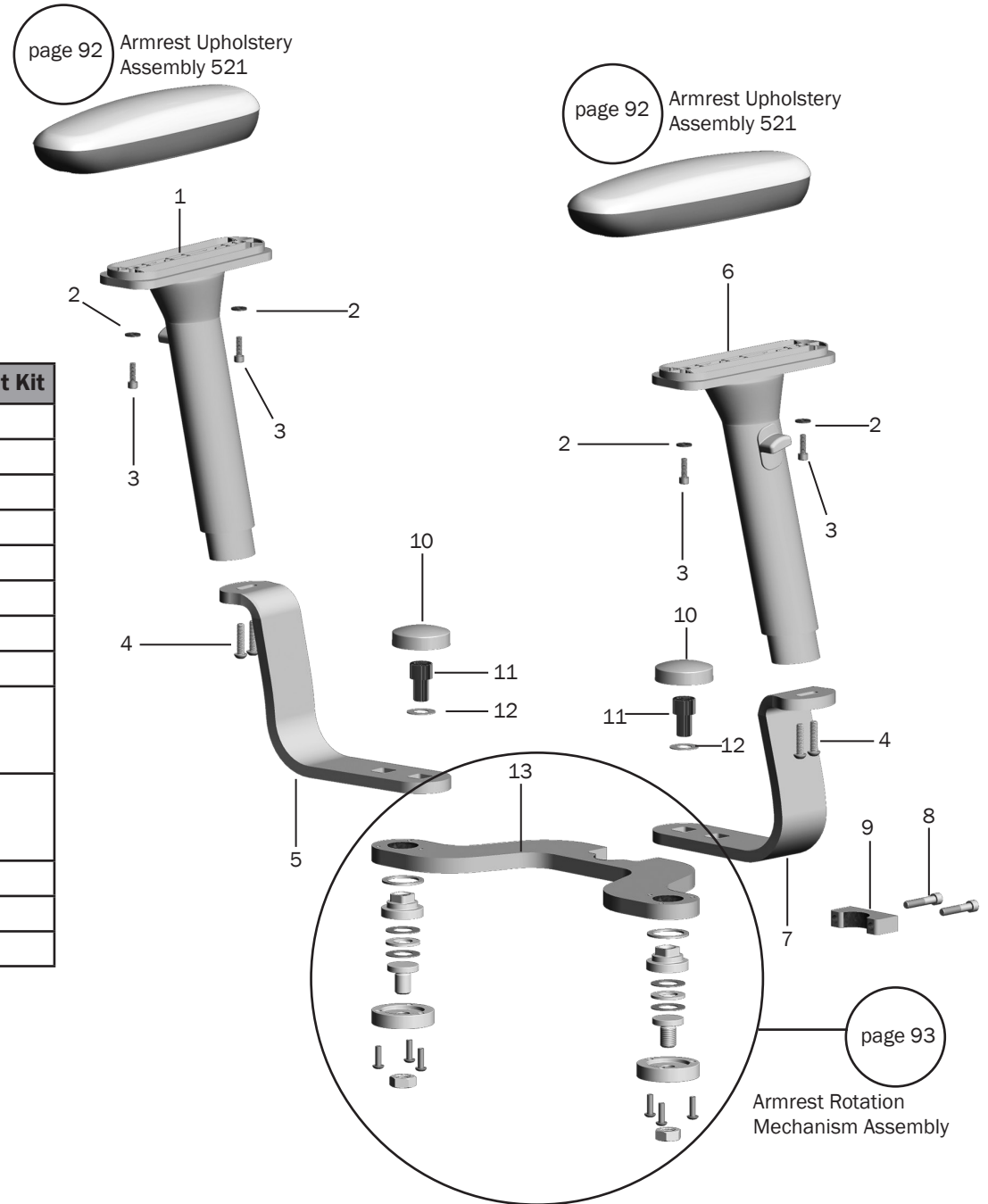
▶ Doctor's Stool 521
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▶ Assistant's Stool 522
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Armrest Assembly 521

p/n: 90.1508.00

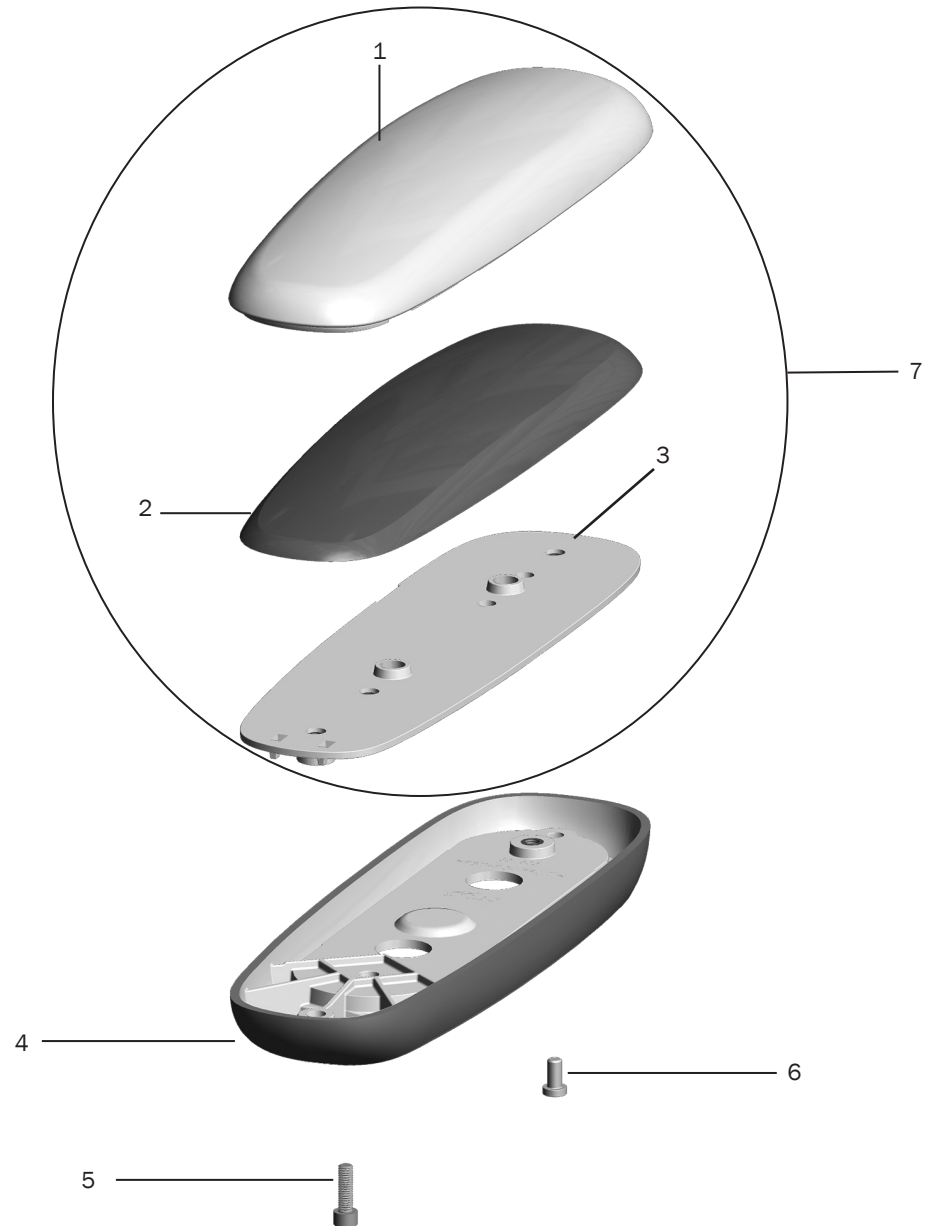
Item	Part Number	Description	Replacement Kit
1	90.1517.00	RH Armrest mechanism kit	
2	004.015.00	Brass washer	
3	001.088.00	Socket head screw, 10-32 x 5/8	
4	045.017.00	Button head cap patch screw, 6 x 25mm	
5	65.1834.00	RH Armrest weldment	90.1508.00
6	90.1516.00	LH Armrest mechanism kit	90.1516.00
7	65.1835.00	LH Armrest weldment	90.1508.00
8	001.093.00	Socket head screw, 1/4-20 x 1-1/4	
9	65.1869.00	Armrest mount	90.1508.00, 90.1518.00, 90.1549.00
10	65.1875.00	Mounting plate	90.1508.00, 90.1518.00, 90.1549.00
11	001.294.00	Socket head screw, 1/2 -13 x 3/4	
12	004.136.00	Thrust bearing washer, .500 ID	
13	90.1518.00	Armrest mounting bracket	



Armrest Upholstery Assembly 521

p/n: 90.1515.00

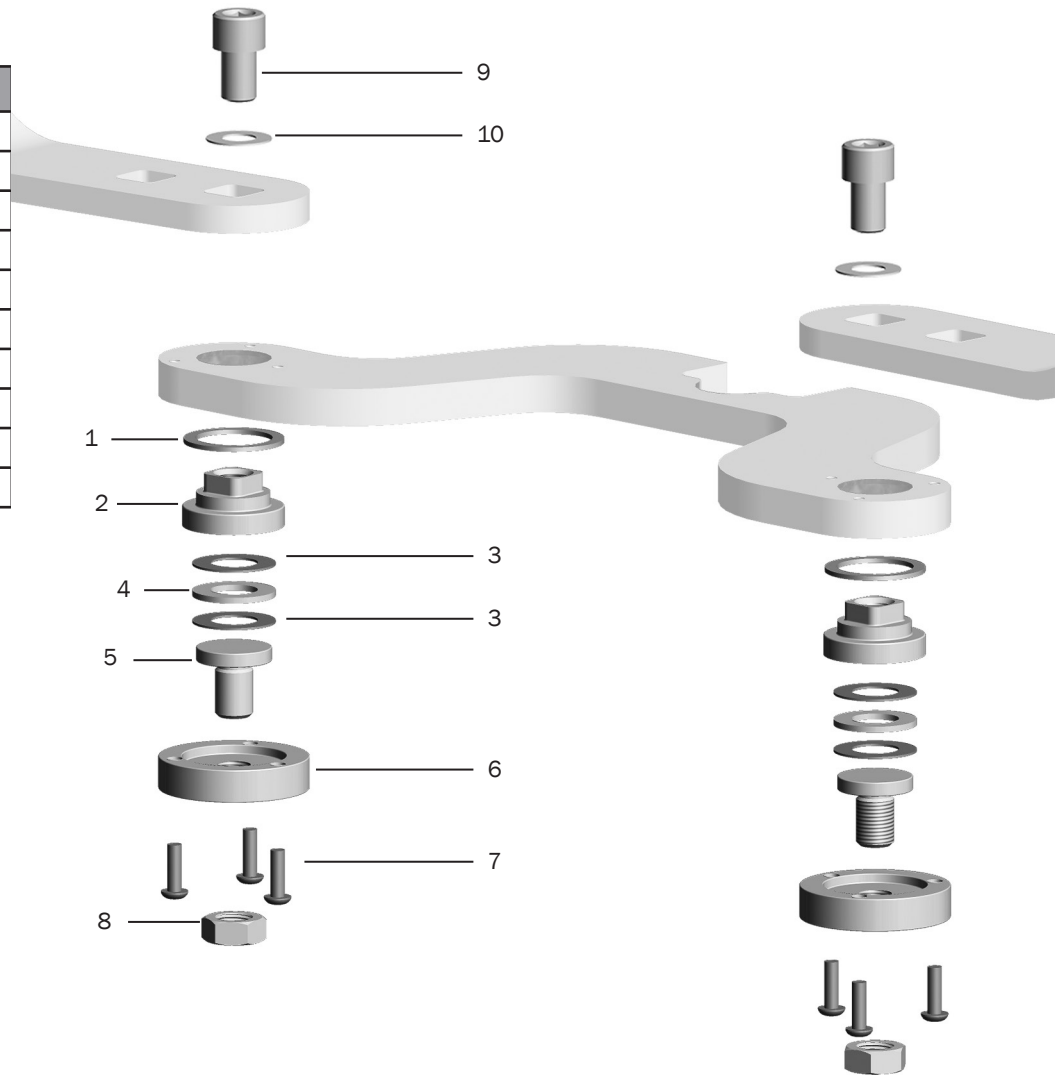
Item	Part Number	Description
1	62.0828.00	Armrest cover
2	62.0831.00	Foam, kit
3	62.0830.00	Armature
4	65.1806.00	Lower armrest cover
5	001.088.00	Socket head screw, 10-32 x 5/8
6	005.134.00	Low head socket screw, 10-32 x 3/8
7	90.1514.00	Armrest cap kit



Armrest Rotation Mechanism 521

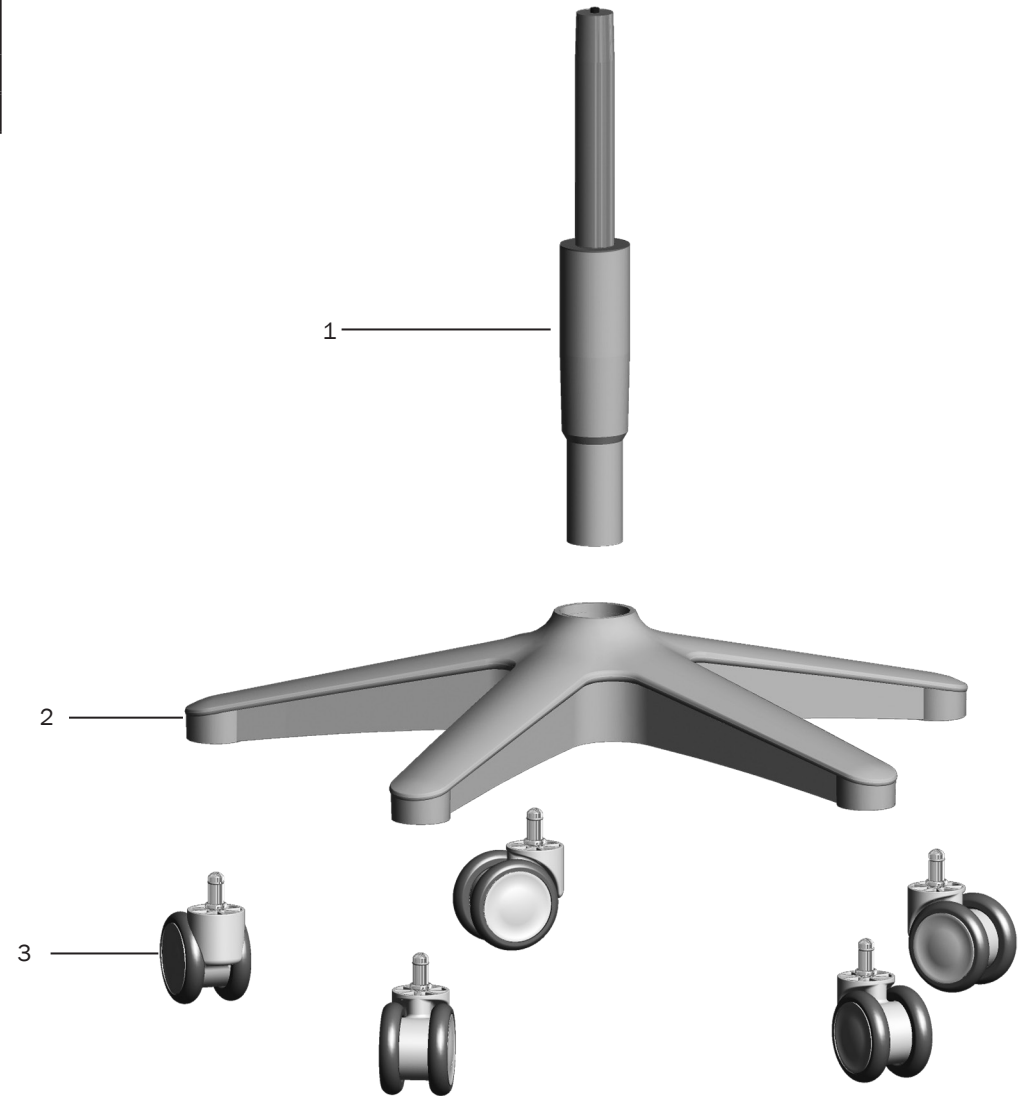
p/n: 90.1519.00

Item	Part Number	Description	Replacement Kit
1	004.126.00	Flat nylatron washer, 1.020 ID	
2	65.1870.00	Hub	90.1508.00
3	004.171.00	Thrust washer, .625 ID	
4	016.098.00	Thrust bearing, .625 ID x .0781 LG	
5	65.1871.00	Plunger	90.1508.00
6	65.1872.00	Armrest plate	90.1508.00
7	005.123.01	Button head socket screw, 10-32 x 3/8	
8	006.171.00	Hex nut, 1/2-20 x .75 x .313	
9	001.294.00	Socket head screw, 1/2-13 X 3/4 SST	
10	004.136.00	Thrust bearing, .500 ID	



Lower Stool Assembly 521

Item	Part Number	Description
1	90.1547.00 90.1548.00	Short gas spring cylinder, 112 mm Tall gas spring cylinder, 245 mm
2	65.1758.00	5-Leg base
3	90.1527.00	Caster package of 5



Assistant's Stool 522



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Seat Assembly 522

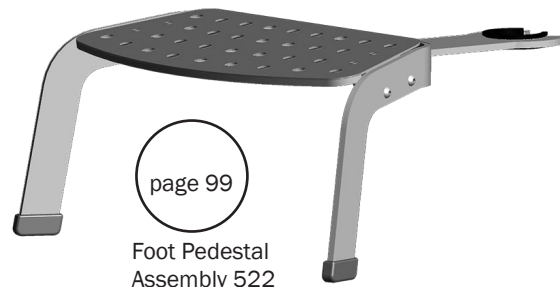
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Torso Band and Back Height Mechanism Assembly 522

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Lower Stool Assembly 522

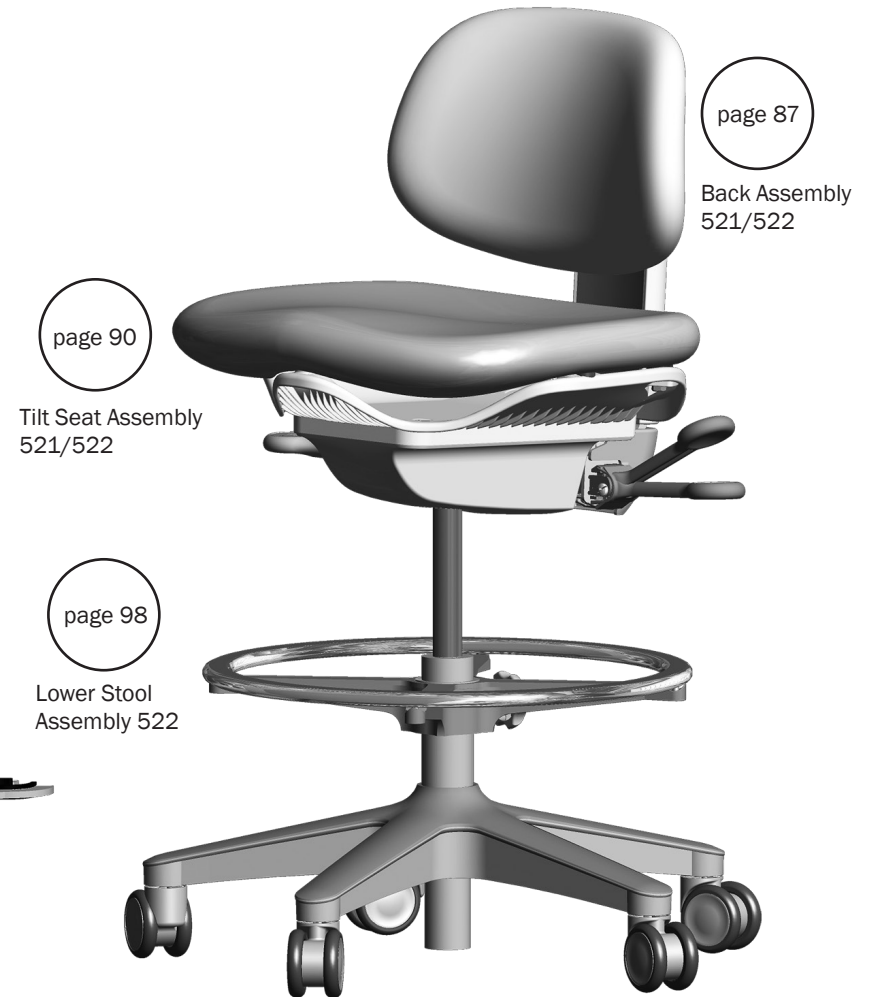
Assistant's Stool with Torso Band



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Foot Pedestal Assembly 522

Stools 521/522
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Back Assembly 521/522

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Tilt Seat Assembly 521/522

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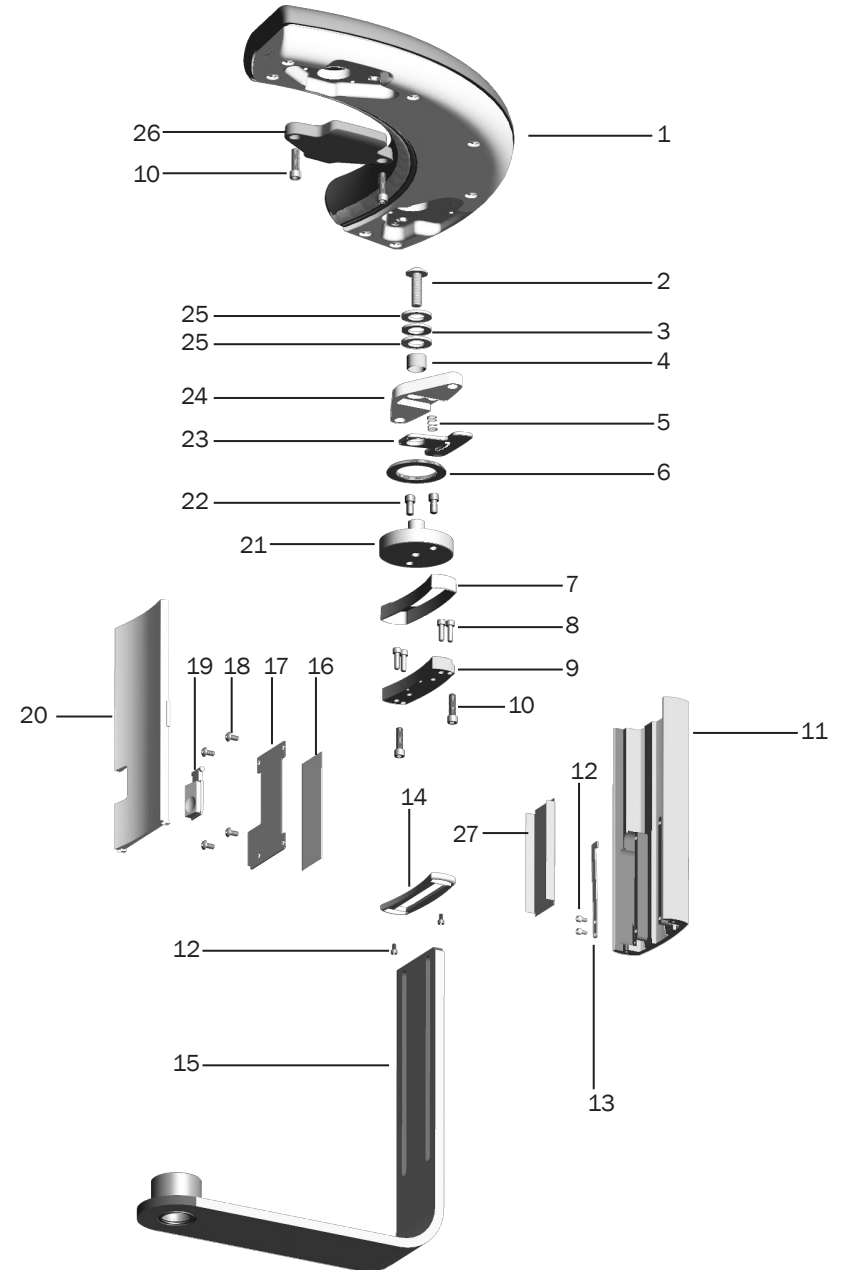
Lower Stool Assembly 522

Assistant's Stool with Back

Torso Band and Back Height Mechanism Assembly 522

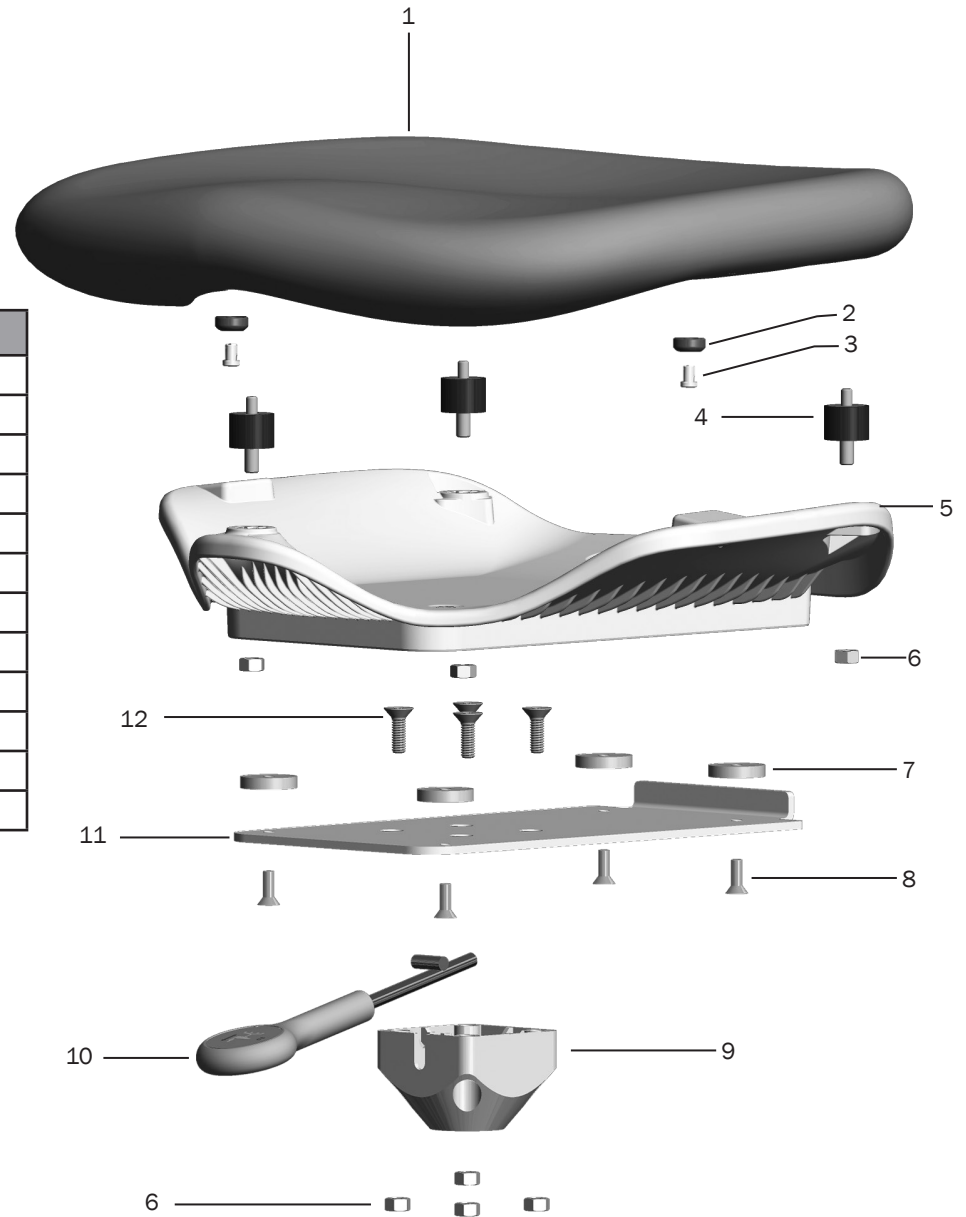
Item	Part Number	Description
1	90.1520.00	Torso band cap kit
2	001.285.00	Flange button head socket screw, 3/8-16 x 1-1/4
3	016.098.00	Thrust bearing
4	016.186.00	Bearing sleeve
5	013.137.00	Compression spring
6	016.178.00	Thrust bearing
7	65.1864.00	Torso pivot cover
8	002.168.00	Socket head patch screw
9	65.1856.00	Torso pivot mount
10	001.286.00	Socket head screw, 1/4-20 x 7/8
11	65.1807.00	Housing
12	001.034.00	Socket head screw, 6-32 x 1/4
13	65.1792.00	Spring lock
14	90.1523.00	Collar kit
15	90.1525.00	J-bar kit, includes bearing
16	65.1787.00	Wear pad
17	65.1827.00	Clamp plate
18	005.012.05	Button head patch socket screw
19	65.1793.00	Height mechanism button
20	65.1826.00	Front cover
21	65.1854.00	Support
22	005.008.02	Socket head screw
23	65.1855.00	Lever
24	65.1857.00	Hub
25	004.254.00	Thrust washer
26	65.1853.00	Endcap
27	65.1786.00	Lower wear pad

Kit	Description
90.1521.00	Torso band mechanism kit, includes 2 - 13, 18, 21-25, 27
90.1522.00	Mechanism cover kit, includes 8, 11 - 13, 18, 27
90.1524.00	Clamp plate kit, includes 16-19, 27



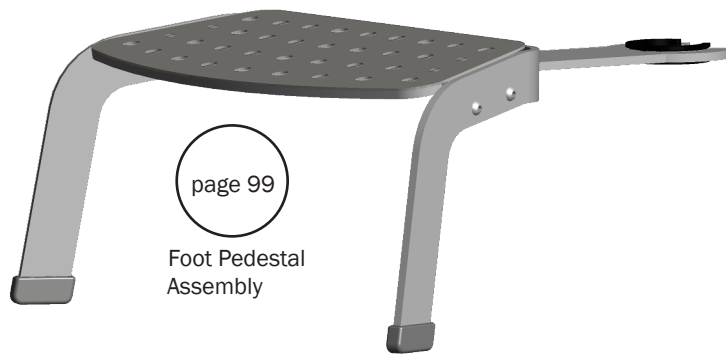
Seat Assembly 522

Item	Part Number	Description	Replacement Kit
1	-	Seat upholstery	
2	65.1905.00	Glide	
3	005.132.00	Low head screw, 1/4-20 x 3/8	
4	65.1816.00	Isolator	90.1533.00
5	65.1815.00	Seat support	90.1605.00
6	006.172.00	Hex nut, 5/16-18 x 17/64	90.1605.00
7	004.229.00	Nylon washer	90.1537.00
8	005.147.00	Flat head socket patch screw, 1/4-20 x 3/4	
9	65.1812.00	Mounting block casting	90.1534.00
10	65.1878.00	Lever assembly	
11	65.1866.00	Plate	90.1536.00
12	001.197.00	Flat head patch socket screw, 5/16-18 x 1	90.1533.00



Lower Stool Assembly 522

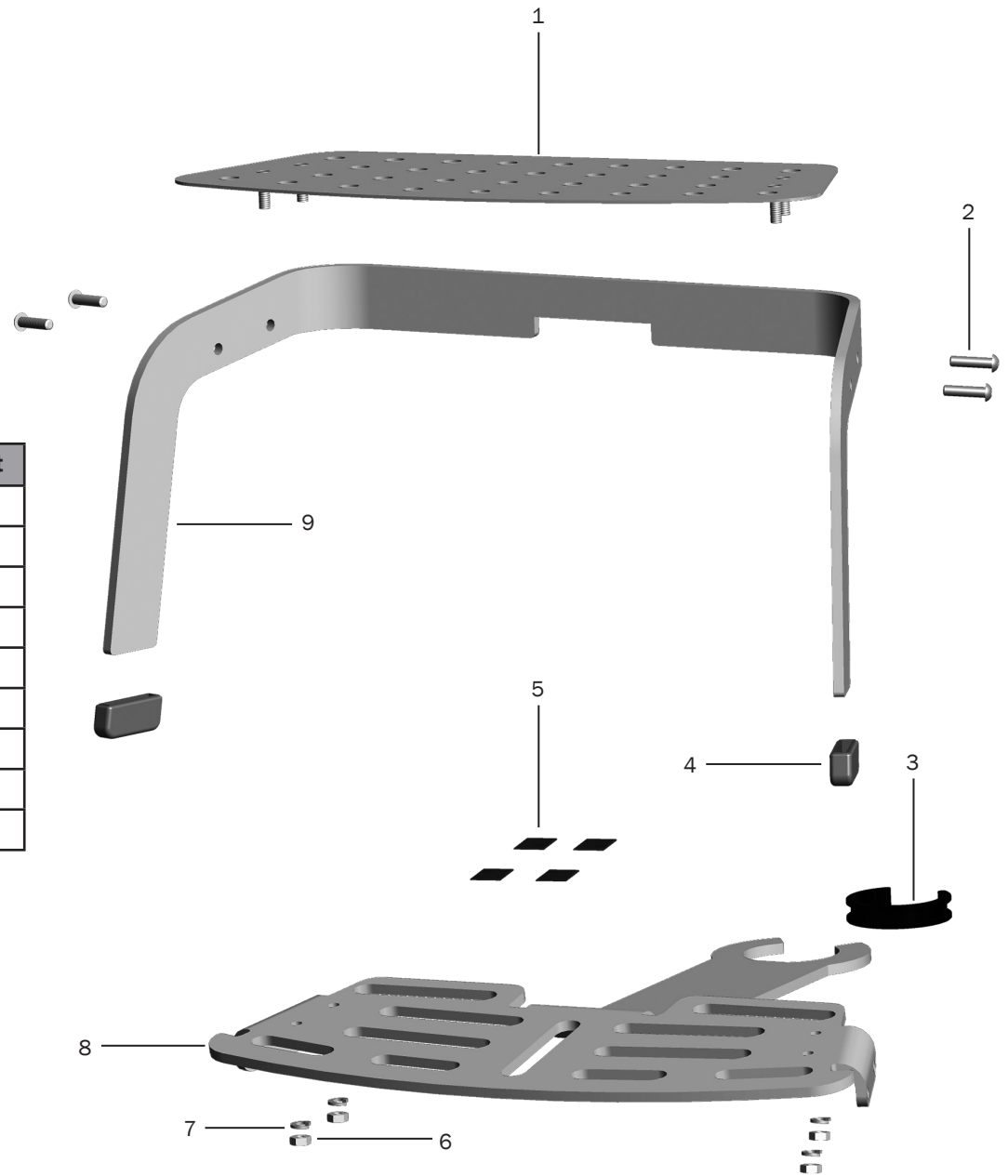
Item	Part Number	Description	Replacement Kit
1	005.008.01	Socket head patch screw, 1/4-20 x 1/2	
2	65.1865.00	Foot ring	
3	65.1758.00	5-Leg base (excludes knob)	
4	65.1754.00	Caster	90.1527.00
5	90.1528.00	Standard gas spring cylinder	
6	65.1800.00	Collar	90.1528.00
7	65.1906.00	Knob, kit	



Foot Pedestal Assembly 522

p/n: 90.1509.00

Item	Part Number	Description	Replacement Kit
1	90.1542.00	Cover kit	
2	005.109.00	Button head socket screw, 1/4-20 x 1	
3	65.1898.00	Hub	90.1544.00
4	90.1541.00	Pedestal cap kit, pkg of 2	
5	048.253.00	Velcro® strip, 1" x .75"	
6	006.023.00	Hex nut, 1/4-20 x 7/16 x 3/16	
7	004.016.00	Split lock washer	
8	90.1544.00	Platform kit	
9	90.1543.00	Pedestal support kit	





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