



Model B3/30 AC DS
Electric Narrow Aisle Actuated Forklift
Parts Manual



LANDOLL CORPORATION

1900 North Street
Marysville, Kansas 66508
(785) 562-5381
800-428-5655 ~ **WWW.LANDOLL.COM**

Table of Contents

1 Illustrated Parts List

Instructions for Ordering Parts	1-1
Brakes	1-2
Brake and Spindle Installation	1-2
Brake Assembly, Right	1-4
Brake Assembly, Left	1-5
Brake Pedal and Lines Installation	1-6
Brake Pedal Assembly	1-8
Brake Wheel Installation	1-10
Braking Wheel Assembly	1-12
Parking Brake Installation	1-14
Covers and Counterweights	1-16
Battery Compartment Door Installation	1-16
Counterweights and Frame Components	1-18
Covers Installation	1-20
Hose Routing Installation	1-24
Rigid Door Installation	1-27
Decals	1-31
Decal Placement	1-31
Decals	1-34
Electrical	1-36
Alarm and Lighting	1-36
Contactors Installation	1-39
Controller Installation	1-42
Drive Motor Assembly	1-44
Emergency Stop Button Installation	1-45
Pump Motor Assembly	1-46
Static Strap Installation	1-47
Steering Potentiometer and Horn Installation	1-48

Hydraulics	1-50
Breather Installation	1-50
Hydraulic Control Valve Installation	1-52
Hydraulic Components Installation	1-54
Hydraulic Control Valve Assembly	1-56
Hydraulic Motor, Pump, and Filter Installation	1-58
Hydraulic Tank Installation	1-60
In-Tank Filter Assembly	1-62
Steering Control Valve Assembly	1-63
Steering Hydraulics	1-64
Steering Orbital Assembly	1-66
Tilt Cylinder	1-68
 Mast and Front Rotation	 1-69
Forks	1-69
Front Plate Assembly	1-70
Front Plate Installation	1-72
Load Backrest	1-74
Mast Installation	1-76
Mast	1-78
Tilt Cylinder Installation	1-80
 Operator's Compartment	 1-82
Accelerator Assembly	1-82
Control Levers Installation	1-84
Overhead Guard Installation	1-86
Seat Assembly, Cloth	1-88
Seat Assembly, Vinyl	1-90
Seat Base Installation	1-92
Seat Installation	1-94
Steering Column and Dash Display Assembly	1-96
Steering Column Assembly	1-98
Steering Column and Orbital Installation	1-100
 Powertrain	 1-102
Drive Installation	1-102
Drive Wheel Assembly	1-104
Gearbox Assembly, 29:1 In-Line, Brevini	1-105
 Options	 1-106
Accessories	1-106
Battery Guides Installation	1-107
Battery Restraint Assembly	1-109
Battery Tray, Lift Out	1-110
Battery Tray Assembly, Roll Out	1-111
Battery Tray Assembly, Slide Out	1-113

Service Tools	1-115
Software Programs, Cables, Handsets, and Documents	1-115

2 Numerical Index

3 Glossary

Illustrated Parts List

Instructions for Ordering Parts

**** Repair parts must be ordered through an Authorized Dealer ****

DEALER INSTRUCTIONS FOR ORDERING PARTS FROM LANDOLL PARTS DISTRIBUTION CENTER

PHONE #: 800-423-4320 OR 785-562-5381

FAX #: 888-527-3909

ORDER ONLINE: companystore.landoll.com

IDENTIFICATION PLATE

See Figure 1-1 for the identification plate, which lists the rated capacity, serial number, and other vehicle characteristics. It is located on the frame under the operator seat.

SERIAL NUMBER NOMENCLATURE

The serial number for the Bendi forklift and mast is located on the identification plate. The following information will help decode the Bendi serial number:

B3/aattDS-yymms-xxxxx

aa	= rated capacity of truck (ex. "30" means 3000lbs.)
tt	= type (i.e. "AC")
yy	= last 2 digits of the year manufactured (ex. "09" means 2009, "10" means 2010)
mm	= month of manufacture
s	= component series (ex. "A")
xxxxx	= frame number

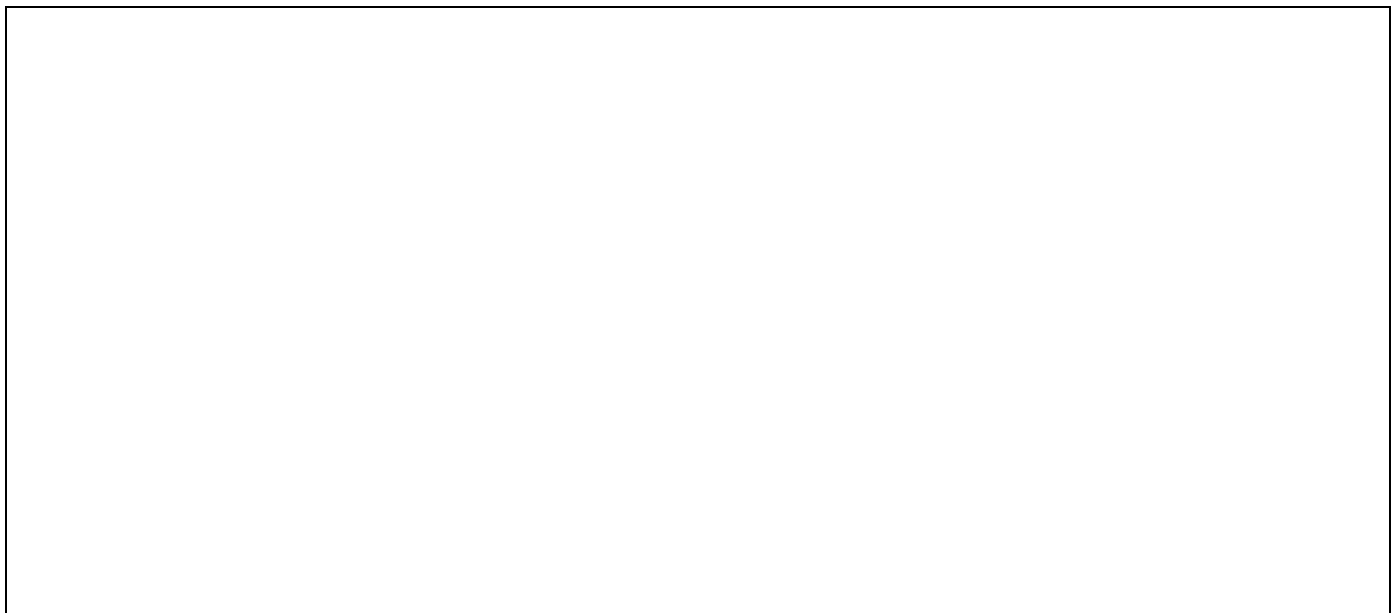


Figure 1-1: Identification Plate

Brakes

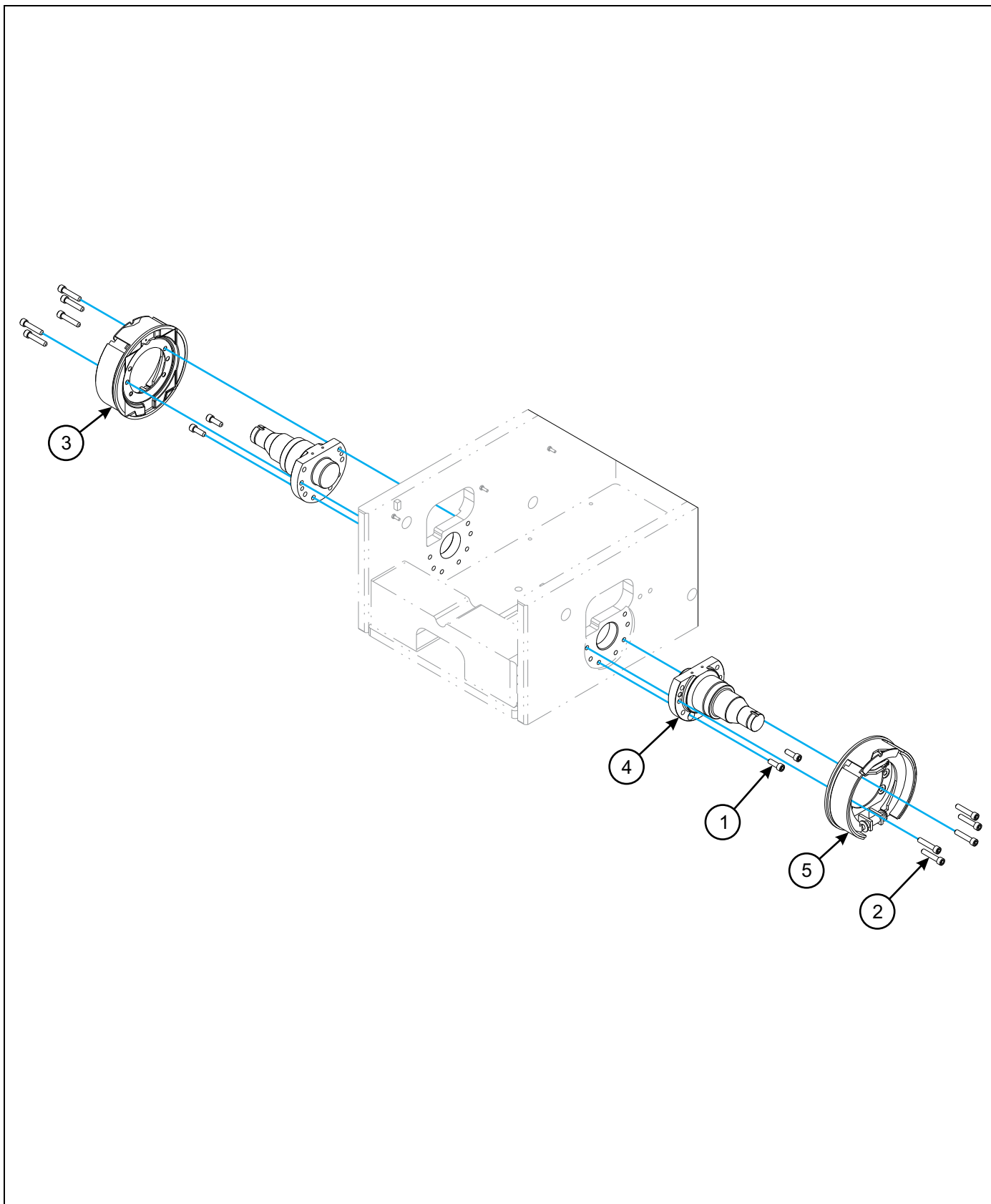
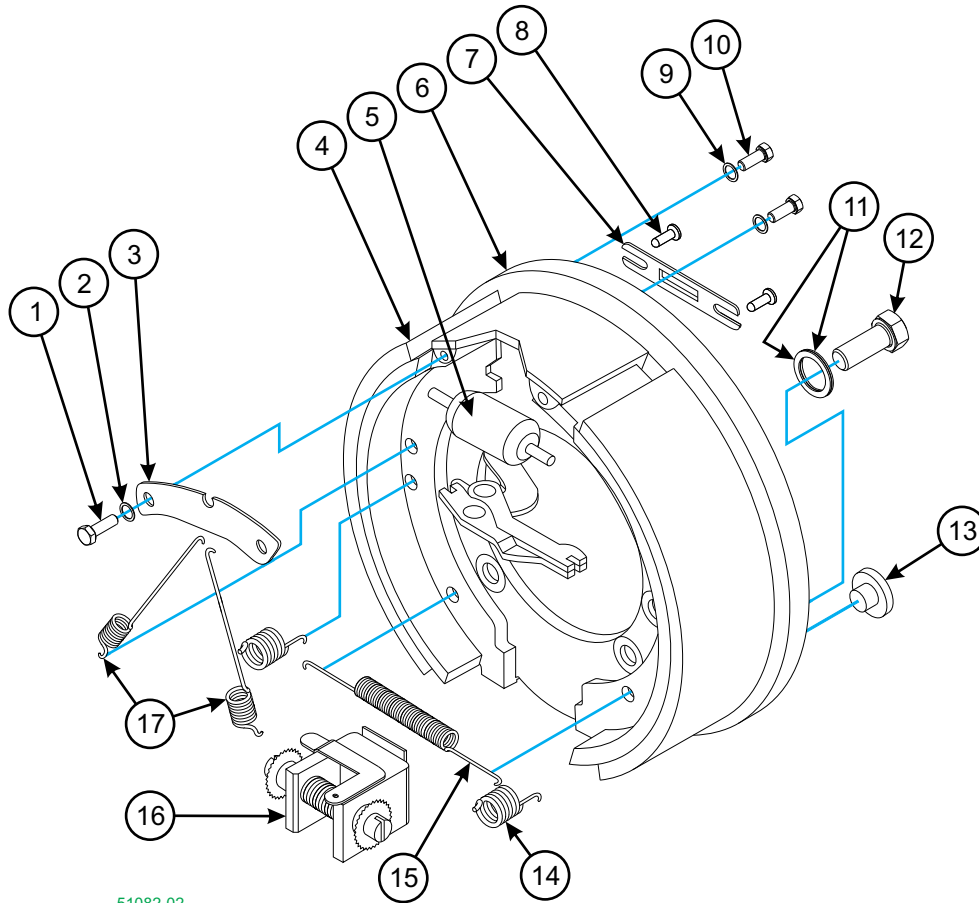


Figure 1-2: Brake and Spindle Installation

Brake and Spindle Installation

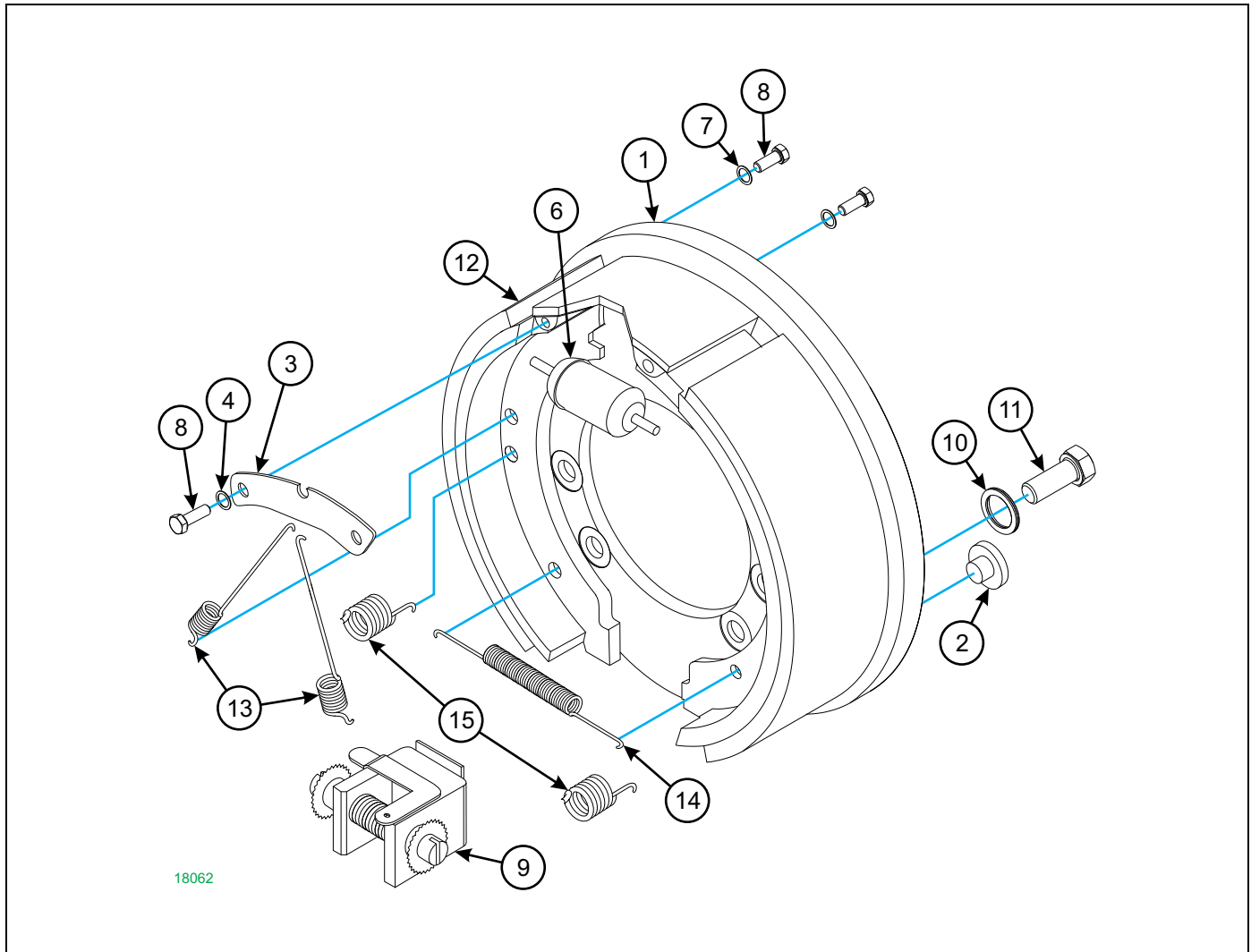
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010104315	SCREW,HX SKT,1/2-13UNCX1-1/2	4
2	118577	SCREW HX SKT HD1/2-13X2-1/2ZP	10
3	18062	BRAKE ASSY, 10.5X2.5 (LEFT BRAKE) (SEE PAGE 1-5)	1
4	37082	SPINDLE	2
5	51082-02	LH BRAKE ASSY, 10.5X2.5 (RIGHT BRAKE) (SEE PAGE 1-4)	1

ILLUSTRATED PARTS LIST

51082-02

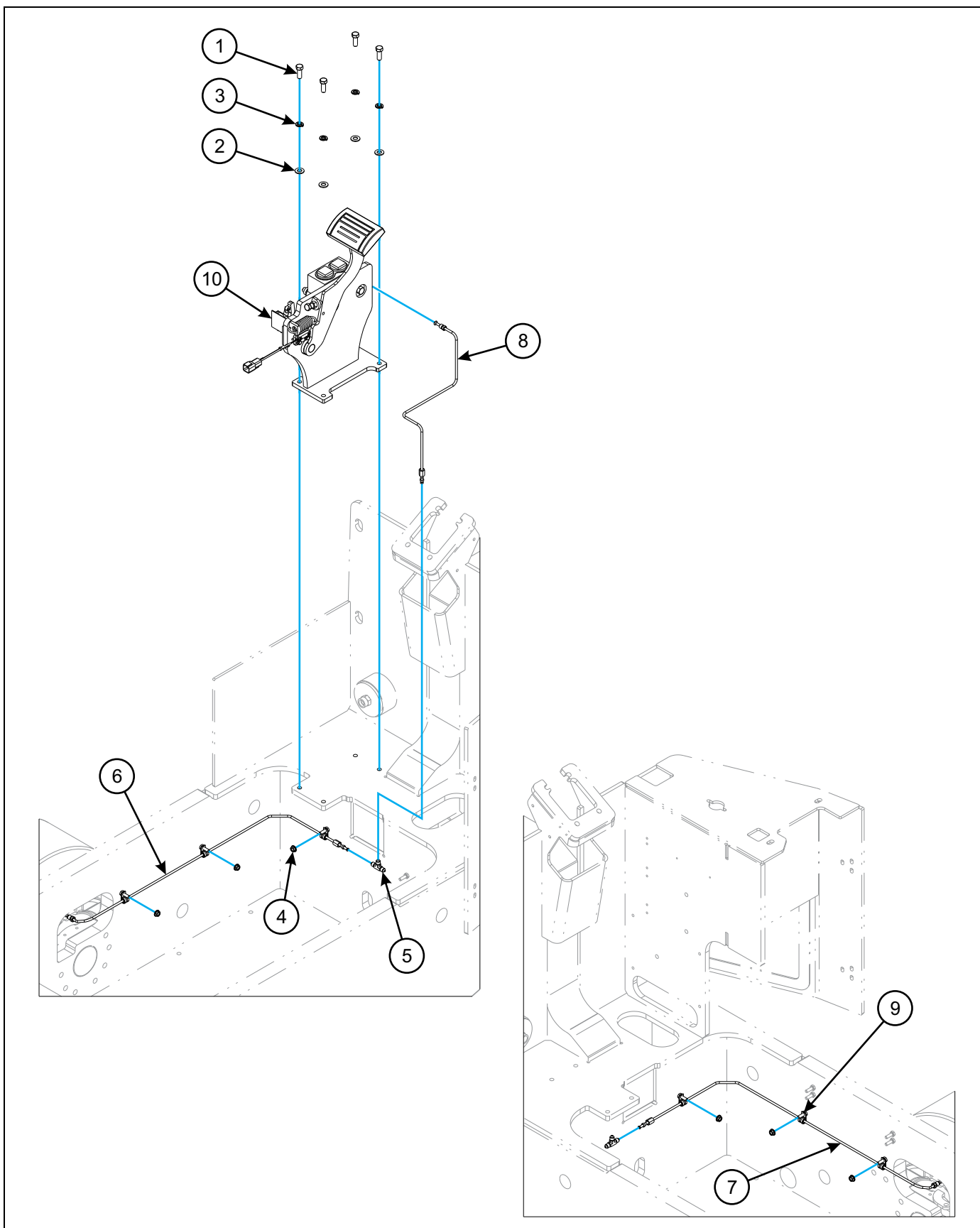
Figure 1-3: Brake Assembly, Right**Brake Assembly, Right**

ITEM	PART NUMBER	DESCRIPTION	QTY.
	51082-02	LH BRAKE ASSY, 10.5X2.5	
1	1CM816ER	SCREW HX HD M8X16MM ZP CL8.8	2
2	18EM816ER	WASHER, FL M8 PLATED	2
3	26278	CLAMP, HOLD DOWN	1
4	1422701	BRAKE SHOE ASSY W/899250 LIN	2
5	28218	WHEEL CYLINDER	1
6	52661	PLATE BACKING ASSY	1
7	53026	PLATE	1
8	53027	HSS JOBBER 118DEG 13/32 BIT	1
9	6EM60ER	WASHER LOCK SPRING M6 ZP	2
10	28967-5	BOLT	2
11	26270	WASHER, CAM LOCKING, M12	2
12	1CM1225ER	SCREW M12-1.75X25 HCS 8.8 ZP	1
13	26261	PLUG, RUBBER,	1
14	26277	HOLD DOWN SPRING	2
15	26276	SPRING, RETURN	2
16	26269	BRAKE ADJUSTER	1
17	26275	SPRING, RETURN	2


Figure 1-4: Brake Assembly, Left

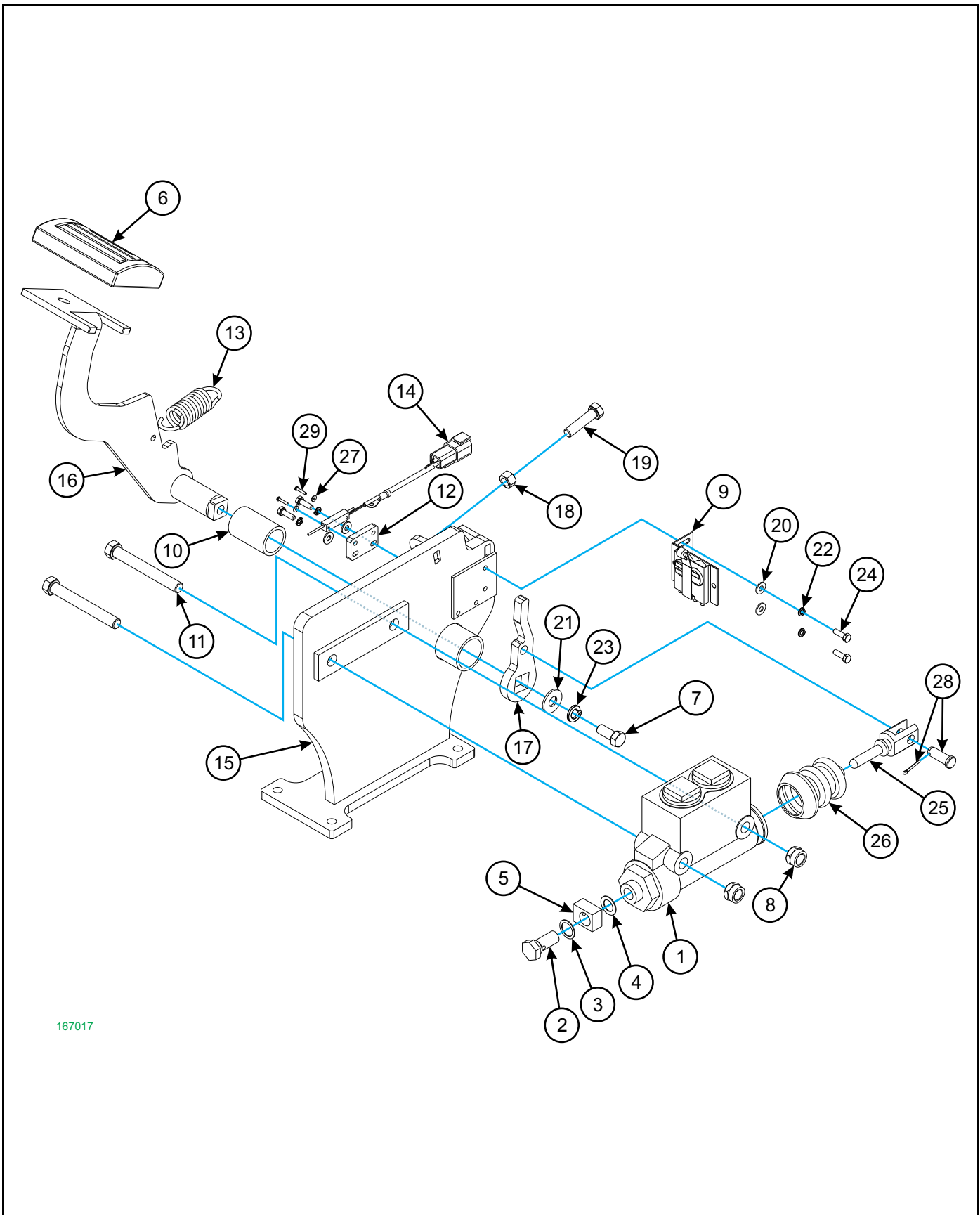
Brake Assembly, Left

ITEM	PART NUMBER	DESCRIPTION	QTY.
	18062	BRAKE ASSY, 10.5X2.5	
1	52661	PLATE BACKING ASSY	1
2	26261	PLUG, RUBBER,	2
3	26278	CLAMP, HOLD DOWN	1
4	18EM816ER	WASHER, FL M8 PLATED	2
5	1CM816ER	SCREW HX HD M8X16MM ZP CL8.8	2
6	28218	WHEEL CYLINDER	1
7	6EM60ER	WASHER LOCK SPRING M6 ZP	4
8	28967-5	BOLT	2
9	26269	BRAKE ADJUSTER	1
10	26270	WASHER, CAM LOCKING, M12	2
11	1CM1225ER	SCREW M12-1.75X25 HCS 8.8 ZP	1
12	1422701	BRAKE SHOE ASSY W/899250 LIN	2
13	26275	SPRING, RETURN	2
14	26276	SPRING, RETURN	1
15	26277	HOLD DOWN SPRING	2

**Figure 1-5: Brake Pedal and Lines Installation**

Brake Pedal and Lines Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010051-05	SCREW,HEX CAP 3/8-16UNCX1 GR5	4
2	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	4
3	1-861-010034-11	WASHER, LKG HLCL SPR, 3/8	4
4	108417	NUT SPIRAL 1/4-20HX FG	6
5	10K2	FITTING, TEE SAE37	1
6	129609	BRAKE LINE ASSY, B3-4 LH	1
7	129610	BRAKE LINE ASSY, B3-4 RH	1
8	145728	BRAKE LINE ASSY, B3-4 CTR	1
9	162290	CLAMP, CABLE 1/4 SST	6
10	167017	PEDAL ASSY, B3-3 BRAKE (SEE PAGE 1-8)	1

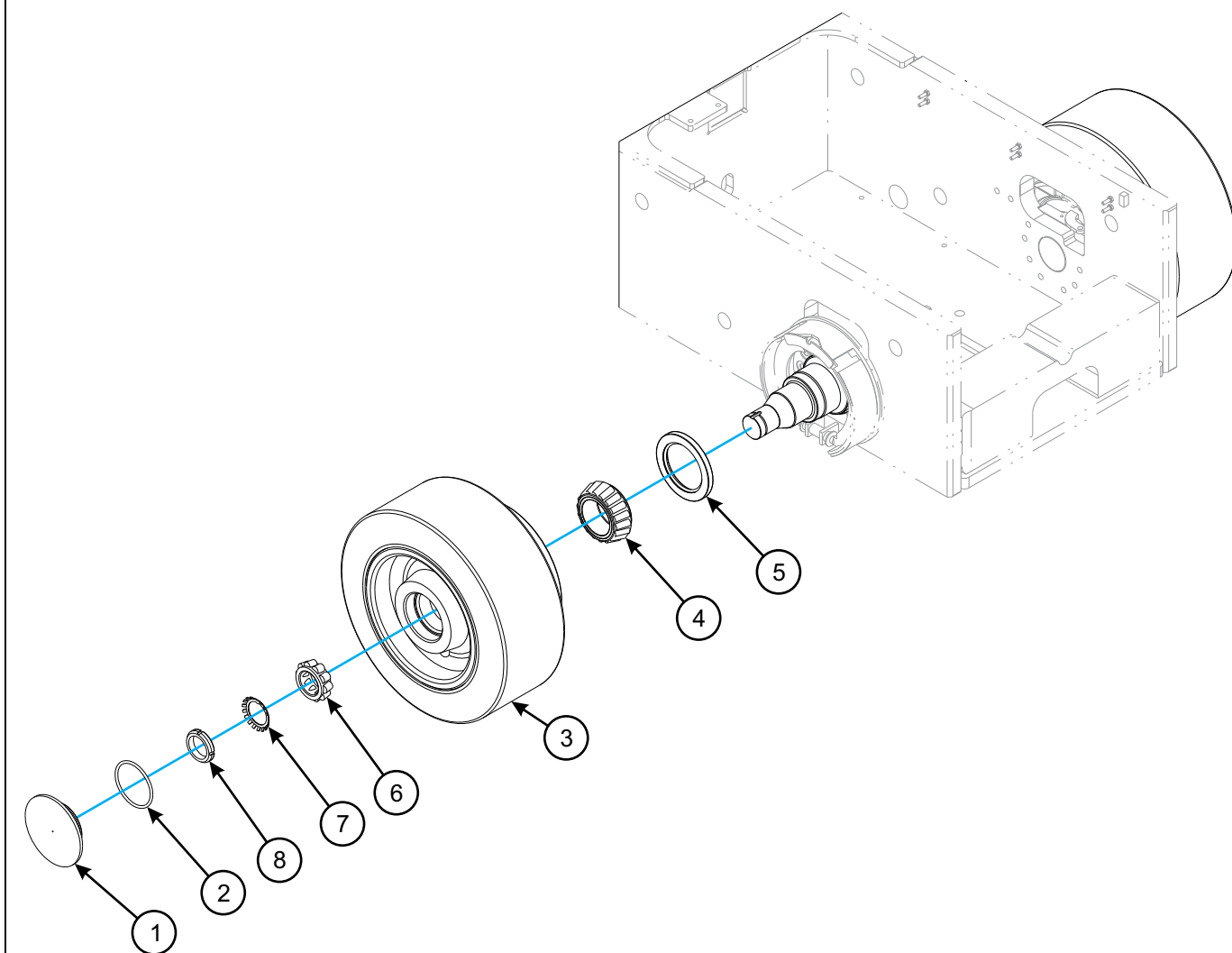


167017

Figure 1-6: Brake Pedal Assembly

Brake Pedal Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	167017	PEDAL ASSY, B3-3 BRAKE	
1	0012200	BRAKE, MASTER CYLINDER, BENDI48	1
2	0012212	FITTING BRAKE MICO	1
3	0012214	WASHER COPPER MICO BRAKE LG	1
4	0012215	WASHER COPPER MICO BRAKE SM	1
5	25028	FITTING, SWIVEL BRASS 3/8-24	1
6	0050002	PAD, BRAKE PEDAL	1
7	100131	SCREW HHC, 3/8-16UNCX7/8 GR5	1
8	101988	NUT, HEXSLF-LKG 7/16-14 GRB	2
9	113089	SWITCH ASSY, BRK LGT/ACLTR C/O	1
10	117437	BUSHING, BT BRAKE PEDAL PIVOT	1
11	141808	SCREW HX CP7/16-14UNCX3-1/2G5	2
12	153231	PLATE, BT/AC BRAKE POT MNT	1
13	153232	SPRING, BT/AC BRAKE RETURN	1
14	155689	ASSY, AC LIFTTRUCK BRAKE POT	1
15	167016	WLDMT, B3-3 BRAKE PEDAL BASE	1
16	167018	WLDMT, B3-3 BRAKE PEDAL	1
17	167022	PLATE, B3-3 MASTER CYL CRANK	1
18	1-512-010007-07	NUT, HEX 3/8-16 ZP	1
19	1-654-010051-07	SCREW, HEX CAP, 3/8-16UNCX1-1/2	1
20	1-861-010032-03	WASHER, FLAT #10 ZP/CD	5
21	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	1
22	1-861-010034-07	WASHER, LKG, HLCL SPR, NO 10	4
23	1-861-010034-11	WASHER, LKG HLCL SPR, 3/8	1
24	107-1001	SCREW, HEX HD #10-24 X .62 LG	4
25	22-0627	PUSH ROD	1
26	22-0628	BOOT, PUSH ROD	1
27	25E2E	WASHER, FLAT #2	2
28	3-557-010253	PIN ASSY, YOKE3/8	1
29	85G208E	SCREW PAN HD SLT 2-56X1/2	2

**Figure 1-7: Brake Wheel Installation**

Brake Wheel Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0019039	HUB CAP, LOAD WHEEL	2
2	0022016	O-RING,LOAD WHEEL,BENDI 48	2
3	143521	WHEEL,REAR 7" SM KRT B3-2 (SEE PAGE 1-12)	2
4	23926	CONE, ROLLER BEARING	2
5	28028	SEAL	2
6	50421	CONE, BEARING, OUTER	2
7	50422	LOCKWASHER EXT TOOTH	2
8	50423	LOCKNUT	2

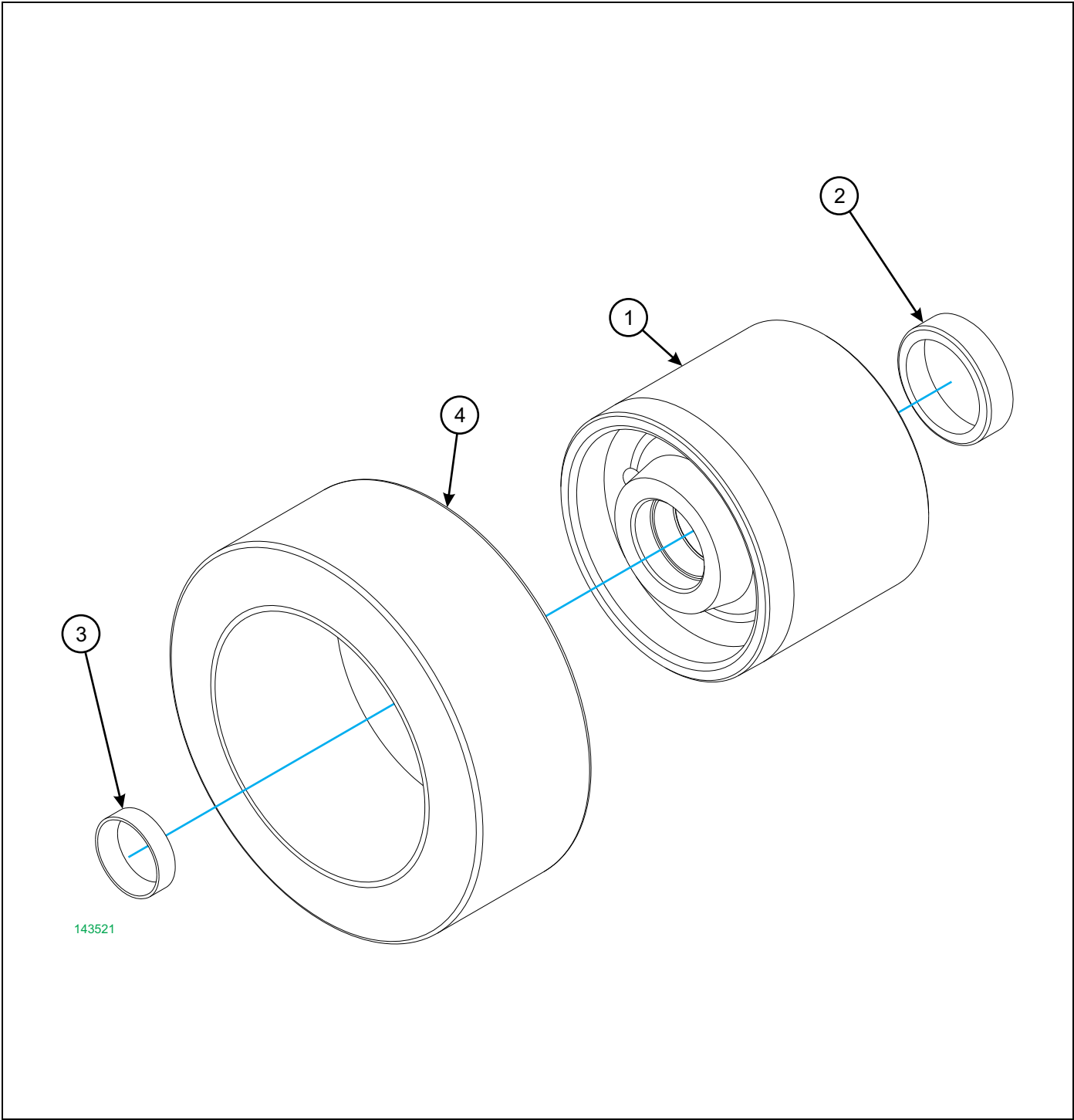
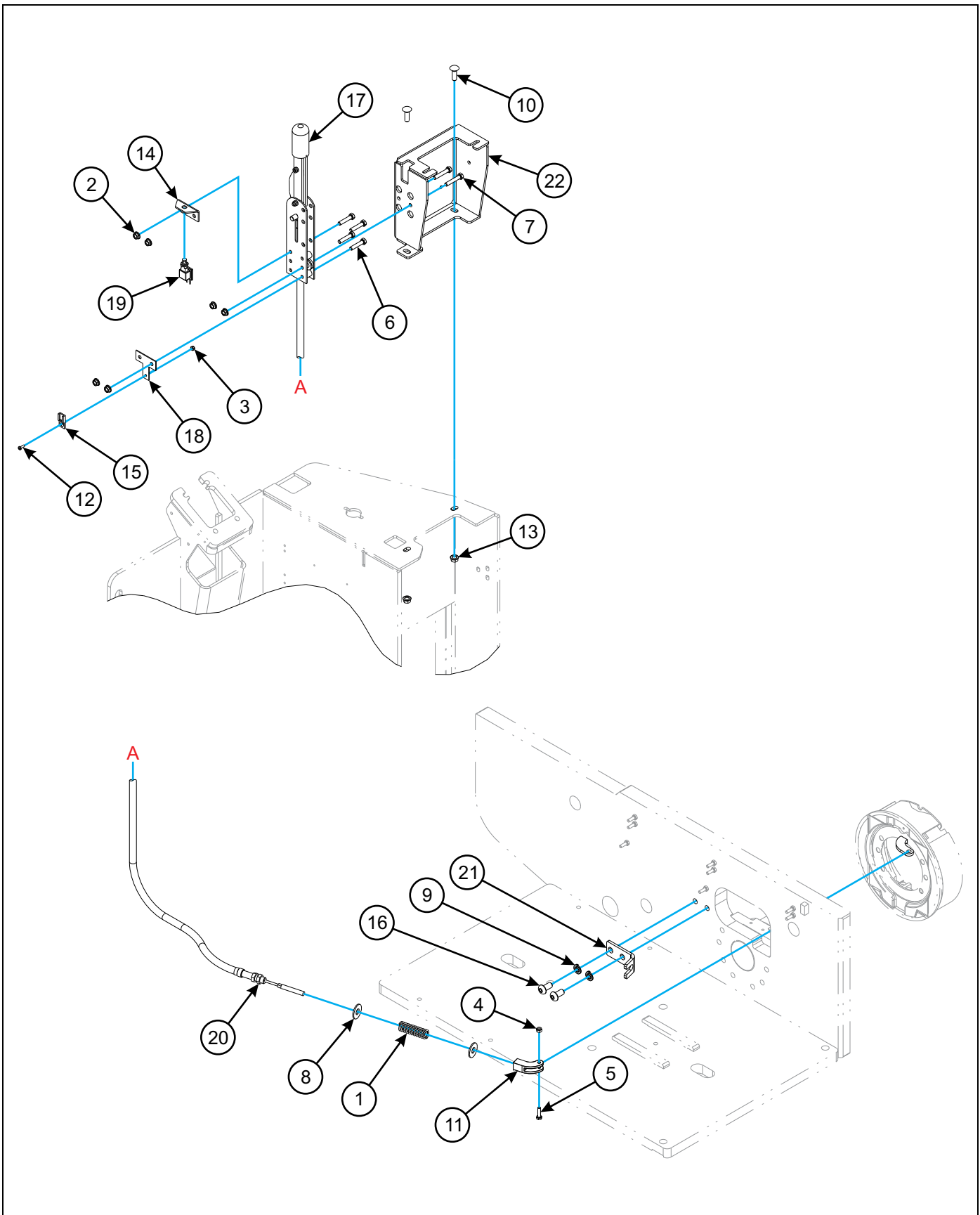


Figure 1-8: Braking Wheel Assembly

Braking Wheel Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	143521	WHEEL, REAR 7" SM KRT B3-2	
1	149321	WHEEL, CAST 12X9 SPINDLE MNT	1
2	23927	CUP, ROLLER BEARING	1
3	50420	CUP, BEARING, OUTER	1
4	106487	TIRE, PRESS-ON, SMOOTH, KRT, 18X7	1

[illegible]

**Figure 1-9: Parking Brake Installation**

Parking Brake Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0013512	BRAKE, SPRING PARK	1
2	1-510-010004-03	NUT HX FLANGE, 5/16-18 GR8	6
3	1-512-010003-03	NUT,HX 8-32,SLF-LKG W/NYL	1
4	1-512-010003-09	NUT,1/4-20 ESNA	1
5	1-654-010047-06	SCREW,HX CP 1/4-20UNCX1 GR5	1
6	1-654-010049-07	SCREW,HX CP 5/16-18UNCX1-1/2	4
7	1-654-010049-08	SCREW,HX CP,5/16-18UNCX1-3/4	2
8	1-861-010032-15	WASHER, FLAT 1/2 W ZP/CD	2
9	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	2
10	101864	SCREW,RD HD 3/8-16X1-1/4 GR5	2
11	104399	YOKE,EMERGENCY BRAKE END	1
12	107-0762	SCR SLOT PAN HD #8-32X1/2	1
13	107470	NUT,SPIRALOCK 3/8-16HX	2
14	109548	BRCKT,SERV BRAKE SWITCH MOUNT	1
15	111271	HANGER,DEUTSCH CONNECTOR	1
16	111341	SCREW, BHSC 1/2-13UNCX1	2
17	112866	LEVER ASSY,SERV BRAKE W/LOCK	1
18	113510	BRKT,BRAKE SWITCH CONN MOUNT	1
19	113535	SWITCH,E-BRAKE CUTOUT	1
20	145901	CABLE,B3 PARKING BRAKE	1
21	146162	BRACKET,PARK BRK CBL,B3	1
22	167072	BRACKET WLDMT,BT/AC HYD LEVER	1

Covers and Counterweights

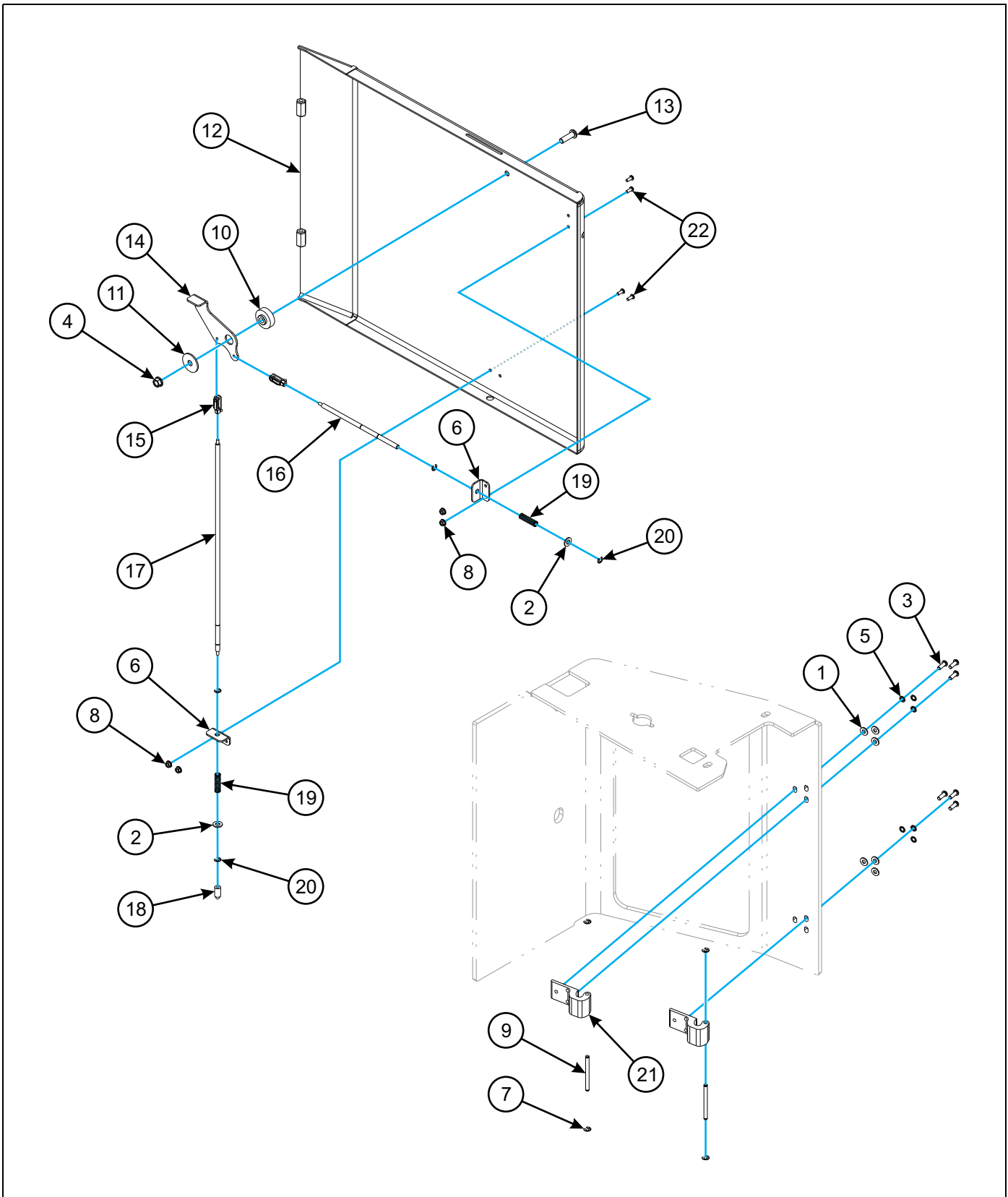


Figure 1-10: Battery Compartment Door Installation

Battery Compartment Door Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-861-010032-06	WASHER, FLAT 1/4 N ZP/CD	6
2	1-861-010032-08	WASHER,FLAT 5/16 ZP	2
3	106955	SCREW,BHSC 1/4-20UNCX3/4	6
4	107470	NUT,SPIRALOCK 3/8-16HX	1
5	108797	WASHER 1/4 LKG INT TOOTH	6
6	111340	BRACKET,SER4 DOOR LATCH GUIDE	2
7	115668	RING,RETAINING,EXT,E,1/4	4
8	115673	NUT,HEX FLANGE 10-32 SPIRAL	4
9	119741	PIN, SER 4 DOOR HINGE	2
10	128306	SPACER,SER 4 DOOR LATCH MNT	1
11	128757	WASHER,SER4 DOOR LATCH RTNR	1
12	128861	DOOR WLDMT,B30-4 RH BATT COMP	1
13	130405	SCREW,BHSC 3/8-16UNCX1-1/4	1
14	130406	HANDLE,SER4 DOOR LATCH	1
15	130412	CLEVIS,10-32 MACH STEEL	2
16	130413	PIN,SER4 UPPER DOOR LATCH	1
17	130414	PIN,SER4 LOWER DOOR LATCH	1
18	130415	PIN,SER4 LOWER DOOR LOCATOR	1
19	130604	SPRING,SER4 DOOR LATCH	2
20	131080	RING,RETAINING,EXT,E,5/16	4
21	169112	HINGE B3-4 RH DOOR	2
22	169763	SCREW B4SC 10-32X.500 ZP	4

ILLUSTRATED PARTS LIST

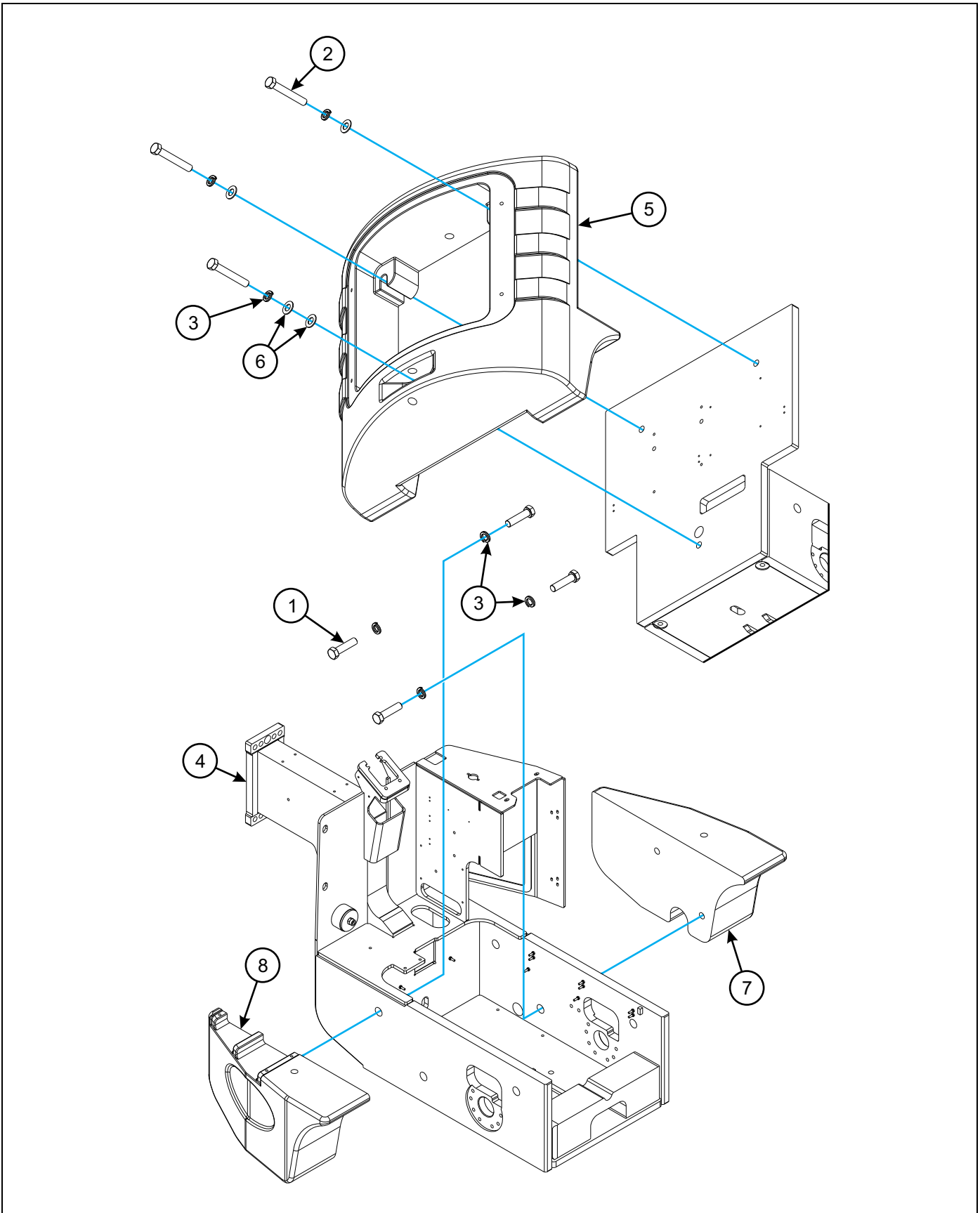


Figure 1-11: Counterweights and Frame Components

Counterweights and Frame Components

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010125-13	SCREW,HX CP 1-8UNCX4, GR8	4
2	1-654-010125-18	SCREW HEX CAP,1-8UNCX6-1/2GR8	3
3	1-861-010034-21	WASHER, LKG HEL SPRG 1IN	7
4	107940	FRAME WLDMT, B3-4/45	1
5	109042	COUNTERWEIGHT RR B-30-B	1
6	110-7389	1 IN SAE FLAT WASHER ZP	4
7	143491	COUNTERWEIGHT B3 RH	1
8	143492	COUNTERWEIGHT B3 LH	1

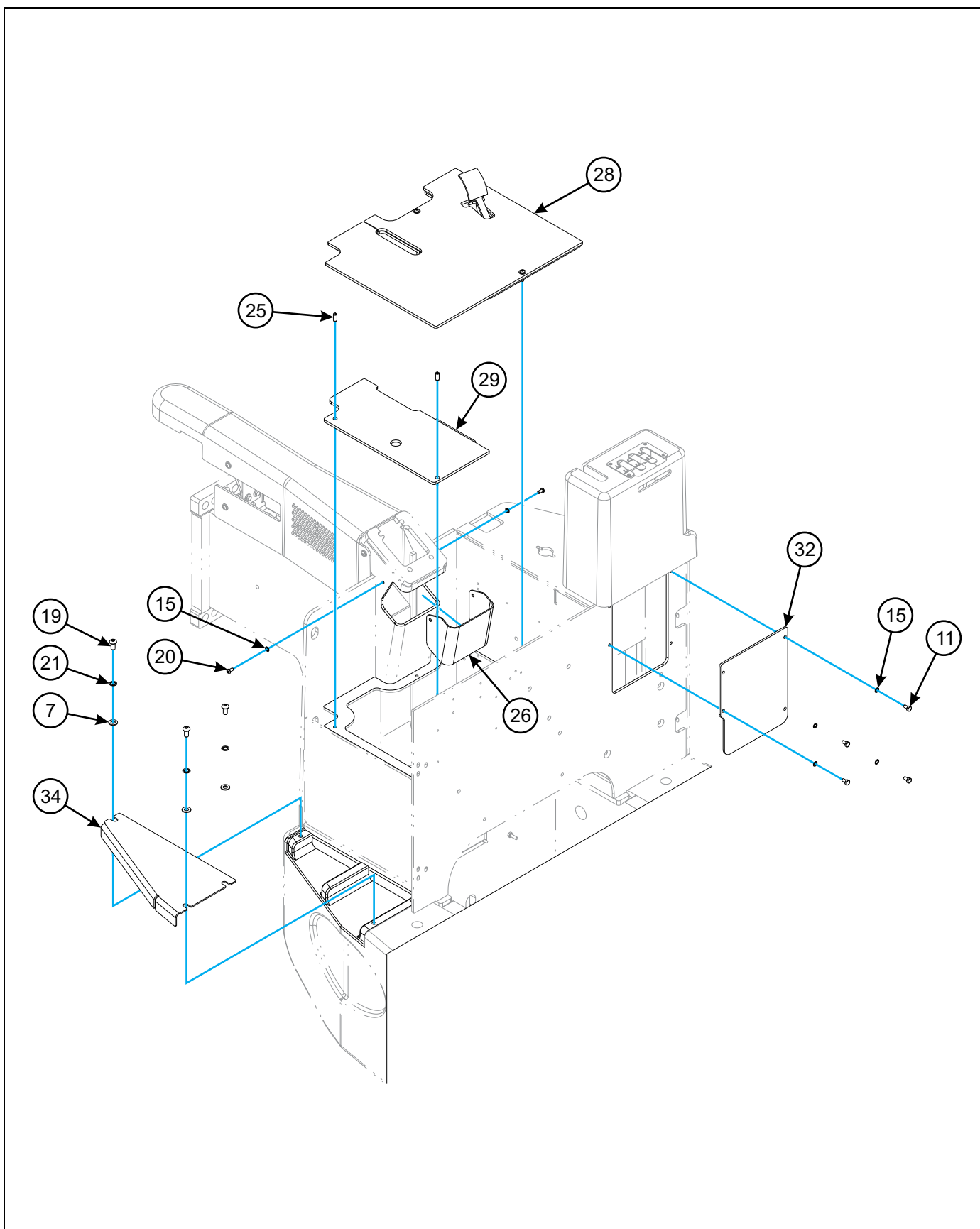


Figure 1-12: Covers Installation (1 of 3)

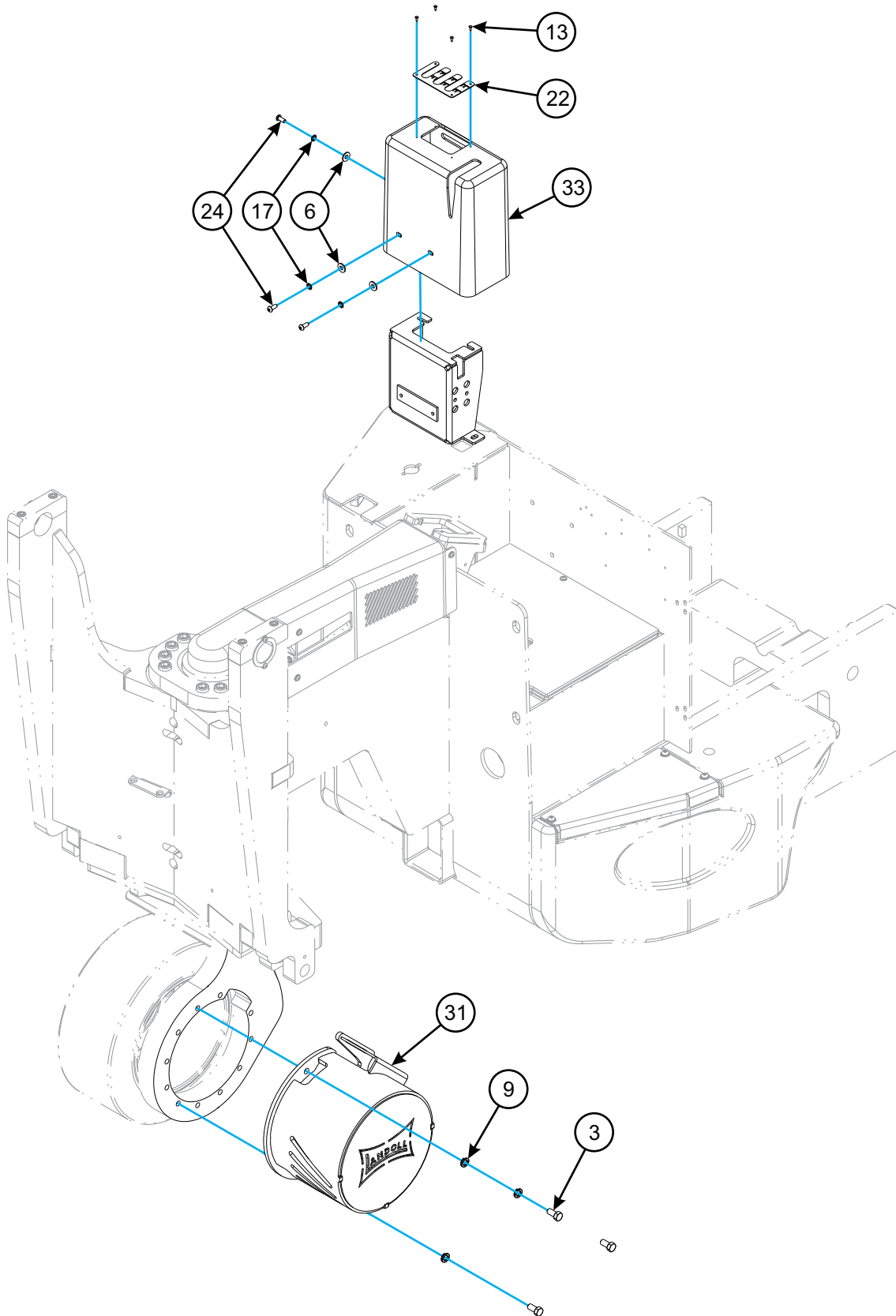


Figure 1-13: Covers Installation (2 of 3)

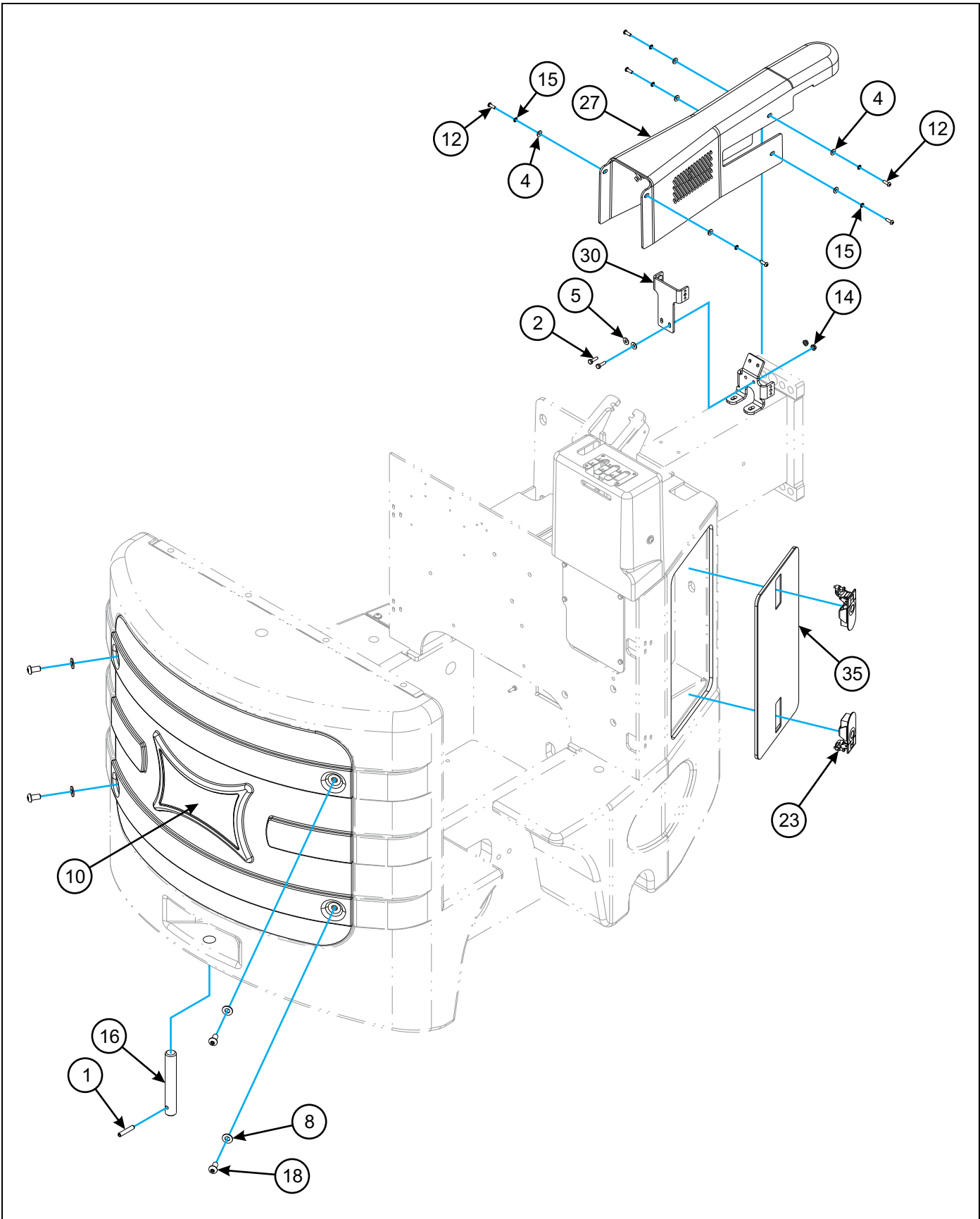
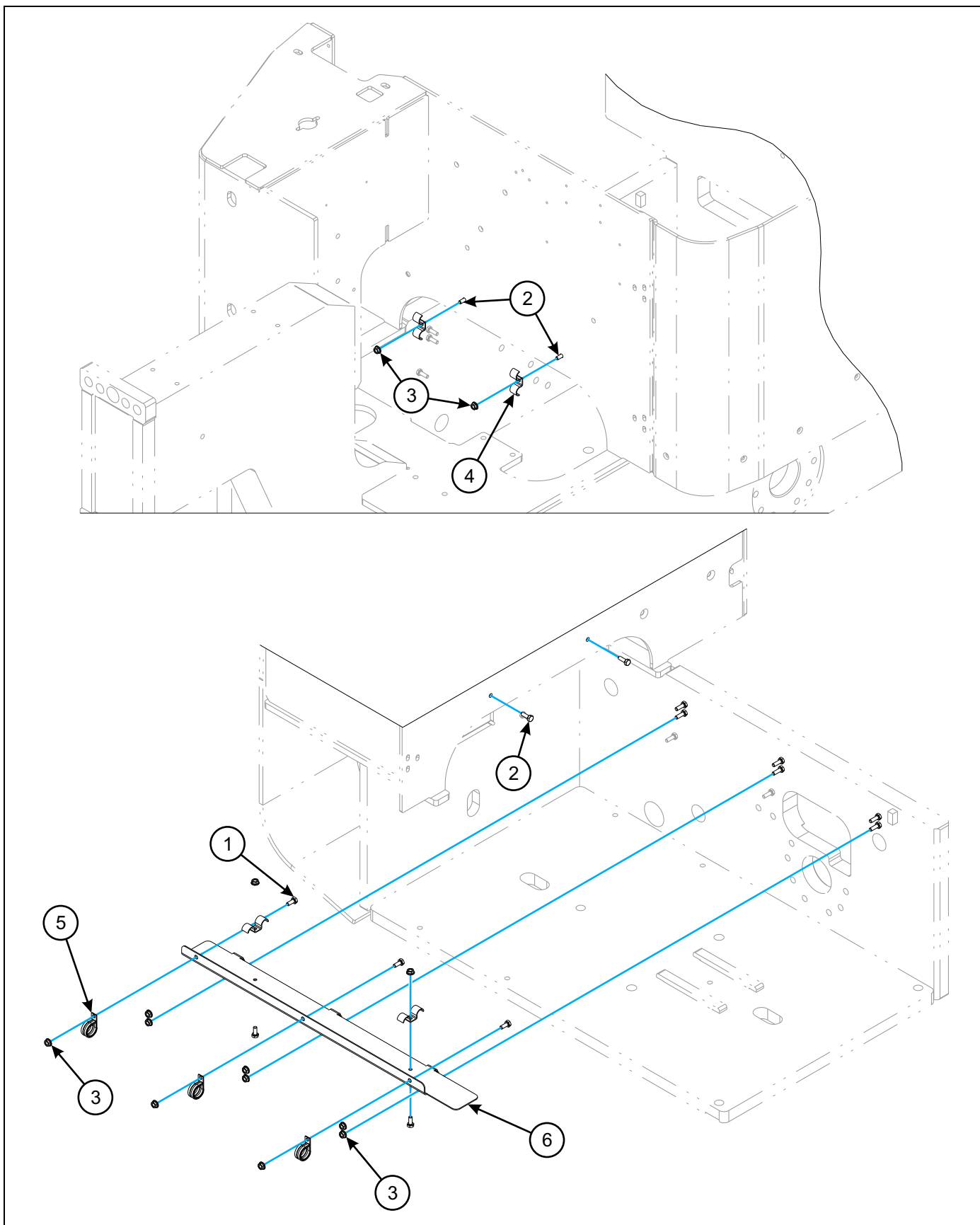


Figure 1-14: Covers Installation (3 of 3)

Covers Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-647-010004255	PIN, SPRING, SLOTTED 3/8X2	1
2	1-654-010047-05	SCREW, HEX CAP 1/4-20UNC GR5	2
3	162248	SCREW HX CP 1/2-20UNF X 1 GR5	3
4	1-861-010032-06	WASHER, FLAT 1/4 N ZP/CD	6
5	1-861-010032-07	WASHER, FLAT 1/4 ZP	2
6	1-861-010032-09	WASHER, FLAT 5/16 W ZP/CD	3
7	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	3
8	1-861-010032-14	WASHER, FLAT 1/2" N ZP/CD	4
9	1-861-010034-13	WASHER, LKG HLCL SPR, 1/2	3
10	104077	COVER, BT ELECT ENCLOSURE	1
11	104877	SCREW, HX CP, 1/4-20UNCX1/2 GR5	4
12	106955	SCREW, BHSC 1/4-20UNCX3/4	6
13	107539	SCREW PNHD 6-32X1/2 SSHK	4
14	108417	NUT SPIRAL 1/4-20HX FG	2
15	108797	WASHER 1/4 LKG INT TOOTH	12
16	110427	PIN, HITCH 1-1/8IN	1
17	110843	SCREW BHSC 5/16-18UNCX3/4	3
18	111341	SCREW, BHSC 1/2-13UNCX1	4
19	111899	SCREW, BHSC 3/8-16UNCX3/4	3
20	115958	SCREW, BHSC 1/4-20UNCX1/2	2
21	119734	WASHER, 3/8 LKG INTERNALTOOTH	3
22	121422	PLACARD, OPERATOR DATA	1
23	121526	LATCH, COMPRESSION	2
24	127627	WASHER 5/16 LKG INT TOOTH	3
25	130345	PIN, SPRING, SLOTTED 5/16X3/4	2
26	136969	COVER, B40DM-4 COLUMN PIPING	1
27	145726	COVER, B3-4 STEERING ROTATION	1
28	145754	ACLTR ASSY, B3-4 (SEE PAGE 1-82)	1
29	145755	PLATE WLDMT, B3-4 LH FLOOR	1
30	145859	BRACKET WLDMT, B3-4 UPR ROTCVR	1
31	145863	SHROUD WLDMT, B3-4 DRIVE MOTOR	1
32	153466	PLATE, BT/AC HYD LINKAGE CVR	1
33	155677	COVER, CTRL LEVERS B30AC	1
34	161412	PLATE, STEP CVR B3	1
35	170637	COVER WLDMT, B3-4 CNTOR COMPT	1

**Figure 1-15: Hose Routing Installation**

Hose Routing Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010047-03	SCREW, HEX 1/4-20UNCX5/8	5
2	1-654-010047-04	SCREW,HEX CAP,1/4-20X3/4 GR5	2
3	108417	NUT SPIRAL 1/4-20HX FG	13
4	109099	CLAMP, 5/8 DOUBLE TUBE	4
5	239-9076-009	CLAMP	3
6	157345	TRAY, CABLE & HARNESS B3-AC	1

Table provided for general use.

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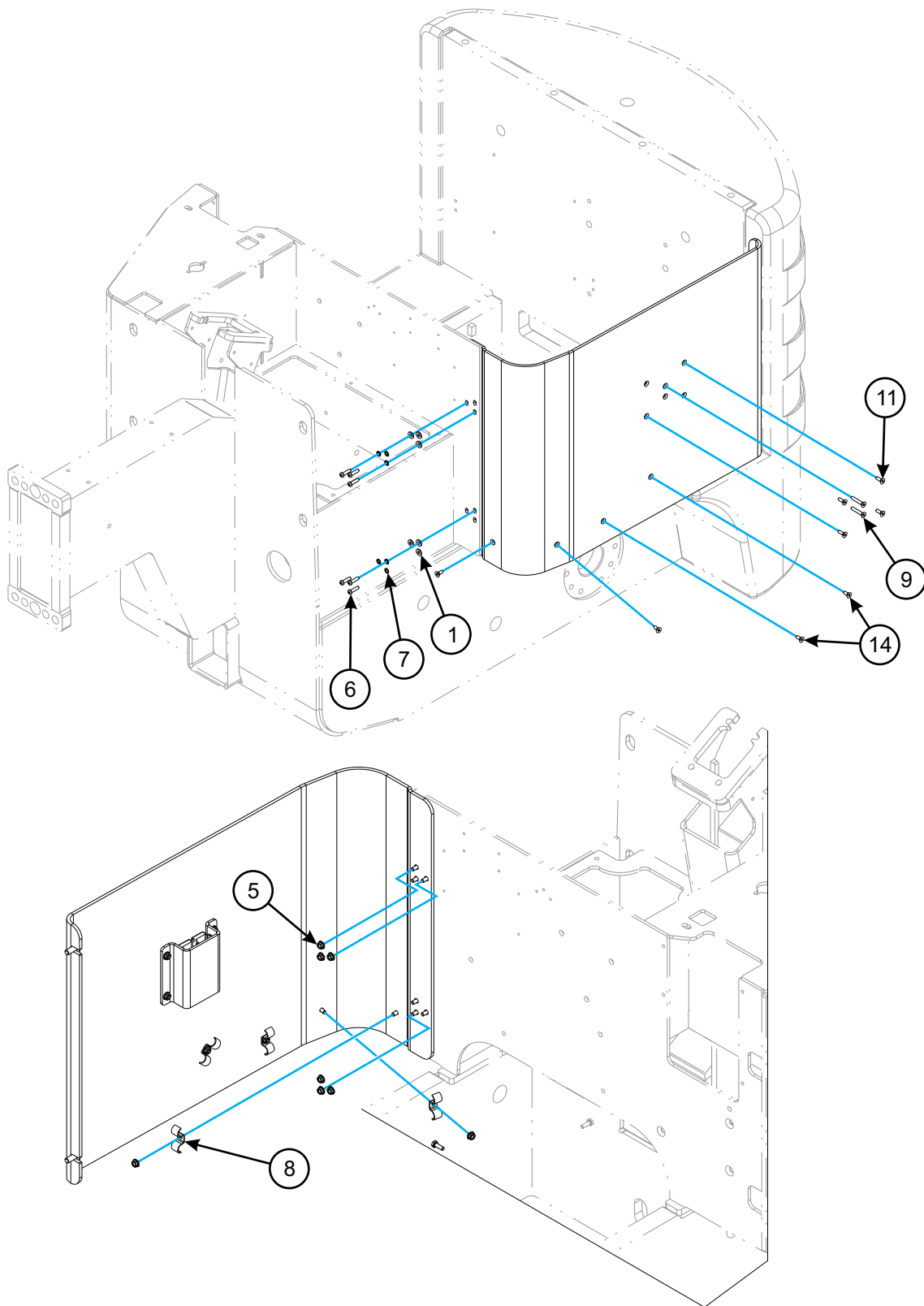
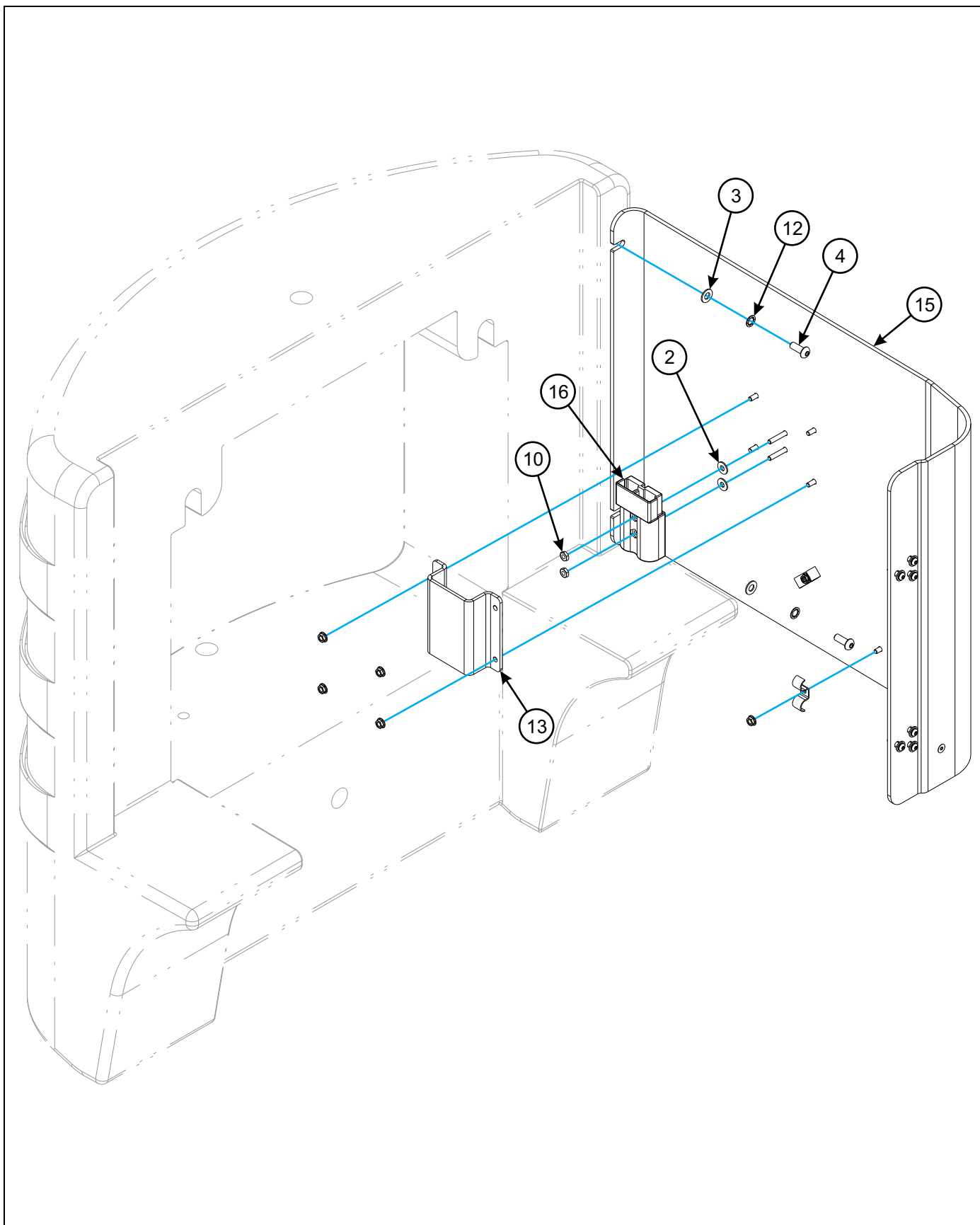


Figure 1-16: Rigid Door Installation (1 of 2)

**Figure 1-17: Rigid Door Installation (2 of 2)**

Rigid Door Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-861-010032-06	WASHER, FLAT 1/4 N ZP/CD	6
2	1-861-010032-07	WASHER,FLAT 1/4 ZP	2
3	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	2
4	108336	SCREW SKT BTN 3/8-16X1	2
5	108417	NUT SPIRAL 1/4-20HX FG	14
6	108610	SCREW BHSC 1/4-20UNCX1	6
7	108797	WASHER 1/4 LKG INT TOOTH	6
8	109099	CLAMP, 5/8 DOUBLE TUBE	4
9	111630	SCREW,HXSKT CTSK1/4-20UNCX1.5	2
10	115963	NUT,HVY HX JAM 1/4-20	2
11	118631	SCREW HX SKT CTSK1/4-20X3/4ZP	4
12	119734	WASHER, 3/8 LKG INTERNALTOOTH	2
13	127090	CHANNEL,B40UK-4 BATT CONN MNT	1
14	127356	SCREW HXSKT CTSK1/4-20UNCX5/8	4
15	128859	PANEL,B30UK-4 LH BATT COMP	1
16	30008	CONNECTOR BATTERY SB350 BLUE	1

Table provided for general use.

[illegible]

Decals

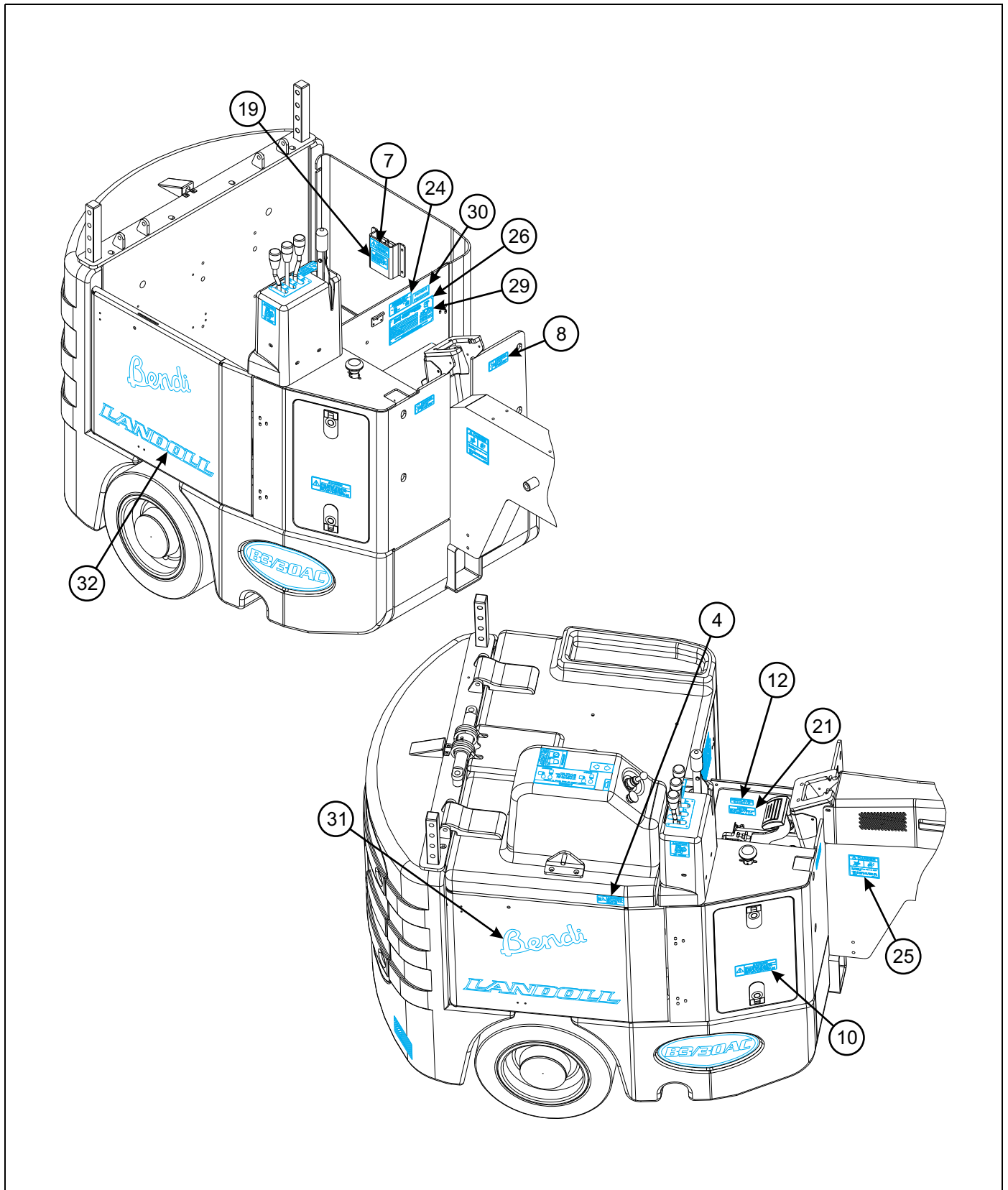


Figure 1-18: Decal Placement (1 of 2)

ILLUSTRATED PARTS LIST

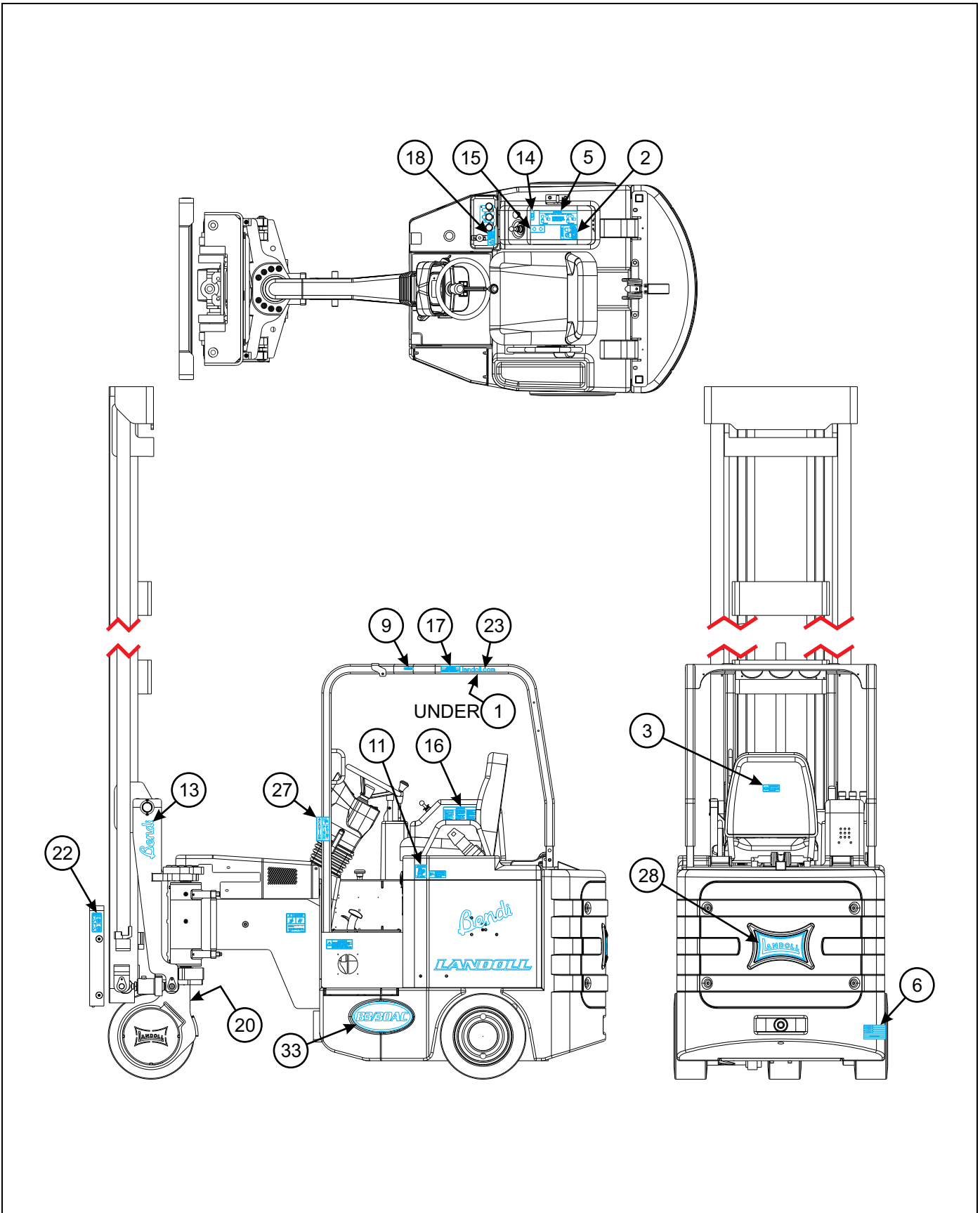


Figure 1-19: Decal Placement (2 of 2)

Decal Placement

ITEM	PART NUMBER	DESCRIPTION	QTY.
1		DECAL, DANGER ROLLOVER	1
2		DECAL, OVERLOAD WARNING	1
3		DECAL, BEFORE OPER. WARNING	1
4		DECAL, COVER OPEN WARNING	2
5		DECAL, PROPER VEH. LOADING	1
6		DECAL, MADE IN USA FLAG	1
7		DECAL, BATTERY WARNING	1
8		DECAL, SIDE SHIFT CAUTION	2
9		DECAL, OVERHEAD GUARD	1
10		DECAL, TIRE REPLACEMENT	2
11		DECAL, OPERATOR WARNING	1
12		DECAL, HYDRAULIC FLUID ONLY	1
13		DECAL, OHG PINCH PT	2
14		DECAL, BENDI DIRECTIONAL	1
15		DECAL, HORN BENDI	1
16		DECAL, NO RIDERS	2
17		DECAL, DO NOT REMOVE GUARD	1
18		DECAL, APPLY PARK BRAKE	1
19		DECAL, BATTERY LEAD WARNING	1
20		DECAL, BREVINI OIL SPEC	1
21		DECAL, SER 4 HYD FILTER	1
22		DECAL, WARNING, FORK HAZARD	2
23		DECAL, LANDOLL.COM GRAY	1
24		DECAL, FORKLIFT PATENTS	1
25		DECAL, DANGER PINCHING	2
26	107-0828	POP RIVET 5/32 CHERRY #BSP52	4
27	130602	DECAL, DREXEL YELLOW BENDI 8	2
28	130603	DECAL, DREXEL YELLOW BOW-TIE	1
29	163857	DATA PLATE, LANDOLL FORKLIFT	1
30	2P726	DECAL, PATENT PENDING	1
31	151430	DECAL, BENDI 12 (BLACK)	2
32	152870	DECAL, BLK OUTLINE 20" LANDOLL	2
33	158958	DECAL, B3/30AC SIDE p	2
34	173698	SAFETY LABELS, BT/B3 (INCLUDES ITEMS 1 - 25 AND EXTRAS)	1



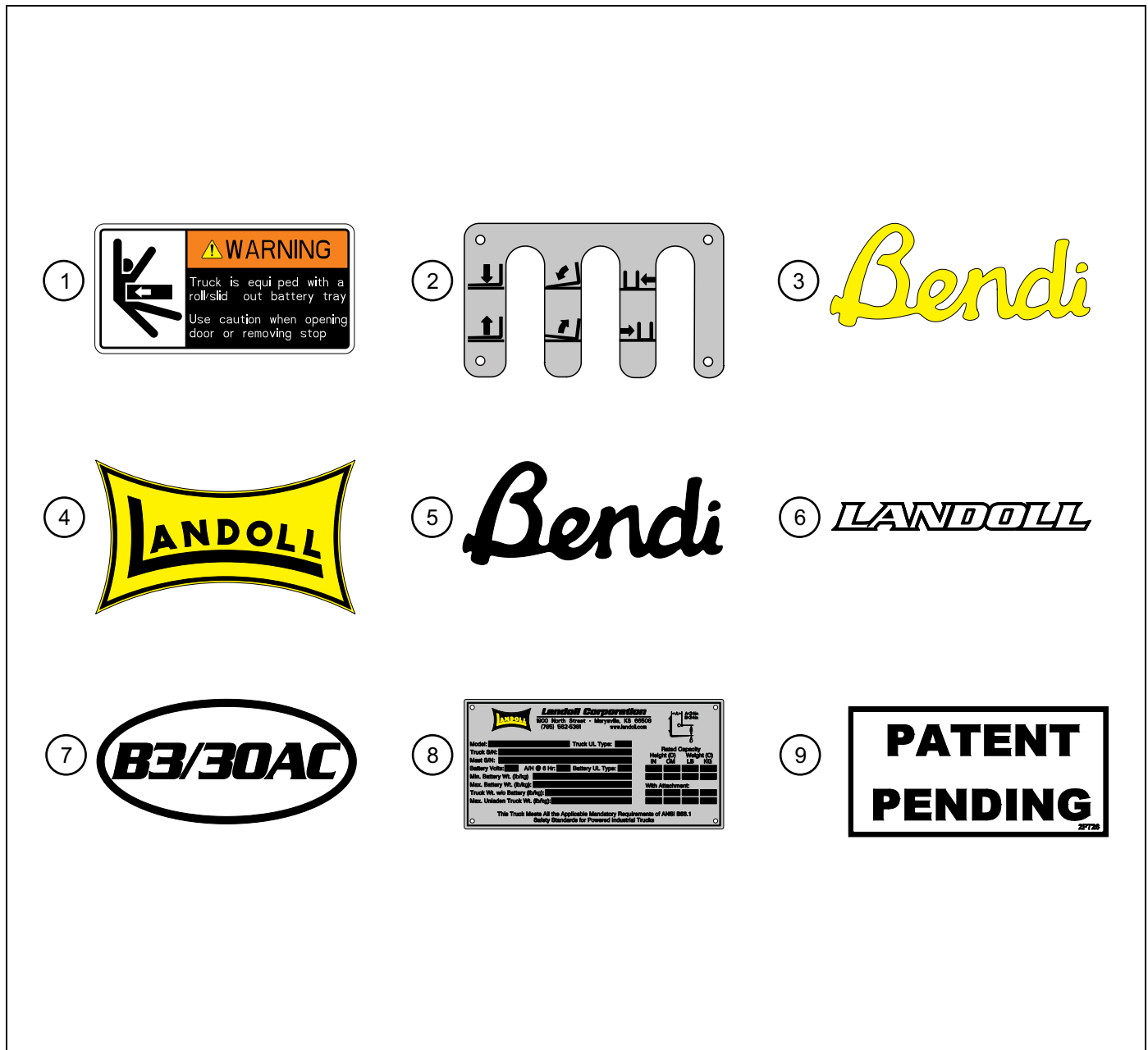


Figure 1-21: Decals (2 of 2)

Decals

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	102159	DECAL, CAUTION ROLLOUT BATT.	1
2	121422	PLACARD, OPERATOR DATA	1
3	130602	DECAL,DREXEL YELLOW BENDI 8	2
4	130603	DECAL,DREXEL YELLOW BOW-TIE	1
5	151430	DECAL,BENDI 12 (BLACK)	2
6	152870	DECAL,BLK OUTLINE 20" LANDOLL	2
7	158958	DECAL, B3/30AC SIDE	2
8	163857	DATA PLATE, LANDOLL FORKLIFT	1
9	2P726	DECAL, PATENT PENDING	1
10	173698	SAFETY LABELS, BT/B3 (INCLUDES EXTRAS)	1

Electrical

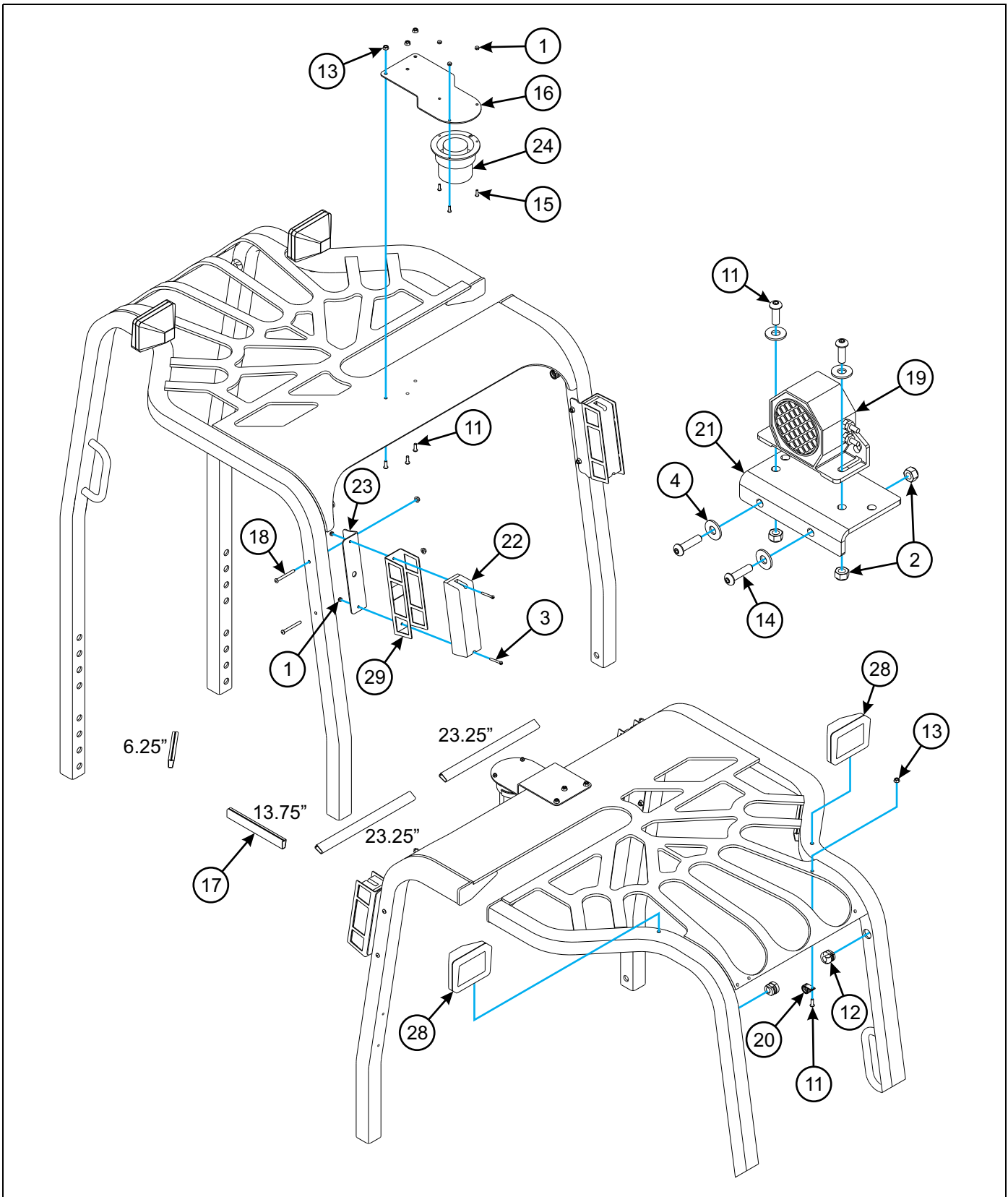


Figure 1-22: Alarm and Lighting

Alarm and Lighting

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010003-06	NUT,HEX,SLFLKG W/NLY 10-24	
2	1-512-010003-09	NUT,1/4-20 ESNA	
3	1-654-010100028	SCREW MACH TRUSS HD 10-24X1	
4	1-861-010032-07	WASHER,FLAT 1/4 ZP	
5	2-879-010103	WIRE INSULATED 18AWG BLACK (NOT SHOWN)	
6	239-3646-3	TERMINAL #14AWG TO #8 RING (NOT SHOWN)	
7	622-2967-002	PLUG 2 POS. (FEMALE) (NOT SHOWN)	
8	622-2967-015	SOCKET, 16-18AWG, SOLID (NOT SHOWN)	
9	622-2967-018	WEDGE, 2 POS PLUG (NOT SHOWN)	
10	9-879-010066	WIRE,INSULATED, 18AWG RED (NOT SHOWN)	
11	106955	SCREW,BHSC 1/4-20UNCX3/4	
12	108409	BUSHING,STR-THRU STRN RELIEF	
13	108417	NUT SPIRAL 1/4-20HX FG	
14	108610	SCREW BHSC 1/4-20UNCX1	
15	109394	SCREW, BHSC #10-24UNCX5/8	
16	110289	BRACKET,STROBE MOUNT	
17	110470	SURFACE RACEWAY (SOLD BY THE INCH) (ORDER LENGTH OF EACH PIECE INDIVIDUALLY)	
18	115849	SCREW BHSC 1/4-20UNCX2-1/2 ZP	
19	117997	ALARM DB ADJ SMART BACKUP	
19	143573	ALARM, 12-80VDC 87DBA	
19	158471	ALARM, 102dBA 12-48V BACK-UP	
20	125894	CLAMP, CABLE 5/8 SST	
21	127991	BRACKET, BACKUP ALARM MNT I/C	
22	145817	ASSY, 48V LED TAIL LIGHT	
23	146056	BRACKET, LED TAILLIGHT MNT	
24	146067	ASSY, 12-80V LED STROBE	
24	110467	ASSY,REVERSE STROBE	
25	146160	HARNESS, PM/SL REV LT JMP (NOT SHOWN)	
26	154179	HARNESS, OHG HEAD LT BENDI AC (NOT SHOWN)	
27	154180	HARNESS OHG TAIL LT BENDI AC (NOT SHOWN)	
28	169104	LIGHT,48V SQUARE LED FLOOD	
29	0030024	BRACKET STOP LIGHTS	

NOTE: QUANTITIES NOT SHOWN DUE TO THE VARIETY OF COMBINATIONS OF ALARM AND LIGHTING OPTIONS.

Table provided for general use.

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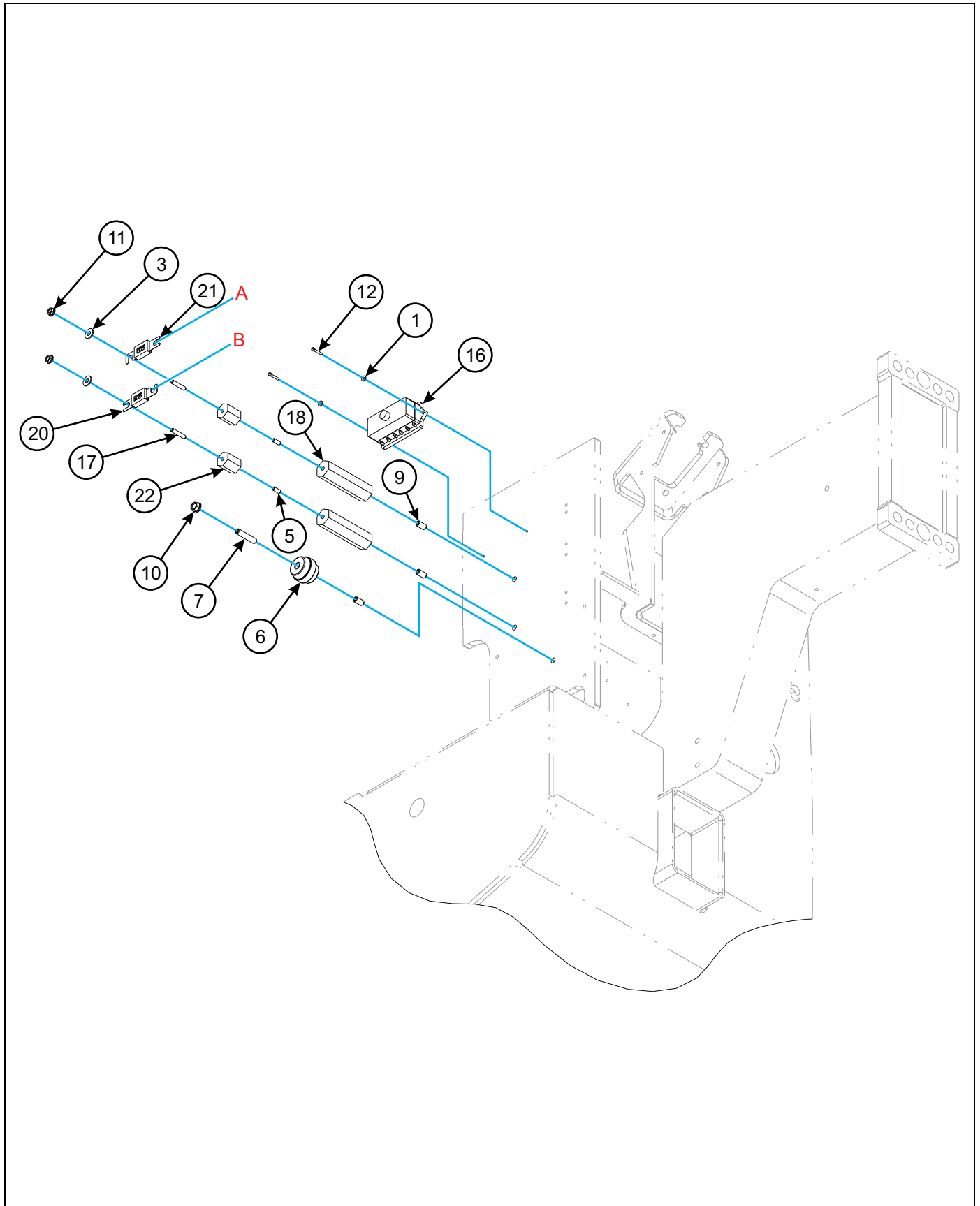


Figure 1-23: Contactors Installation (1 of 2)

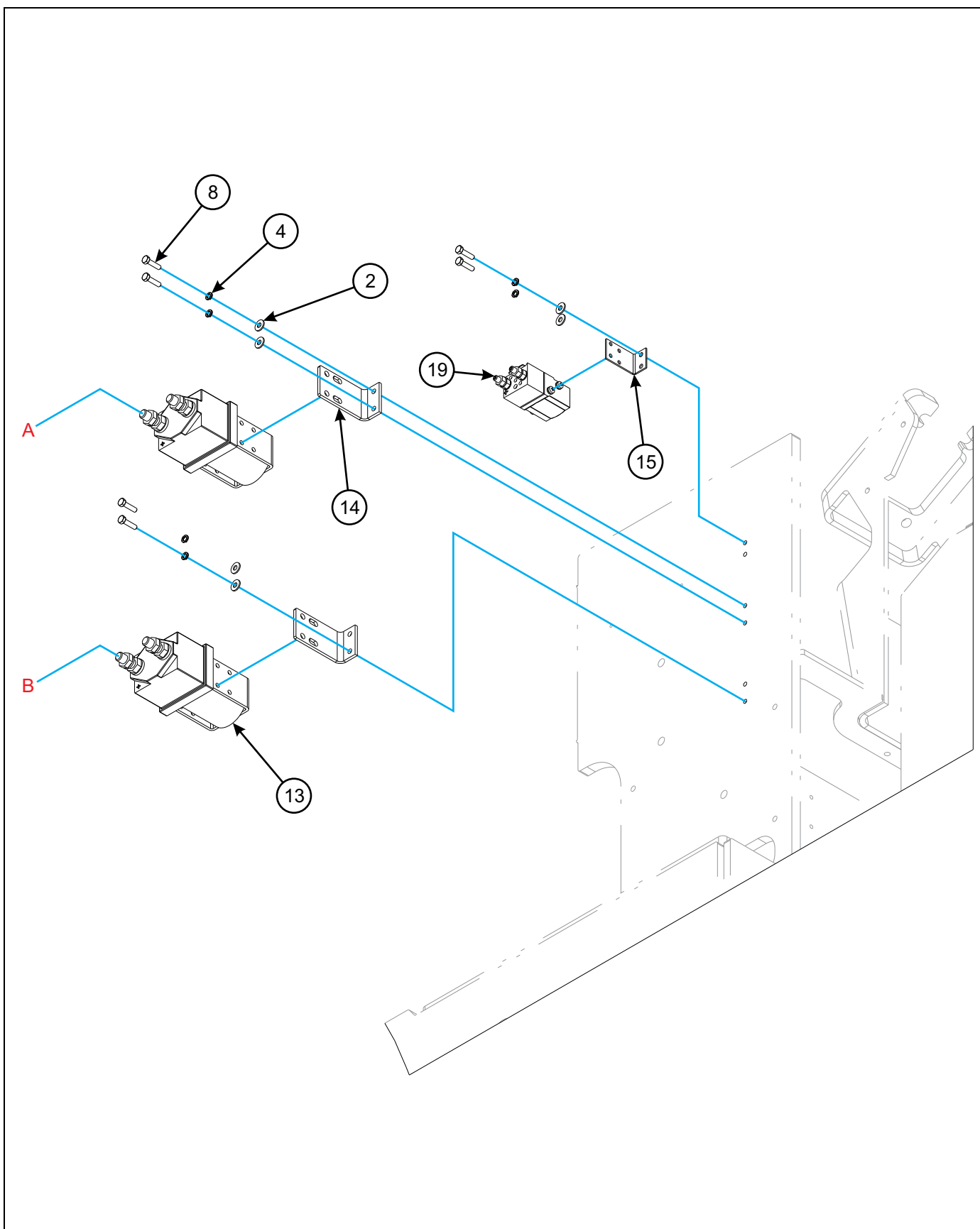
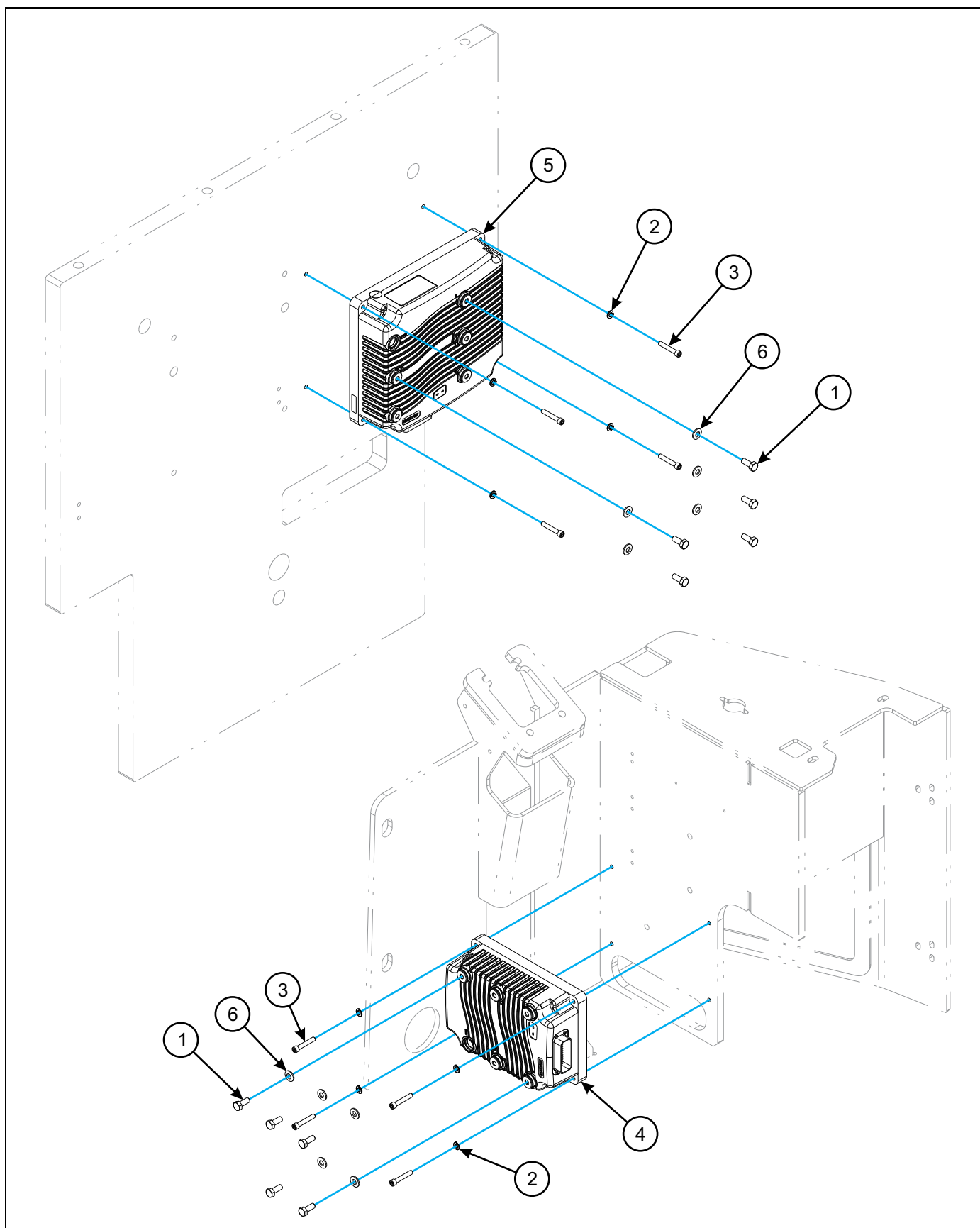


Figure 1-24: Contactors Installation (2 of 2)

Contactors Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-861-010032-01	WASHER, FLAT #6 ZP/CD	2
2	1-861-010032-03	WASHER, FLAT #10 ZP/CD	6
3	1-861-010032-07	WASHER,FLAT 1/4 ZP	2
4	1-861-010034-07	WASHER,LKG,HLCL SPR, NO 10	6
5	101375	SCREW HEX,SKT 1/4-20X5/8	2
6	105494	INSULATOR,600V STANDOFF	1
7	106100	SCREW,SET,HX SKT3/8-16X1-3/4	1
8	107-0002	#10-24X3/4LG HHCS	6
9	107-0984	SCREW,SET 3/8-16UNCX.75KNRLCPT	3
10	107470	NUT,SPIRALOCK 3/8-16HX	1
11	108417	NUT SPIRAL 1/4-20HX FG	2
12	122187	SCREW,MACH SLOT FILL 6-32X3/4	2
13	143542	CONTACTOR, SW200 W/ DUST SHLD	2
14	143547	MOUNT,SW CONTACTOR B3-2	2
15	145406	L-BRACKET FOR CONTACTOR	1
16	146061	HOLDER, COVERED 6 FUSE	1
17	146072	SCREW, HEX/SKT, 1/4-20X1-1/4	2
18	146632	STANDOFF, FUSE INSULATOR	2
19	152144	CONTACTOR,SW60 48V DC ENCLSD	1
20	36204	FUSE, 425 AMP	1
21	36205	FUSE 325 AMP	1
22	40-0933	INSULATOR, POWER FUSE	2

**Figure 1-25: Controller Installation**

Controller Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010166-04	SCREW M8-1 25X20 HCS 8.8 ZP	10
2	1-861-010034-09	WASHER, LKG HLCL SPR, 1/4	8
3	118575	SCREW HX SKT HD1/4-20X1-1/2ZP	8
4	146295	CONTROLLER, 48V 350A AC MOTOR	1
5	146296	CONTROLLER, 48V 650A AC MOTOR	1
6	146613	WSHR,5/16IDX5/64THK CONL SAF	10



Figure 1-26: Drive Motor Assembly

Drive Motor Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	157539	MOTOR, AC B3 DRIVE	
1	144599	PIN SIZE 20 DEUTSCH	4
2	150673	RECEPTACLE 6 PIN SIZE 20	1
3	150674	LOCK RECEPTACLE 6 PIN	1
4	170122	SHAFT SEAL 38X52X7 BA	1
5	170123	WAVY-WASHER KAS 67-K3	1
6	170124	BALL BEARING 6008 2ZC3 HL	1
7	170127	GEAR WHEEL SENSOR 200-64	1
8	170128	BALL BEARING 6205 2ZC3 HL	1
9	170130	CYL SCRW DIN912 M6X16-8.8-A1P-	1
10	174269	STATOR 200	1
11	174270	SENSOR, TEMPERATURE COMPLETE	1
12	174271	SENSOR, COMPLETE	1
13	174272	ROTOR 200-AS	1

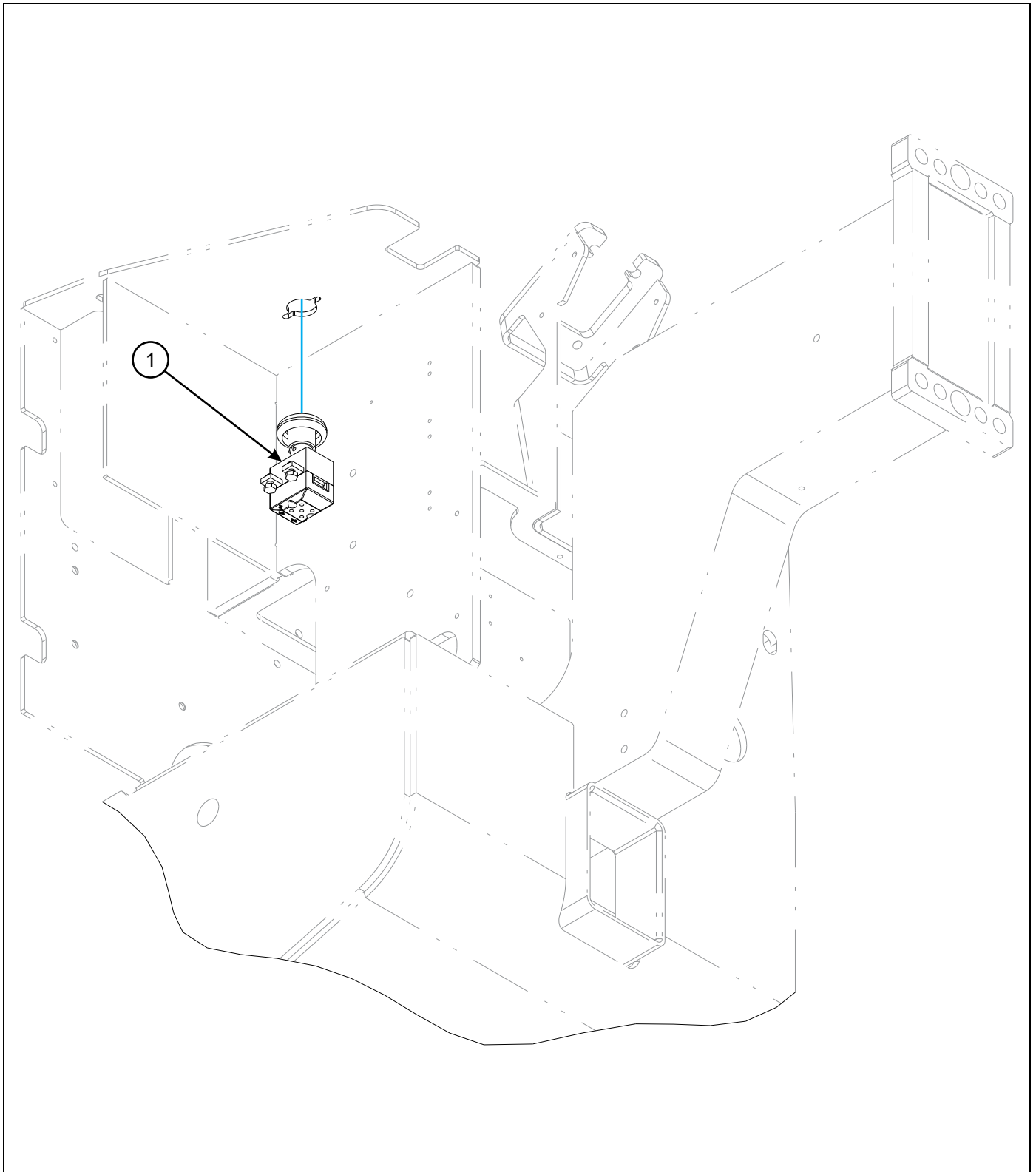


Figure 1-27: Emergency Stop Button Installation

Emergency Stop Button Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0030010	SWITCH,EMERGENCY KILL,BENDI48	1

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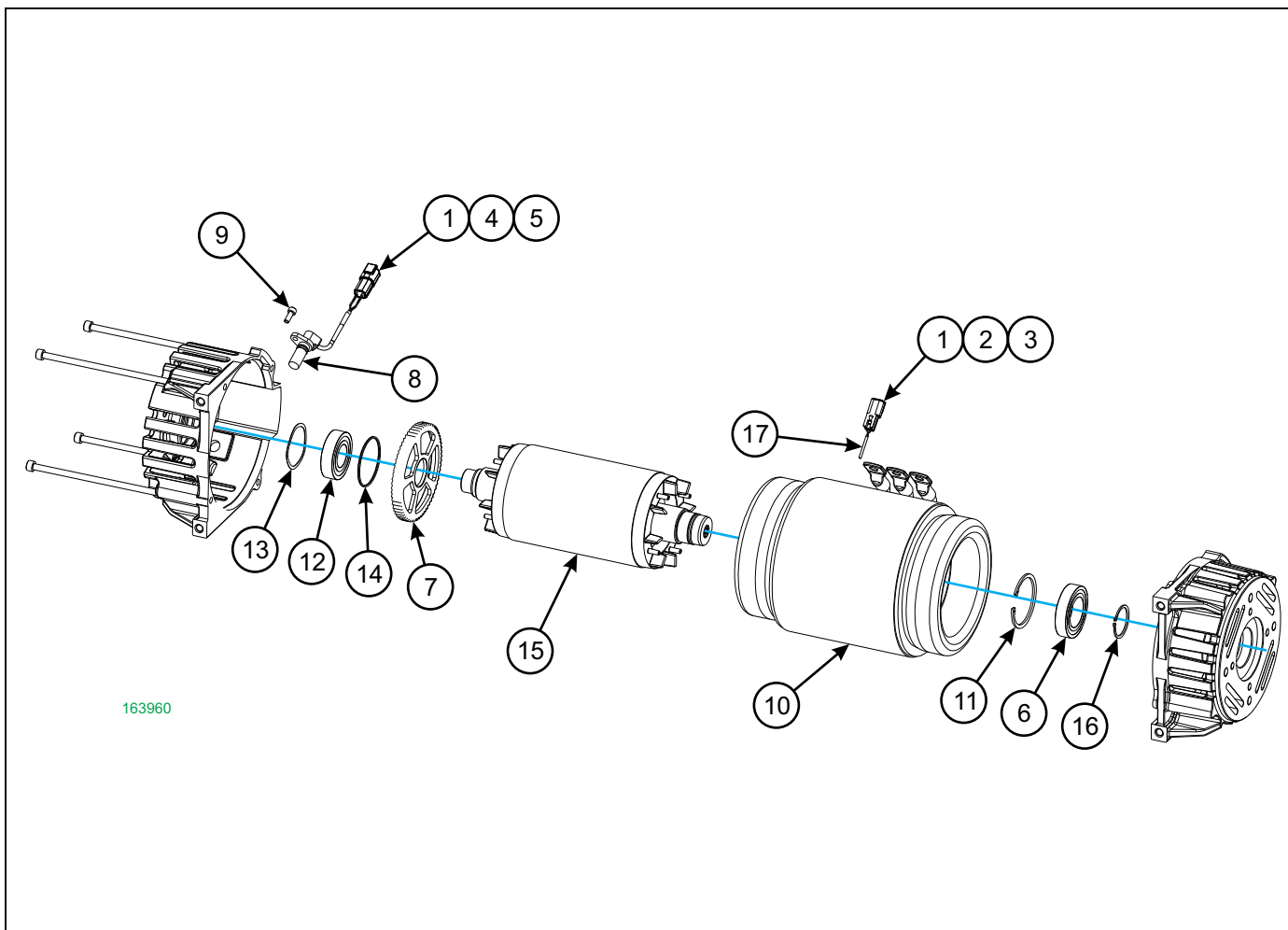
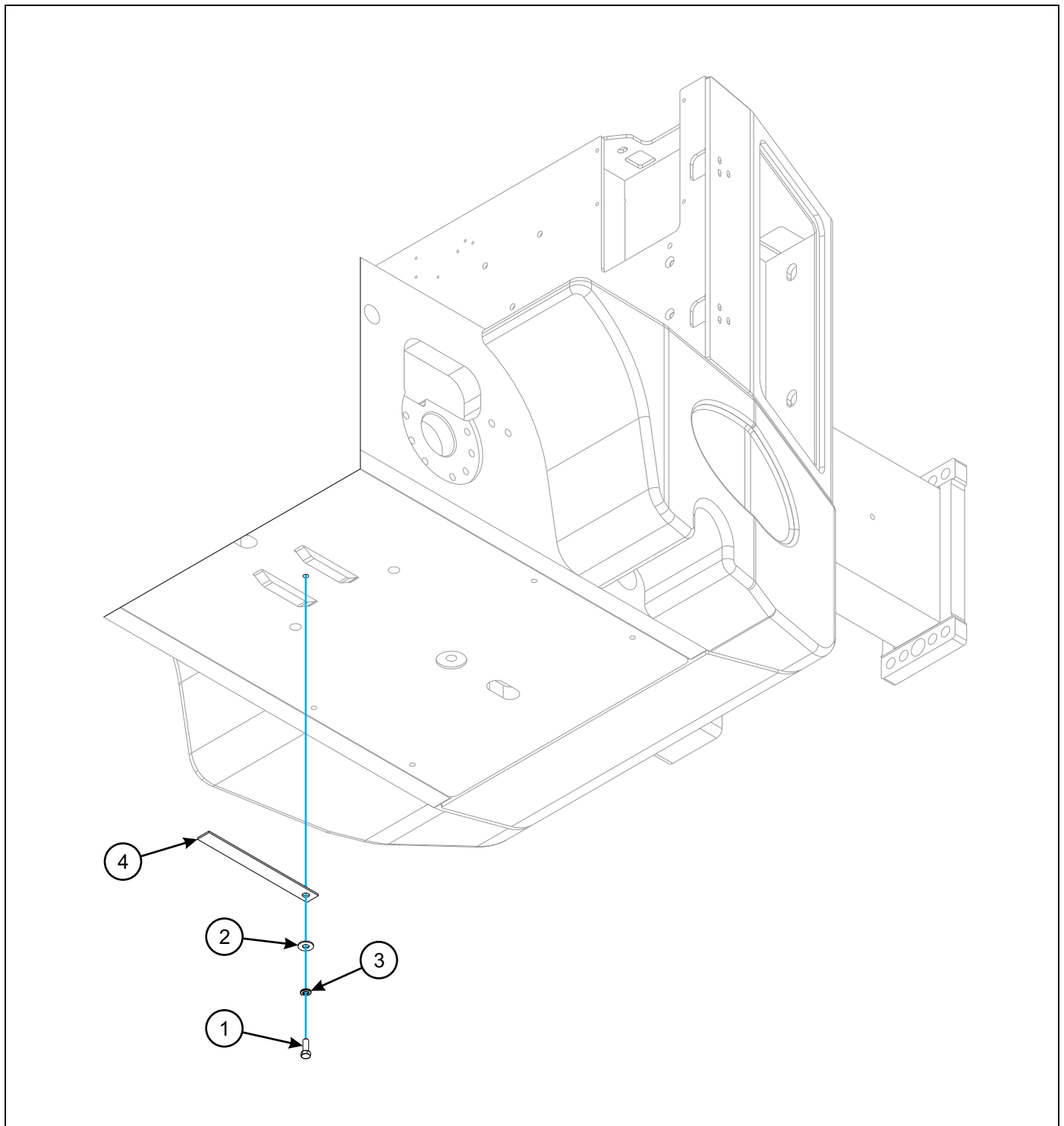


Figure 1-28: Pump Motor Assembly

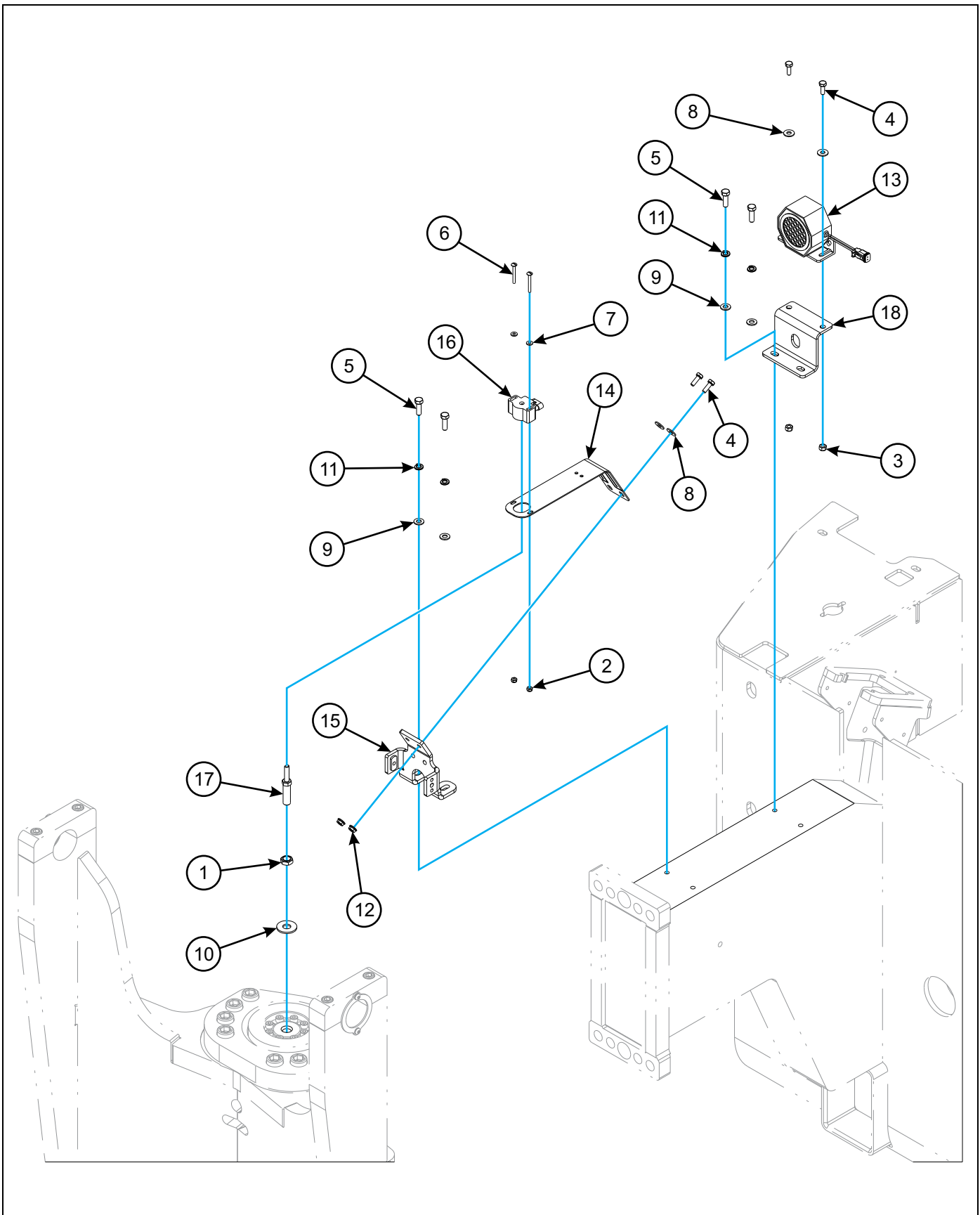
Pump Motor Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	163960	MOTOR,SCH 20KW AC PUMP	
1	144599	PIN SIZE 20 DEUTSCH	6
2	150665	RECEPTACLE 2 PIN SIZE 20	1
3	150666	LOCK RECEPTACLE 2 PIN	1
4	150669	RECEPTACLE 4 PIN SIZE 20	1
5	150670	LOCK RECEPTACLE 4 PIN	1
6	170124	BALL BEARING 6008 2ZC3 HL	1
7	170127	GEAR WHEEL SENSOR 200-64	1
8	170129	SENSOR COMPLETE	1
9	170130	CYL SCR W DIN912 M6X16-8.8-A1P-	1
10	170134	STATOR 200	1
11	170135	CIRCLIP DIN 472-68X2, 5	1
12	170136	BALL BEARING 6206 2ZC3 HL	1
13	170137	WAVY WASHER 6206K3	1
14	170138	O-RING 62X2, 0	1
15	170139	ROTOR 200-AS	1
16	170140	CIRCLIP DIN471-40X1,75	1
17	170141	TEMP SENSOR CPL KTY84-130 DTM	1

**Figure 1-29: Static Strap Installation**

Static Strap Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010051-05	SCREW,HEX CAP 3/8-16UNCX1 GR5	1
2	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	1
3	1-861-010034-11	WASHER, LKG HLCL SPR, 3/8	1
4	6719	STRAP, GROUND	1

**Figure 1-30: Steering Potentiometer and Horn Installation**

Steering Potentiometer and Horn Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-511-010002-05	NUT,HEX JAM,1/2-20UNF GR2	1
2	1-512-010003-03	NUT,HX 8-32,SLF-LKG W/NYL	2
3	1-512-010003-09	NUT,1/4-20 ESNA	2
4	1-654-010047-04	SCREW,HEX CAP,1/4-20X3/4 GR5	4
5	1-654-010049-05	SCREW HX CP 5/16-18UNCX1 GR5	4
6	1-656-010003034	SCREW, 8-32X1-1/2 RD HD MACH	2
7	1-861-010032-02	WASHER,FL #8 ZP/CD	2
8	1-861-010032-07	WASHER,FLAT 1/4 ZP	4
9	1-861-010032-08	WASHER,FLAT 5/16 ZP	4
10	1-861-010032-15	WASHER, FLAT 1/2 W ZP/CD	1
11	1-861-010034-10	WASHER,LKG 5/16	4
12	108417	NUT SPIRAL 1/4-20HX FG	2
13	116144	HORN, BT ELECTRONIC	1
14	145851	BRACKET, B3-4 FLEX STEER POT	1
15	145857	BRACKET WLDMT, B3-4 ROT SW/CVR	1
16	145962	POT,CONTINUOUS ROTATION 5K	1
17	160442	ROD,B55 POTENTIOMETER DRIVE	1
18	145740	BRACKET, B3-4 STRG BLKHED/HORN	1

Hydraulics

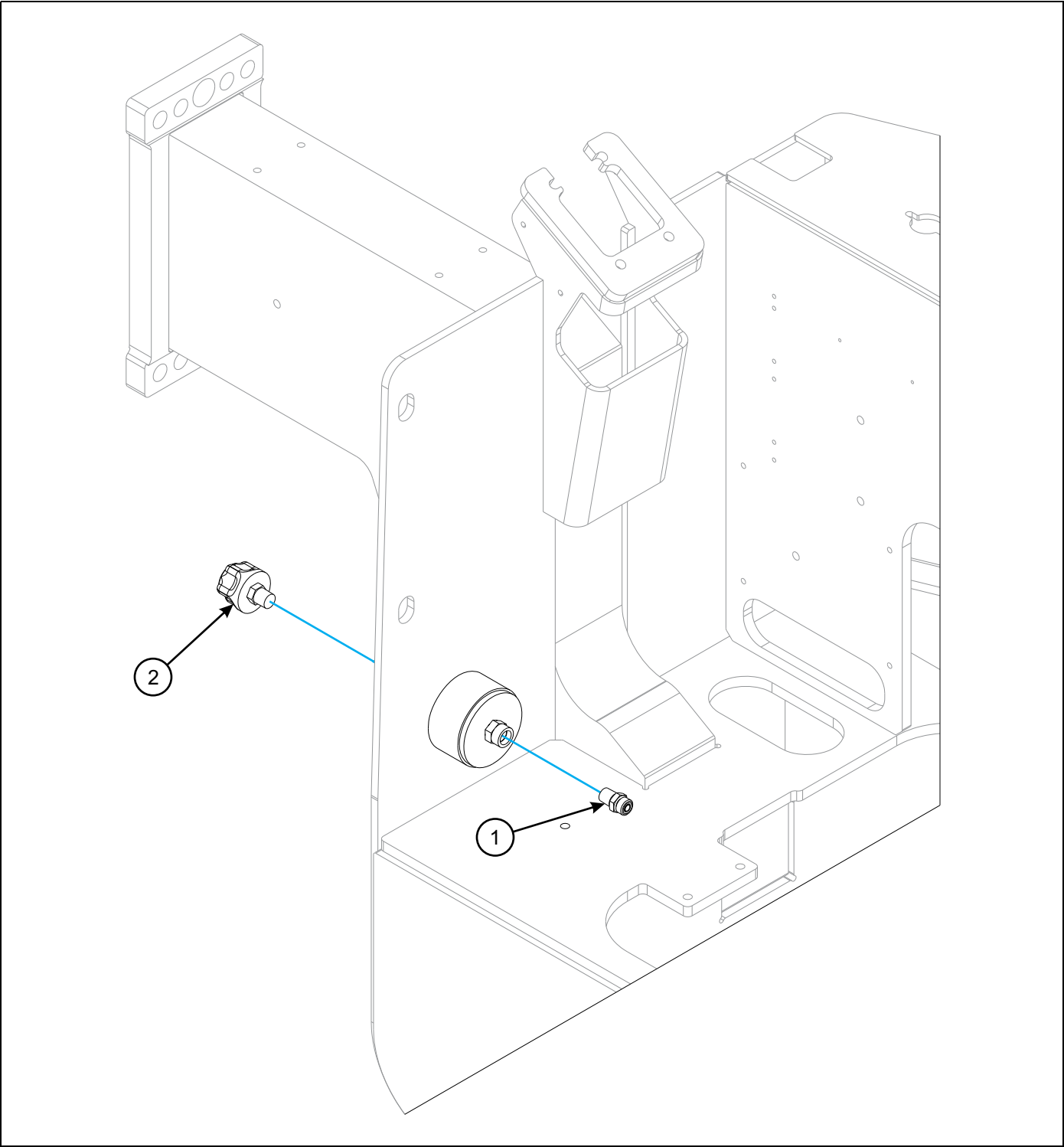
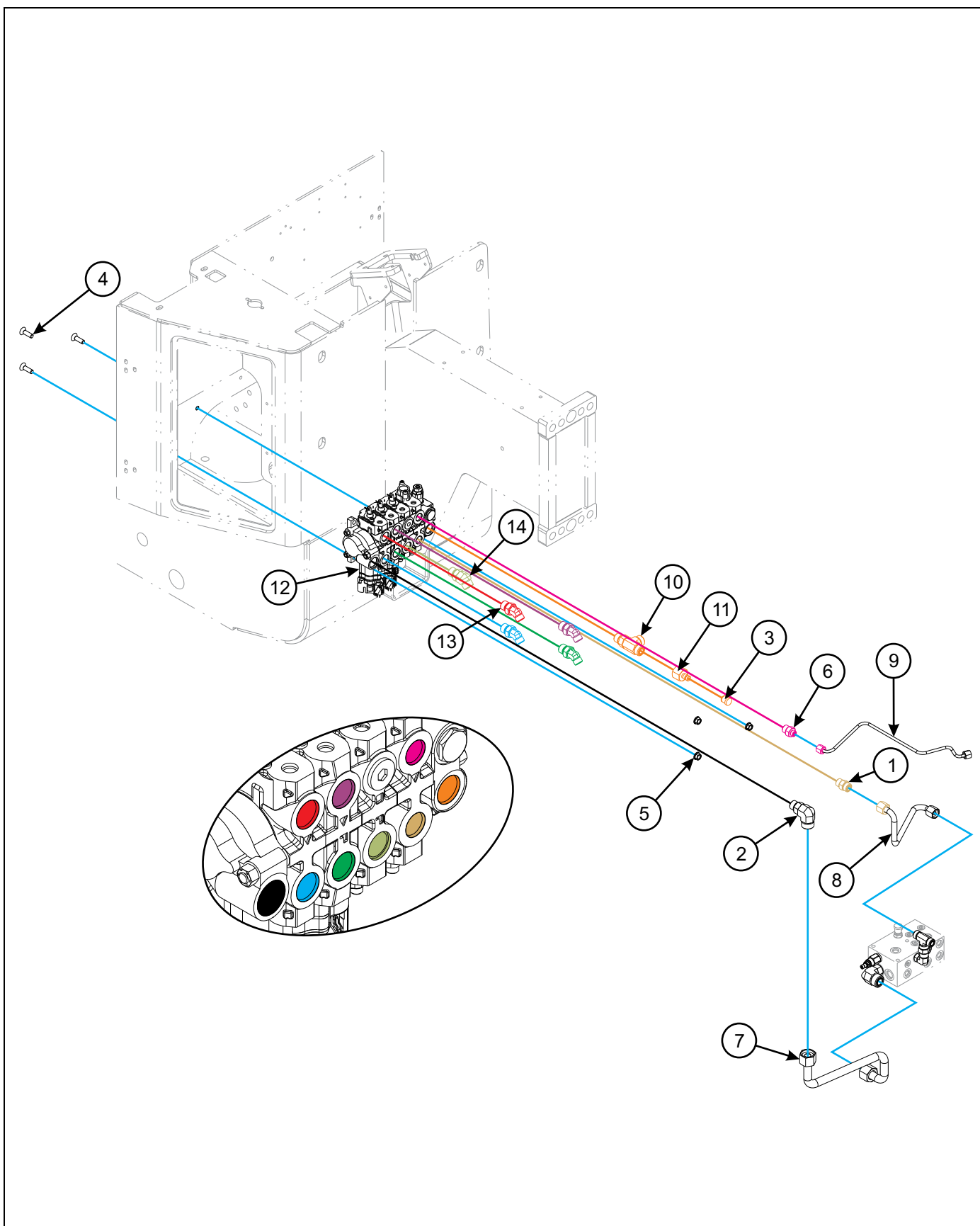


Figure 1-31: Breather Installation

Breather Installation

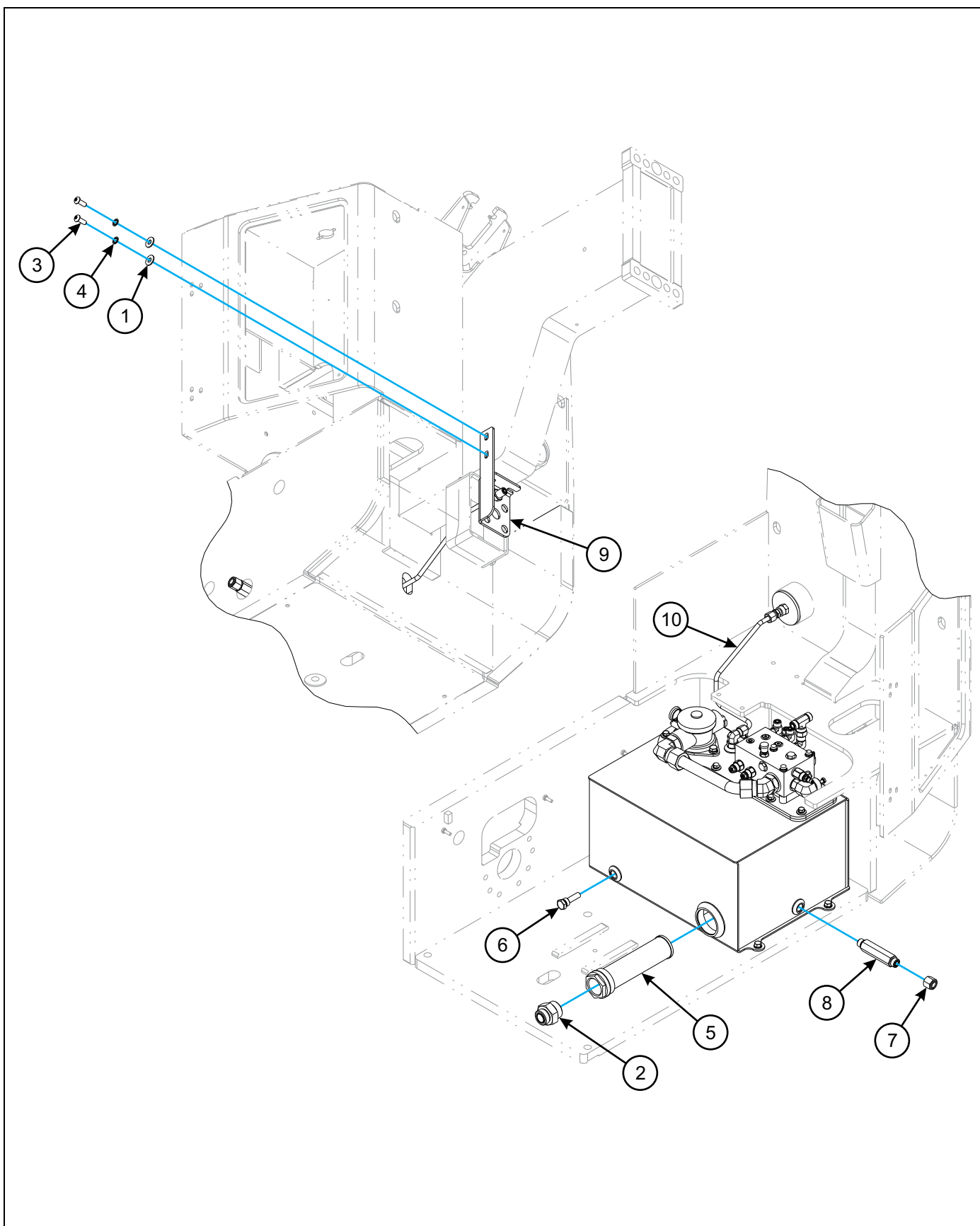
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	123910	ADAPTER,#6ORS X #6NPT,CONNECT	1
2	125056	BREATHER,SER 4 HYDRAULIC TANK	1

[illegible]

**Figure 1-32: Hydraulic Control Valve Installation**

Hydraulic Control Valve Installation

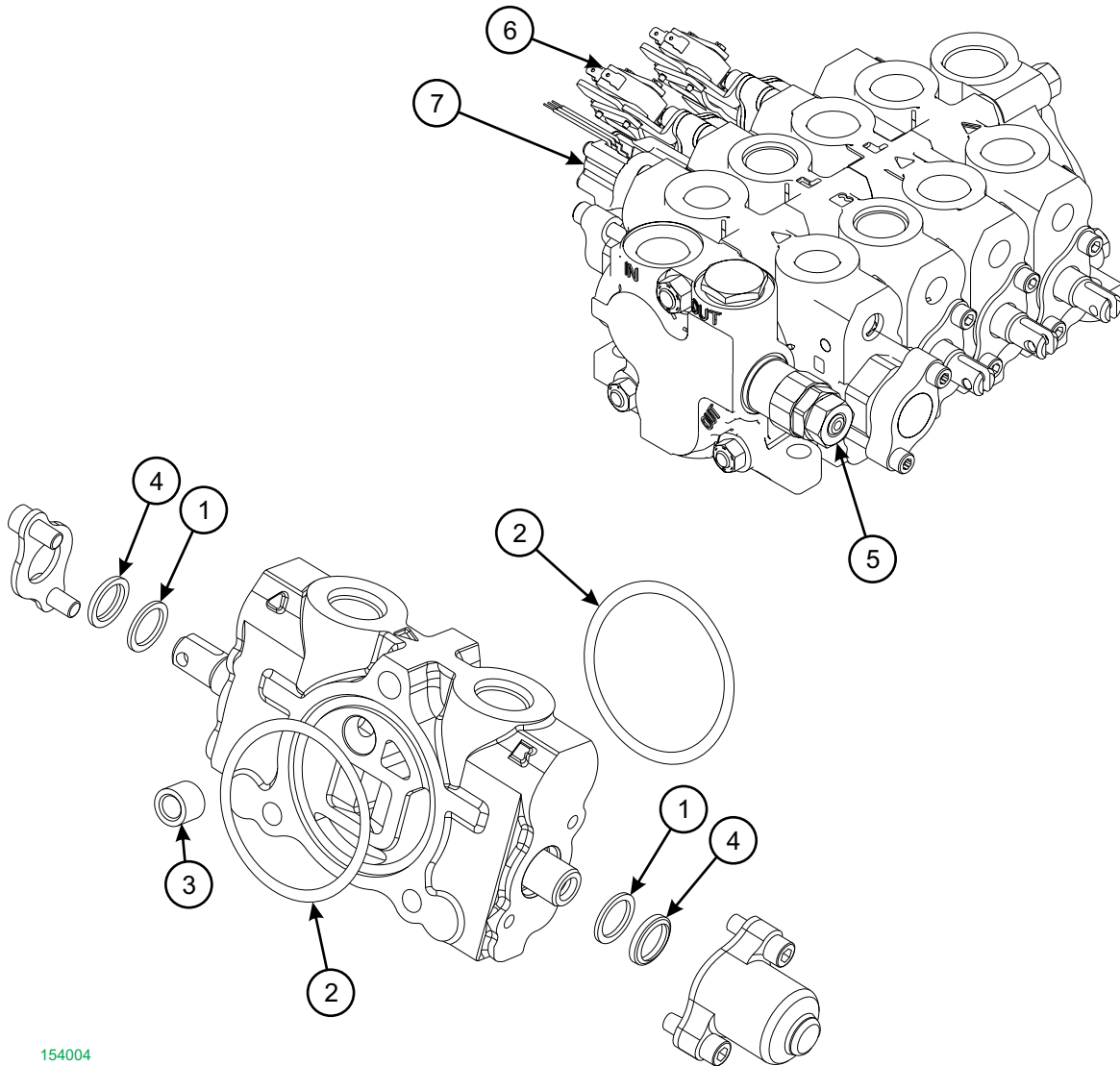
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0018110	ADAPTER VALVE 1/2	1
2	0018119	ADAPTER P-STEER PUMP SUCTION	1
3	0018149	PORT DUST COVER	1
4	106429	SCREW,HX SKTCTSK3/8-16X1-1/4	3
5	107470	NUT, SPIRALOCK 3/8-16HX	3
6	127621	ADAPTER, #4 ORS X #8 ORB CONN	1
7	145853	TUBE, B3-4 HYD VAVLE RETURN	1
8	145854	TUBE, B3-4 STRG PRESS SUPPLY	1
9	145855	TUBE, B3-4 VLV LDSN TO ORBTL	1
10	153283	ADAPTER, #10 ORS RUN TEE	1
11	153284	NIPPLE, #10 ORS DIAGNOSTIC	1
12	154004	VALVE, 3SPL HUSCO AX30454-180 (SEE PAGE 1-56)	1
13	154541	ADAPTER, #8ORS X #10ORB, 45ELB	4
14	154542	ADAPTER, #10ORS X #10ORB, 45ELB	1

**Figure 1-33: Hydraulic Components Installation**

Hydraulic Components Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	2
2	102048	ADAPTER, #20 ORB X #16 ORS ST	1
3	108336	SCREW SKT BTN 3/8-16X1	2
4	119734	WASHER, 3/8 LKG INTERNALTOOTH	2
5	126088	STRAINER, TANK SAE #20 O-RING	1
6	127759	PLUG MAGNETIC #8 SAE 3/4-16	1
7	135032	CAP, FEMALE, 08 ORS	1
8	145736	ADAPTER, 80RB X 80RS LONG ACTR	1
9	145737	BRACKET, B3-4 MAST HOSE BLKHD	1
10	145739	TUBE, B3-4 BREATHER TO TANK	1

ILLUSTRATED PARTS LIST



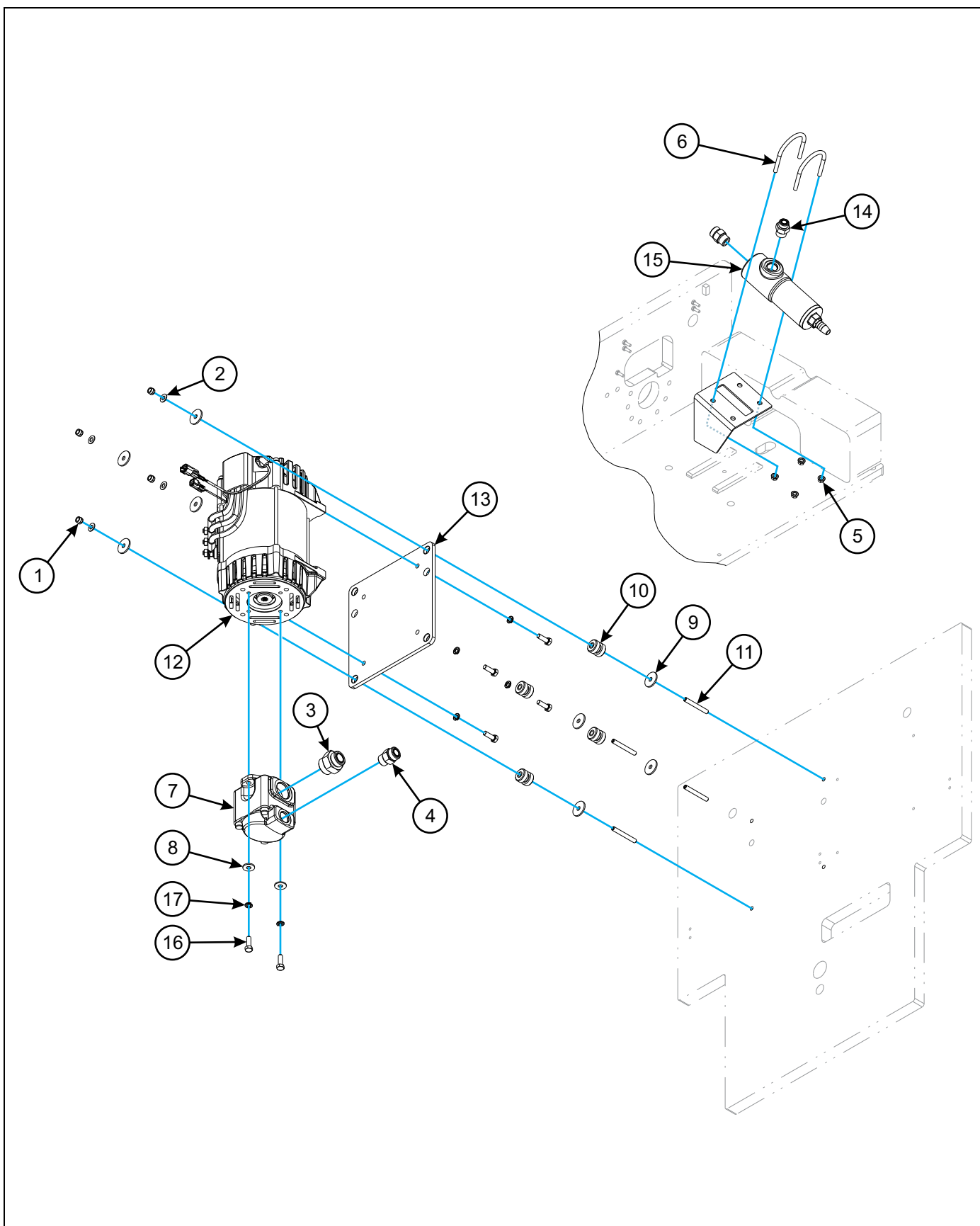
154004

Figure 1-34: Hydraulic Control Valve Assembly

Hydraulic Control Valve Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	154004	VALVE, 3SPL HUSCO AX30454-180	
1	168223	O-RING	2
2	168219	O-RING	2
3	168220	POPPET-C.V.	1
4	168222	WIPER	2
5	168221	RELIEF VALVE ASSY.	1
6	25035	SWITCH, MICRO	2
7	156260	KIT, BTAC LIFT SPOOL SENSOR (ONE KIT PER SPOOL)	REF

[illegible]

**Figure 1-35: Hydraulic Motor, Pump, and Filter Installation**

Hydraulic Motor, Pump, and Filter Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010005-05	NUT, HEX, SLFLKG GRB 3/8-16	4
2	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	4
3	102048	ADAPTER,#20 ORB X #16 ORS ST	1
4	104382	ADAPTER,#12 ORS X #12 ORB ST	2
5	107470	NUT, SPIRALOCK 3/8-16HX	4
6	110578	U-BOLT, 3/8-16 x 3-1/8 x 4-1/8	2
7	146676	PUMP, BI-T3 AUXILIARY HYD	1
8	149443	WASHER, FLAT M10 STD ZP	2
9	154015	WASHER 3/8X1-1/2X1/8 FENDER	8
10	154016	MOUNT, BT/AC HYD MTR ANTI-VIB	4
11	157542	SCREW, 3/8-16X3 CUP PT SET	4
12	163960	MOTOR, SCH 20KW AC PUMP (SEE PAGE 1-46)	1
13	165738	PLATE PUMP MTR MOUNT SL	1
14	167736	ADAPTER, #12ORB X #10 ORS STRP	1
15	173927	FILTER, 3000PSI 60GPM HYD	1
16	7CM1030ER	SCREW M10-1.5X30 HCS 10.9 ZP	6
17	M10SLW ZP	WASHER, SPLIT LK METRIC 10MMZP	6

ILLUSTRATED PARTS LIST

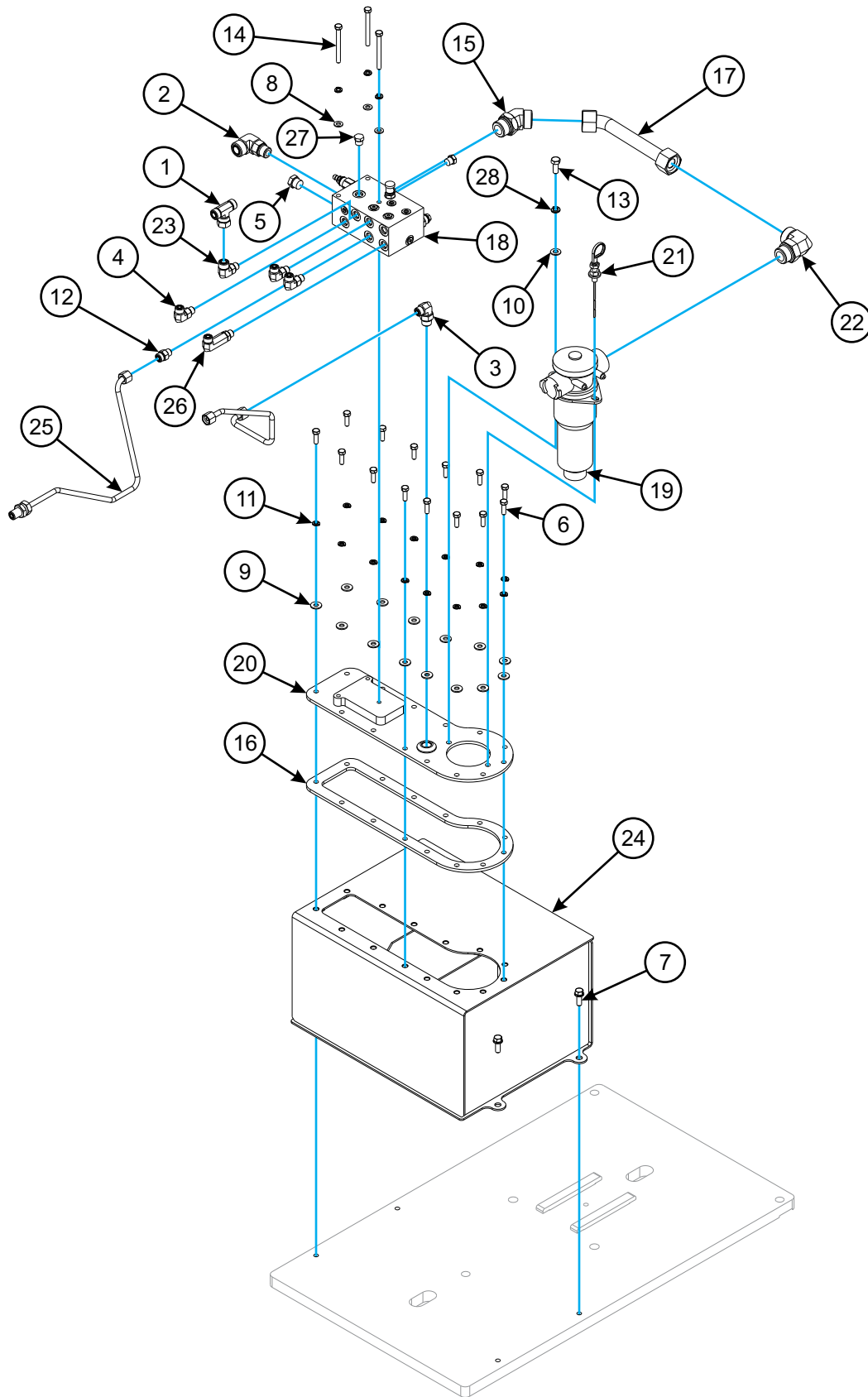


Figure 1-36: Hydraulic Tank Installation

Hydraulic Tank Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0018117	FITTING RETURN LINE MCV TEE	1
2	0018119	ADAPTER P-STEER PUMP SUCTION	1
3	0018120	ADAPTER P-STEER PUMP PRESSURE	1
4	0018136	ADAPTER P-STEER RELIEF PRESS	3
5	1-007-010025	PLUG, 3/4-16 O-RING BOSS	1
6	1-654-010049-05	SCREW HX CP 5/16-18UNCX1 GR5	14
7	1-655-010003-05	SCREW,FLANGE HD 3/8-16X1 GR8	4
8	1-861-010032-08	WASHER,FLAT 5/16 ZP	3
9	1-861-010032-09	WASHER, FLAT 5/16 W ZP/CD	14
10	1-861-010032-10	WASHER, FLAT 3/8" N ZP/CD	1
11	1-861-010034-10	WASHER,LKG 5/16	17
12	104582	ADAPTER,#6 ORS X #6 ORB ST	1
13	107-0754	SCREW, HHC, M10 X 1.5 X 25	1
14	109874	SCREW,HEX CAP,5/16-18X3-1/4GR	3
15	123909	ADAPTER,#16ORSX#16ORB,45 ELB	1
16	128305	GASKET,B40DM-4 HYD TANK COV	1
17	129421	TUBE,VALVE BODY TO FILTER	1
18	129608	VALVE, SER 5 STEERING CONTROL (SEE PAGE 1-63)	1
19	129635	FILTER,IN-TANK,NON-VENT,44GPM (SEE PAGE 1-62)	1
20	129677	COVER WLDMT,SER4 HYD TANK	1
21	130149	DIPSTICK,SER 4 HYD TANK	1
22	130595	ADAPTER,#16ORSX#16ORB,90 ELB	1
23	131808	FITTING,90 8-6 ORF TO ORB	1
24	145729	TANK WLDMT, B3-4 HYDRAULIC	1
25	145738	TUBE, B3-4 VLV BDY M2 TO BLKHD	1
26	156301	ADAPTER, #6ORFS X #6ORB 90L	1
27	900598-6S	PLUG O-RING 9/16-18 AEROQUIP	2
28	M10SLW ZP	WASHER,SPLIT LK METRIC 10MMZP	1

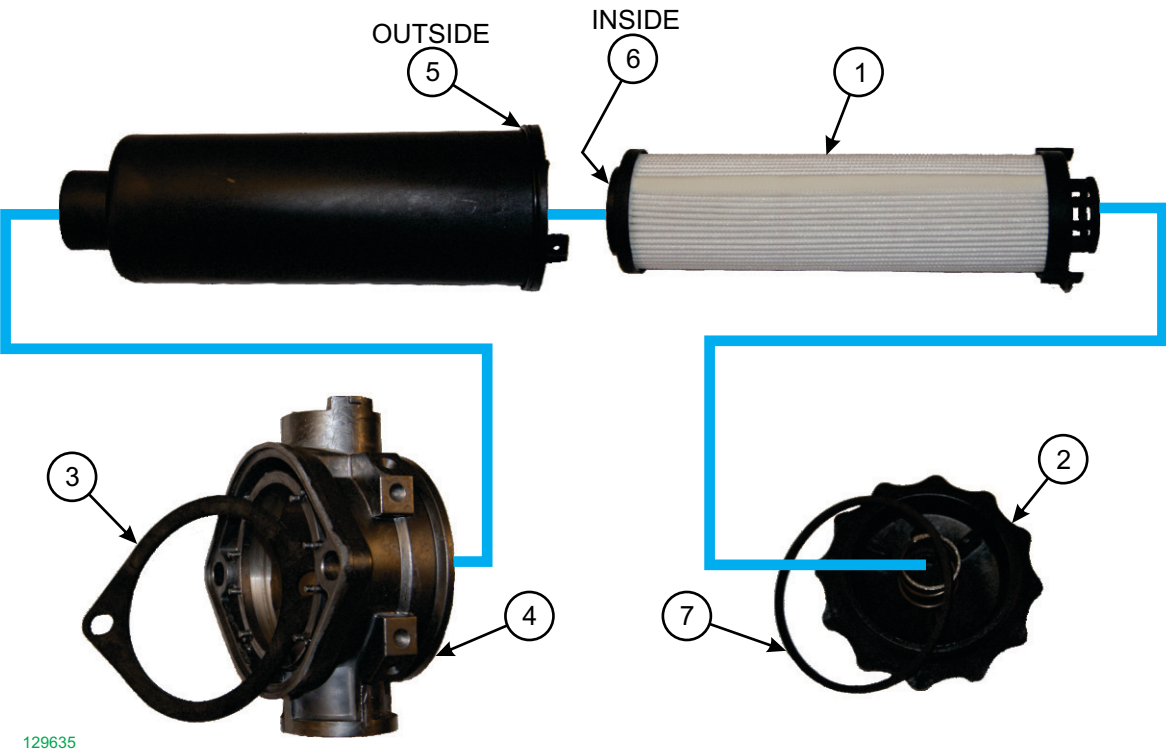


Figure 1-37: In-Tank Filter Assembly

In-Tank Filter Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	129635	FILTER,IN-TANK,NON-VENT,44GPM	
1	112876	REPLACEMENT FILTER ELEMENT	1
2	149560	LID	1
3	149562	GASKET	1
4	151507	SEAL COVER PLATE 84X3.4X3-NBR	1
5	149561	O-RING 71.12X2.62	1
6	168584	O-RING 34X3.5-NBR-70	1
7	149563	SEAL KIT (ALSO INCLUDES ITEMS 3, 5, AND 6)	REF

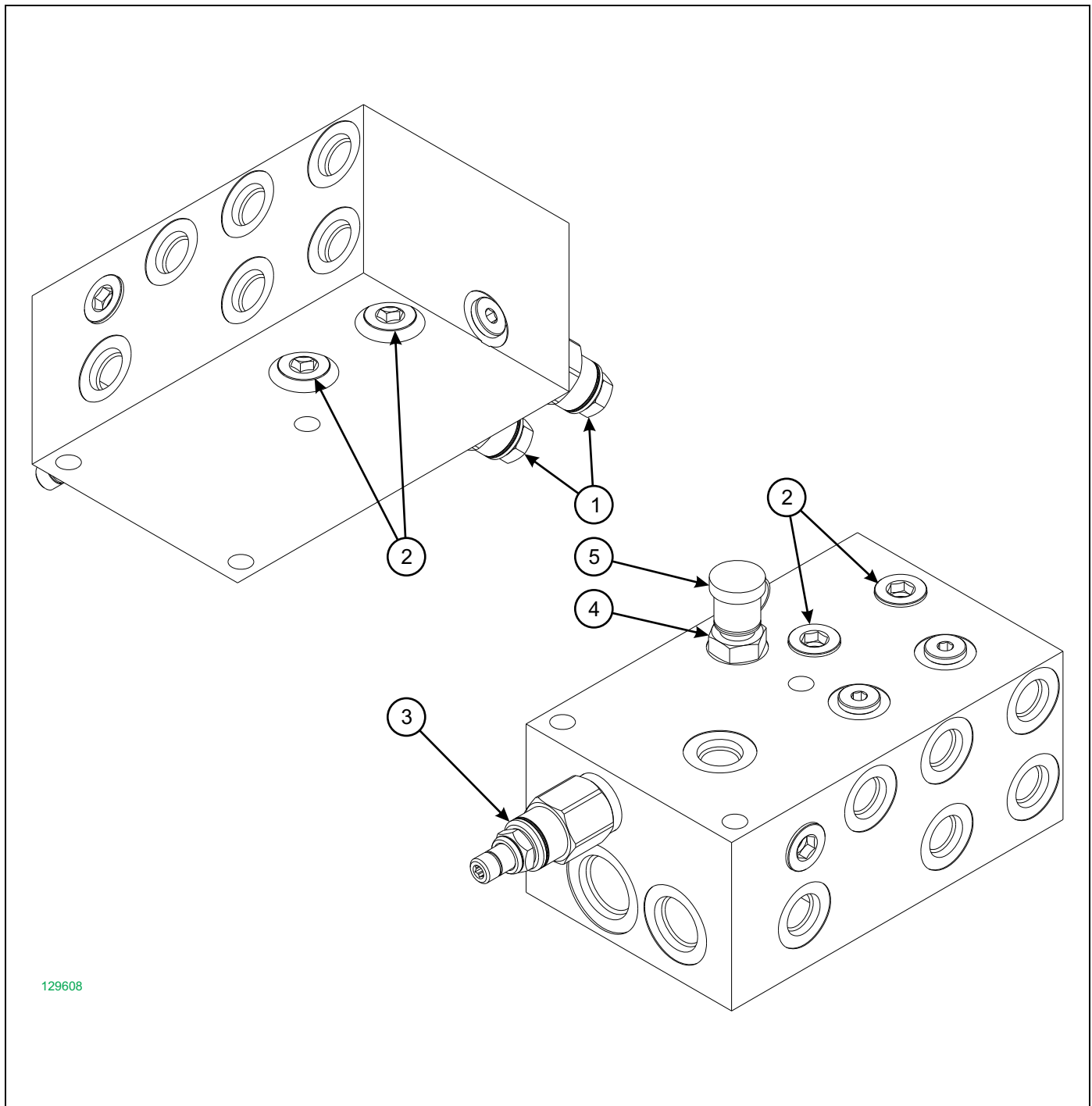


Figure 1-38: Steering Control Valve Assembly

Steering Control Valve Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	129608	VALVE, SER 5 STEERING CONTROL	
1	131827	COUNTERBALANCE VALVE CART	2
2	131828	CHECK VALVE	5
3	131829	DIRECT ACTING RELIEF VALVE	1
4	PD341	NIPPLE	1
5	0018149	PORT DUST COVER	1

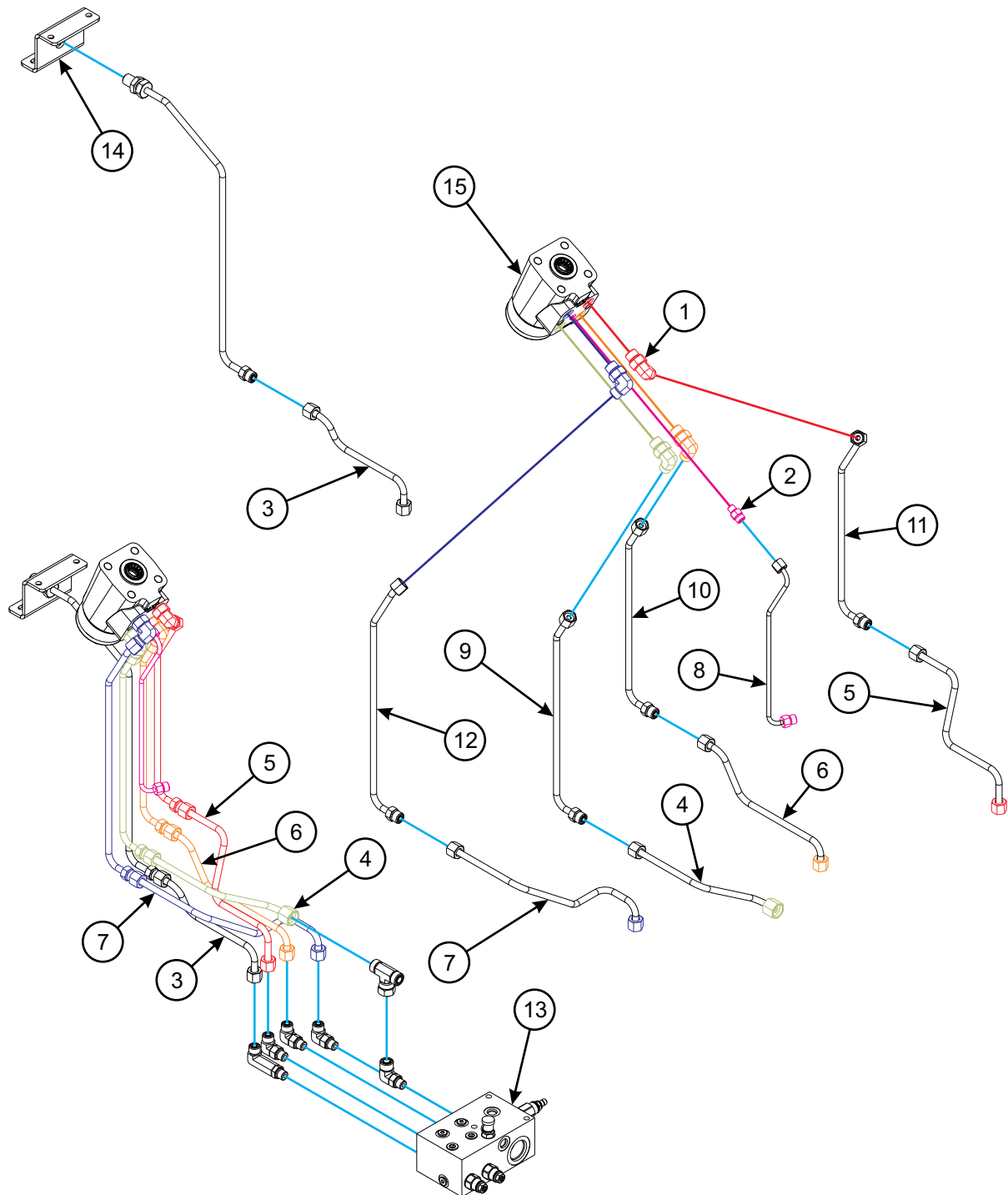


Figure 1-39: Steering Hydraulics

Steering Hydraulics

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0018120	ADAPTER P-STEER PUMP PRESSURE	4
2	0018160	ADAPTER WHITE CASE DRAIN	1
3	145743	TUBE, B3-4 ACTR P2 TO VALVE M1	1
4	145744	TUBE, B3-4 VLV P1 TO ORB PRESS	1
5	145745	TUBE, B3-4 VLV V1 TO ORBTL RH	1
6	145847	TUBE, B3-4 VLV V2 TO ORBTL LH	1
7	145848	TUBE, B3-4 VLV D2 TO ORBTL RH	1
8	154539	TUBE,BT/AC ORBITAL LDSEN DOWN	1
9	162580	TUBE, BTAC ORBITAL PRESS DOWN	1
10	162581	TUBE, BTAC ORBITAL LH DOWN	1
11	162582	TUBE, BTAC ORBITAL RH DOWN	1
12	162583	TUBE,BTAC ORBITAL RETURN DOWN	1
13	129608	VALVE, SER 5 STEERING CONTROL (SEE PAGE 1-63)	1
14	145740	BRACKET, B3-4 STRG BLKHED/HORN	1
15	168316	ORBITAL, B3 ACTR LOAD SENSING	1

ILLUSTRATED PARTS LIST

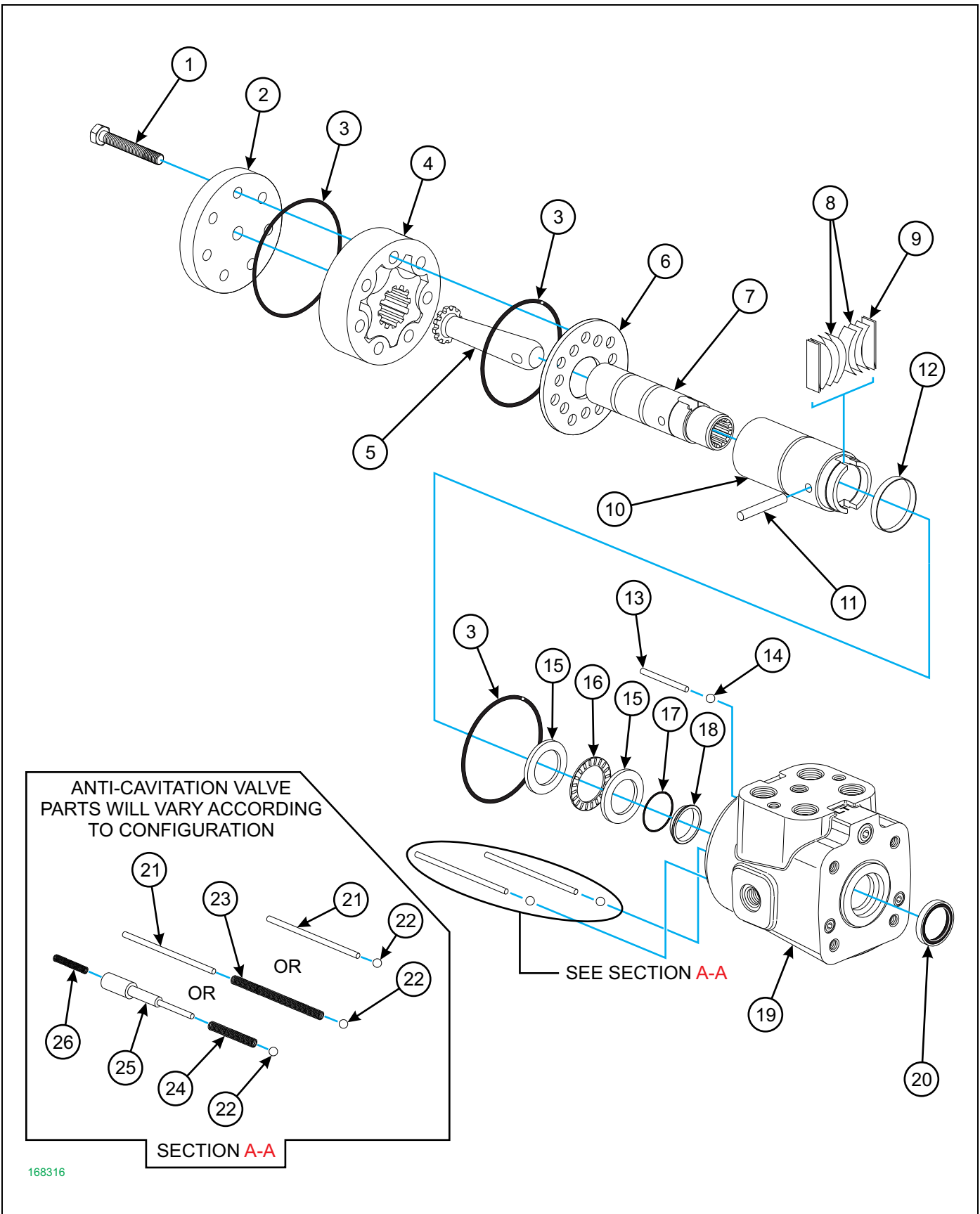


Figure 1-40: Steering Orbital Assembly

Steering Orbital Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	168316		
1		CAP SCREW, HEX HEAD	7
2		CAP, END	1
3		SEAL, 72.6MM [2.86 IN.] ID	3
4		GEROTOR, SUB-ASSEMBLY	1
5		DRIVE	1
6		PLATE, SPACER	1
7		CONTROL SPOOL	1
8		SPRING, CENTERING	6
9		SPRING, SPACER	2
10		CONTROL SLEEVE	1
11		PIN, CENTERING	1
12		RETAINER SPRING	1
13		PIN, ROLL- 34.92 MM [.98 IN.] ID	1
14		BALL- 6.35 MM [.25 IN.] OD	1
15		BEARING RACE	2
16		BEARING, NEEDLE THRUST	1
17		O-RING	1
18		SEAL- 24.9 MM [.98 IN.] ID	1
19		HOUSING, VALVE	1
20		DUST SEAL	1
21		PIN, ROLL- 40.00 MM [1.575 IN.] LENGTH	2
22		BALL, CHECK- 6.35 MM [.25 IN.] OD	2
23		COMPRESSION SPRING	2
24		COMPRESSION SPRING	2
25		ANTI-CAV PLUG RETAINER	2
26		COMPRESSION SPRING	2
27	129909	SEAL KIT,STEERING CONTROL UNT (INCLUDES ITEMS 3, 17, 18, AND 20)	REF

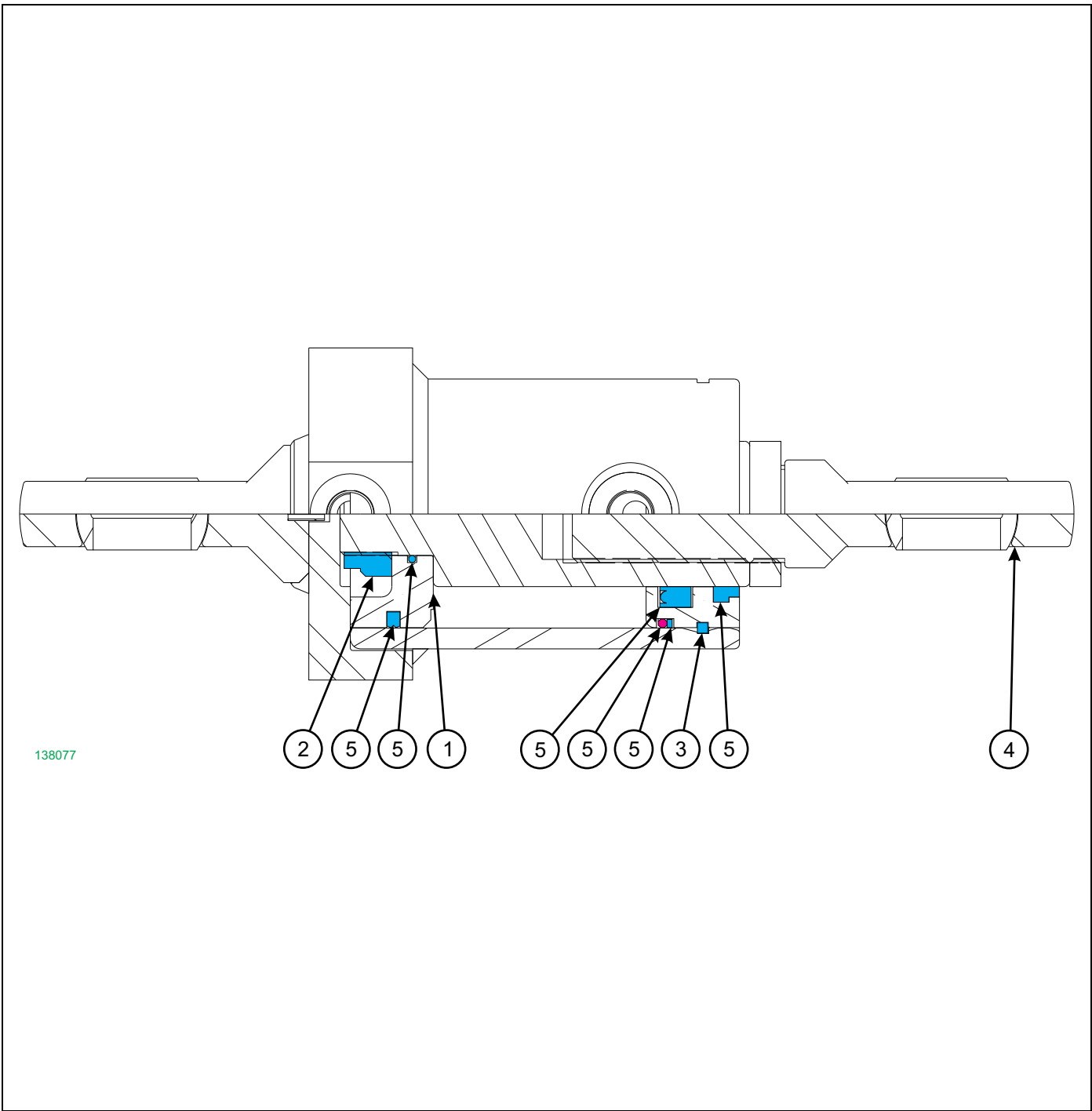


Figure 1-41: Tilt Cylinder

Tilt Cylinder

ITEM	PART NUMBER	DESCRIPTION	QTY.
	138077	CYLINDER, BT-HLFT TILT	
1	151201	2-3/4 PISTON 1" SHAFT	1
2	151202	1" LOCK JAM NUT	1
3	151203	1/8" KEYSTOCK	1
4	151204	BEARING	2
5	150753	KIT, 138077 COL HYD REPAIR	REF

Mast and Front Rotation

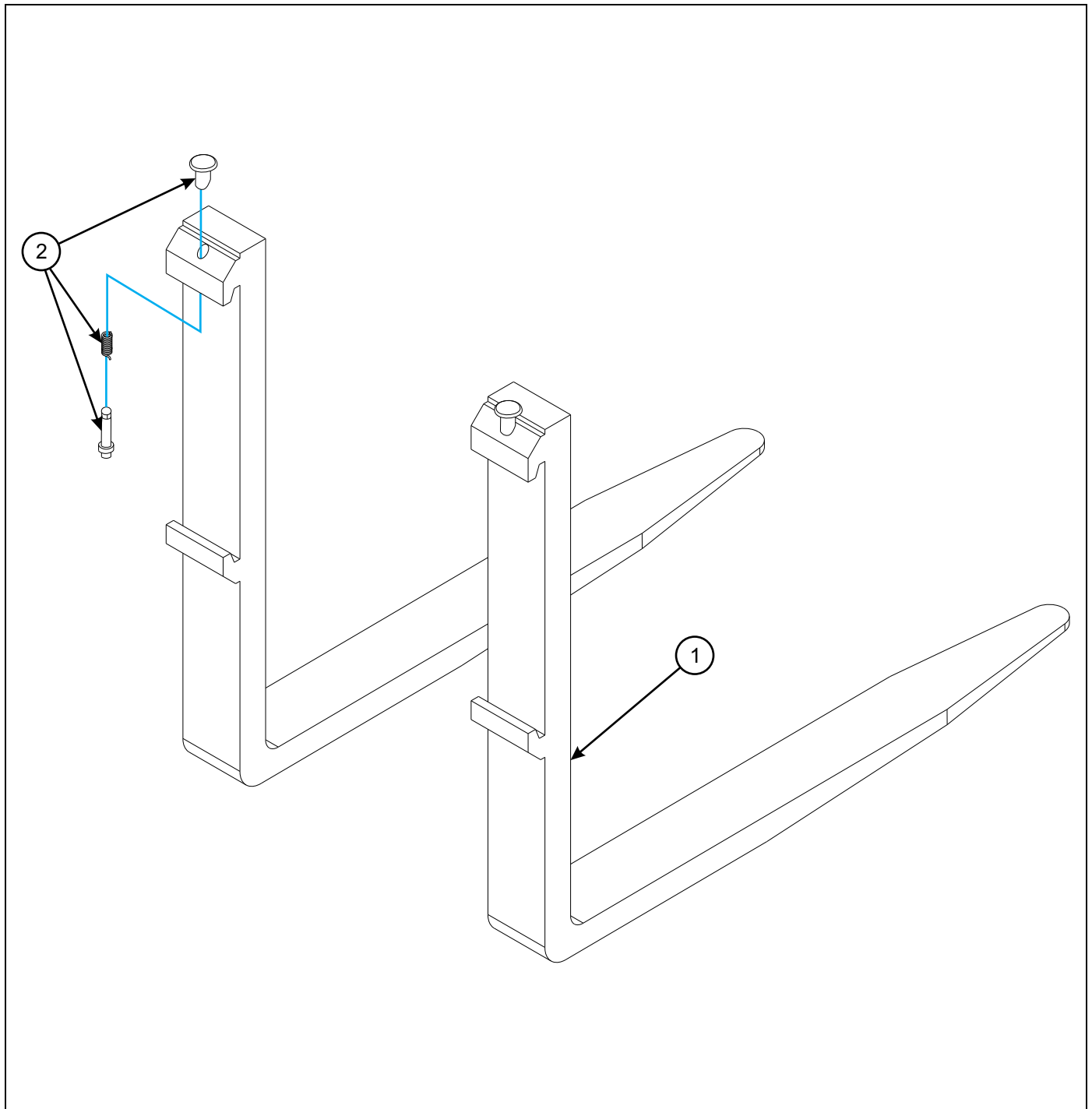


Figure 1-42: Forks

Forks

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	127644	FORK, 36" 12" DROP ,BN	2
1	131519	FORK,40" CL2 12-IN DROP,BN	2
1	131520	FORK,42" CL2 12-IN DROP,BN	2
2	112643	PIN KIT KENHAR FORKS	REF

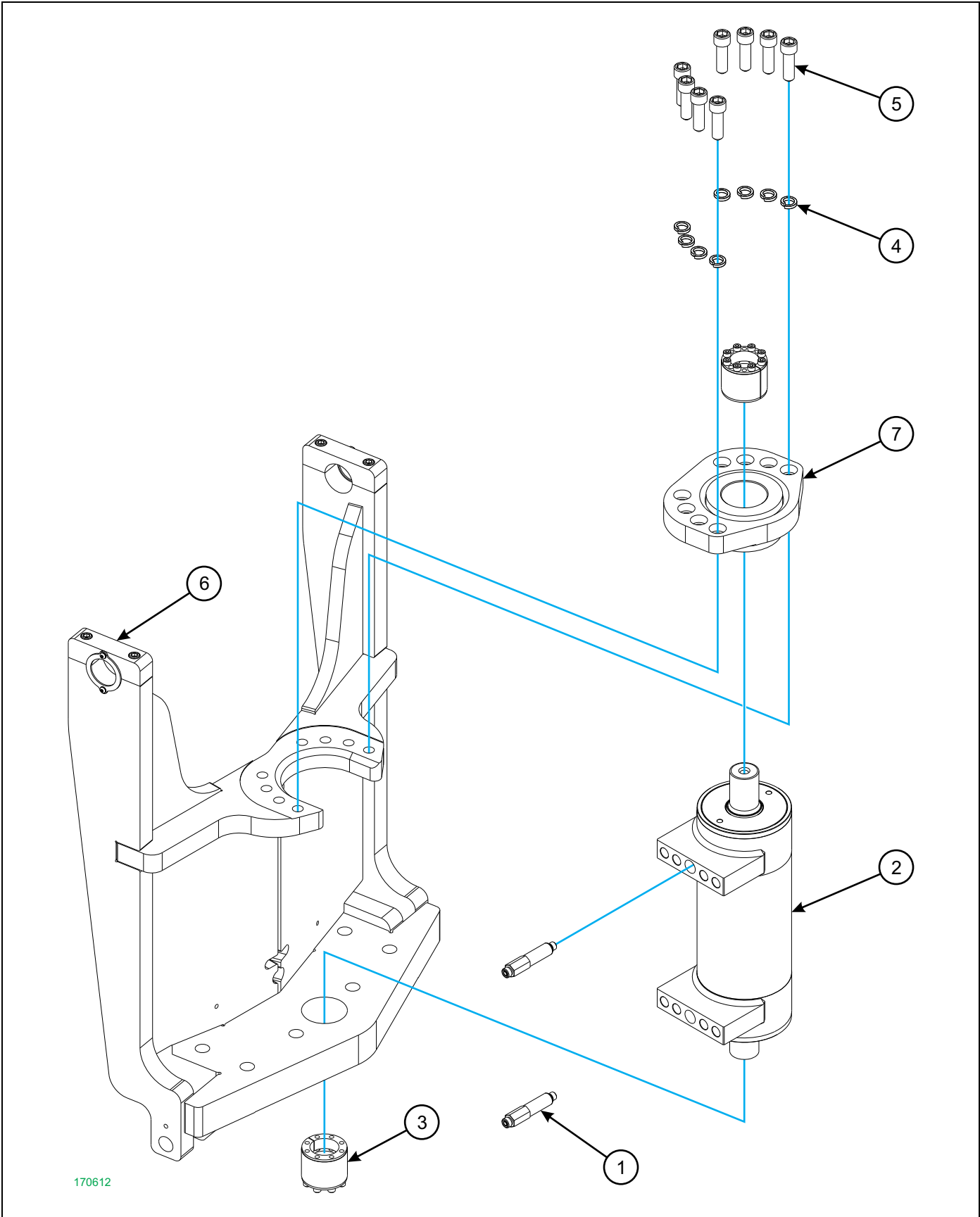


Figure 1-43: Front Plate Assembly

Front Plate Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	170612	FRONT PLATE ASSY, B3-4 HELAC	
1	157521	ADAPTER,6 ORBX 6ORS LONG ACTR	2
2	168312	ACTUATOR HELAC B3 STEERING	1
3	168318	CONNECTION RINGFEDER 2X3.150	2
4	169067	WASHER 3/4 HI-COLLAR LOCK ZP	8
5	169337	SCREW 4XSKT 3/4-16UNFX2.50 ZP	8
6	170597	FRONT END WLDMT, B3-4 ACTR	1
7	170611	MOUNT WLDMT, B3-4 UPR ACTR	1

ILLUSTRATED PARTS LIST

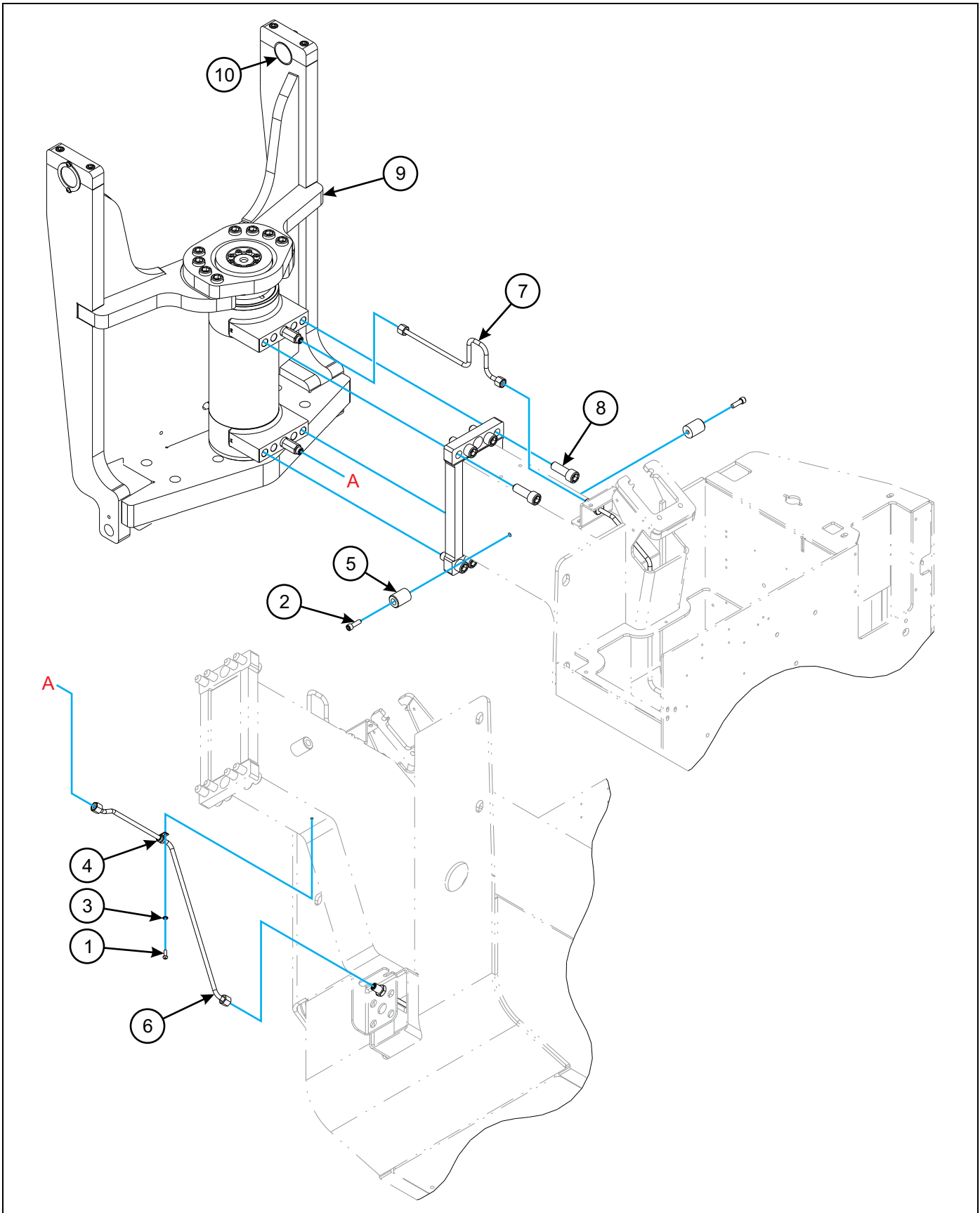


Figure 1-44: Front Plate Installation

Front Plate Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	106955	SCREW,BHSC 1/4-20UNCX3/4	1
2	108337	SCREW HX SKT3/8-16X1-1/4	2
3	108797	WASHER 1/4 LKG INT TOOTH	1
4	125892	CLAMP, CABLE 3/8 SST	1
5	145741	STOP, B3-4 FRT ROTATION	2
6	145849	TUBE, B3-4 ACTR P1 TO BLKHD	1
7	145850	TUBE, B3-4 ACTR P2 TO BLKHD	1
8	169336	SCREW 4XSKT 3/4-16UNFX2.25 ZP	8
9	170612	FRONT PLATE ASSY, B3-4 HELAC (SEE PAGE 1-70)	1
10	146386	BUSHING, B3 MAST MOUNT	2

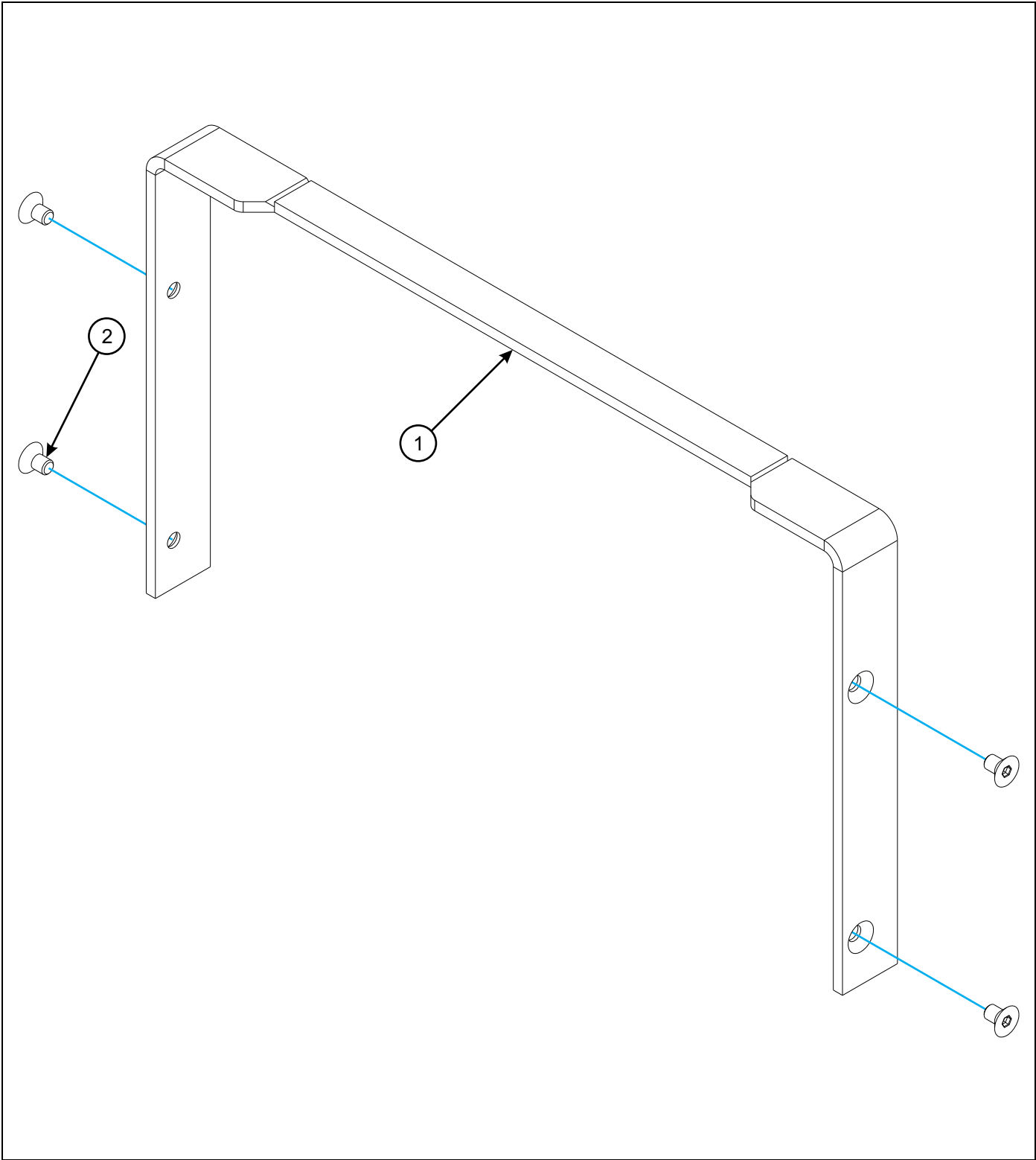
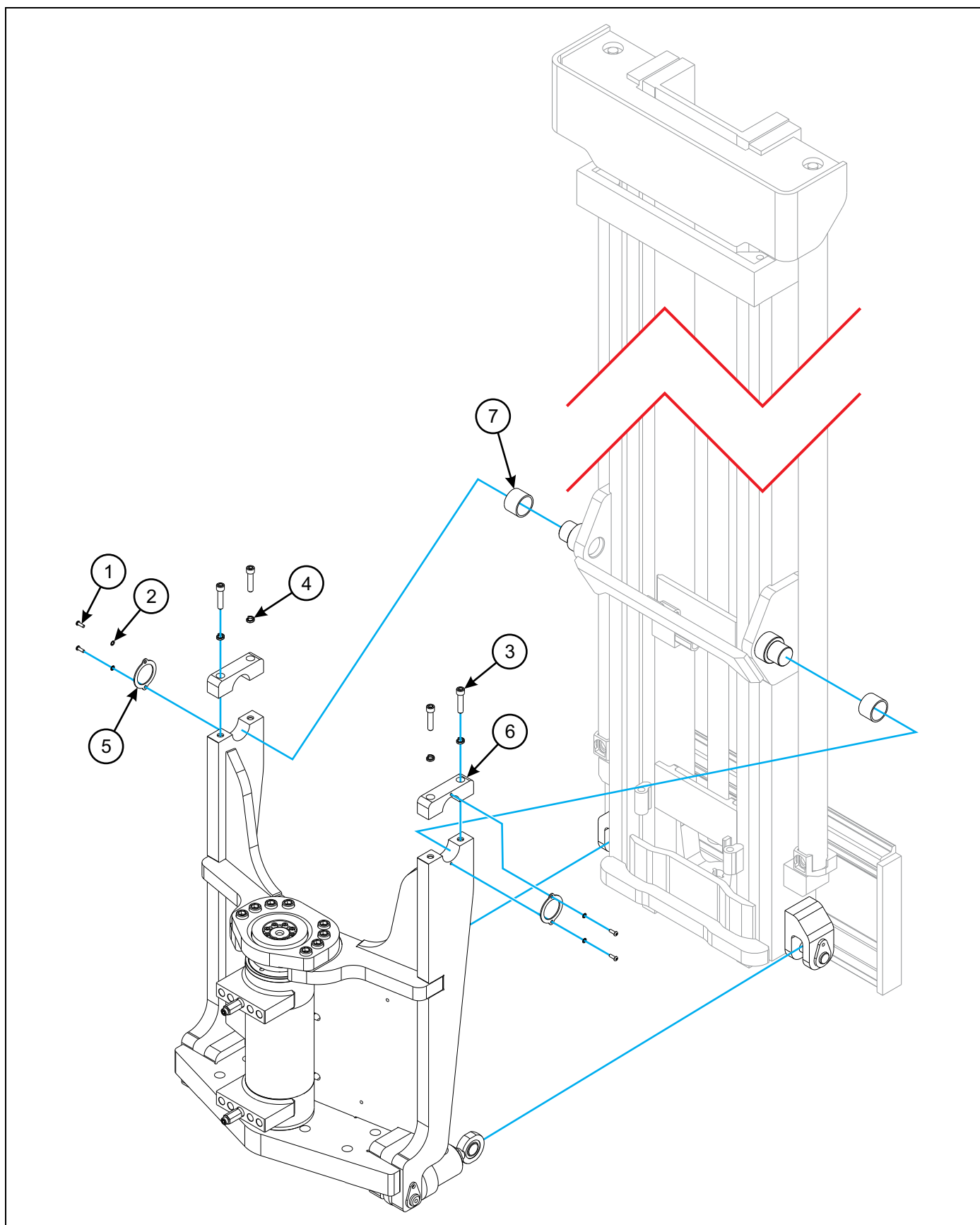


Figure 1-45: Load Backrest

Load Backrest

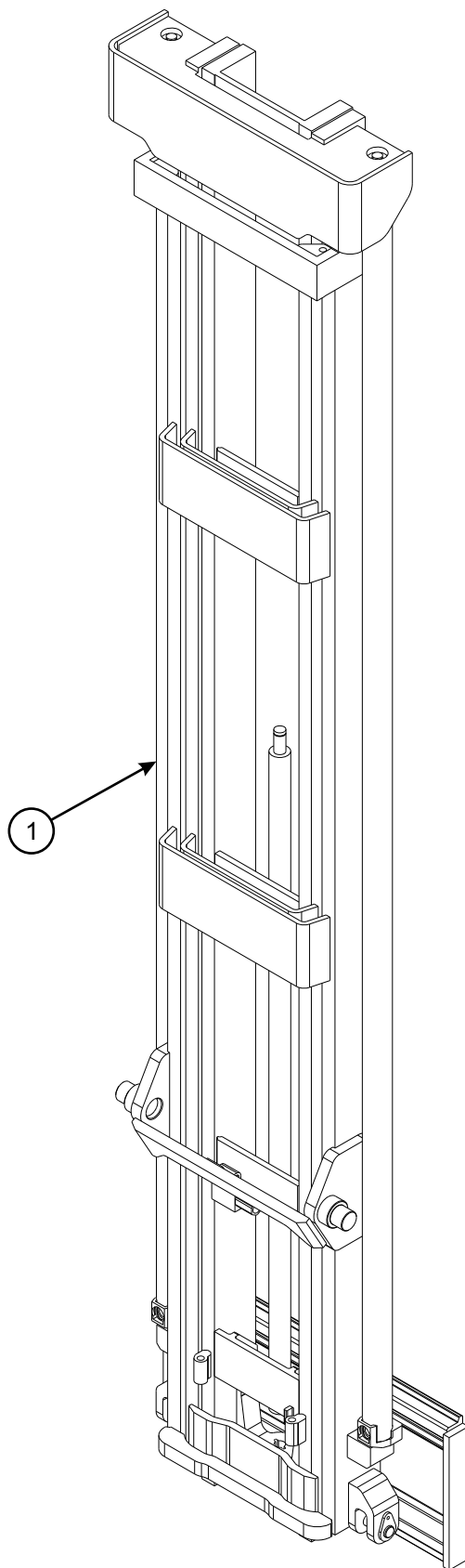
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	146291	LOAD BACKREST WLDMT, B3 (INCLUDES ITEM 2)	1
2	118180	SCREW FLAT CTSK 16MM-2.0X25MM	4

[illegible]

**Figure 1-46: Mast Installation**

Mast Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	106955	SCREW,BHSC 1/4-20UNCX3/4	4
2	108797	WASHER 1/4 LKG INT TOOTH	4
3	123763	SCREW HEX SCKT 1/2-13X2-1/4	4
4	128174	LOCKWASHER 1/2 HIGH COLLARPLN	4
5	138749	RETAINER,BI-FWD MAST BUSHING	2
6	143516	PLATE,FRT END CAP B3-2	2
7	146386	BUSHING, B3 MAST MOUNT	2

**Figure 1-47: Mast**

Mast

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	146259	MAST,40TD-MT 92/156,6R 37 ISS	1
1	146260	MAST,40TD-MT108/204,6R 37 ISS	1
1	146261	MAST,40TD-MT133/250,6R 37 ISS	1
1	146262	MAST,40TD-MT147/288,6R 37 ISS	1
1	146263	MAST,40TD-MT174/360,6R 37 ISS	1
1	146364	MAST,40TD-MT108/204,6R,CS,1SS	1
1	149416	MAST,40TD-MT155/312,6R 37 ISS	1
1	150494	MAST,40TD-MT151/300,6R 37 ISS	1
1	153238	MAST,40TD-MT118/222,6R 37 ISS	1
1	153309	MAST,40TD-MT141/272,6R 37ISS	1
1	159642	MAST,40TD-MT 110/208,6R 37ISSp	1
1	161318	MAST,40TDMT108/204,637,ISS,IF	1
1	162667	MAST,40TD,118/222,637,ISS,DR n	1
1	167015	MST,40TDMT,174/360,637,ISS,DR	1
1	167495	MAST,40TD-MT120/222,6R 37 ISS	1
1	167496	MAST,40TD-MT139/250,6R 37 ISS	1
1	167497	MAST,40TD-MT154/272,6R 37 ISS	1
1	167498	MAST,40TD-MT161/288,6R 37 ISS	1
1	167499	MAST,40TD-MT178/312,6R 37 ISS	1
1	167500	MAST,40TD-MT199/360,6R 37 ISS	1
1	168303	MAST,40TD-MT141/272,646 ISS	1
1	169051	MAST,40TD-MT133/250,637,ISSFP	1
1	171561	MAST,40TDMT178/312,637,ISS,CR	1

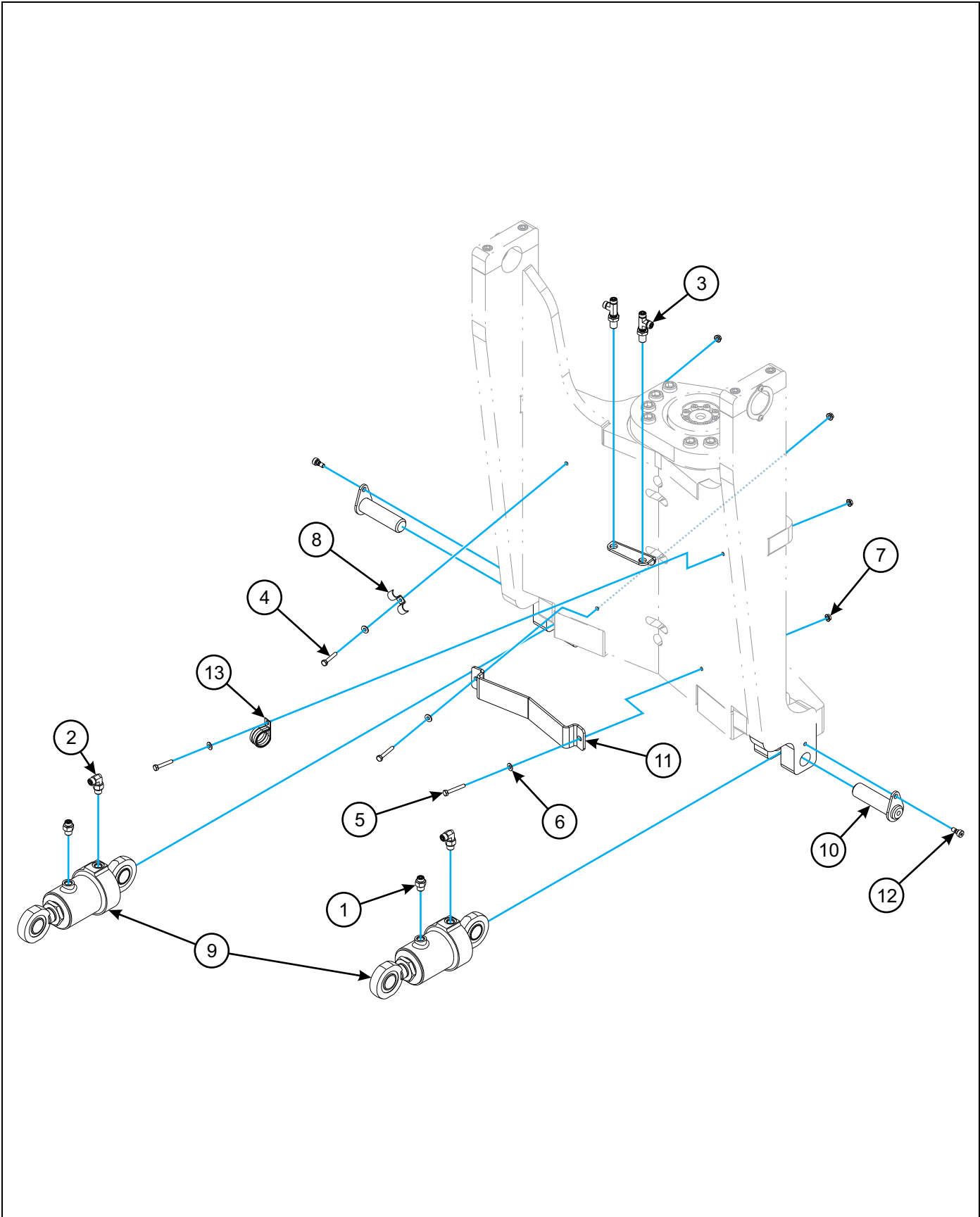


Figure 1-48: Tilt Cylinder Installation

Tilt Cylinder Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0018108	ADAPTER VALVE REAR TILT	2
2	0018109	ADAPTER VALVE FOREWARD TILT	2
3	0018126	FITTING BULKHEAD TEE TILTS	2
4	1-654-010047-08	SCREW HX CP,1/4-20UNCX1-1/2G5	2
5	1-654-010047-09	SCREW,HX CP,1/4-20UNCX1-3/4G5	2
6	1-861-010032-06	WASHER, FLAT 1/4 N ZP/CD	4
7	108417	NUT SPIRAL 1/4-20HX FG	4
8	109099	CLAMP, 5/8 DOUBLE TUBE	1
9	138077	CYLINDER, BT-HLFT TILT (SEE PAGE 1-68)	2
10	144587	PIN,TILT CYL WLDMT, B3 MAST	2
11	167443	WEB BOL FRT OTR RH 835-CON	1
12	169760	SCREW HEX SHLDR 3/8 X 1/4	2
13	239-9076-009	CLAMP, HOSE 1-1/4,LOOM	1

Operator's Compartment

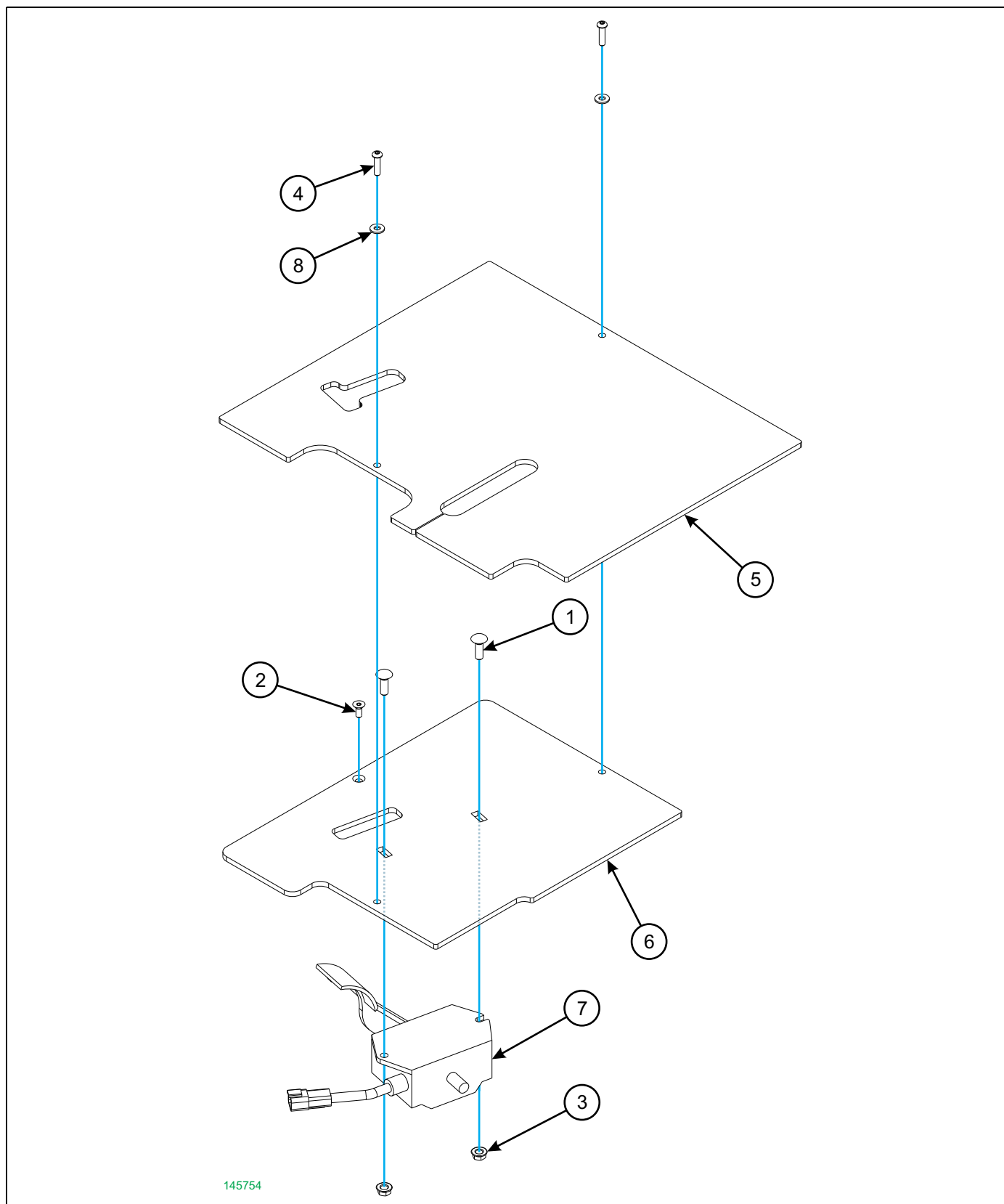


Figure 1-49: Accelerator Assembly

Accelerator Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	145754	ACLTR ASSY, B3-4	
1	104031	SCREW,RDHD,SQNK 5/16-18X1 GR5	2
2	127356	SCREW HXSKT CTSK1/4-20UNCX5/8	1
3	1-510-010004-03	NUT HX FLANGE, 5/16-18 GR8	2
4	108610	SCREW BHSC 1/4-20UNCX1	2
5	145751	MAT, B3-4 FLOOR	1
6	145753	PLATE, B3-4 RH FLOOR	1
7	151471	ACCEL,CURTIS FP6 W/ PLUG	1
8	1-861-010032-06	WASHER, FLAT 1/4 N ZP/CD	2

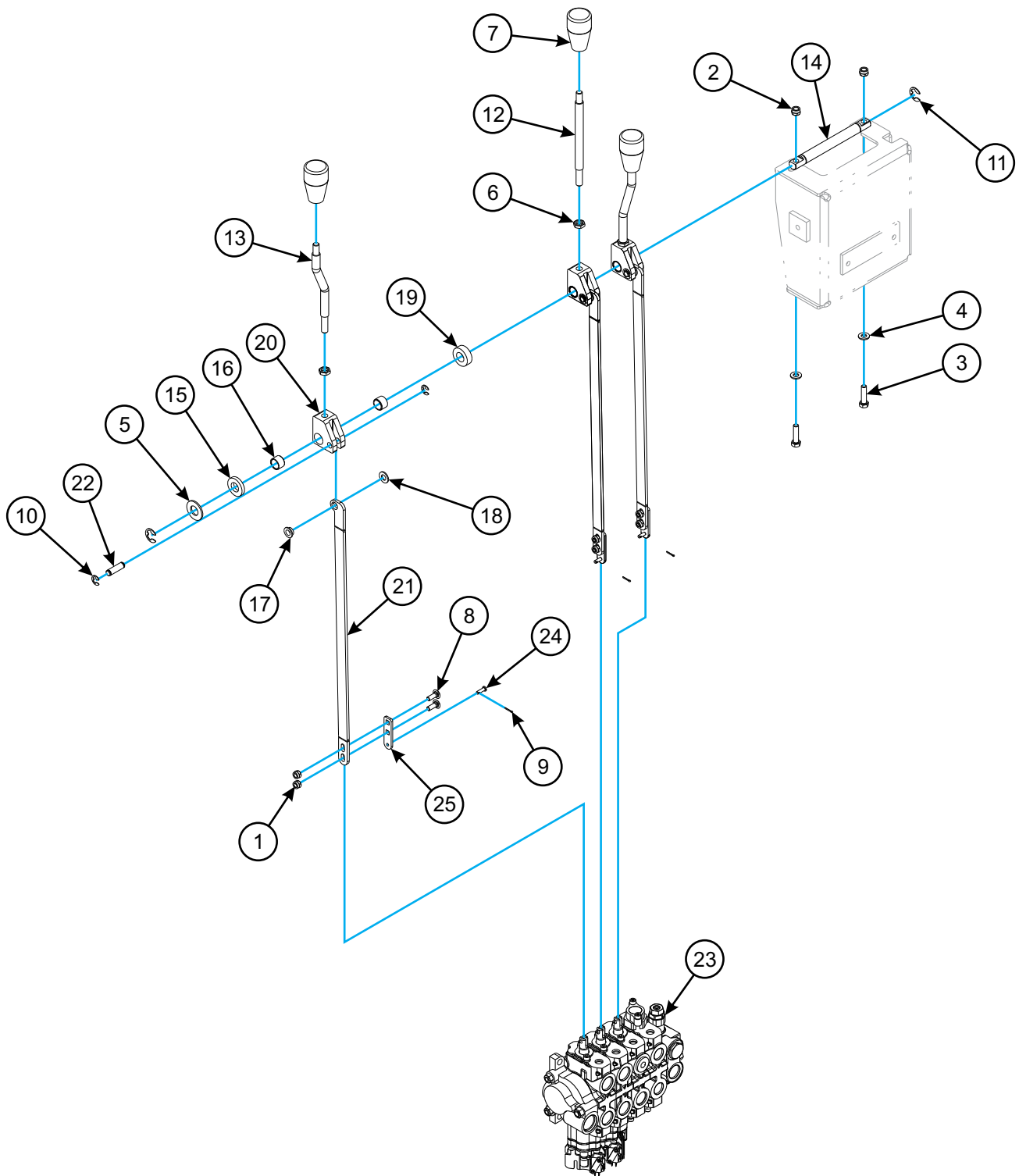


Figure 1-50: Control Levers Installation

Control Levers Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010004-05	NUT HEX 1/4-20 SELF-LK, GRA	6
2	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	2
3	1-654-010049-06	SCREW, H/CAP, 5/16-18UNCX1-1/4	2
4	1-861-010032-08	WASHER, FLAT 5/16 ZP	2
5	1-861-010032-18	WASHER, FLAT 5/8 N ZP/CD	2
6	101967	NUT, HEX JAM M10X1.5 GR2 ZP	3
7	107199	KNOB, TAPERED BLACK	3
8	110-2760	BOLT, CARRIAGE 1/4-20X3/4	6
9	114067	PIN, 1/16X1/2 COTTER	3
10	119547	RING, RETAINING, EXT, E, 3/8	6
11	119548	RING, RETAINING, EXT, E, 5/8	2
12	121421	CONTROL VALVE TILT ROD	1
13	121571	LEVER, CNTL LIFT/SIDE SHIFT	2
14	151409	PIN, BT/AC HYD LEVER PIVOT	1
15	151412	WASHER, BT/AC OTR HYD LVR SPCR	2
16	153235	BEARING, BT/AC VALVE LEVER	6
17	153253	BEARING, BT/AC VALVE LINK	3
18	153303	BEARING, BT/AC VALVE LK THRUST	3
19	153457	WASHER, BT/AC INR HYD LVR SPCR	2
20	153458	BLOCK, BT/AC HYD LVR ROCKER	3
21	153467	LINK, BT/AC HUSCO VLV LEVER	3
22	153496	PIN, BT/AC UPR VALVE LINK	3
23	154004	VALVE, 3SPL HUSCO AX30454-180 (SEE PAGE 1-56)	1
24	160417	PIN, 3/16 X 5/8 CLEVIS ZP	3
25	160520	PLATE, LINKAGE LWR LSC	3

ILLUSTRATED PARTS LIST

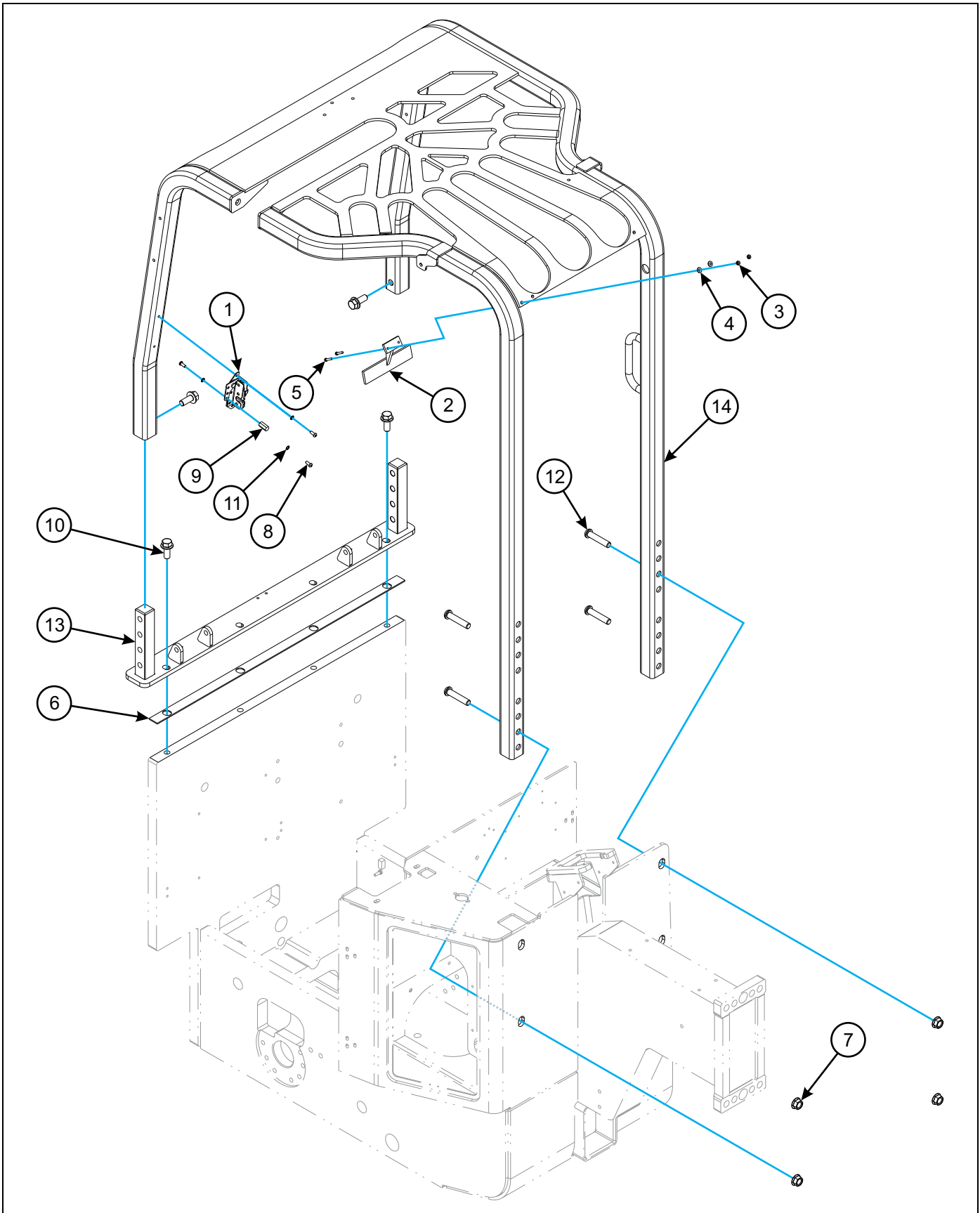


Figure 1-51: Overhead Guard Installation

Overhead Guard Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0010931	LATCH, COVER HOLD-UP	1
2	0011269	MIRROR REAR VIEW	1
3	1-512-010003-05	NUT HEX SLFLKG W/NYL 10-32	2
4	1-861-010032-04	WASHER,FLAT 3/16 ZP	2
5	10-32X1	SCREW MACH HEX SLOT HEAD STL	2
6	101909	SHIM, BT SERIES III OHG	1
7	106534	NUT,HEX FLG 5/8-11,GR8, ZP	4
8	106954	SCREW,BHSC 1/4-20UNCX5/8	3
9	107920	LATCH RELEASE KNOB	1
10	108151	SCREW 5/8-11 UNCX1-1/2 FLG HD	4
11	108797	WASHER 1/4 LKG INT TOOTH	3
12	111360	SCREW BHSC 5/8-11UNCX3	4
13	118710	BASE WLDMT, B40-4 OHG	1
14	156266	OHG WELDMENT, BT/AC	1

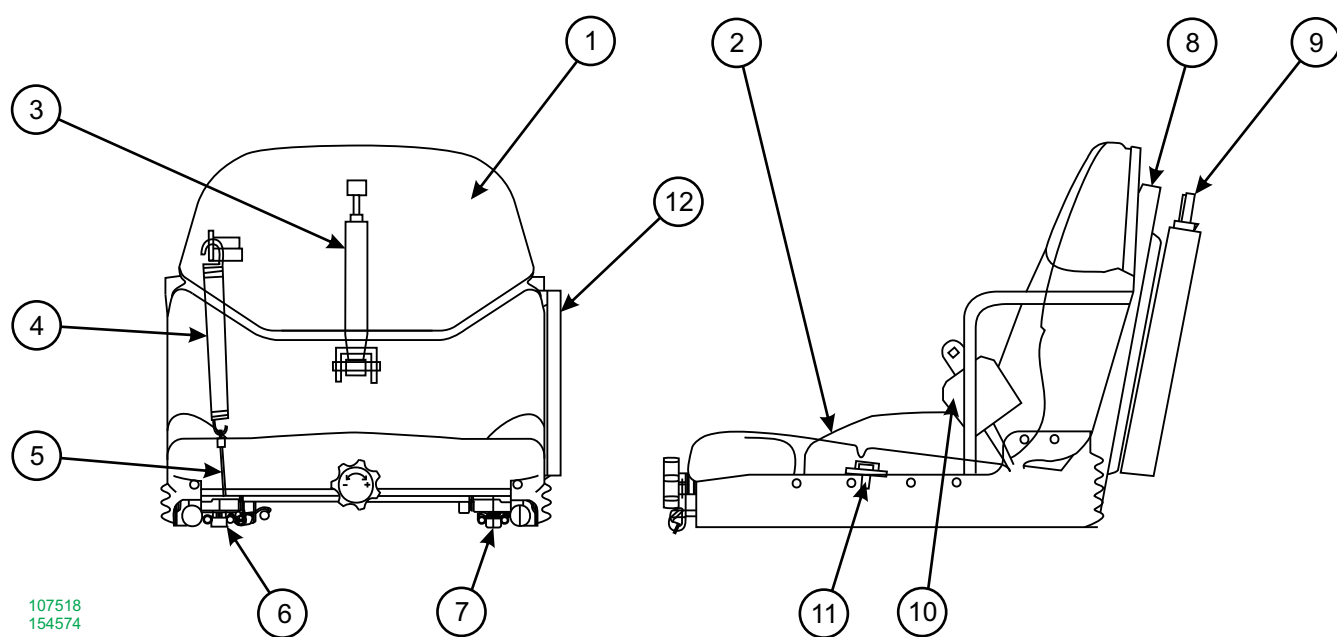


Figure 1-52: Seat Assembly, Cloth

Seat Assembly, Cloth

ITEM	PART NUMBER	DESCRIPTION	QTY.
	107518	SEAT,CLOTH LO-RIDER SRS	
	154574	SEAT, SEARS CLOTH BT-4.5	
1	111708	CUSHION ASSY,BACK CLOTH	1
2	111710	CUSHION ASSY,SEAT CLOTH	1
3	111712	SHOCK ABSORBER, SEAT	1
4	111713	SPRING, SEAT (S7911-000B)	2
5	111714	CABLE,SPRING ADJ	2
6	111715	SLIDE & HANDLE ASSY	1
7	111716	SLIDE, LOCKING	1
8	111717	COVER, REAR	1
9	111718	BOOK BOX, SEAT	1
10	111719	SEAT BELT (S32557)	1
11	111720	SWITCH, SEAT	1
12	120047	LH HIP RESTRAINT	1

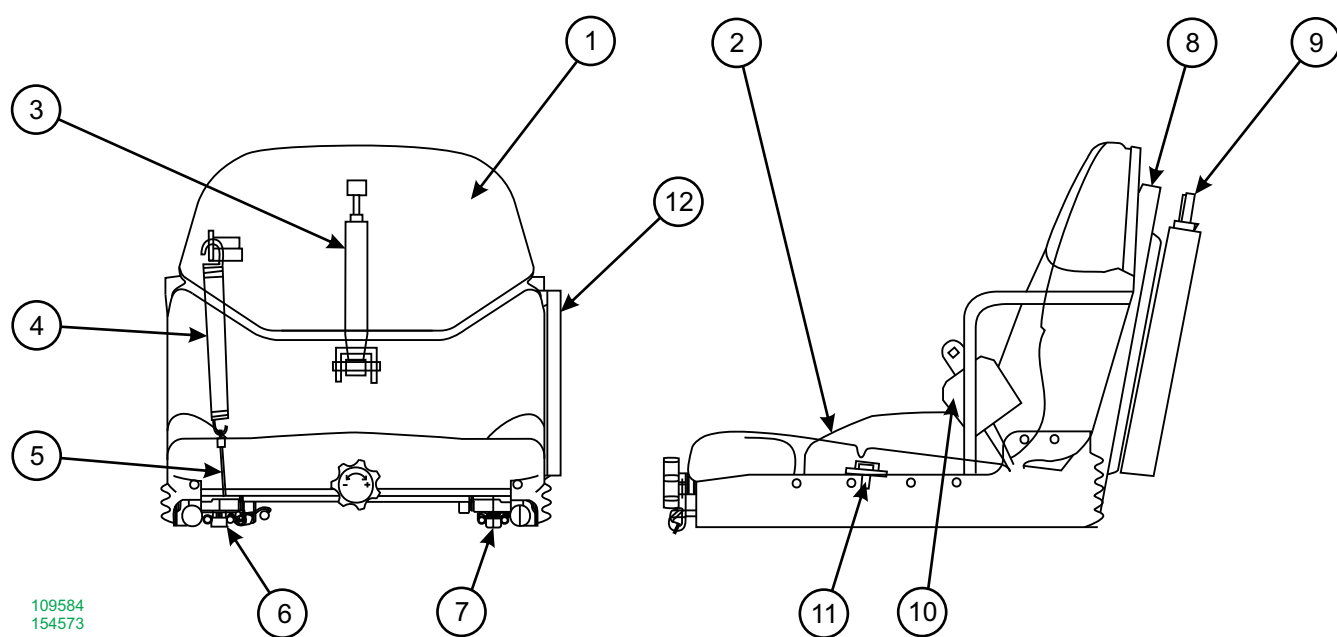


Figure 1-53: Seat Assembly, Vinyl

Seat Assembly, Vinyl

ITEM	PART NUMBER	DESCRIPTION	QTY.
	109584	SEAT,VINYL LO-RIDER	
	154573	SEAT, SEARS VINYL BT-4.5	
1	111709	CUSHION ASSY,BACK VINYL	1
2	111711	CUSHION ASSY,SEAT VINYL	1
3	111712	SHOCK ABSORBER, SEAT	1
4	111713	SPRING, SEAT (S7911-000B)	2
5	111714	CABLE,SPRING ADJ	2
6	111715	SLIDE & HANDLE ASSY	1
7	111716	SLIDE, LOCKING	1
8	111717	COVER, REAR	1
9	111718	BOOK BOX, SEAT	1
10	111719	SEAT BELT (S32557)	1
11	111720	SWITCH, SEAT	1
12	120047	LH HIP RESTRAINT	1

ILLUSTRATED PARTS LIST

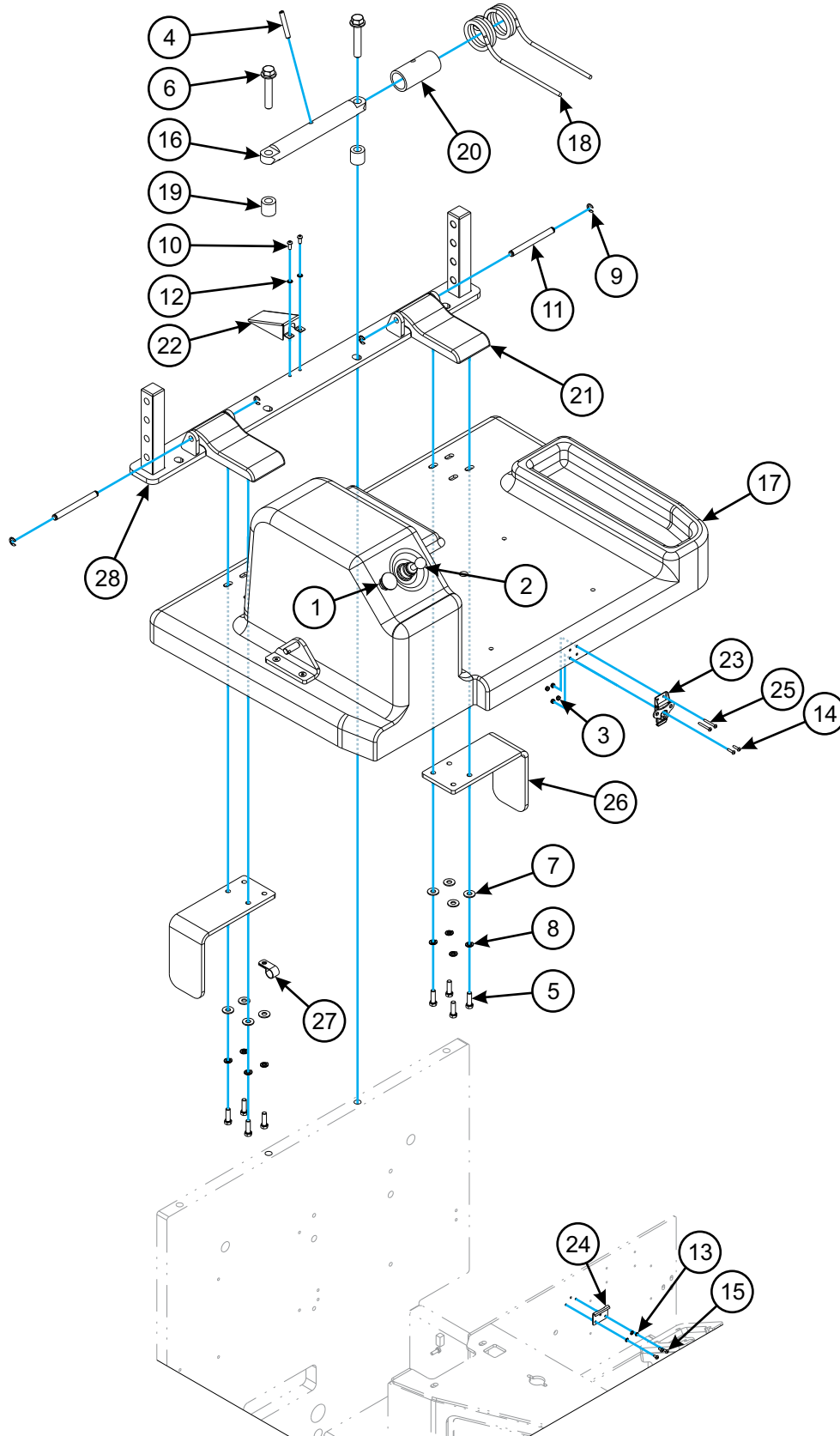


Figure 1-54: Seat Base Installation

Seat Base Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	0030011	SWITCH,HORN BUTTON,BENDI 48	1
2	0030033	SWITCH F/R COLD STORAGE	1
3	1-512-010003-06	NUT,HEX,SLFLKG W/NLY 10-24	4
4	1-647-010004257	PIN,SPRING,SLOTTED 3/8X2-1/2	1
5	1-654-010051-06	SCREW,HEX CAP 3/8-16UNCX1-1/4	8
6	1-655-010002-11	SCREW FLANGE HD 5/8-11X3-1/2	2
7	1-861-010032-11	WASHER, FLAT 3/8 W ZP/CD	8
8	1-861-010034-11	WASHER, LKG HLCL SPR, 3/8	8
9	106240	RING,RETANING,EXT,E,1/2	4
10	106954	SCREW,BHSC 1/4-20UNCX5/8	2
11	107750	PIN, TOP COVER HINGE	2
12	108797	WASHER 1/4 LKG INT TOOTH	2
13	109392	WASHER,#10 LKG,INTERNAL TOOTH	3
14	109410	SCREW, BHSC #10-24UNCX314	2
15	114849	SCREW,BHSC #10-24UNCX3/8	3
16	117136	SHAFT, SEAT SPRING	1
17	120123	COVER, BATTERY B30-4	1
18	126685	SPRING, BAT COVER, TORSIONAL	1
19	127080	SPACER,B40-4 SEAT SPRING	2
20	127082	BUSHING,B40-4 SEAT SPRING	1
21	127084	HINGE,B40-4 SEAT BASE	2
22	127640	COVER, REAR CAST WIRE, BT-4	1
23	127919	LATCH, FLAT CAM, S.S.	1
24	127920	KEEPER PLATE, LATCH, S.S.	1
25	131339	SCREW,BHSC #10-24UNCX1-1/2	2
26	156356	BRACKET,HORZ BAT REST, B30AC	2
27	40-0717-02	CLAMP,HYD HOSE SUPPORT	1
28	118710	BASE WLDMT, B40-4 OHG	1

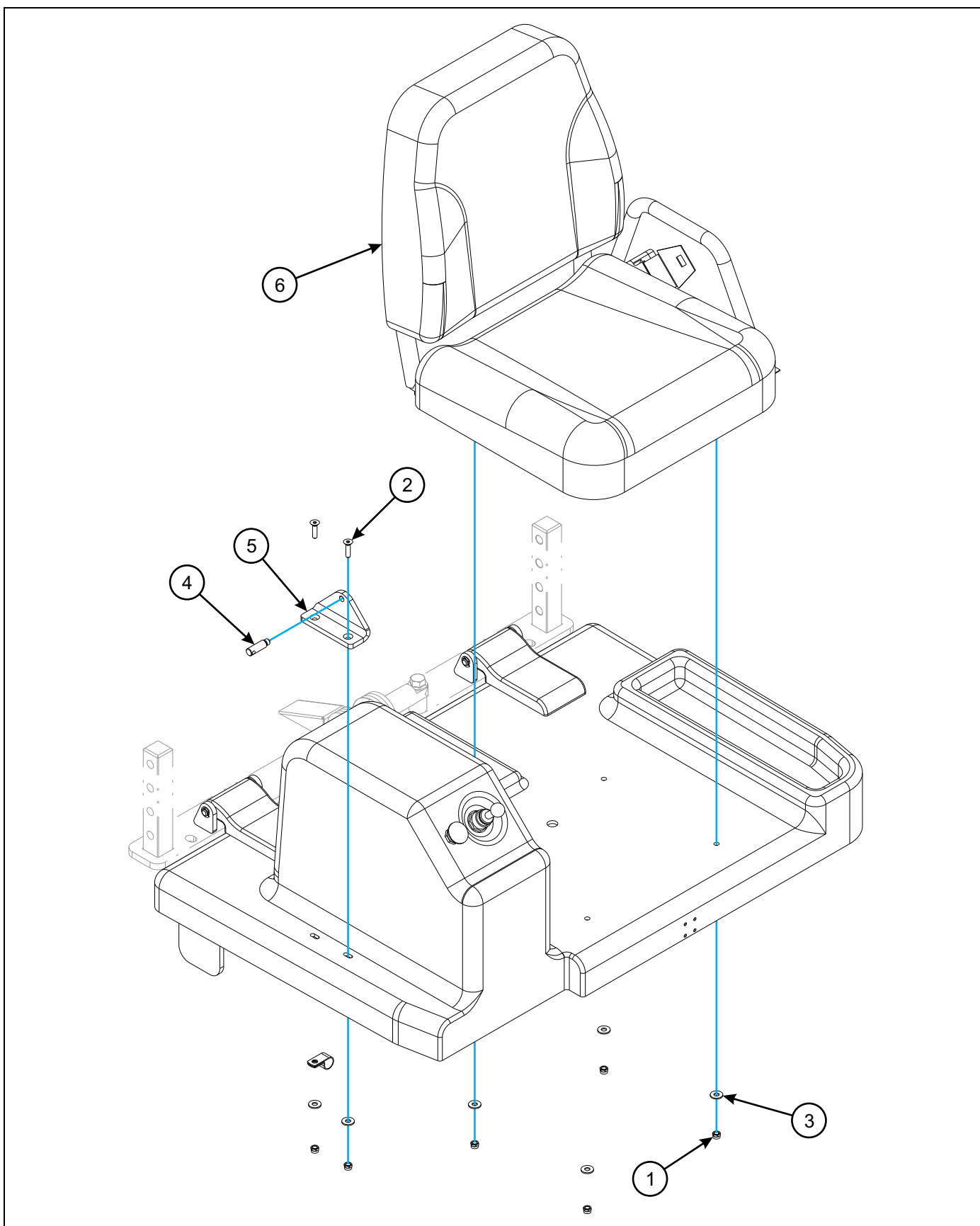
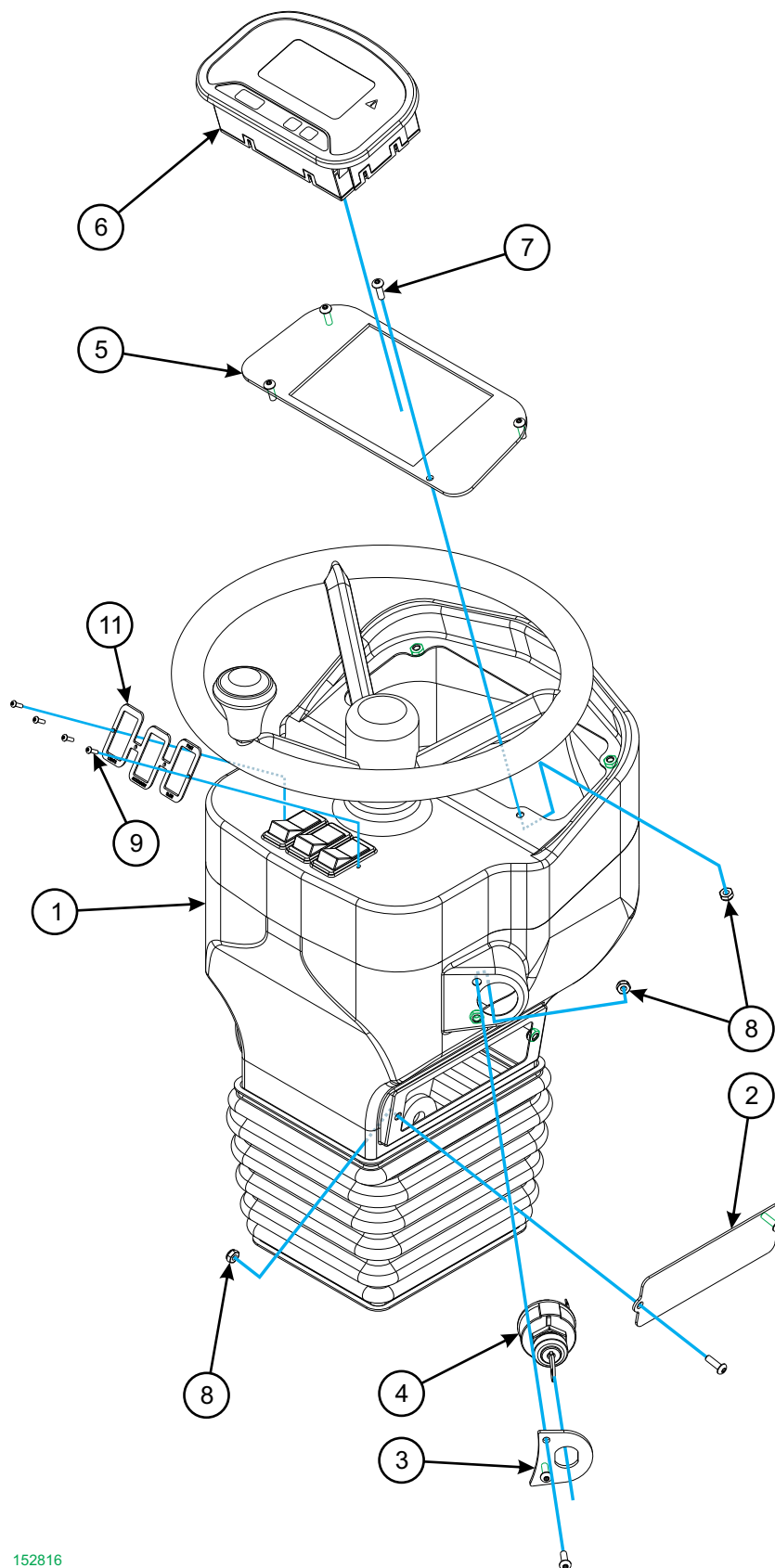


Figure 1-55: Seat Installation

Seat Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-512-010005-03	NUT HEX SLFLKG GRB 5/16-18	6
2	1-654-010121-06	SCREW HEX SKT CTSK,5/16X1-1/4	2
3	1-861-010032-09	WASHER, FLAT 5/16 W ZP/CD	6
4	123391	PIN,COVER HOLD-UP SHORT	1
5	127083	BRACKET,B40-4 SEAT BASE LATCH	1
6	107518	SEAT,CLOTH LO-RIDER SRS (SEE PAGE 1-88)	1
6	109584	SEAT,VINYL LO-RIDER (SEE PAGE 1-90)	1
6	154573	SEAT, SEARS VINYL BT-4.5 (SEE PAGE 1-90)	1
6	154574	SEAT, SEARS CLOTH BT-4.5 (SEE PAGE 1-88)	1



152816

Figure 1-56: Steering Column and Dash Display Assembly

Steering Column and Dash Display Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	152816	STEERING COLUMN ASSY,BT-AC	
1	126193	STEERING COLUMN, I/C (SEE PAGE 1-98)	1
2	129626	MOUNT,CIRCUIT BRK BLANK BT-4	1
3	135568	PLATE BT HEAVY DUTY KEYSWITCH	1
4	135617	KEYSWITCH,2POSITION,HEAVYDUTY	1
5	146057	PANEL, ENGAGE IV DASH	1
6	146297	DISPLAY, ENGAGE IV DASH	1
7	169764	SCREW B4SC 10-32X.600 ZP	8
8	1-512-010003-05	NUT HEX SLFLKG W/NYL 10-32	8
9	107539	SCREW PNHD 6-32X1/2 SSHK	4
10	151398	HARNESS, SER V DASH (NOT SHOWN)	1
11	153310	PLACARD,BT-4.5 COLUMN SWITCH	1

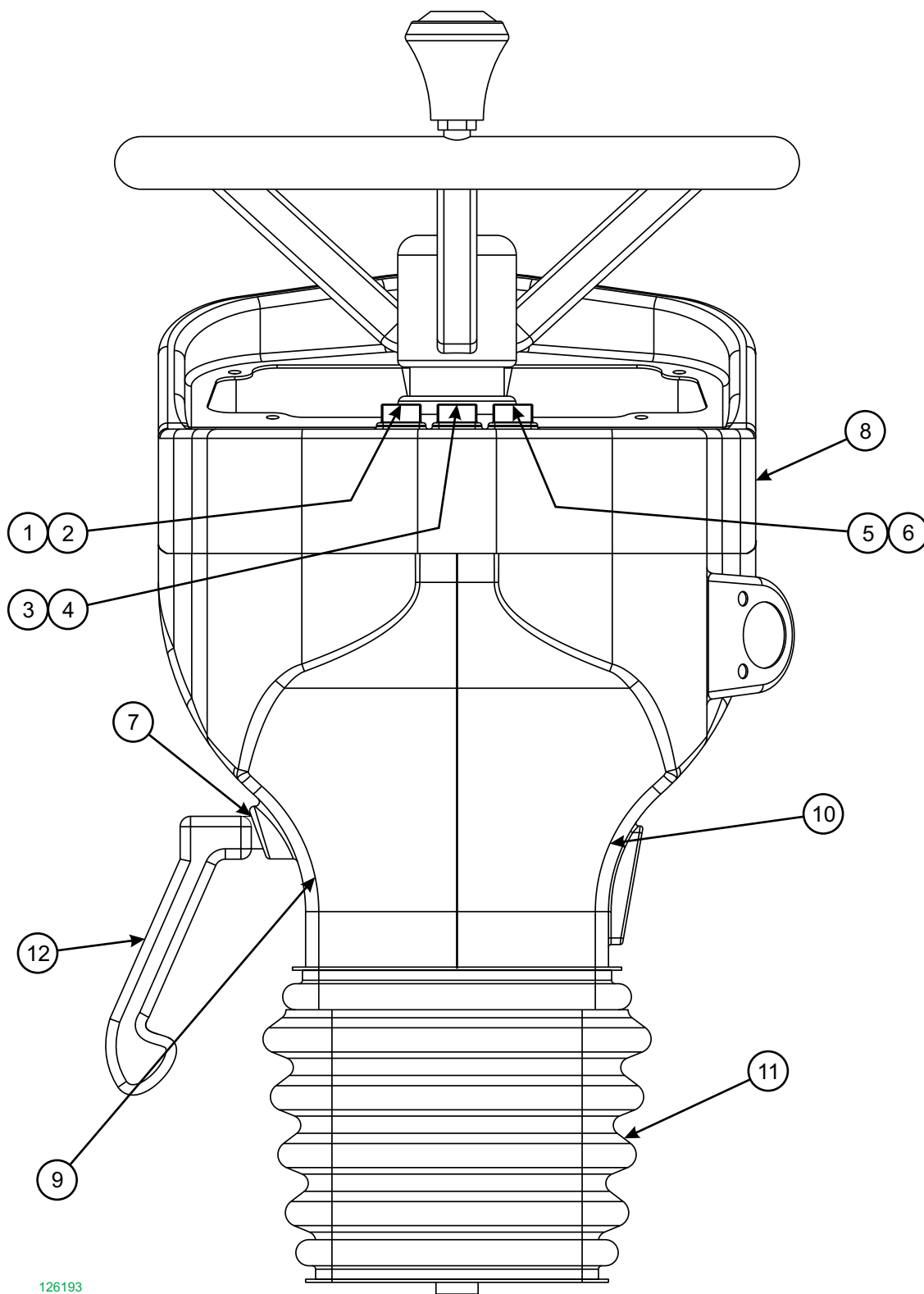
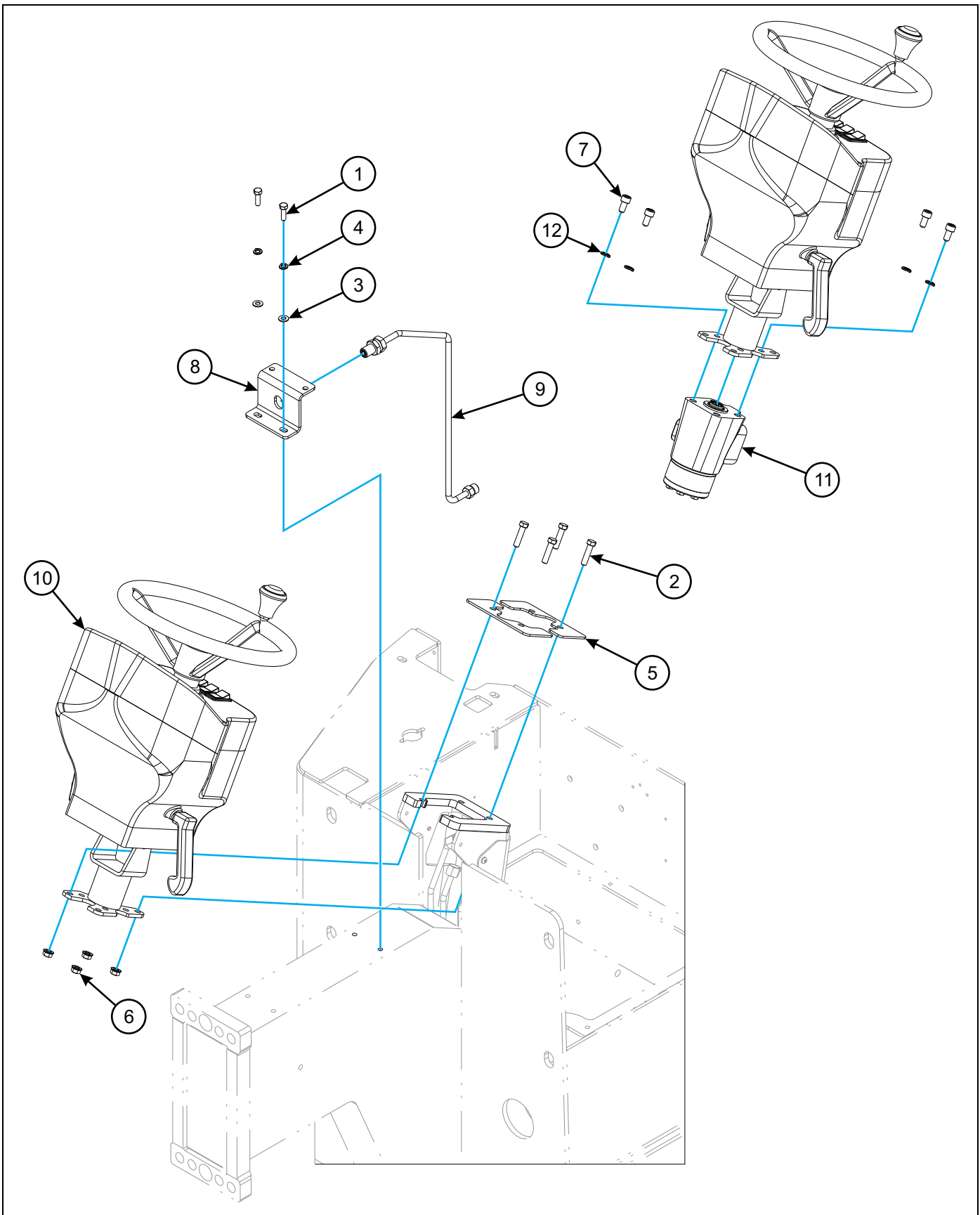


Figure 1-57: Steering Column Assembly

Steering Column Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	126193	STEERING COLUMN, I/C	
1	128093	SWITCH (0058-0346) N	1
2	128082	ROCKER BUTTON (0011-0618)	1
3	128083	SWITCH (0058.0345) N	1
4	128084	ROCKER BUTTON (0011-0638)	1
5	128085	SWITCH (0058-0310) N	1
6	128086	ROCKER BUTTON (0011-0610)	1
7	128088	MAIN SHAFT (0034.0785)	1
8	128089	UPPER CLUSTER (0052.1396)	1
9	128090	LH COVER (0052.1367)	1
10	128091	RH COVER (0052.1368)	1
11	128092	RUBBER CLADDING (0046.0130)	1
12	138570	HANDLE, COBO COLUMN TILT	1
13	139806	HARDWARE KIT FOR TC01.E503 (INCLUDES PLUGS/CONNECTORS FOR SWITCHES)	REF

**Figure 1-58: Steering Column and Orbital Installation**

Steering Column and Orbital Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010049-05	SCREW HX CP 5/16-18UNCX1 GR5	2
2	1-654-010051-07	SCREW,HEX CAP,3/8-16UNCX1-1/2	4
3	1-861-010032-08	WASHER,FLAT 5/16 ZP	2
4	1-861-010034-10	WASHER,LKG 5/16	2
5	100006	PLATE,STRGCOLUMN BELLOWS RTNR	2
6	107470	NUT,SPIRALOCK 3/8-16HX	4
7	131015	SCREW,HXSKT CAP M10-1.50X20ZP	4
8	145740	BRACKET, B3-4 STRG BLKHED/HORN	1
9	145742	TUBE, B3-4 ACTR P2 INTMD COLUM	1
10	152816	STEERING COLUMN ASSY,BT-AC (SEE PAGE 1-96)	1
11	154539	TUBE,BT/AC ORBITAL LDSEN DOWN	1
12	168316	ORBITAL, B3 ACTR LOAD SENSING (SEE PAGE 1-66)	1
13	M10SLW ZP	WASHER,SPLIT LK METRIC 10MMZP	4

Powertrain

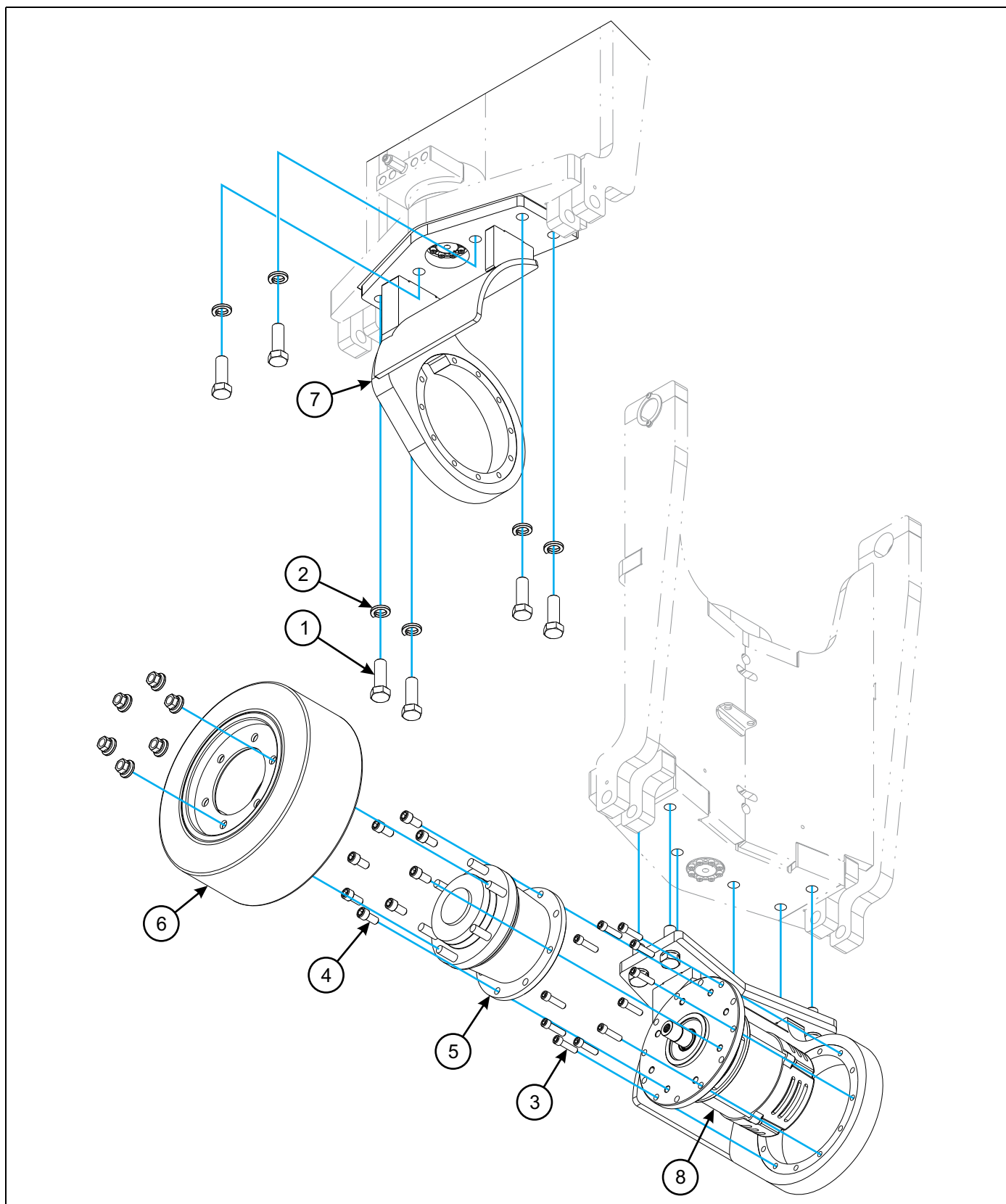


Figure 1-59: Drive Installation

Drive Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-654-010125-09	SCREW,HXCP 1-8UNCX3 GR8	6
2	1-861-010034-21	WASHER, LKG HEL SPRG 1IN	6
3	119119	SCREW HEX SKT 1/2-20X2-1/2	11
4	131848	SCREW,HX SKT M16-2.0X35,12.9	8
5	142229	GEARBOX,BREVINI 29:1 (SEE PAGE 1-105)	1
6	145805	WHEEL,FRONT 7" SM POLY B3-2 (SEE PAGE 1-104)	1
7	145864	MOUNT WLDMT, B3-4 DRV MTR/GRBX	1
8	157539	MOTOR, AC B3 DRIVE (SEE PAGE 1-44)	1

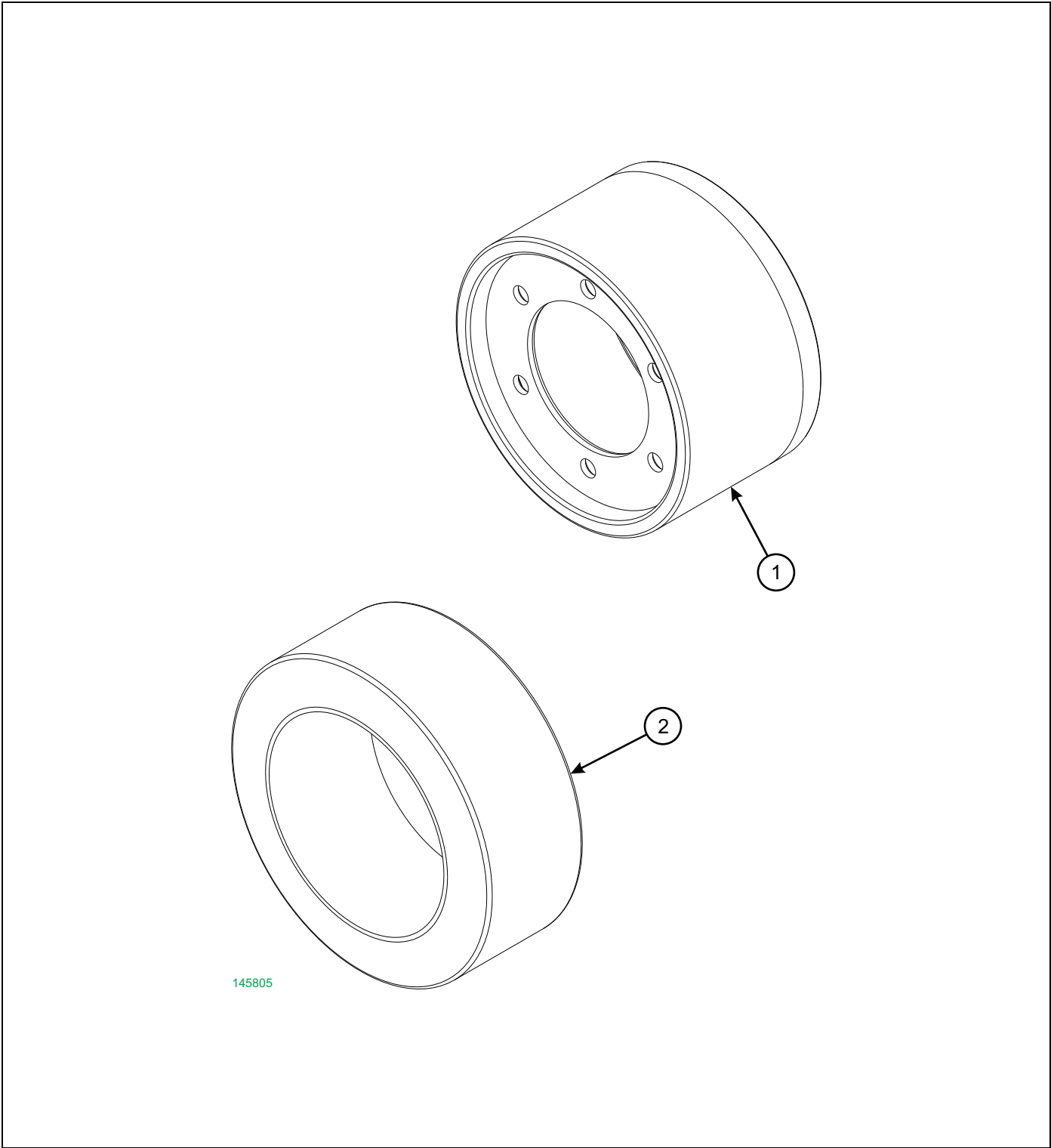


Figure 1-60: Drive Wheel Assembly

Drive Wheel Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	145805	WHEEL,FRONT 7" SM POLY B3-2	
1	145019	WHEEL BREVINI 7" B3-2	1
2	0012566	TIRE,PRESS-ON,POLY,18X7	1

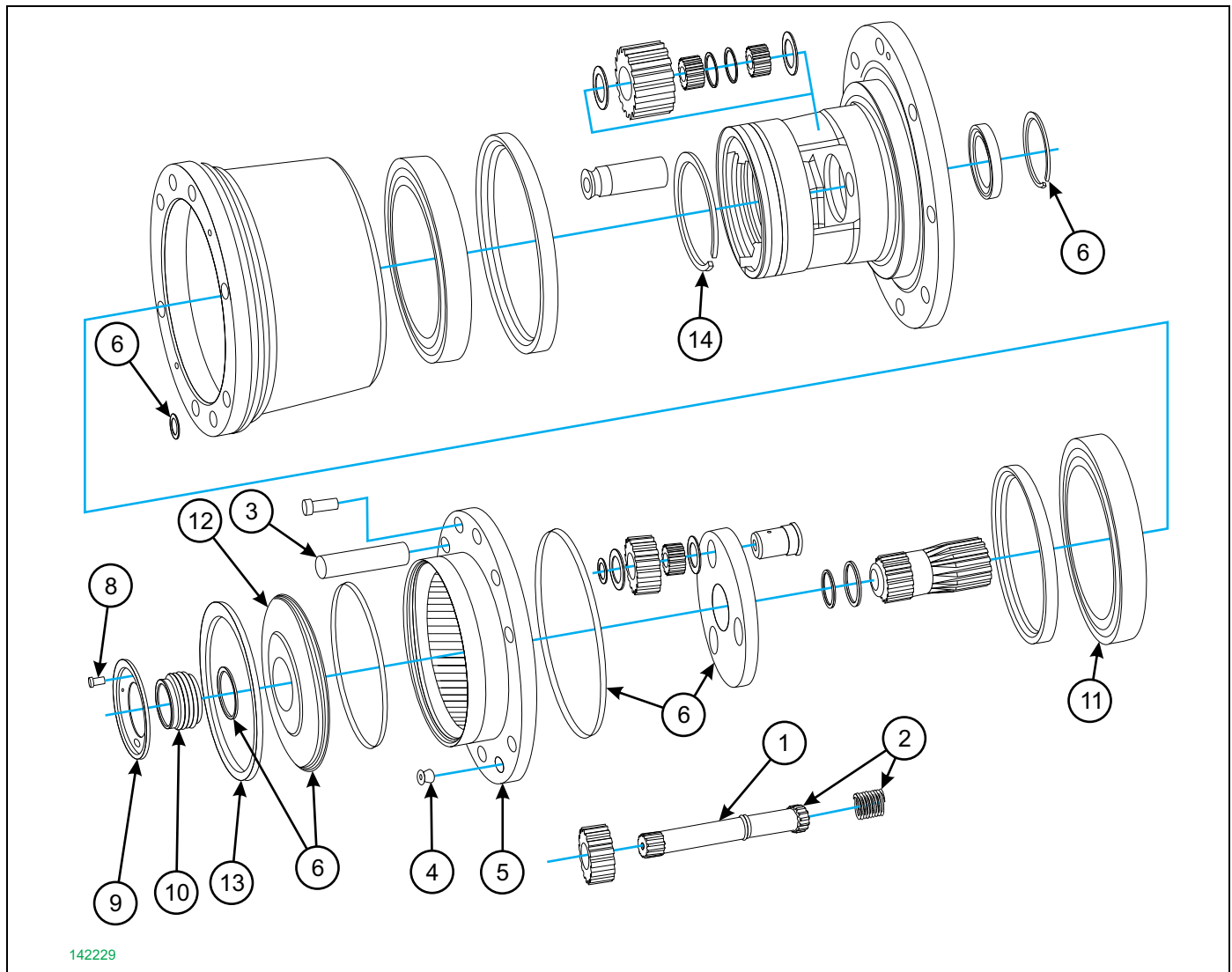


Figure 1-61: Gearbox Assembly, 29:1 In-Line, Brevini

Gearbox Assembly, 29:1 In-Line, Brevini

ITEM	PART NUMBER	DESCRIPTION	QTY.
	142229	GEARBOX,BREVINI 29:1	
1	127519	SHAFT,BREVINI GEARBOX DRIVE	1
2	131075	TRANSFER SHAFT W/SPRING	1
3	131076	STUD M18X1.5 (37002840000)	6
4	131077	PLUG M10X1 DIN908	1
5	131078	WASHER-DIN7603-A 10X15-CU	1
6	131079	SEAL KIT FOR P/N 124201 (DOES NOT INCLUDE ITEM 11)	REF
7	131455	LUG NUT,BREVINI M18X1.5 (NOT SHOWN)	6
8	136304	SCREW, COVER, GEARBOX	2
9	136305	COVER, GEARBOX CENTER CIRCLIP	1
10	136306	THRUST PLUG, GEARBOX CENTER	1
11	148080	OIL SEAL FOR 124201 GEAR BOX	1
12	148954	COVER	1
13	148955	RING	1
14	149546	CIRCLIP	1

Options

Accessories

ITEM	PART NUMBER	DESCRIPTION	QTY.
1			
2			
2			
3			
3			
4			
5			

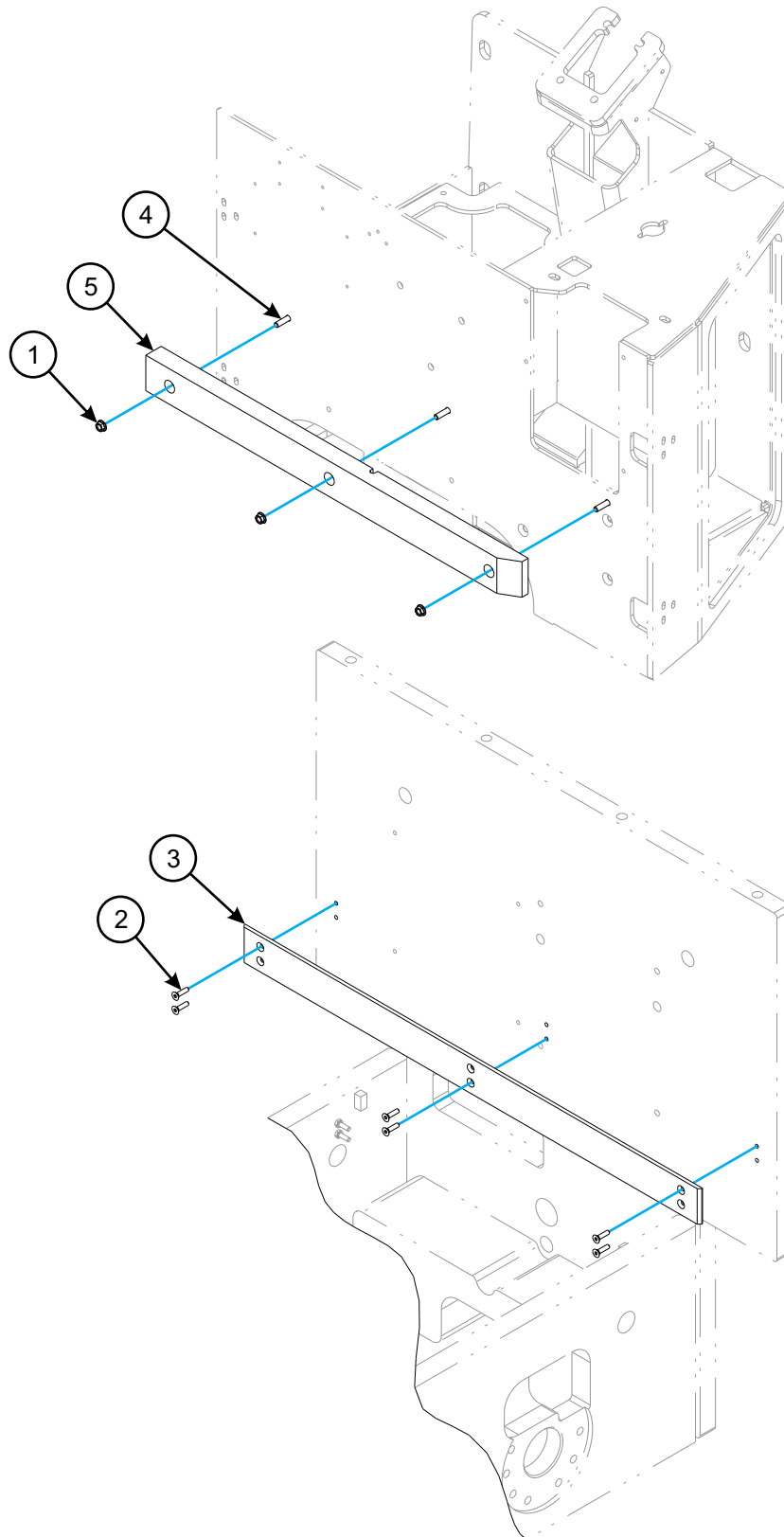


Figure 1-62: Battery Guides Installation

Battery Guides Installation

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	1-510-010004-03	NUT HX FLANGE, 5/16-18 GR8	3
2	1-654-010079-6	SCREW SKT FL C/SUNK 1/4-20X1	6
2	1-654-010079-9	SCREW SKT CTSK 1/4-20X1-3/4 (26" BATTERY OPTION ONLY)	6
3	108456	BAR,B30 RR UHMW BATTERY GUIDE	1
3	118708	BAR, B30 B&Q UHMW BATTGUIDE (26" BATTERY OPTION ONLY)	1
4	131206	SCREW,BHSC 5/16-18UNCX1-1/4	3
5	153282	BAR,BT-4.5 FRT UHMW FRT GUIDE	1

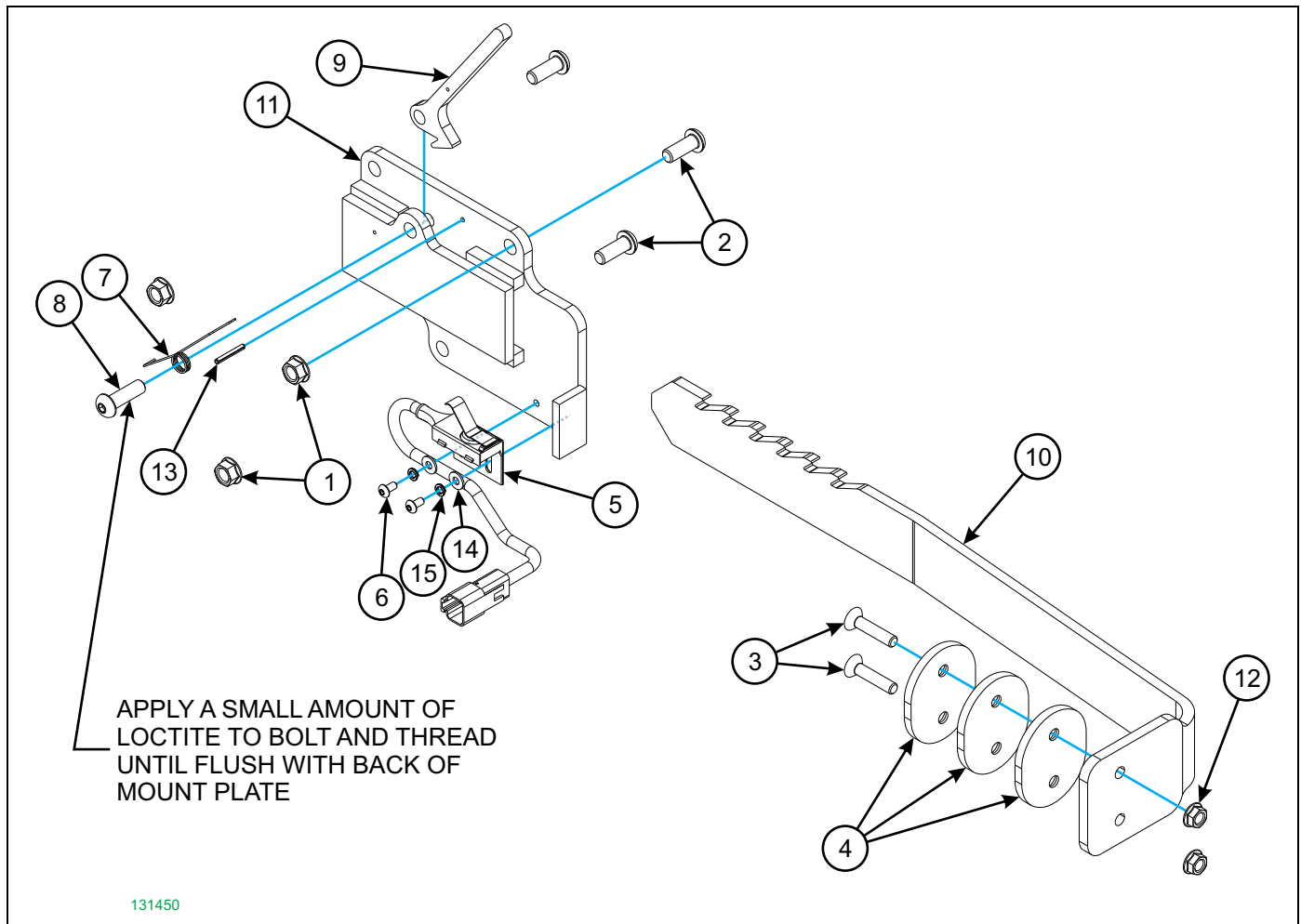


Figure 1-63: Battery Restraint Assembly

Battery Restraint Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY.
	131450	RESTRAINT ROLLOUT BAT BT	
1	107470	NUT, SPIRALOCK 3/8-16HX	3
2	108336	SCREW SKT BTN 3/8-16X1	3
3	108407	SCREW, HXSKT CTSK 5/16-18X1.5	2
3	111311	SCREW HX SKTCTSK, 5/16-18X3/42 (NOT SHOWN) (USED WHEN LESS SPACERS ARE USED)	2
4	108408	PLATE, ROLLOUT BTRY SPACER	3
5	109520	SWITCH, ROLLOUT REST LIM	1
6	114849	SCREW, BHSC #10-24UNCX3/8	2
7	127769	SPRING, TORSION	1
8	130405	SCREW, BHSC 3/8-16UNCX1-1/4	1
9	131429	CATCH ROLLOUT BAT RST BT	1
10	131430	ARM ROLLOUT BAT RST BT	1
11	131449	MOUNT ROLLOUT BAT RST BT WLD	1
12	1-510-010004-03	NUT HX FLANGE, 5/16-18 GR8	2
13	1-647-010004117	SPRING PIN, SLOTTED 1/8X1	1
14	1-861-010032-03	WASHER, FLAT #10 ZP/CD	2
15	1-861-010034-07	WASHER, LKG, HLCL SPR, NO 10	2

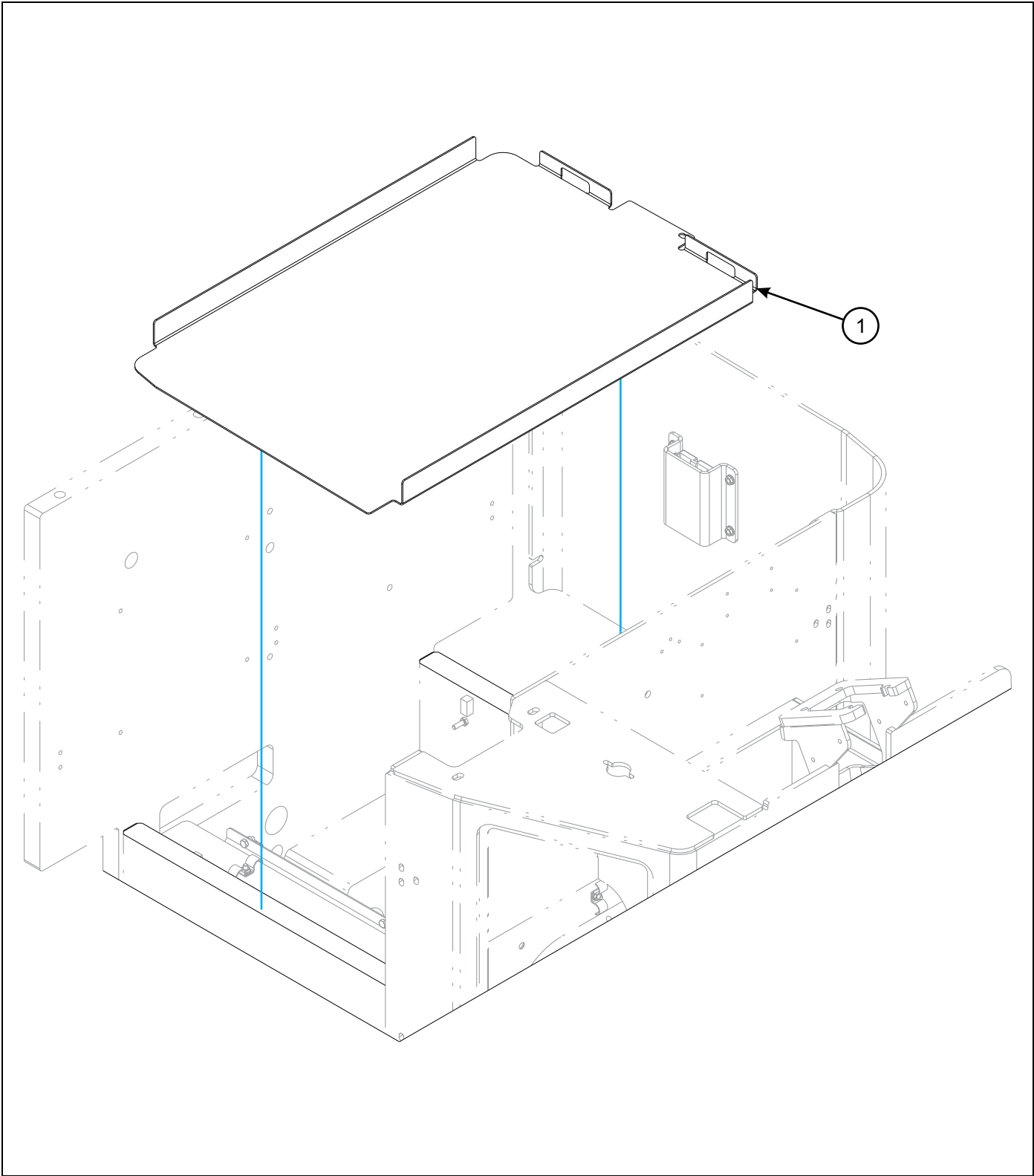


Figure 1-64: Battery Tray, Lift Out

Battery Tray, Lift Out

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	130621	TRAY SERIES 4, B30 LIFTOUT	1

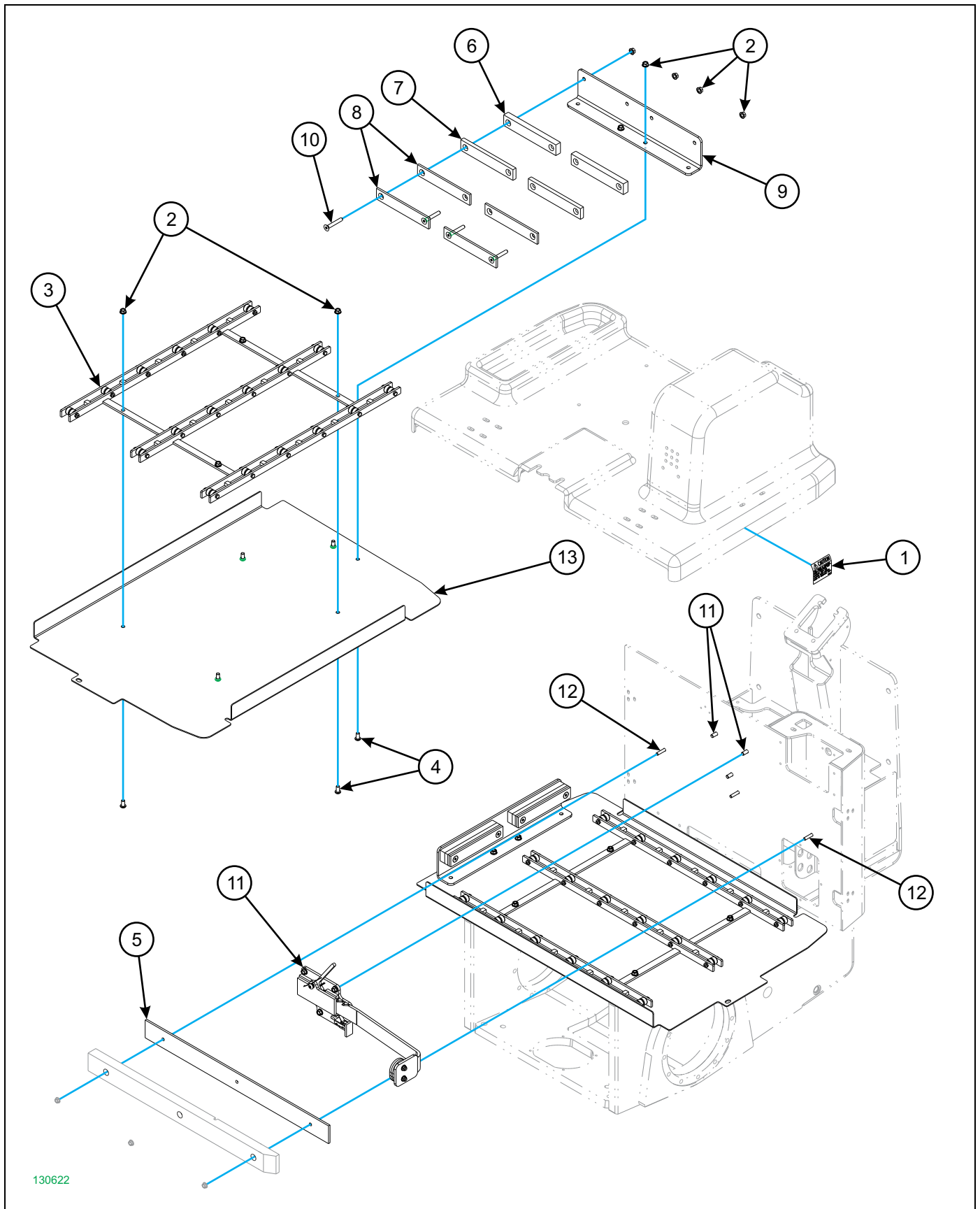


Figure 1-65: Battery Tray Assembly, Roll Out

ILLUSTRATED PARTS LIST**Battery Tray Assembly, Roll Out**

ITEM	PART NUMBER	DESCRIPTION	QTY.
	130622	OPTION,ROLLOUT BAT TRAY,42-4	
1	102159	DECAL, CAUTION ROLLOUT BATT.	1
2	107470	NUT, SPIRALOCK 3/8-16HX	10
3	111762	TRAY, B30B ROLLER	1
4	111899	SCREW, BHSC 3/8-16UNCX3/4	6
5	126618	BAR, ROLLOUT FRT BATT SPCR, BT4	1
6	131395	SHIM 3/4 BATT REST BT	AR
7	131396	SHIM 1/2 BATT REST BT	AR
8	131397	SHIM 1/4 BATT REST BT	AR
9	131398	RESTRAINT LH ROLLOUT BAT	1
10	131427	SCREW HXSKT CTSK 3/8-16X2-1/2	4
11	131450	RESTRAINT ROLLOUT BAT BT (SEE PAGE 1-109)	1
12	133917	SCREW, BHSC 5-16-18UNCX1-1/2	3
13	135638	TRAY WLDMT B30-4 ROLLOUT BAT	1

NOTE: NUMBER OF SHIMS AND SPACER PLATES (ITEMS 6-8) VARIES DEPENDING UPON CUSTOMER BATTERIES.

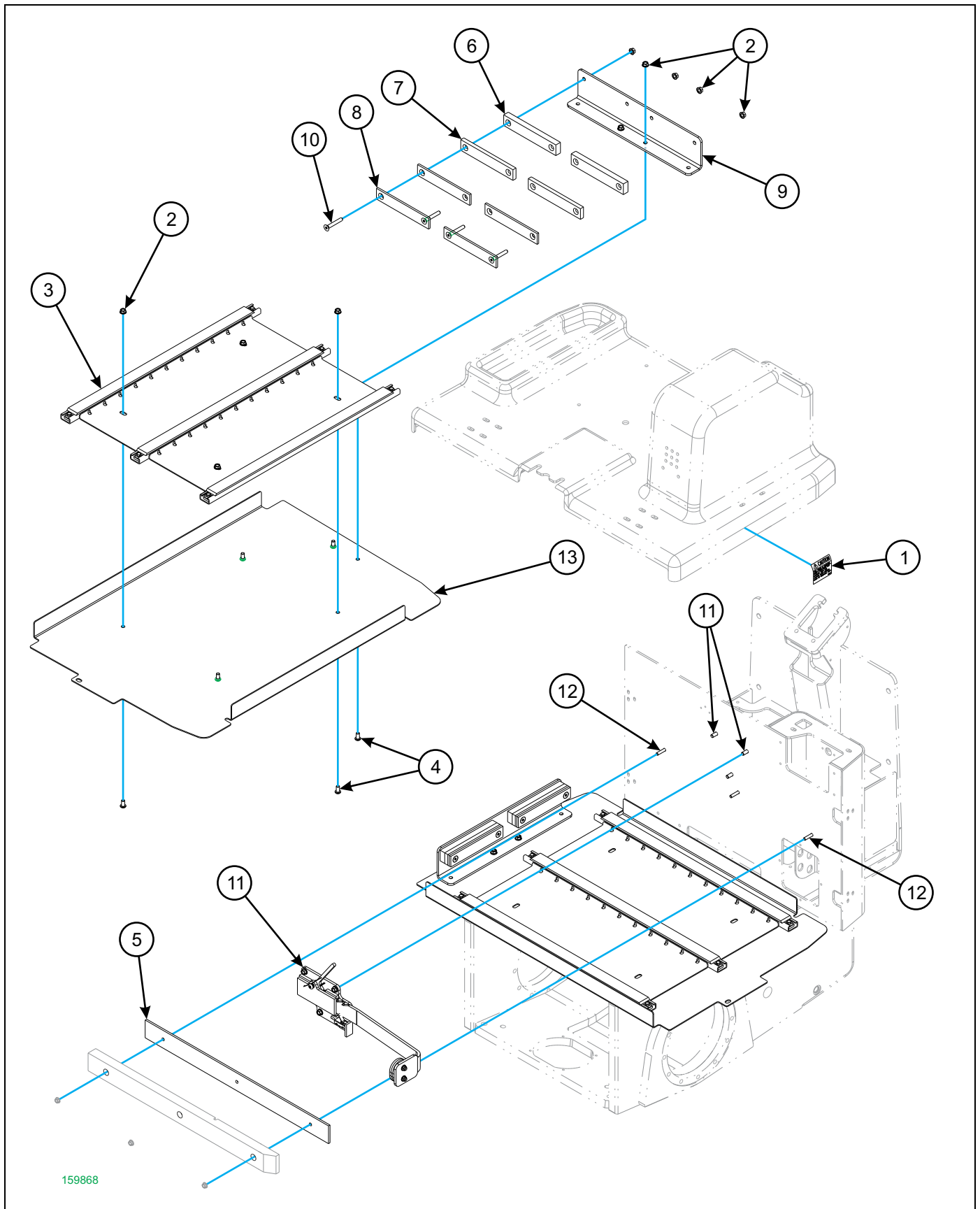


Figure 1-66: Battery Tray Assembly, Slide Out

ILLUSTRATED PARTS LIST**Battery Tray Assembly, Slide Out**

ITEM	PART NUMBER	DESCRIPTION	QTY.
	159868	OPTION,SLIDEOUT BATT 42-4	
1	102159	DECAL, CAUTION ROLLOUT BATT.	1
2	107470	NUT, SPIRALOCK 3/8-16HX	10
3	159862	ASSY,31"X24" 3 RAIL BAT SLIDE	1
4	111899	SCREW,BHSC 3/8-16UNCX3/4	6
5	126618	BAR,ROLLOUT FRT BATT SPCR,BT4	1
6	131395	SHIM 3/4 BATT REST BT	AR
7	131396	SHIM 1/2 BATT REST BT	AR
8	131397	SHIM 1/4 BATT REST BT	AR
9	131398	RESTRAINT LH ROLLOUT BAT	1
10	131427	SCREW HXSKT CTSK 3/8-16X2-1/2	4
11	131450	RESTRAINT ROLLOUT BAT BT (SEE PAGE 1-109)	1
12	133917	SCREW,BHSC 5-16-18UNCX1-1/2	3
13	135638	TRAY WLDMT B30-4 ROLLOUT BAT	1

NOTE: NUMBER OF SHIMS AND SPACER PLATES (ITEMS 6-8) VARIES DEPENDING UPON CUSTOMER BATTERIES.

Service Tools

Software Programs, Cables, Handsets, and Documents

ITEM	PART NUMBER	DESCRIPTION	QTY.
1	145405	KIT, CURTIS 1314 OEM PROG (REPLACED BY ITEM 8)	
2	0018152	GAUGE KIT, HYDRAULIC PRESSURE	
3	128554	DEUTSCH SERVICE KIT	
4	161364	KIT,MINI DEUTSCH CONN	
5	143837	PROGRAMMER, CURTIS 1311 SERV V	
6	168284	DONGLE, CURTIS USB W/OUT MOLEX (FOR DEALERS WITH 1314 SOFTWARE) (FOR USE WITH ITEM 7)	
7	171548	CONNECTOR, CURTIS MOLEX (FOR DEALERS WITH 1314 SOFTWARE) (FOR USE WITH ITEM 6)	
8	171549	KIT, CURTIS 1314 USB OEM PROG (INCLUDES USB DONGLE)	

Chapter 2

Numerical Index

Numerics

0010931	1-87
0011269	1-87
0012200	1-9
0012212	1-9
0012214	1-9
0012215	1-9
0012566	1-104
0013512	1-15
0018108	1-81
0018109	1-81
0018110	1-53
0018117	1-61
0018119	1-53, 1-61
0018120	1-61, 1-65
0018126	1-81
0018136	1-61
0018149	1-53, 1-63
0018152	1-115
0018160	1-65
0019039	1-11
0022016	1-11
0030010	1-45
0030011	1-93
0030024	1-37
0030033	1-93
0050002	1-9
100006	1-101
100131	1-9

1-007-010025	1-61
101375	1-41
101864	1-15
101909	1-87
101967	1-85
101988	1-9
102048	1-55, 1-59
102159	1-35, 1-112, 1-114
10-32X1	1-87
104031	1-83
104077	1-23
104382	1-59
104399	1-15
104582	1-61
104877	1-23
105494	1-41
106100	1-41
106240	1-93
106429	1-53
106487	1-12
106534	1-87
106954	1-87, 1-93
106955	1-17, 1-23, 1-37, 1-73, 1-77
107-0002	1-41
107-0754	1-61
107-0762	1-15
107-0984	1-41
107-1001	1-9
107199	1-85

NUMERICAL INDEX

107470	1-15, 1-17, 1-41, 1-53, 1-59, 1-101, 1-109, 1-112, 1-114	111630	1-29
107518	1-89, 1-95	111708	1-89
107539	1-23, 1-97	111709	1-91
107750	1-93	111710	1-89
107920	1-87	111711	1-91
107940	1-19	111712	1-89, 1-91
108151	1-87	111713	1-89, 1-91
108336	1-29, 1-55, 1-109	111714	1-89, 1-91
108337	1-73	111715	1-89, 1-91
108407	1-109	111716	1-89, 1-91
108408	1-109	111717	1-89, 1-91
108409	1-37	111718	1-89, 1-91
108417	1-7, 1-23, 1-25, 1-29, 1-37, 1-41, 1-49, 1-81	111719	1-89, 1-91
108456	1-108	111720	1-89, 1-91
108610	1-29, 1-37, 1-83	111762	1-112
108797	1-17, 1-23, 1-29, 1-73, 1-77, 1-87, 1-93	111899	1-23, 1-112, 1-114
109042	1-19	112643	1-69
109099	1-25, 1-29, 1-81	112866	1-15
109394	1-37	112876	1-62
109520	1-109	113089	1-9
109548	1-15	113510	1-15
109584	1-91, 1-95	113535	1-15
109874	1-61	114067	1-85
10K2	1-7	114849	1-109
110-2760	1-85	115668	1-17
110289	1-37	115673	1-17
110427	1-23	115849	1-37
110467	1-37	115958	1-23
110470	1-37	115963	1-29
110578	1-59	116144	1-49
110-7389	1-19	117136	1-93
110843	1-23	117437	1-9
111271	1-15	117997	1-37
111311	1-109	118180	1-74
111340	1-17	118575	1-43
111341	1-15, 1-23	118577	1-3
111360	1-87	118631	1-29
		118708	1-108

118710	1-87, 1-93	128082	1-99
119119	1-103	128083	1-99
119547	1-85	128084	1-99
119548	1-85	128085	1-99
119734	1-23, 1-29, 1-55	128086	1-99
119741	1-17	128088	1-99
120047	1-89, 1-91	128089	1-99
120123	1-93	128090	1-99
121421	1-85	128091	1-99
121422	1-23, 1-35	128092	1-99
121526	1-23	128093	1-99
121571	1-85	128174	1-77
122187	1-41	128305	1-61
123391	1-95	128306	1-17
123763	1-77	128554	1-115
123909	1-61	128757	1-17
123910	1-50	128859	1-29
125056	1-50	128861	1-17
125892	1-73	129421	1-61
125894	1-37	129608	1-61, 1-63, 1-65
126088	1-55	129609	1-7
126193	1-97, 1-99	129610	1-7
126618	1-112, 1-114	129626	1-97
126685	1-93	129635	1-61, 1-62
127080	1-93	129677	1-61
127082	1-93	129909	1-67
127083	1-95	130149	1-61
127084	1-93	130345	1-23
127090	1-29	130405	1-17, 1-109
127356	1-29, 1-83	130406	1-17
127519	1-105	130412	1-17
127621	1-53	130413	1-17
127627	1-23	130414	1-17
127640	1-93	130415	1-17
127644	1-69	130595	1-61
127759	1-55	130602	1-35
127769	1-109	130603	1-35
127991	1-37	130604	1-17

NUMERICAL INDEX

130621	1-110	138749	1-77
130622	1-112	139806	1-99
131015	1-101	141808	1-9
131075	1-105	142229	1-103, 1-105
131076	1-105	1422701	1-4, 1-5
131077	1-105	143491	1-19
131078	1-105	143492	1-19
131079	1-105	143516	1-77
131080	1-17	143521	1-11, 1-12
131206	1-108	143542	1-41
131395	1-112, 1-114	143547	1-41
131396	1-112, 1-114	143573	1-37
131397	1-112, 1-114	143837	1-115
131398	1-112, 1-114	144587	1-81
131427	1-112, 1-114	144599	1-44, 1-46
131429	1-109	145019	1-104
131430	1-109	145405	1-115
131449	1-109	145406	1-41
131450	1-109, 1-112, 1-114	145726	1-23
131455	1-105	145728	1-7
131519	1-69	145729	1-61
131520	1-69	145736	1-55
131808	1-61	145737	1-55
131827	1-63	145738	1-61
131828	1-63	145739	1-55
131829	1-63	145740	1-65, 1-101
131848	1-103	145741	1-73
133917	1-112, 1-114	145742	1-101
135032	1-55	145743	1-65
135568	1-97	145744	1-65
135617	1-97	145745	1-65
135638	1-112, 1-114	145751	1-83
136304	1-105	145753	1-83
136305	1-105	145754	1-23, 1-83
136306	1-105	145755	1-23
136969	1-23	145805	1-103, 1-104
138077	1-68, 1-81	145817	1-37
138570	1-99	145847	1-65

145848	1-65	149416	1-79
145849	1-73	149443	1-59
145850	1-73	149546	1-105
145851	1-49	149560	1-62
145853	1-53	149561	1-62
145854	1-53	149562	1-62
145855	1-53	149563	1-62
145857	1-49	150494	1-79
145859	1-23	150665	1-46
145863	1-23	150666	1-46
145864	1-103	150669	1-46
145901	1-15	150670	1-46
145962	1-49	150673	1-44
146056	1-37	150674	1-44
146057	1-97	150753	1-68
146061	1-41	1-510-010004-03	1-15, 1-83, 1-108, 1-109
146067	1-37	1-511-010002-05	1-49
146072	1-41	151201	1-68
146160	1-37	1-512-010003-03	1-15, 1-49
146162	1-15	1-512-010003-05	1-87, 1-97
146259	1-79	1-512-010003-06	1-37
146260	1-79	1-512-010003-09	1-15, 1-37, 1-49
146261	1-79	1-512-010004-05	1-85
146262	1-79	1-512-010005-03	1-85, 1-95
146263	1-79	1-512-010005-05	1-59
146291	1-74	1-512-010007-07	1-9
146295	1-43	151202	1-68
146296	1-43	151203	1-68
146297	1-97	151204	1-68
146364	1-79	151398	1-97
146386	1-73, 1-77	151409	1-85
146613	1-43	151412	1-85
146632	1-41	151430	1-35
146676	1-59	151471	1-83
148080	1-105	151507	1-62
148954	1-105	152144	1-41
148955	1-105	152816	1-97, 1-101
149321	1-12	152870	1-35

NUMERICAL INDEX

153231	1-9	159642	1-79
153232	1-9	159862	1-114
153235	1-85	159868	1-114
153238	1-79	160417	1-85
153253	1-85	160442	1-49
153282	1-108	160520	1-85
153283	1-53	161318	1-79
153284	1-53	161364	1-115
153303	1-85	161412	1-23
153309	1-79	162248	1-23
153310	1-97	162290	1-7
153457	1-85	162580	1-65
153458	1-85	162581	1-65
153466	1-23	162582	1-65
153467	1-85	162583	1-65
153496	1-85	162667	1-79
154004	1-53, 1-56, 1-85	163857	1-35
154015	1-59	163960	1-46, 1-59
154016	1-59	1-647-010004117	1-109
154179	1-37	1-647-010004255	1-23
154180	1-37	1-647-010004257	1-93
154539	1-65, 1-101	1-654-010047-03	1-25
154541	1-53	1-654-010047-04	1-25, 1-49
154542	1-53	1-654-010047-05	1-23
154573	1-91, 1-95	1-654-010047-06	1-15
154574	1-89, 1-95	1-654-010047-08	1-81
155677	1-23	1-654-010047-09	1-81
155689	1-9	1-654-010049-05	1-49, 1-61, 1-101
156260	1-56	1-654-010049-06	1-85
156266	1-87	1-654-010049-07	1-15
156301	1-61	1-654-010049-08	1-15
156356	1-93	1-654-010051-05	1-7, 1-47
157345	1-25	1-654-010051-06	1-93
157521	1-71	1-654-010051-07	1-9, 1-101
157539	1-44, 1-103	1-654-010079-6	1-108
157542	1-59	1-654-010079-9	1-108
158471	1-37	1-654-010100028	1-37
158958	1-35	1-654-010104315	1-3

1-654-010121-06	1-95	169336	1-73
1-654-010125-09	1-103	169337	1-71
1-654-010125-13	1-19	169760	1-81
1-654-010125-18	1-19	169763	1-17
1-654-010166-04	1-43	169764	1-97
1-655-010002-11	1-93	170122	1-44
1-655-010003-05	1-61	170123	1-44
1-656-010003034	1-49	170124	1-44, 1-46
165738	1-59	170127	1-44, 1-46
167015	1-79	170128	1-44
167016	1-9	170129	1-46
167017	1-7, 1-9	170130	1-44, 1-46
167018	1-9	170134	1-46
167022	1-9	170135	1-46
167072	1-15	170136	1-46
167443	1-81	170137	1-46
167495	1-79	170138	1-46
167496	1-79	170139	1-46
167497	1-79	170140	1-46
167498	1-79	170141	1-46
167499	1-79	170597	1-71
167500	1-79	170611	1-71
167736	1-59	170612	1-71, 1-73
168219	1-56	170637	1-23
168220	1-56	171548	1-115
168221	1-56	171549	1-115
168222	1-56	171561	1-79
168223	1-56	173698	1-35
168284	1-115	173927	1-59
168303	1-79	174269	1-44
168312	1-71	174270	1-44
168316	1-65, 1-67, 1-101	174271	1-44
168318	1-71	174272	1-44
168584	1-62	18062	1-3, 1-5
169051	1-79	1-861-010032-01	1-41
169067	1-71	1-861-010032-02	1-49
169104	1-37	1-861-010032-03	1-9, 1-41, 1-109
169112	1-17	1-861-010032-04	1-87

NUMERICAL INDEX

1-861-010032-06	1-17, 1-23, 1-29, 1-81, 1-83	2P726	1-35
1-861-010032-07	1-23, 1-29, 1-37, 1-41, 1-49	30008	1-29
1-861-010032-08	1-17, 1-49, 1-61, 1-85, 1-101	3-557-010253	1-9
1-861-010032-09	1-23, 1-61, 1-95	36204	1-41
1-861-010032-10	1-7, 1-23, 1-29, 1-59, 1-61	36205	1-41
1-861-010032-11	1-9, 1-47, 1-55, 1-93	37082	1-3
1-861-010032-14	1-23	40-0717-02	1-93
1-861-010032-15	1-15, 1-49	40-0933	1-41
1-861-010032-18	1-85	50420	1-12
1-861-010034-07	1-9, 1-41, 1-109	50421	1-11
1-861-010034-09	1-43	50422	1-11
1-861-010034-10	1-49, 1-61, 1-101	50423	1-11
1-861-010034-11	1-7, 1-9, 1-47, 1-93	51082-02	1-3, 1-4
1-861-010034-13	1-15, 1-23	52661	1-4, 1-5
1-861-010034-21	1-19, 1-103	53026	1-4
18EM816ER	1-4, 1-5	53027	1-4
1CM1225ER	1-4, 1-5	622-2967-002	1-37
1CM816ER	1-4, 1-5	622-2967-015	1-37
22-0627	1-9	622-2967-018	1-37
22-0628	1-9	6719	1-47
23926	1-11	6EM60ER	1-4, 1-5
23927	1-12	7CM1030ER	1-59
239-3646-3	1-37	85G208E	1-9
239-9076-009	1-25, 1-81	900598-6S	1-61
25028	1-9	9-879-010066	1-37
25035	1-56		
25E2E	1-9		
26261	1-4, 1-5		
26269	1-4, 1-5		
26270	1-4, 1-5		
26275	1-4, 1-5		
26276	1-4, 1-5		
26277	1-4, 1-5		
26278	1-4, 1-5		
28028	1-11		
28218	1-4, 1-5		
2-879-010103	1-37		
28967-5	1-4, 1-5		

M

M10SLW ZP	1-59, 1-61, 1-101
-----------	-------------------

P

PD341	1-63
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Chapter 3

Glossary

For clarity this glossary of industry standard abbreviations and their definitions are provided.

For additional information, See “Instructions for Ordering Parts” on page 1-1.

A

ASSY Assembly

B

BATT Battery
BHSC Button Head Socket Cap
BLK Black
BLKHD Bulkhead
BLNCE Balance
BRK Brake
BTN Button

C

CB Carriage Bolt
CD Cadmium
COMPSTR Compensator
CONN Connector
CP Cap
CRG Carriage
CTSK Countersunk
CTWT Counterweight
CVR Cover
CYD OR CYL Cylinder

D

DBL Double
DEG Degree
DIA Diameter

E

ENCLSD Enclosed

F

FHCS Flanged Head Cap Screw
FHHCS Flanged Hex Head Cap Screw
FL OR FLG Flange
FLT Flat
FRT Front

G

GA Gauge
GR5 Grade 5
GR8 Grade 8

H

HHCS Hex Head Cap Screw
HCS High Carbon Steel
HD Head
HLCL OR HEL Helical
HCSKT Hex Socket
HSFC Hex Socket Flat Countersunk
HX Hex
HYD Hydraulic

I

I/C Internal Combustion
ID Inside Diameter
IND Indicator
INT Interior

GLOSSARY

J

JIC Joint Industry Council

L

LD Lead
LH Lefthand
LIM Limit
LKG OR LOCK Locking
LWR Lower

M

MACH Machined
MANF Manifold
MNT Mount
MTR Motor

N

NK Neck
NRW Narrow
NSS Not Serviced Separately
NYL Nylon

O

OD Outside Diameter
OHG Overhead Guard
ORFS OR ORS O-Ring Seal
ORP OR ORB O-Ring Boss

P

P-STEER Power Steering
POT Potentiometer
PTFE Polytetrafluoroethylene (Teflon)

R

REFLECTV Reflective
RH Righthand
RND OR RD Round
ROT Rotation
RTNR Retainer

S

SAE Society of Automobile Engineers
 (Imperial System)
SER Series
SGL Single
SHCS Socket Head Cap Screw
SHLD Shield
SKT Socket
SLFLKG Selflocking
SOC Socket
SOL Solenoid
SPDT Single Pole Double Throw
SPR Spring
SQ Square
SRTD Serrated
SSCR Setscrew
SST Stainless Steel
STD Standard
STRG Steering
STRN Strain
SWVL Swivel

T

TRAC Traction

U

UNC Unified Coarse Thread
UNF Unified Fine Thread
UPR Upper

W

WHL Wheel
WLD OR WLDMT Weldment
WSHR Washer

Z

ZP Zinc Plate

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LANDOLL CORPORATION

1900 North Street

Marysville, Kansas 66508

(785) 562-5381

800-428-5655 ~ WWW.LANDOLL.COM



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