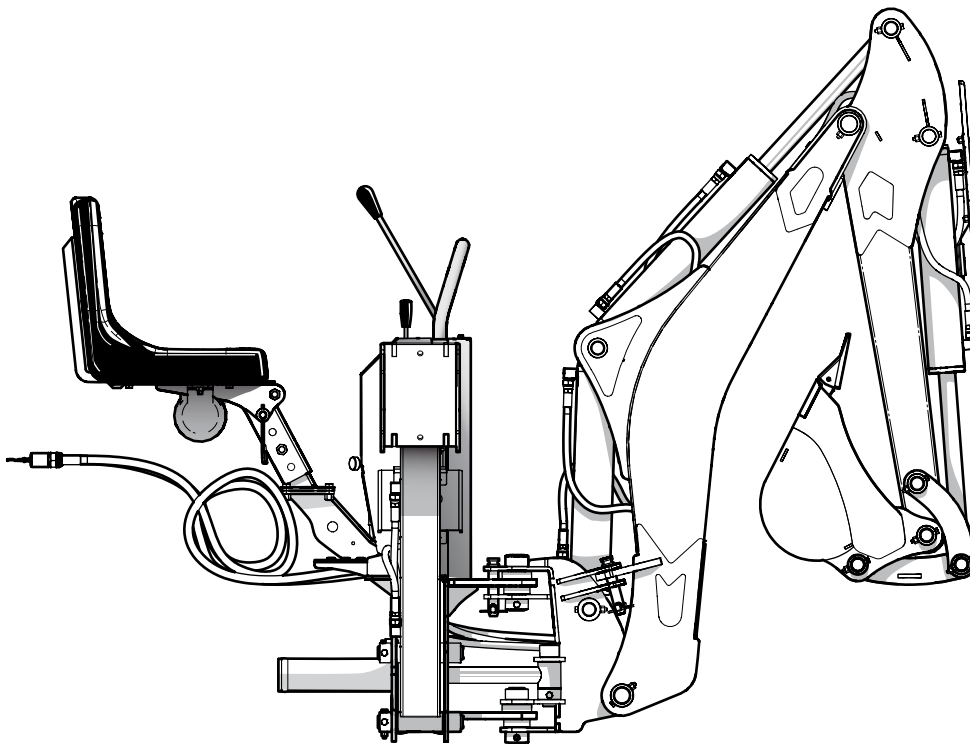


PARTS MANUAL

Serial Number 3620514 & up

GX620
BACKHOE



Foreword

This Wallenstein parts manual is prepared to assist customers in ordering quality OEM replacement parts.

Regular maintenance combined with replacing old, worn or broken parts with the correct OEM parts is essential in prolonging the life of your Wallenstein product. Refer to this manual to identify replacement parts.

To order parts, contact your Wallenstein dealer or distributor. Have the product model and serial number handy.

If your dealer is no longer available, please go to our website: <http://wallensteinequipment.com> and click on the [Dealer Locator](#) to find the nearest dealer.

All information contained in this parts manual is current as per the revision date at the bottom of the page. Wallenstein reserves the right to change product specifications at any time without notice.

If your product specifications differ from those contained in this manual, contact Wallenstein for current information.

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WARNING!

Refer to the operators manual for safe operation and maintenance.

Maintenance should be performed by trained personnel only.

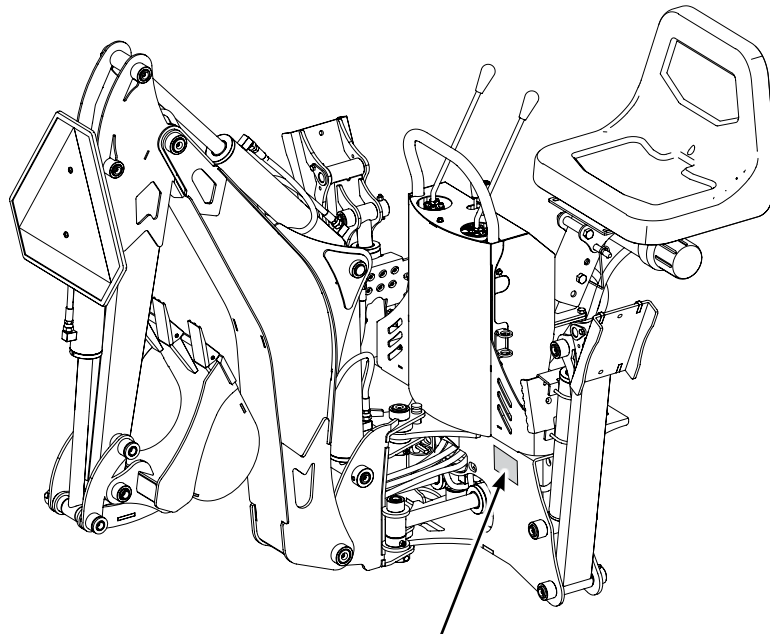
Serial Number Location

Always provide the model and serial number of your Wallenstein product when ordering parts or requesting service or other information. This information is found on the product information plate as shown below.

Record your product information here for future reference.

Model _____

Serial Number _____



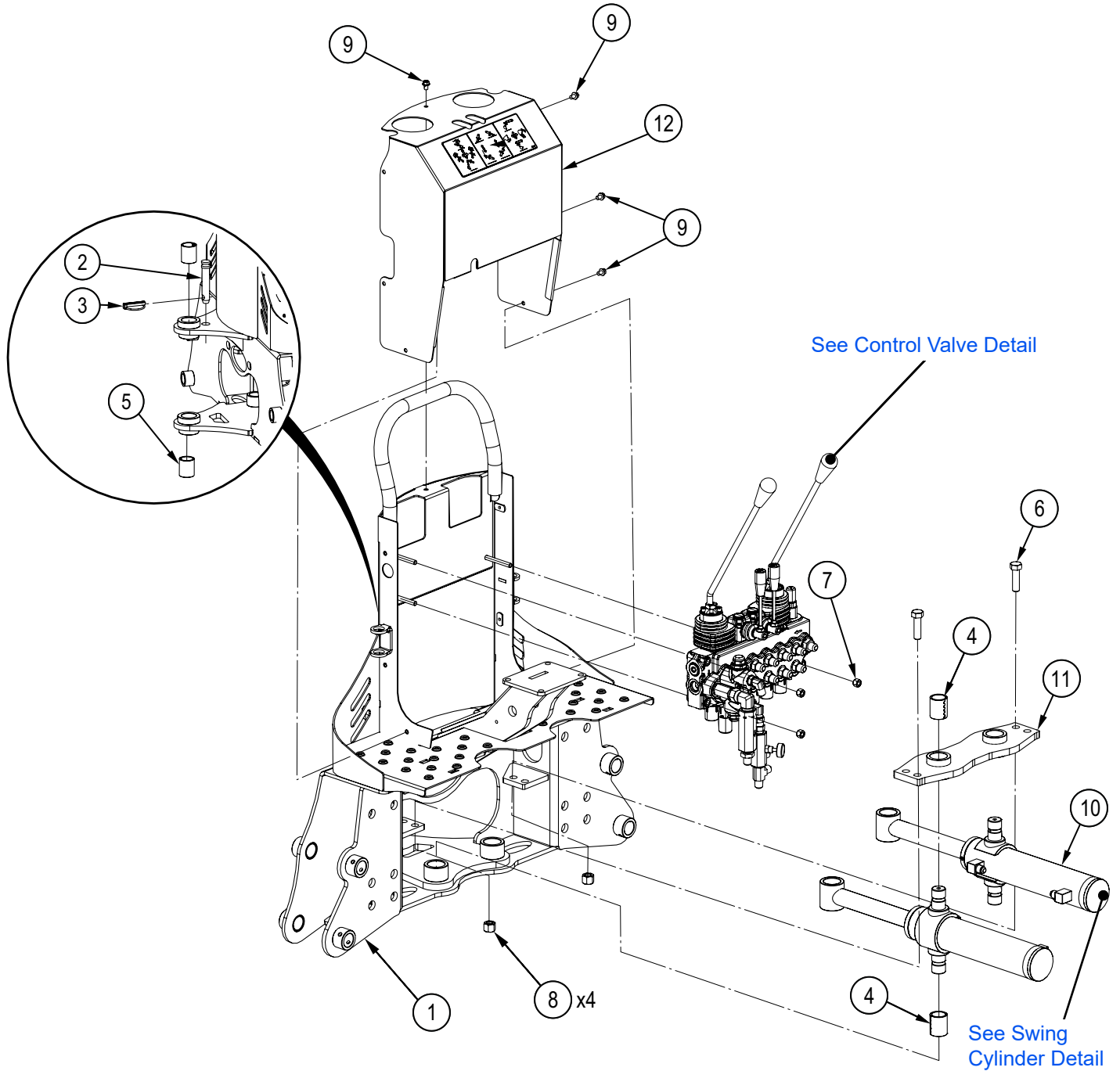
Model and Serial
Number Location

www.wallensteinequipment.com

Contents

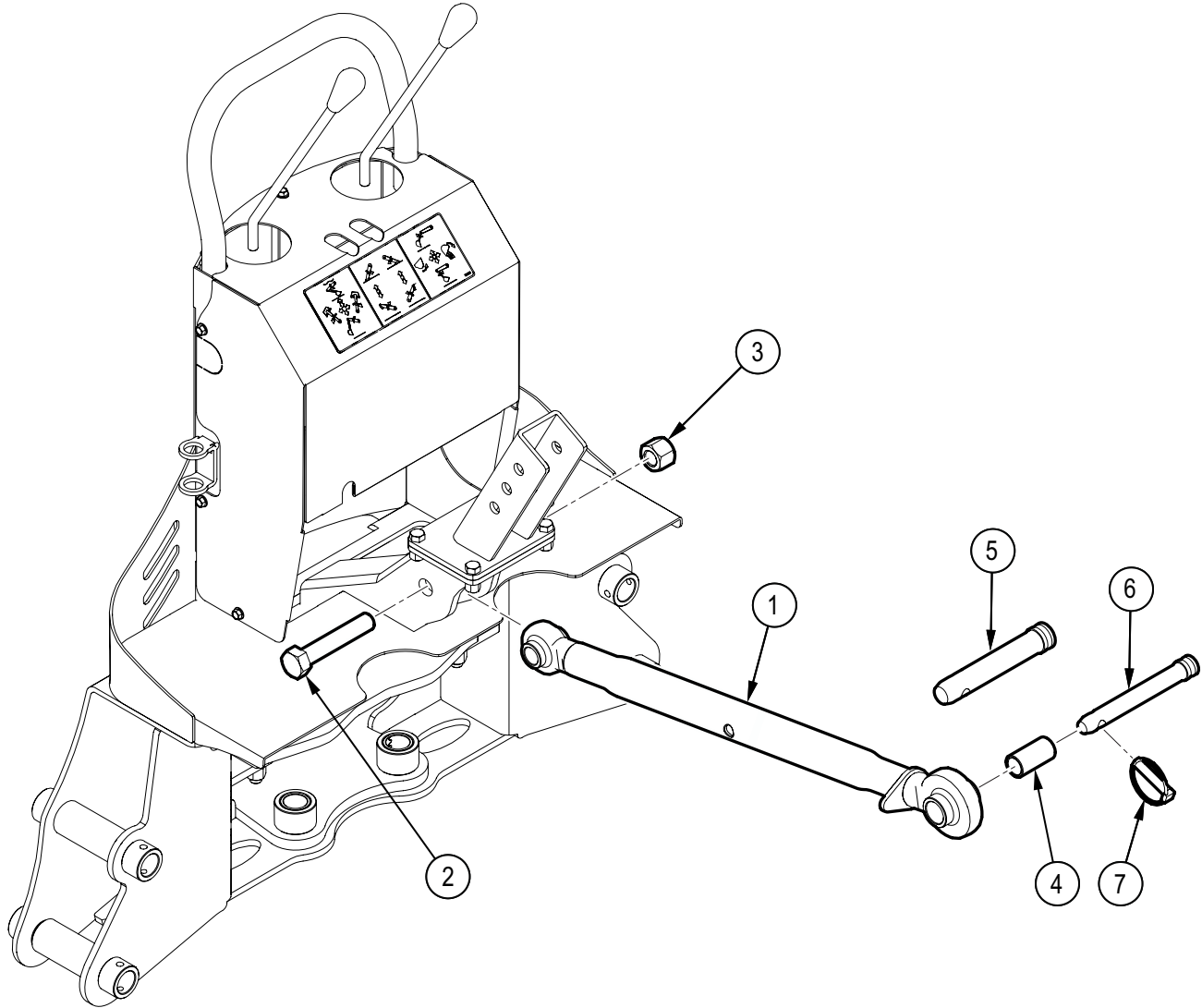
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Main Parts



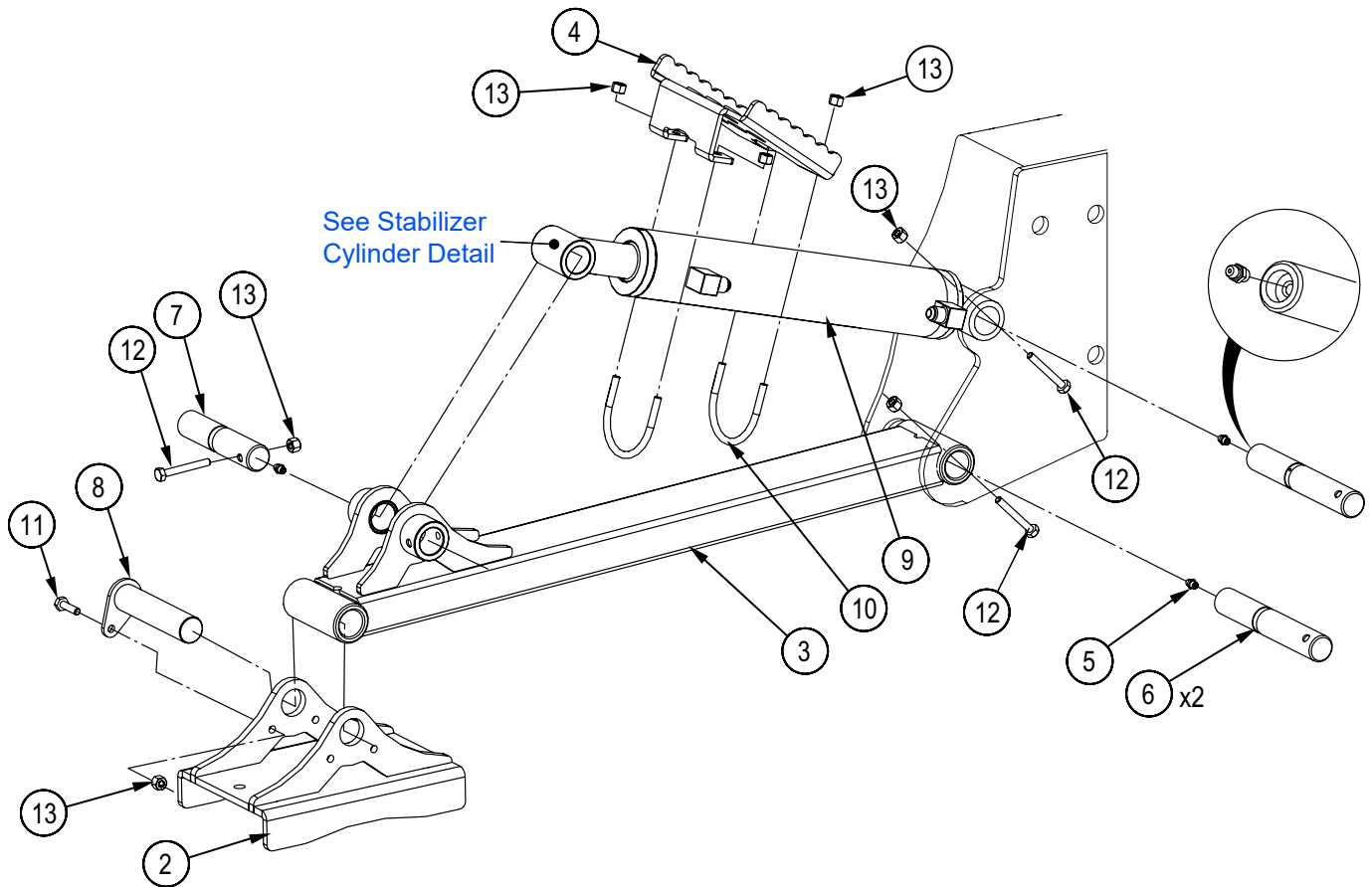
Item No.	Part No.	Description	Qty	Item No.	Part No.	Description	Qty
1	3011W150	Main Frame	1	7	Z72221	Hex Lock Nut, 5/16NC	3
2	Z11121	Toplink Pin, 3/4" x 2-3/4"	1	8	Z72251	Hex Lock Nut, 1/2NC	4
3	Z12140	Lynch Pin, 7/16"	1	9	Z76113	Flange Bolt, 1/4NC x 3/8"	7
4	Z27221	Bushing 1 ID x 1-1/4 OD x 1-1/2 long x 1/8 wall	4	10	3011C103	Cylinder, 2" x 7-3/4 Stroke	2
5	Z27231	Bushing 1-1/4 x 1-3/4	2	11	3011W151	Bar, Swing Cylinder Retaining	1
6	Z71517	Hex Bolt, 1/2NC x 1-3/4"	4	12	3011L204	Shield, Control Valve	1

Top Link Serial Number 3620779 and Up



Item No.	Part No.	Description	Qty
1	Z11507	Toplink, Cat 1 & 2 x 24" x 34"	1
2	Z71740	Hex Bolt, 3/4NC x 4"	1
3	Z72271	Hex Lock Nut, 3/4NC	1
4	3041M201	Bushing Drawbar Tab	1
5	Z11142	Toplink Pin, 1" x 4-5/16"	1
6	Z11123	Toplink Pin, 3/4" x 4-3/4"	1
7	Z12140	Lynch Pin, 7/16"	1

Stabilizer Leg Assembly

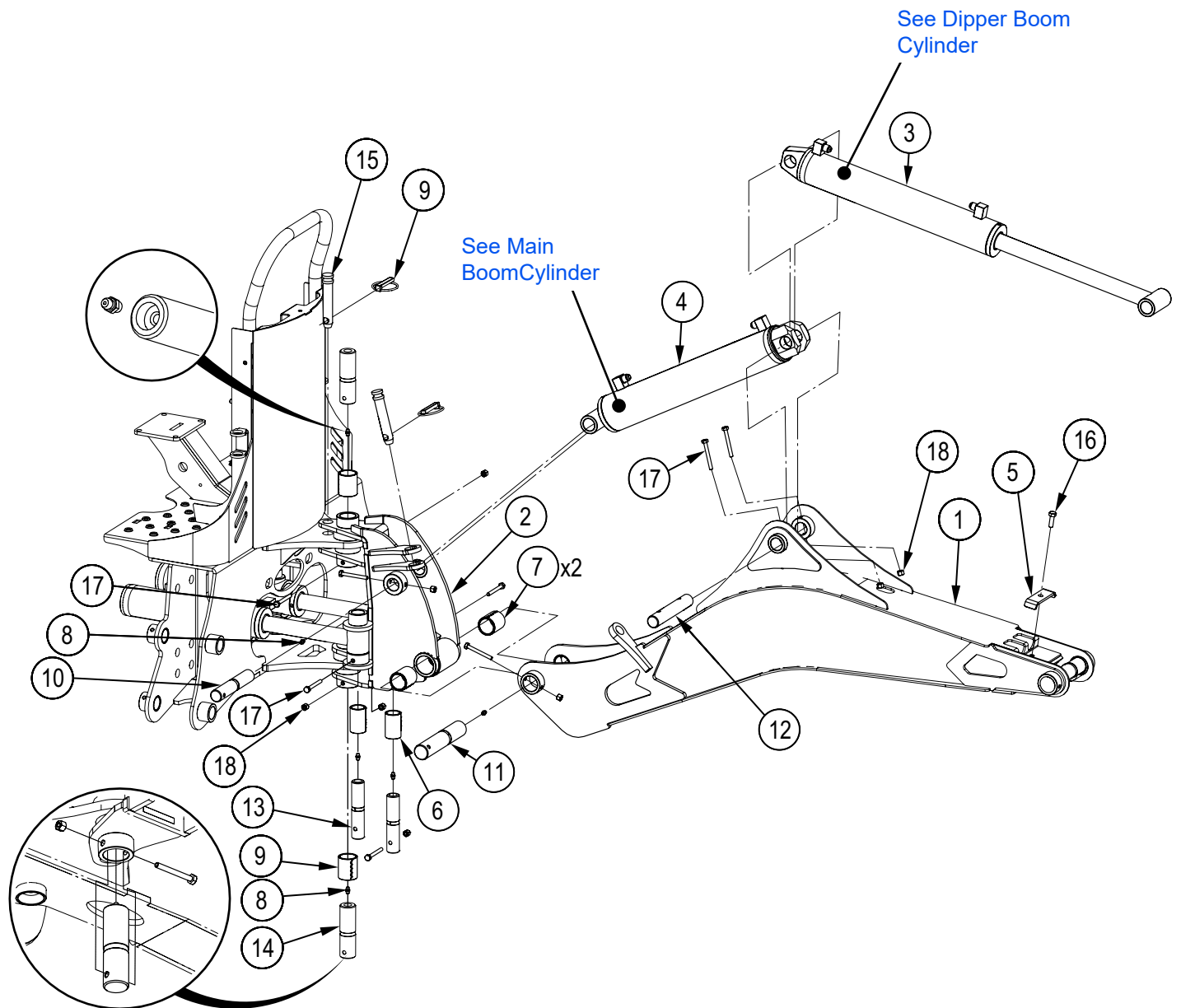


Left Stabilizer is shown, left and right assemblies are the same

Item No.	Part No.	Description	Qty
1	3011W108	RH Stabilizer - Not Shown	1
2	3011W107	Foot, Stabilizer	2
3	3011W109	LH Stabilizer	1
4	3011L140	Step, Stabilizer	2
5	Z29202	Grease Zerk 1/4NF	6
6	3011M106	Pin, 1" x 6-1/2" Greasable	4
7	3011M123	Pin, 1" x 4-3/4" Greasable	2

Item No.	Part No.	Description	Qty
8	3011W118	Flange Pin, 1" x 4-1/2"	2
9	3011C104	Cylinder, 2" x 9-3/4" Stroke	2
10	3011S107	U-Bolt, Stab Step	4
11	Z71110	Hex Bolt, 1/4NC x 1"	2
12	Z71120	Hex Bolt, 1/4NC x 2"	6
13	Z72211	Hex Lock Nut, 1/4NC	16

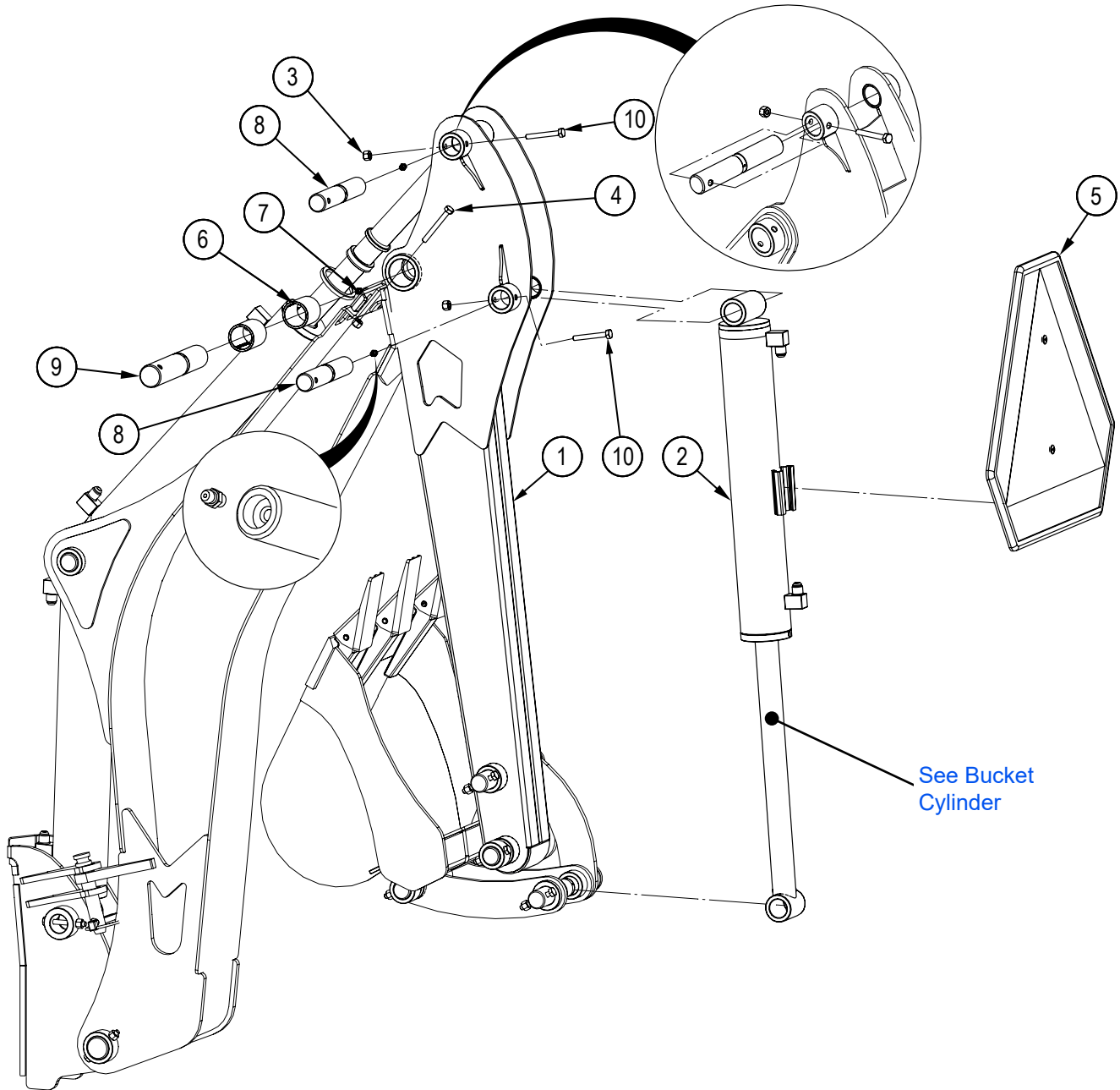
Main Boom Assembly



Item No.	Part No.	Description	Qty
1	3011W104	Main Boom	1
2	3011W105	Swing Tower	1
3	3011C105	Cylinder, 2-1/4 x 13.1" Stroke	1
4	3011C106	Cylinder, 2-1/2 x 13" Stroke	1
5	3011L176	Clamp, Two Hose	1
6	Z27222	Bushing 1 ID x 1-1/4 OD x 2 long x 1/8 wall	2
7	Z27231	Bushing 1-1/4 x 1-3/4	3
8	Z29202	Grease Zerk 1/4NF	6
9	Z12140	Lynch Pin, 7/16"	2

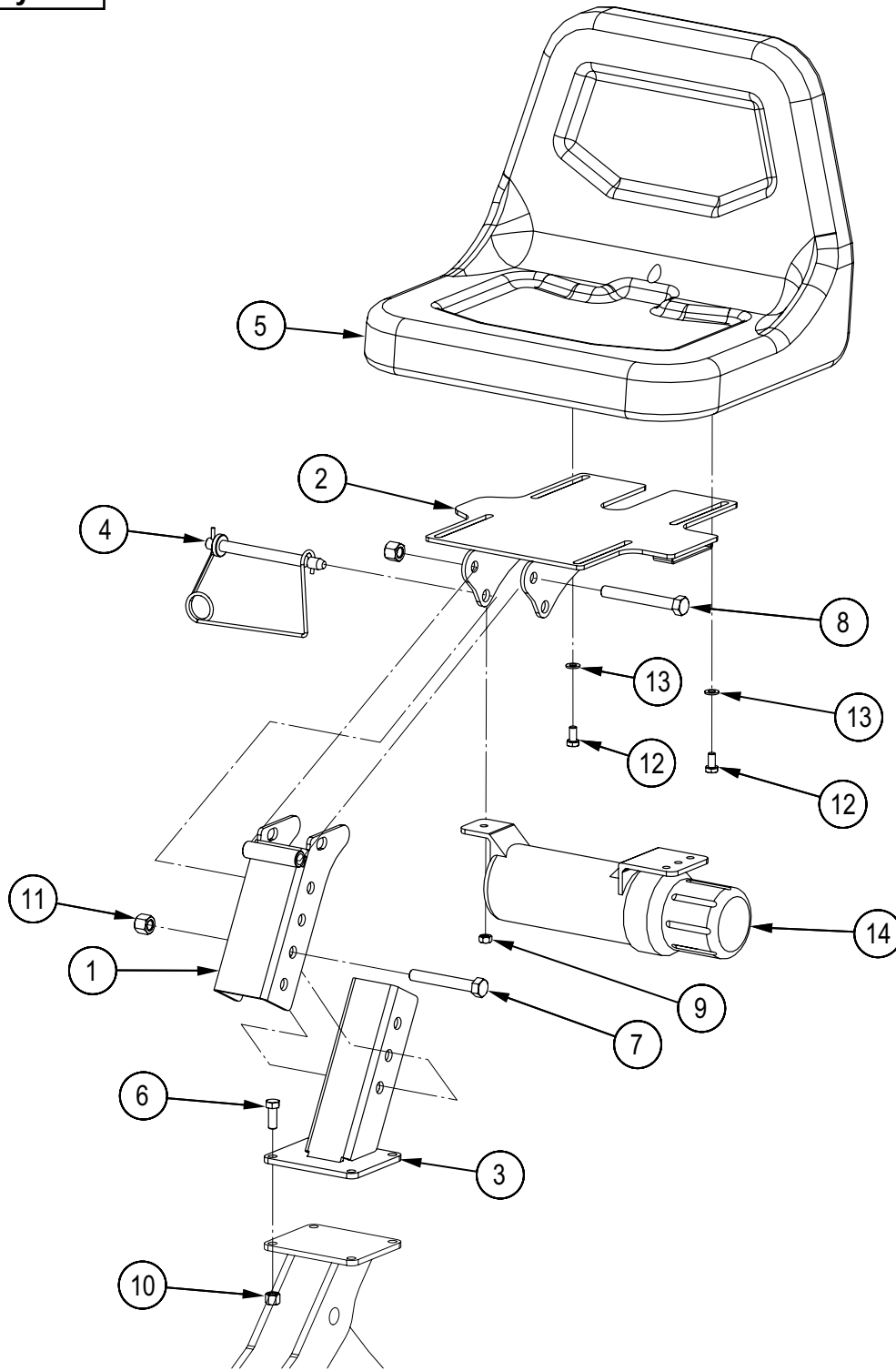
Item No.	Part No.	Description	Qty
10	3011M110	Pin, 1" x 5.66 Greasable	1
11	3011M113	Pin, 1-1/4 x 6-5/8 Greasable	1
12	3011M115	Pin, 1" x 6 Double Hole	1
13	3011M120	Pin, 1" x 4-3/4 Greasable	2
14	3011M133	Pin, 1-1/4 x 4-5/16 Greasable	2
15	Z11121	Toplink Pin, 3/4" x 2-3/4"	2
16	Z71210	Hex Bolt, 5/16NC x 1"	1
17	Z71122	Hex Bolt, 1/4NC x 2-1/4"	8
18	Z72211	Hex Lock Nut, 1/4NC	8

Dipper Boom Assembly



Item No.	Part No.	Description	Qty	Item No.	Part No.	Description	Qty
1	3011W101	Dipper Boom	1	6	Z27231	Connex Bushing 1-1/4 x 1-3/4	2
2	3011C107	Cylinder, 2-1/4 x 12-7/8" Stroke	1	7	Z29202	Grease Zerk 1/4NF	3
3	Z72211	Hex Lock Nut, 1/4NC	3	8	3011M110	Pin, 1" x 5.66 Greasable	2
4	Z71122	Hex Bolt, 1/4NC x 2-1/4"	1	9	3011M113	Pin, 1-1/4 x 6-5/8 Greasable	1
5	Z96605	SMV Sign With Spade, Assembled	1	10	Z71120	Hex Bolt, 1/4NC x 2"	2

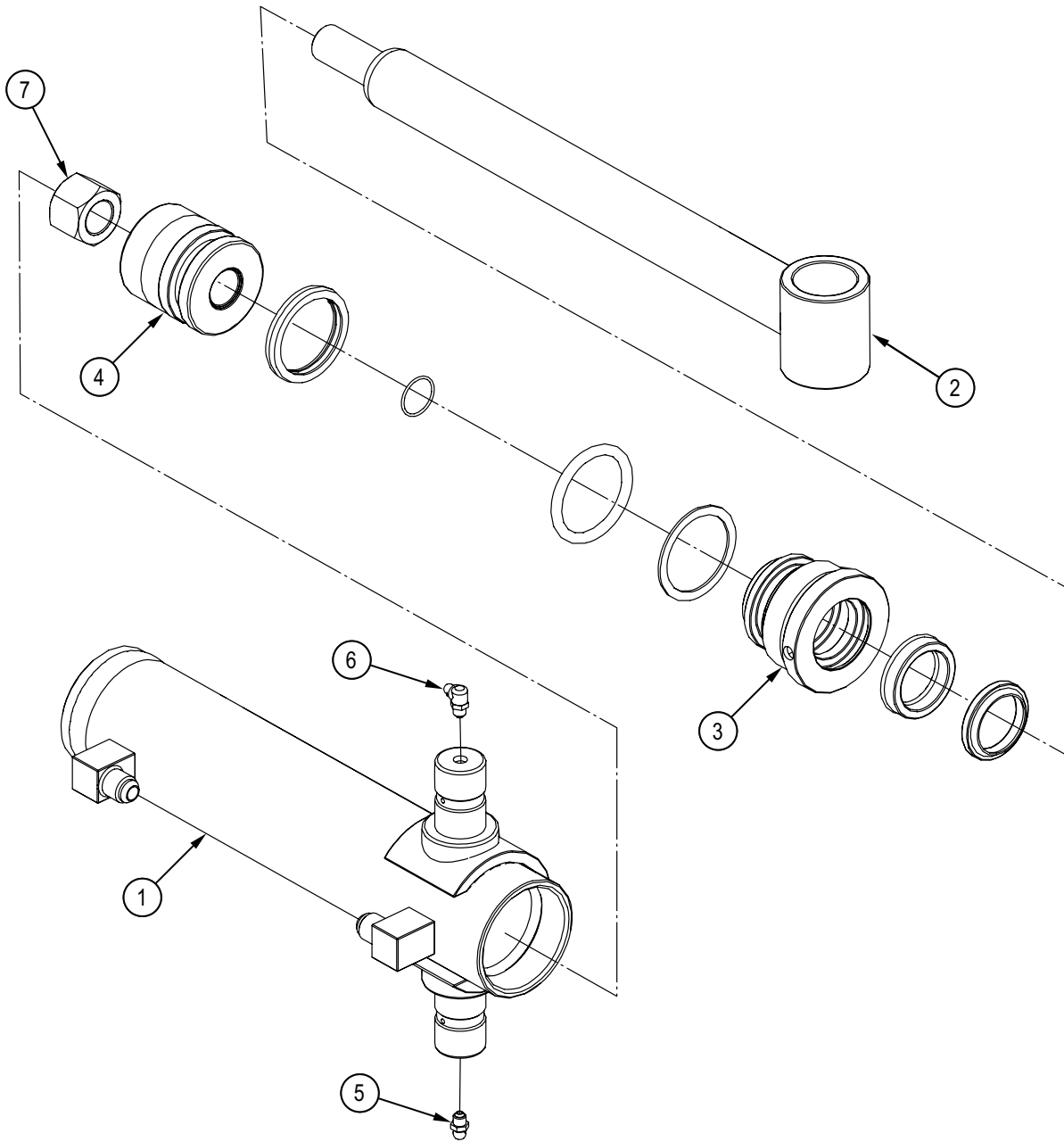
Seat Assembly



Item No.	Part No.	Description	Qty
1	3011W112	Mount, Seat	1
2	3011W113	Plate, Seat	1
3	3011W111	Base, Seat	1
4	Z12441	Snap Lock Pin, 1/2" x 4-1/2"	1
5	Z19201	High-Back Backhoe Seat	1
6	Z71310	Hex Bolt, 3/8NC x 1"	4
7	Z71535	Hex Bolt, 1/2NC x 3-1/2"	1

Item No.	Part No.	Description	Qty
8	Z71540	Hex Bolt, 1/2NC x 4"	1
9	Z72121	Hex Nut, 5/16NC	1
10	Z72231	Hex Lock Nut, 3/8NC	4
11	Z72251	Hex Lock Nut, 1/2NC	2
12	Z77152	Hex Bolt, M8x1.25 x 16mm	4
13	Z77352	DIN 125 Washer, M8	4
14	Z96503	Manual Tube, 3-1/2" Short	1

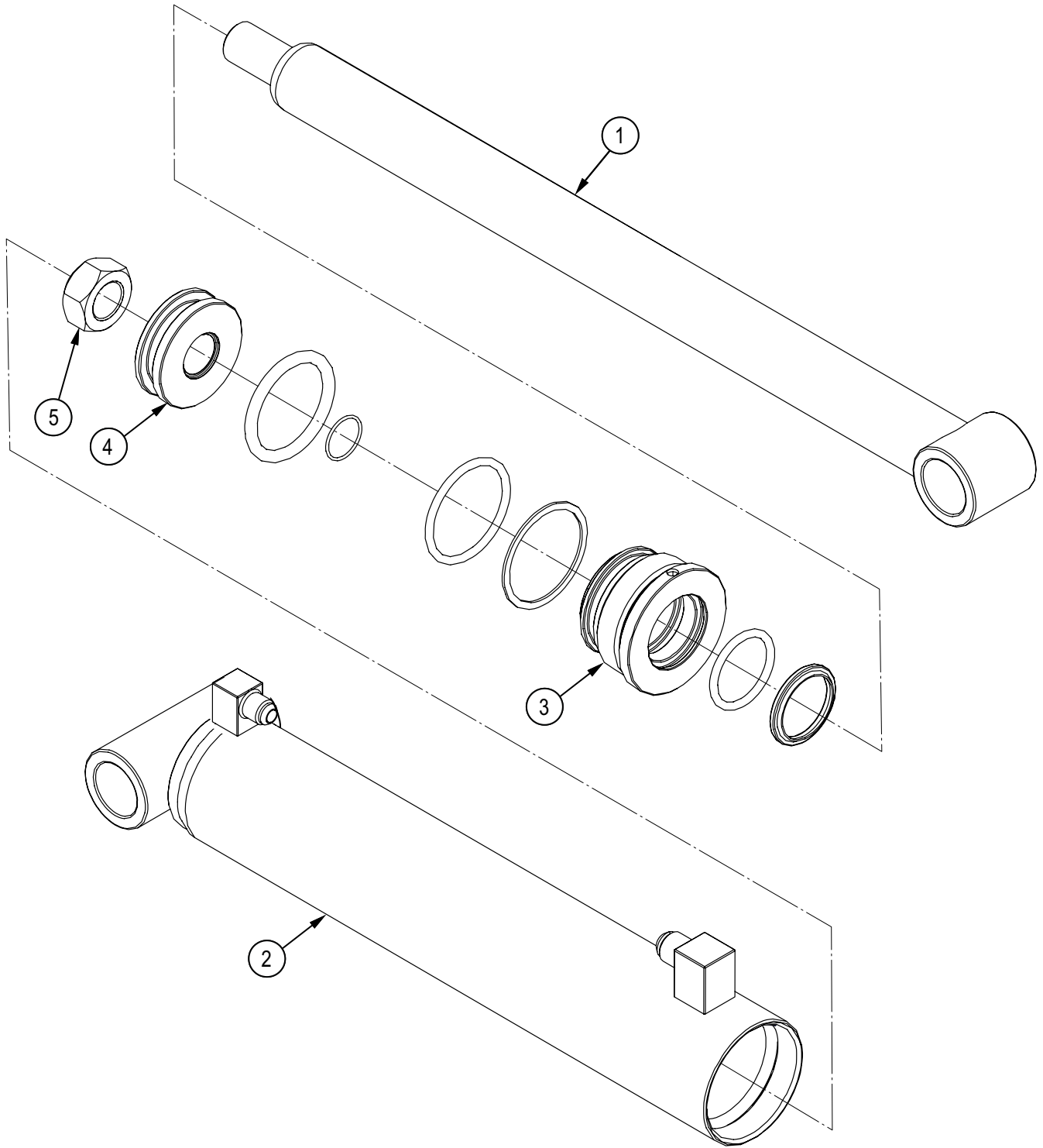
Swing Cylinder Detail



Seal Kit #SLK-2012

Item No.	Part No.	Description	Qty
1	3011C1034	Barrel, 2" Trunnion Mount	1
2	3011C1033	Rod, 1-1/4 x 3/4	1
3	G200-125S	Gland, 2" x 1-1/4"	1
4	P750-200CP	Piston, 2" Bore x Cushion	1
5	Z29202	Grease Zerk 1/4NF	1
6	Z29203	Grease Zerk 90, 1/4NF	1
7	Z72272	Hex Lock Nut 3/4NF Grade 8	1

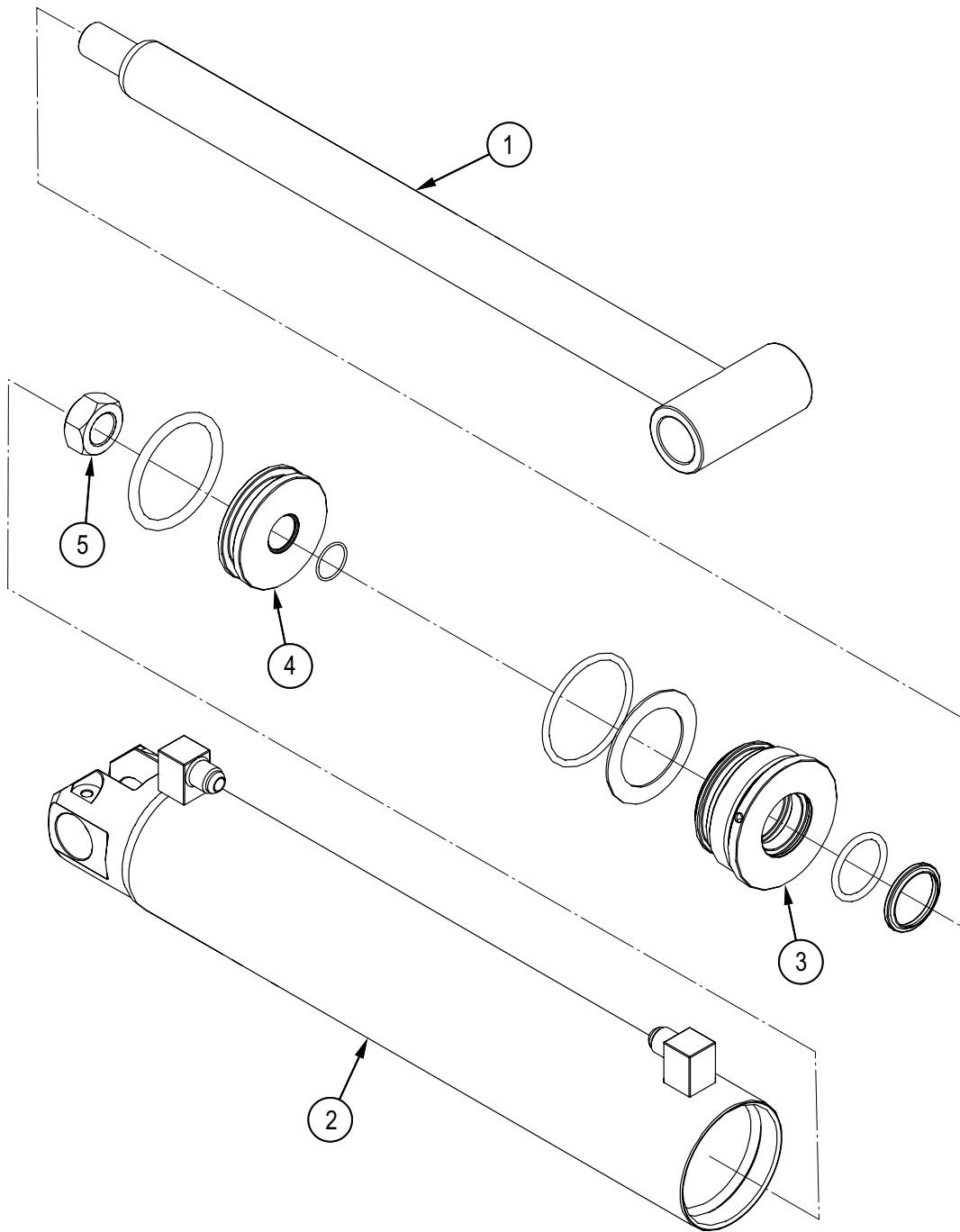
Stabilizer Cylinder Detail



Seal Kit #SLK-2012

Item No.	Part No.	Description	Qty
1	3011C1043	Rod, 1-1/4"	1
2	3011C1044	Barrel, 2" Bore	1
3	G200-125S	Gland, 2" x 1-1/4"	1
4	P750-200SP	Piston, 2" Bore	1
5	Z72276	Hex Top-lock Nut, 3/4NF	1

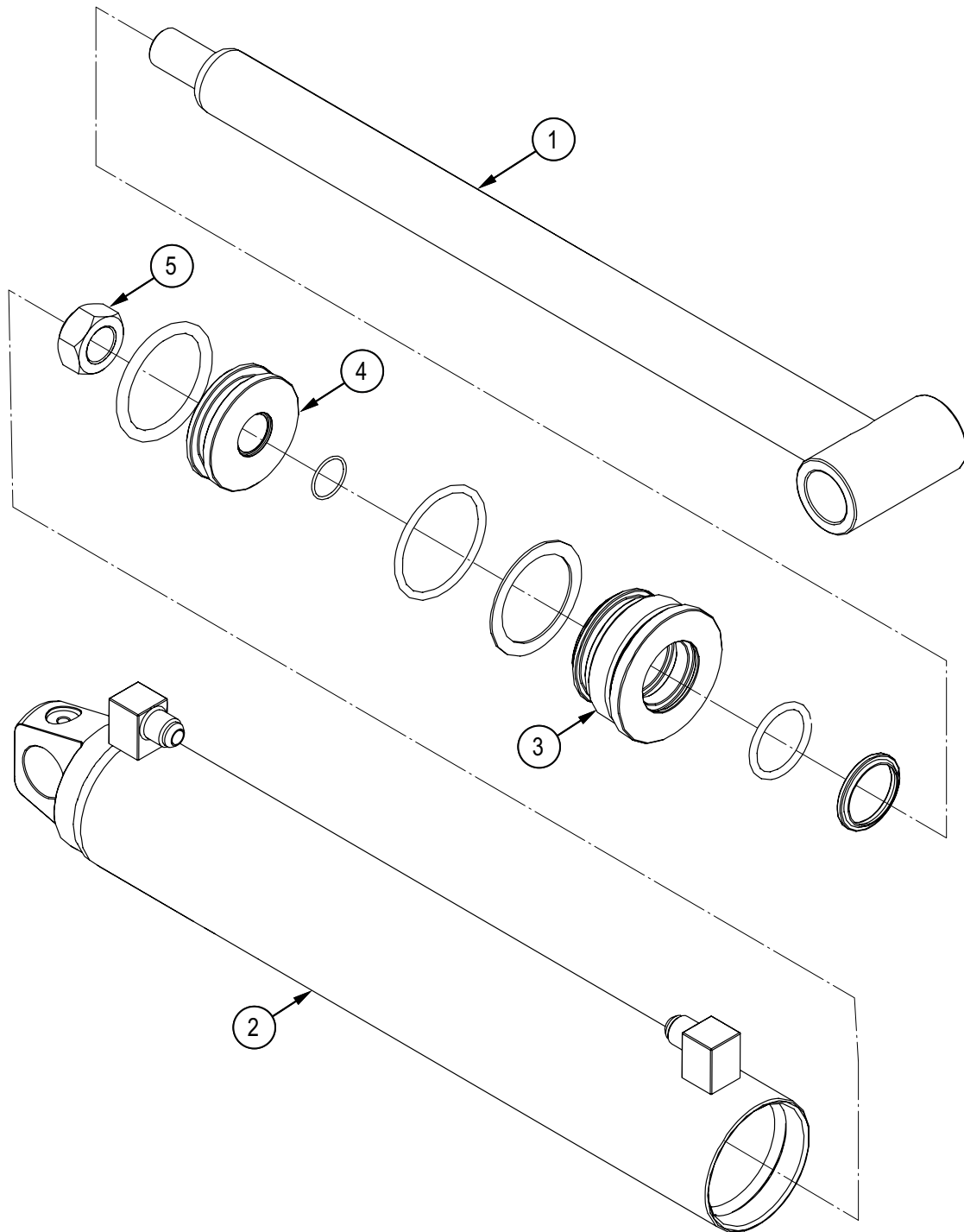
Main Boom Cylinder Detail



Seal Kit #SLK-2512

Item No.	Part No.	Description	Qty
1	3011C1063	Rod, 1-1/4" x 1NF	1
2	3011C1064	Barrel, 2-1/2"	1
3	G250-125S	Gland, 2-1/2" x 1-1/4"	1
4	P100-250SP	Piston, 2-1/2" Bore	1
5	Z72276	Hex Top-lock Nut, 3/4NF	1

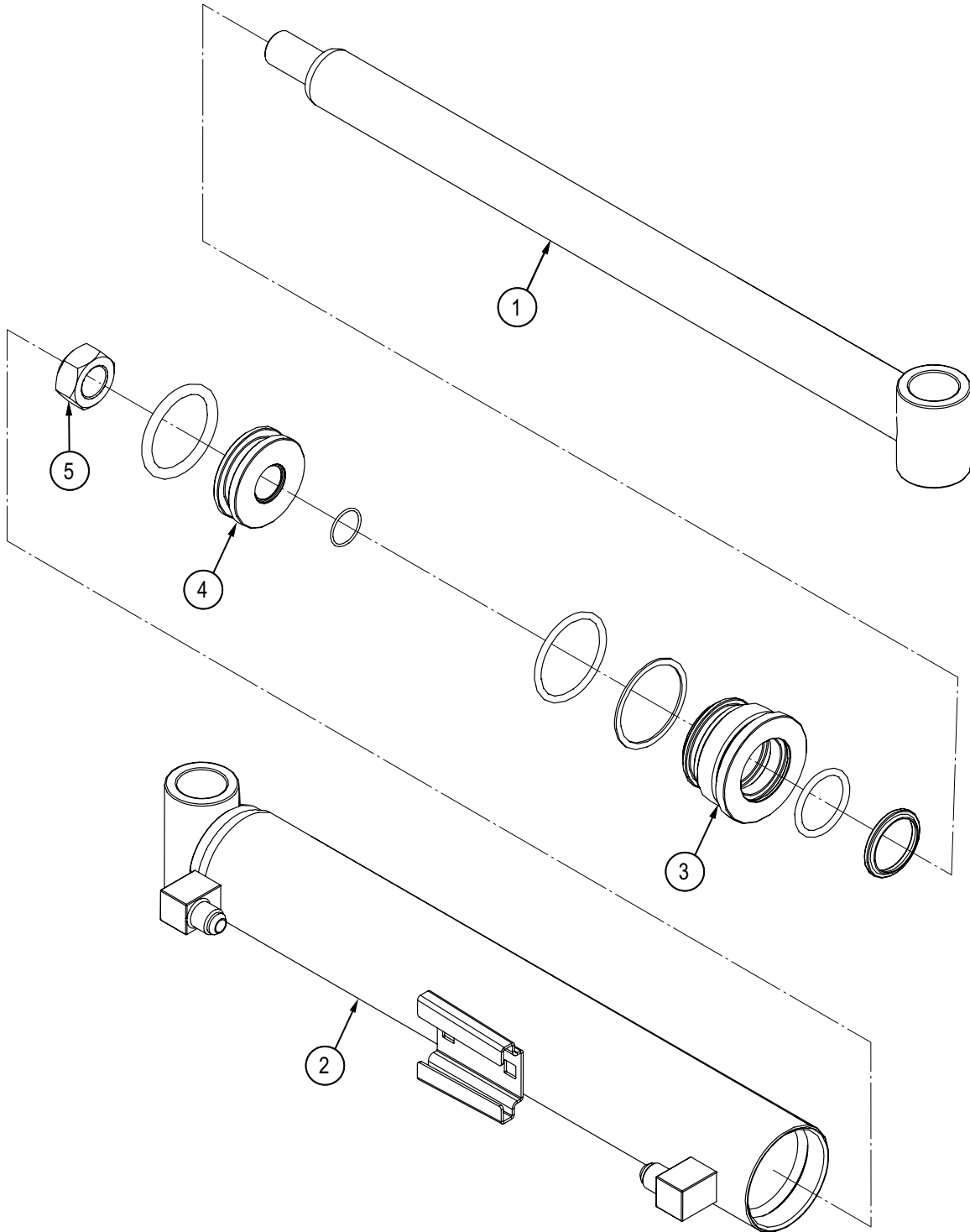
Dipper Boom Cylinder Detail



Seal Kit #SLK-2212

Item No.	Part No.	Description	Qty
1	3011C1053	Rod, 1-1/4" x 3/4NF	1
2	3011C1054	Barrel, 2-1/4"	1
3	G225-125S	Gland, 2-1/4" x 1-1/4"	1
4	P750-225SP	Piston, 2-1/4" Bore	1
5	Z72276	Hex Top-lock Nut, 3/4NF	1

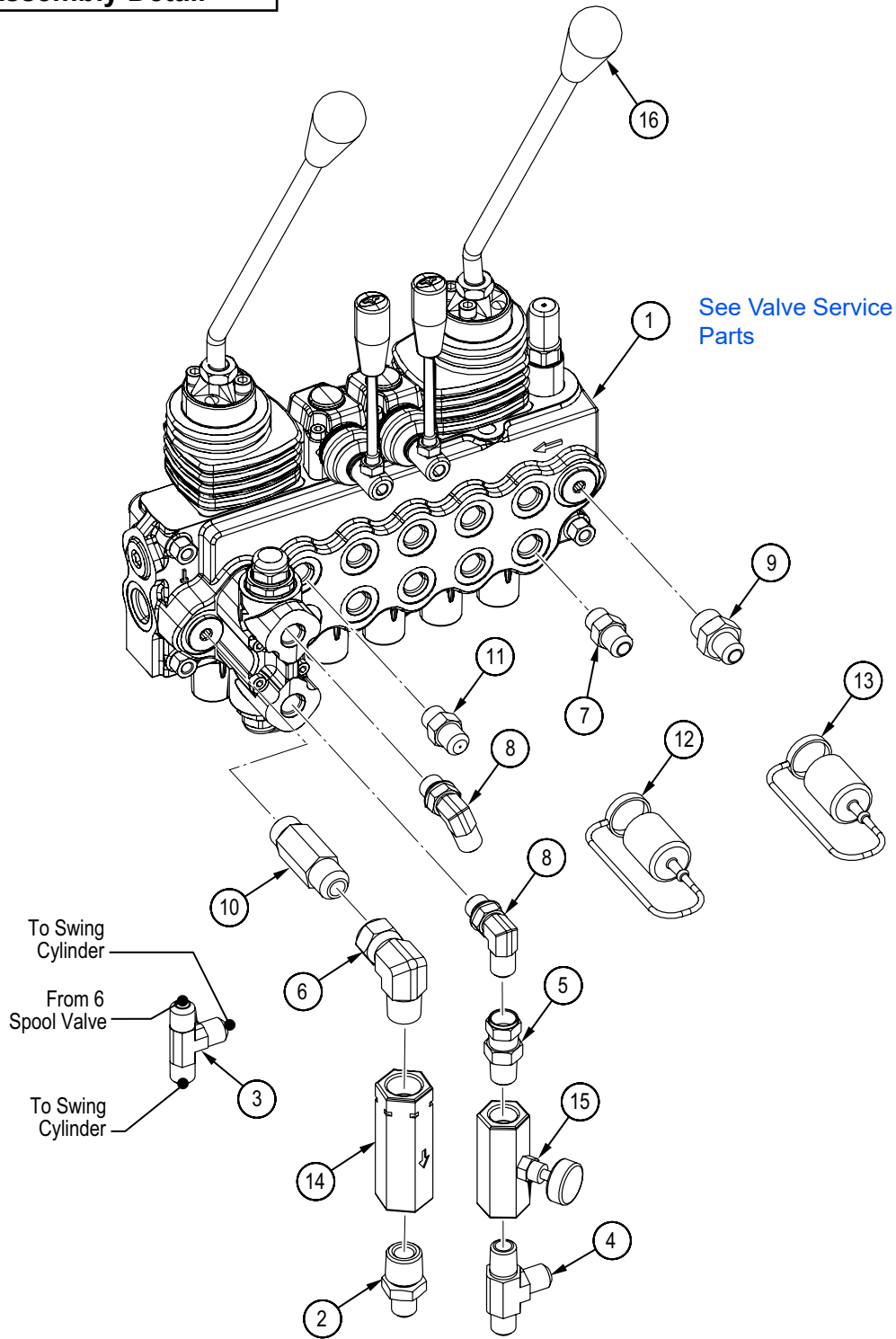
Bucket Cylinder Assembly



Seal Kit #SLK-2212

Item No.	Part No.	Description	Qty
1	3011C1073	Rod, 1-1/4" x 3/4NF	1
2	3011C1074	Barrel, 2-1/4"	1
3	G225-125S	Gland, 2-1/4" x 1-1/4"	1
4	P750-225SP	Piston, 2" Bore	1
5	Z72276	Hex Top-lock Nut, 3/4NF	1

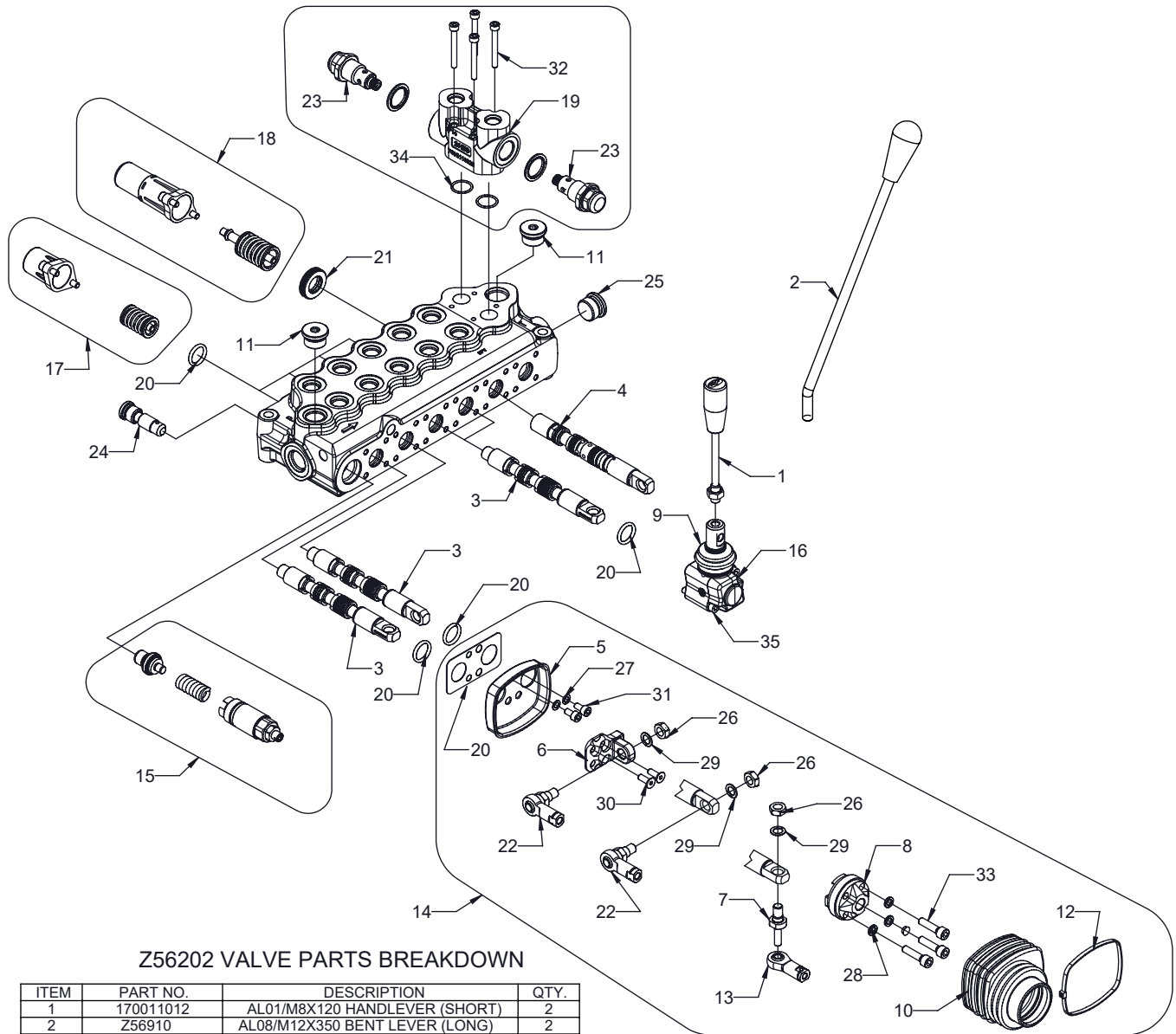
Valve Assembly Detail



Item No.	Part No.	Description	Qty
1	Z56202	Six Spool Valve, VC x 12GPM	1
2	Z51441	Straight, MJIC x MP 0608	1
3	Z51483	Tee, MJIC x MJIC x MJIC 060606	1
4	Z51486	Tee, MJIC x MP x MJIC 060606	1
5	Z51511	Straight, MP x FJICX 0606	1
6	Z51521	Elbow 90, MP x FJICX 0808	1
7	Z51641	Straight, MJIC x MORB 0606	9
8	Z51651	Elbow 90, MJIC x MORB 0606	2

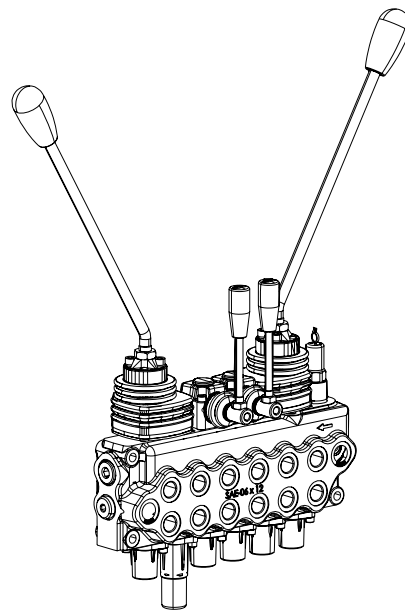
Item No.	Part No.	Description	Qty
9	Z51644	Straight, MJIC x MORB 0608	1
10	Z51642	Straight, MJIC x MORB 0808 Long Custom	1
11	Z51929	Straight, MJIC x MORB 0606 x 0.047" Orifice	1
12	Z52831	Nipple Cap, ISO 7241-1 x Red	1
13	Z52832	Nipple Cap, ISO 7241-1 x Black	1
14	Z56102	Check Valve, FP08 x 0PSI	1
15	Z56301	Flow Control, Needle x 0-9GPM	1
16	Z56910	Backhoe Lever Bent - 12"	2

Valve Service Parts

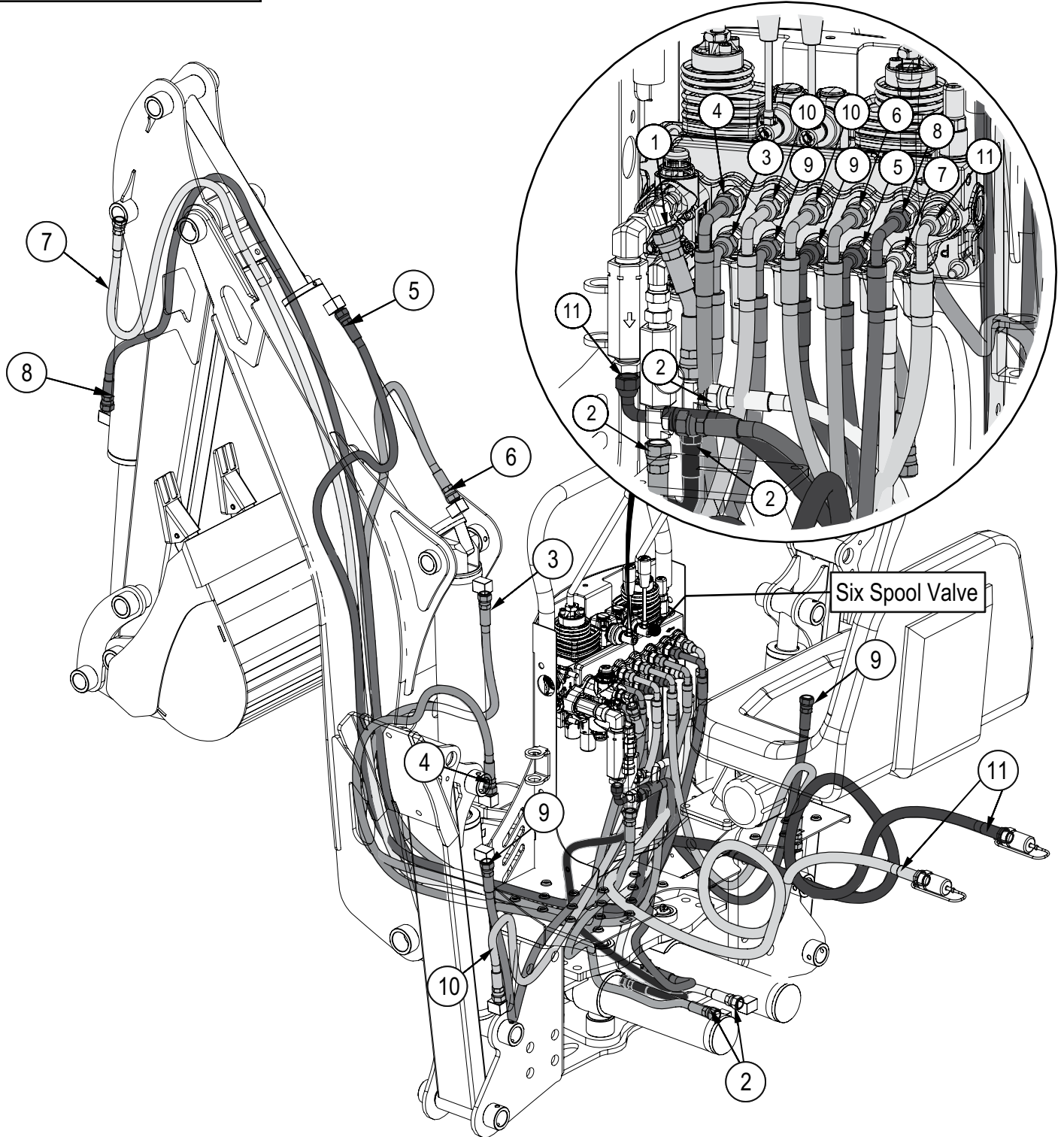


Z56202 VALVE PARTS BREAKDOWN

ITEM	PART NO.	DESCRIPTION	QTY.
1	170011012	AL01/M8X120 HANDLEVER (SHORT)	2
2	Z56910	AL08/M12X350 BENT LEVER (LONG)	2
3	3CU1210133	TIGHT FIT SPOOL	4
4	3CU1245620	FLOAT SPOOL	1
5	3FLA125130	LCB5 FLANGE	2
6	3FUL220101	LCB5 FULCRUM	2
7	3PER515415	LCB5 SPOOL PIN	2
8	3POR340241	LCB5 ADAPTER HANDLE	2
9	3SOF136240	L5 RUBBER BOOT ONLY	2
10	3SOF200701	LCB5 RUBBER BOOT	2
11	3XTAP822150	PLUG SAE8	2
12	4ACC210	TIE STRAP	2
13	4ART706020	LCB6 TUTHILL	2
14	5CLO206100	LCB6 COMPLETE JOYSTICK KIT	2
15	5KIT105413	RELIEF VALVE	1
16	5LEV105000	L5 LEVER BOX	2
17	5V08105000	SPRING CENTER KIT	4
18	5V13405020	FLOAT KIT	1
19	602001101	PORT RELIEF BLOCK	1
20	SK SD5/6	VALVE SEAL KIT (12 O-RINGS, 2 GASKETS)	1
21	XANE228061	RING	1
22	XART706020	LCB6 TUTHILL WITH BOLT	4
23	XCAR211113	PORT RELIEF CARTRIDGE	2
24	XKIT005000	LOAD CHECK	1
25	XTAP623170	OPEN CENTER PLUG	1
	AEK SD5	CLOSED CENTER PLUG	OPTION
26	Z77252	JAM NUT M8x1.25	10
27	Z77321	LOCK WASHER M5	8
28	Z77331	LOCK WASHER M6	6
29	Z77354	LOCK WASHER M8	6
30	Z77521	FHCS M5x0.8x14mm	8
31	Z77522	SHCS M5x0.8x10mm	8
32	Z77523	SHCS M5x0.8x45mm	4
33	Z77531	SHCS M6x1.0x25mm	6
34	OR 17.18X1.78	PORT RELIEF O-RING	2
35	Z77524	SHCS M5x0.8x35mm	8



Hydraulic Circuit



Item No.	Part No.	Description	Qty	Item No.	Part No.	Description	Qty
1	Z52101	1/4" Hose, FJIC06 x FJIC06 x 4"	1	7	Z52107	1/4" Hose, FJIC06 x FJIC06 90 x 102"	1
2	Z52102	1/4" Hose, FJIC06 x FJIC06 x 28"	4	8	Z52108	1/4" Hose, FJIC06 x FJIC06 Long 90 x 102"	1
3	Z52103	1/4" Hose, FJIC06 x FJIC06 90 x 61"	1	9	Z52109	1/4" Hose, FJIC06 x FJIC06 90 x 36-1/2"	2
4	Z52104	1/4" Hose, FJIC06 x FJIC06 Long 90 x 61"	1	10	Z52110	1/4" Hose, FJIC06 x FJIC06 Long 90 x 36-1/2"	2
5	Z52105	1/4" Hose, FJIC06 x FJIC06 90 x 76"	1	11	Z52201	3/8" Hose, 90FJIC06 x MP08 x 66"	2
6	Z52106	1/4" Hose, FJIC06 x FJIC06 Long 90 x 76"	1				

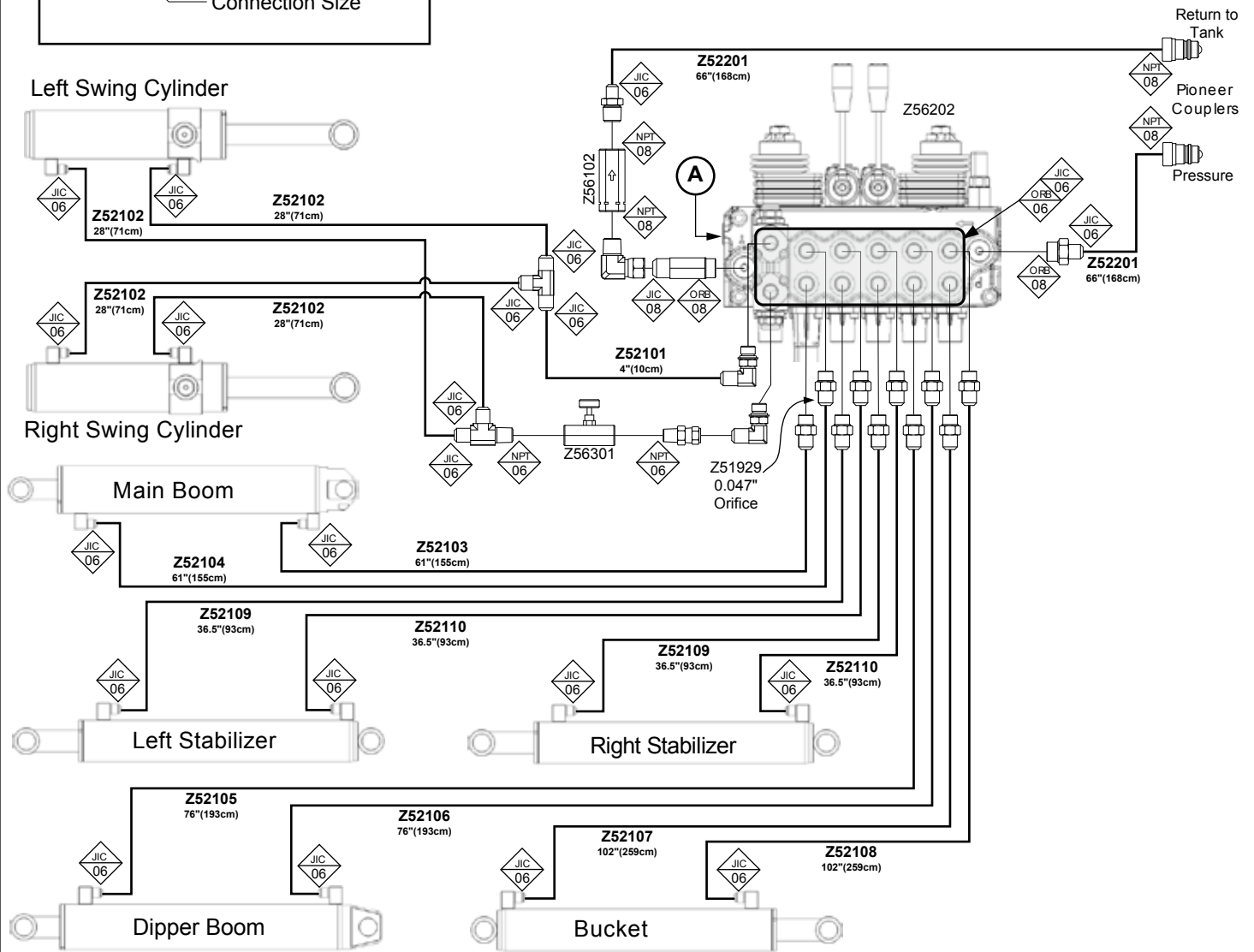
Hydraulic Plumbing Diagram

Hydraulic Fitting Identification

Connection Type
 NPT – National Pipe Thread
 JIC – Tube Flare
 ORB – O-ring Boss
 HB – Hose Barb

Connection Size

Open Center Hydraulic Circuit



Closed Center Hydraulic Circuits —

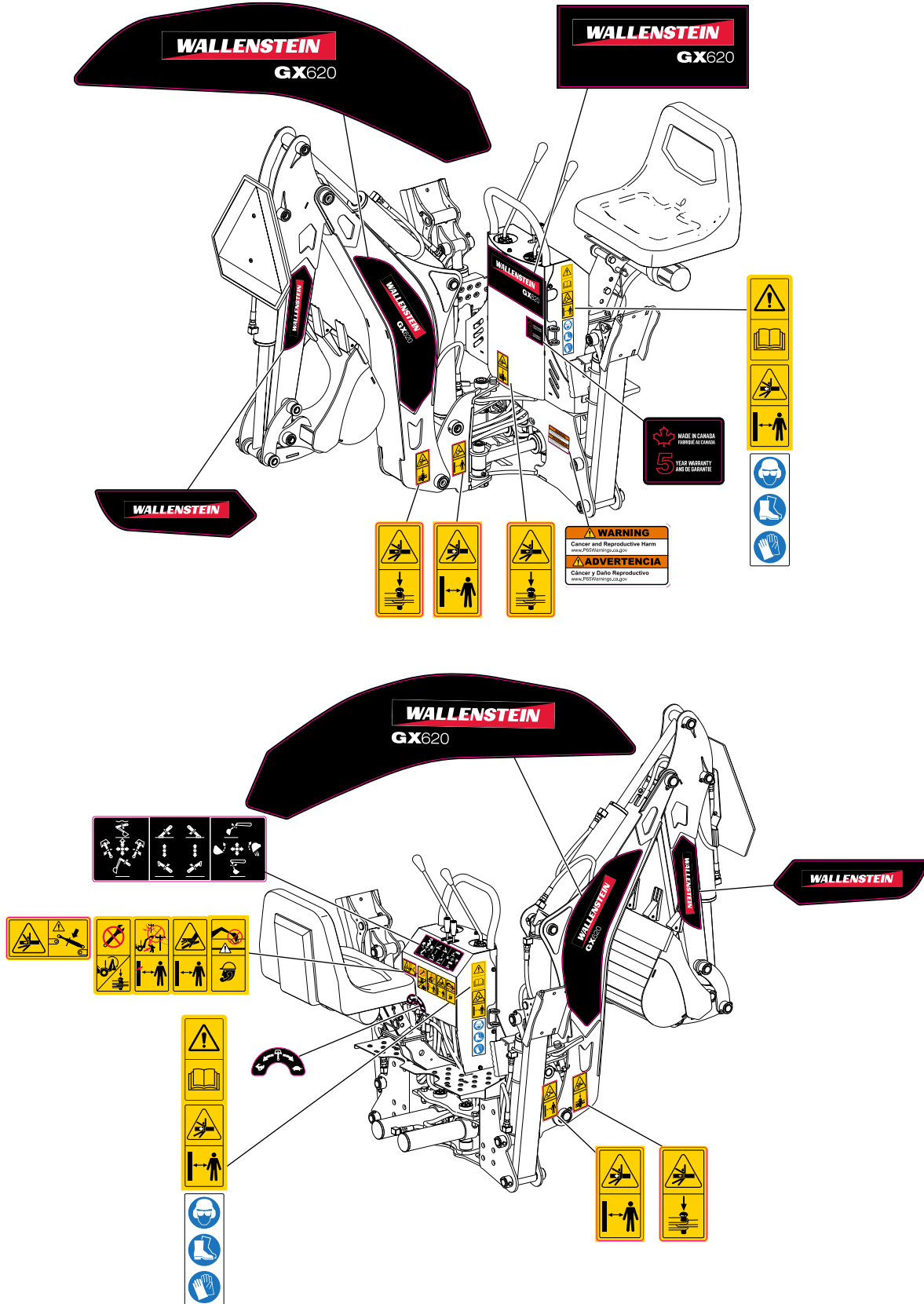
To connect this back hoe to a closed-center circuit, plug P/N Z56916 will be required.

Remove the end plug at Position A in the control valve and install Z56916 in its place. See illustration.

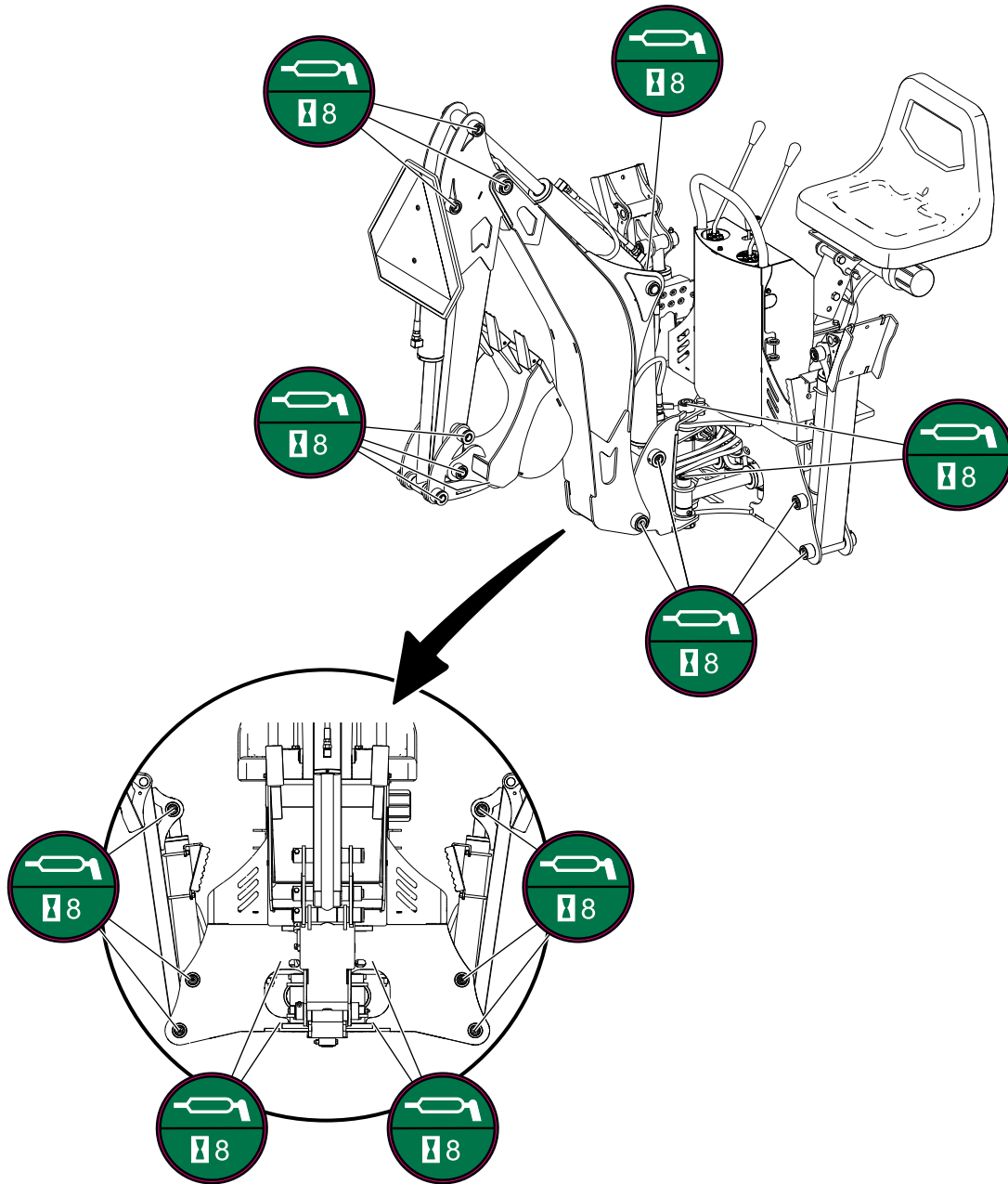
Decal Layout

IMPORTANT! If parts are replaced that have safety signs on them, new signs must be applied. Safety signs must always be replaced if they become damaged, are removed, or become illegible.

Safety signs are included in the product decal kit available from your authorized dealer. Decals are not available separately.



Grease Decals



Accessories

BK2609 – 9" Bucket

- 3 teeth
 - Bucket Volume: 0.5 ft³
-

BK2612 – 12" Bucket

- 3 teeth
 - Bucket Volume: 0.7 ft³
-

BK2615 – 15" Bucket

- 4 teeth
 - Bucket Volume: 0.9 ft³
-

BK2618 – 18" Bucket

- 4 teeth
 - Bucket Volume: 1 ft³
-

BT5280 – Clamp-on mechanical thumb

The mechanical thumb allows better control of material that is difficult to scoop or pick up.

PTO62 – PTO Hydraulic Pump Kit 7 gpm

The PTO pump kit provides hydraulic power to the back hoe for tractors without available auxiliary power.

BP210 – Street Pad Kit

Pads placed on stabilizer cleats to protect pavement or cement.


Common Bolt Torque Values

Checking Bolt Torque

The tables shown give correct torque values for various bolts and capscrews. Tighten all bolts to the torque values specified in the table, unless indicated otherwise. Check tightness of bolts periodically.

IMPORTANT! If replacing hardware, use fasteners of the same grade.

IMPORTANT! Torque figures indicated in the table are for non-greased or non-oiled threads. Do not grease or oil threads unless indicated otherwise. When using a thread locker, increase torque values by 5%.

 **NOTE:** Bolt grades are identified by their head markings.

Imperial Bolt Torque Specifications

Bolt Diameter	Torque Value					
	SAE Gr. 2		SAE Gr. 5		SAE Gr. 8	
	lbf•ft	N•m	lbf•ft	N•m	lbf•ft	N•m
1/4"	6	8	9	12	12	17
5/16"	10	13	19	25	27	36
3/8"	20	27	33	45	45	63
7/16"	30	41	53	72	75	100
1/2"	45	61	80	110	115	155
9/16"	60	95	115	155	165	220
5/8"	95	128	160	215	220	305
3/4"	165	225	290	390	400	540
7/8"	170	230	420	570	650	880
1"	225	345	630	850	970	1320



SAE Gr. 2



SAE Gr. 5



SAE Gr. 8

Metric Bolt Torque Specifications

Bolt Diameter	Torque Value			
	Gr. 8.8		Gr. 10.9	
	lbf•ft	N•m	lbf•ft	N•m
M3	0.4	0.5	1.3	1.8
M4	2.2	3	3.3	4.5
M6	7	10	11	15
M8	18	25	26	35
M10	37	50	52	70
M12	66	90	92	125
M14	83	112	116	158
M16	166	225	229	310
M20	321	435	450	610
M30	1,103	1 495	1,550	2 100



8.8



10.9

Hydraulic Fitting Torque Values

Tightening Flare Type Tube Fittings

1. Check flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Hand-tighten swivel nut until snug.
4. To prevent twisting the tube, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second. Torque to values shown.

If a torque wrench is not available, use the FFFT (Flats From Finger Tight) method.

Hydraulic Fitting Torque					
Tube Size OD	Hex Size Across Flats	Torque value		Flats From Finger Tight	
		lbf•ft	N•m	Flats	Turns
3/16	7/16	6	8	2	1/6
1/4	9/16	11–12	15–17	2	1/6
5/16	5/8	14–16	19–22	2	1/6
3/8	11/16	20–22	27–30	1-1/4	1/6
1/2	7/8	44–48	59–65	1	1/6
5/8	1	50–58	68–79	1	1/6
3/4	1-1/4	79–88	107–119	1	1/8
1	1-5/8	117–125	158–170	1	1/8

Values shown are for non-lubricated connections.