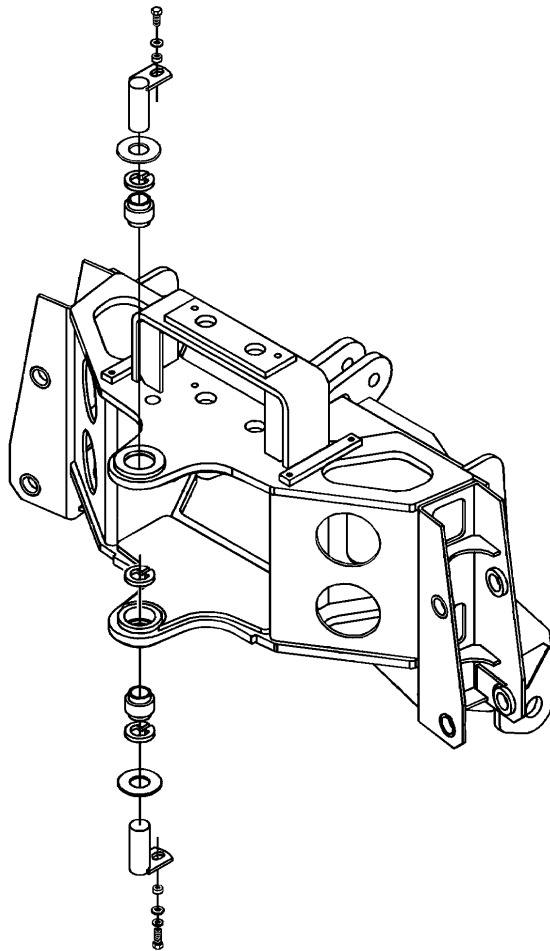




PARTS MANUAL

3511B BACKHOE 3-POINT HITCH / CATEGORY II



SERIAL NUMBER: _____

MODEL NUMBER: _____

Manual Number: PM847
Part Number: 75747
Rev. 3

Limited Warranty

Except for the Excluded Products as described below, all new products are warranted to be free from defects in material and/or workmanship during the Warranty Period, in accordance with and subject to the terms and conditions of this Limited Warranty.

1. Excluded Products. The following products are excluded from this Limited Warranty:

(a) Any cable, part that engages with the ground (i.e. sprockets), digging chain, bearing, teeth, tamping and/or demolition head, blade cutting edge, pilot bit, auger teeth and broom brush that either constitutes or is part of a product.

(b) Any product, merchandise or component that, in the opinion of Paladin Light Construction¹, has been (i) misused; (ii) modified in any unauthorized manner; (iii) altered; (iv) damaged; (v) involved in an accident; or (vi) repaired using parts not obtained through Paladin Light Construction.

2. Warranty Period. The Limited Warranty is provided only to those defects that occur during the Warranty Period, which is the period that begins on the first to occur of: (i) the date of initial purchase by an end-user, (ii) the date the product is first leased or rented, or (iii) the date that is six (6) months after the date of shipment by Paladin Light Construction as evidenced by the invoiced shipment date (the "Commencement Date") and ends on the date that is twenty-four (24) months after the Commencement Date.

3. Terms and Conditions of Limited Warranty. The following terms and conditions apply to the Limited Warranty hereby provided:

(a) Option to Repair or Replace. Paladin Light Construction shall have the option to repair or replace the product.

(b) Timely Repair and Notice. In order to obtain the Limited Warranty, (i) the product must be repaired within thirty (30) days from the date of failure, and (ii) a claim under the warranty must be submitted to Paladin Light Construction in writing within thirty (30) days from the date of repair.

(c) Return of Defective Part or Product. If requested by Paladin Light Construction, the alleged defective part or product shall be shipped to Paladin Light Construction at its manufacturing facility or other location specified by Paladin Light Construction, with freight PRE-PAID by the claimant, to allow Paladin Light Construction to inspect the part or product.

Claims that fail to comply with any of the above terms and conditions shall be denied.

LIMITATIONS AND EXCLUSIONS.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY BASED ON A COURSE OF DEALING OR USAGE OF TRADE.

IN NO EVENT SHALL PALADIN LIGHT CONSTRUCTION BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

IN NO EVENT SHALL PALADIN LIGHT CONSTRUCTION BE LIABLE FOR ANY LOSS OR CLAIM IN AN AMOUNT IN EXCESS OF THE PURCHASE PRICE, OR, AT THE OPTION OF PALADIN LIGHT CONSTRUCTION, THE REPAIR OR REPLACEMENT, OF THE PARTICULAR PRODUCT ON WHICH ANY CLAIM OF LOSS OR DAMAGE IS BASED. THIS LIMITATION OF LIABILITY APPLIES IRRESPECTIVE OF WHETHER THE CLAIM IS BASED ON BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE OR OTHER CAUSE AND WHETHER THE ALLEGED DEFECT IS DISCOVERABLE OR LATENT.

¹Attachment Technologies Inc., a subsidiary of Paladin Brands Holding, Inc. (PBHI) is referred to herein as Paladin Light Construction.

February 10, 2010

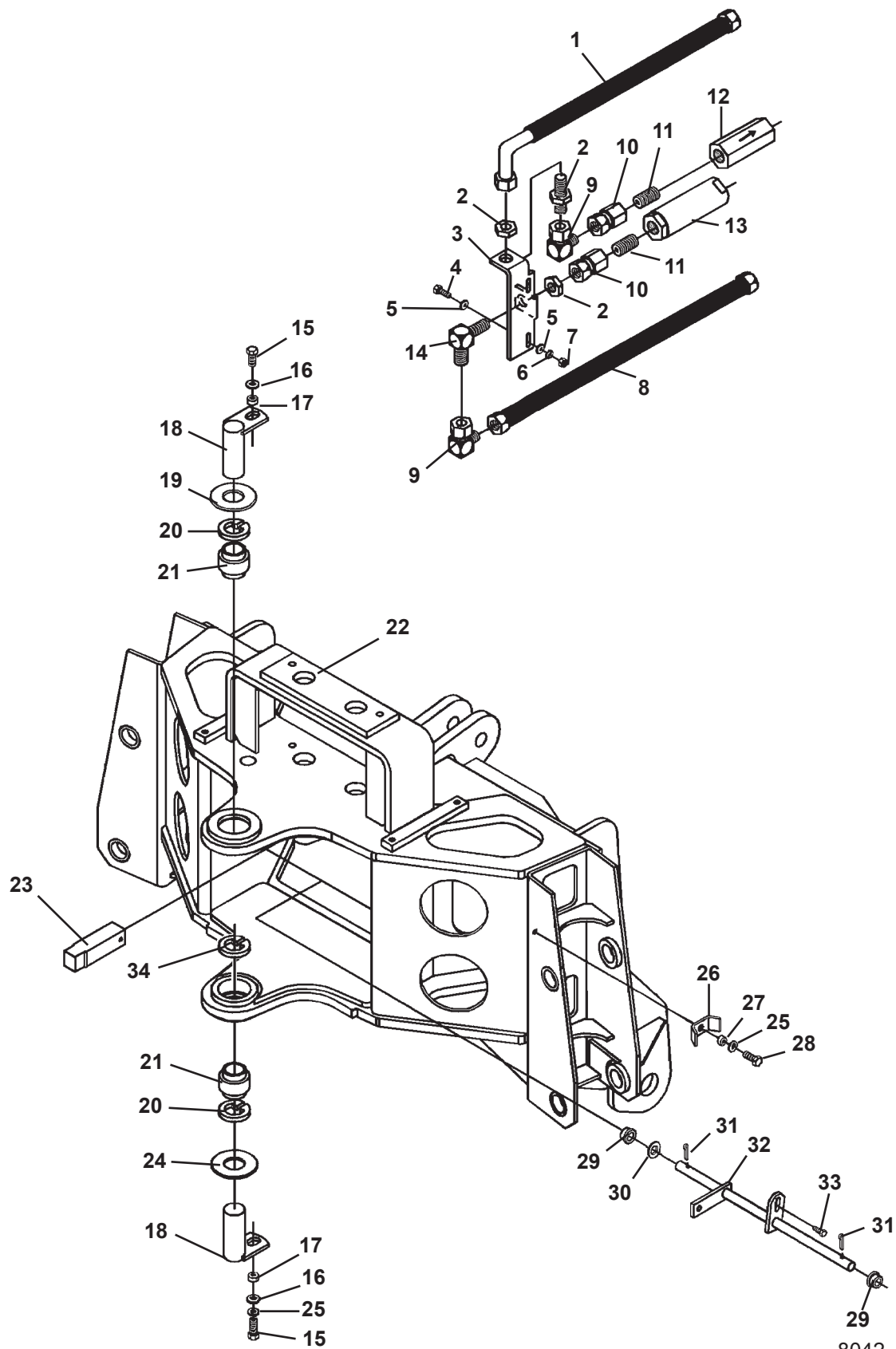
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MAINFRAME ASSEMBLY
ASSEMBLY #88093
MAINFRAME



8042 8-24-11-2

MAINFRAME ASSEMBLY

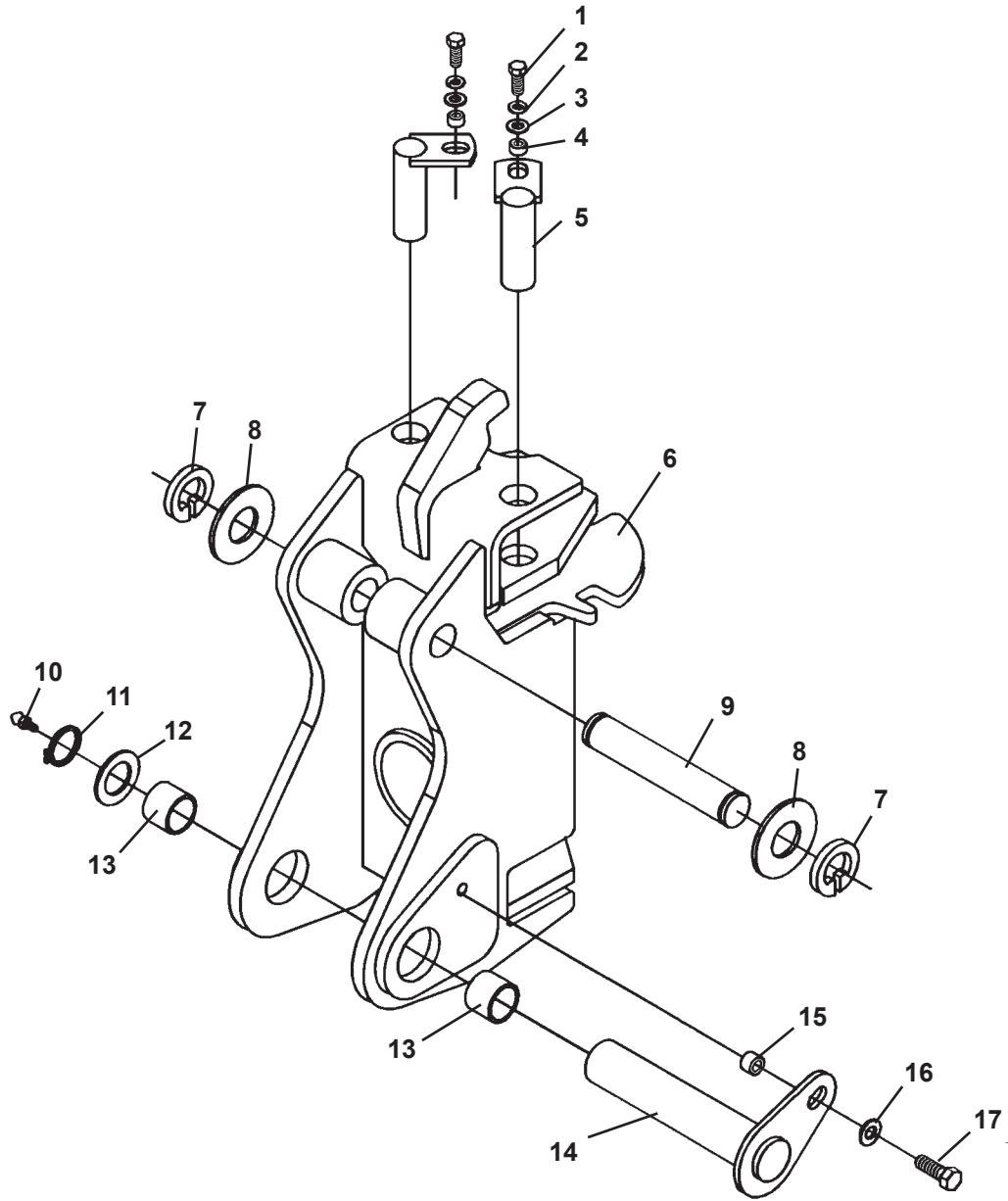
ASSEMBLY #88093

MAINFRAME

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	38341	Hose .50" X 23" 8FJX - 8FJX 90°
2	1	3275	Straight Bulkhead Connector 8MJ-8MJ (Includes Nut)
3	1	105827	Hose Mounting Bracket
4	2	1004	.25" UNC X 1.25" Hex Capscrew
5	4	1512	.25" Flat Washer
6	2	1501	.25" Lock Washer
7	2	1224	.25" UNC Hex Nut
8	1	38342	Hose .50" X 38" 8FJX-8FJX
9	2	3149	90° Elbow 8MJ-8FJX
10	2	3273	Coupling 8FP-8FJX
11	1	3211	Close Nipple .50" NPT (Inline Filter)
	1	3309	Heavy Close Nipple .50" NPT x 4.00" (Check Valve)
12	1	45132	Inline Filter (Round)
13	1	45691	Check Valve (Hex)
14	1	3382	90° Bulkhead Elbow (Includes Nut)
15	2	1043	.38" UNC X 1.00" Hex Capscrew
16	2	1514	.38" Flat Washer
17	2	81807	Spacer Tube
18	2	81592	Pin
	2	6616	Grease Zerk
19	1	83977	Thrust Washer 1.38" X .125"
20	2	1929	Snap Ring
21	2	6615	Bearing
22	1	88119	Mainframe (Includes (4) 83815 Bushings - Installed with Locktite 680)
23	1	82090	Swing Lock Pin
24	As Req'd	83975	Thrust Washer 1.38" X .031"
	As Req'd	83976	Thrust Washer 1.38" X .093"
	As Req'd	83977	Thrust Washer 1.38" X .125"
25	3	1503	.38" Lock Washer
26	2	6186	Hose Clamp
27	2	6799	Spacer Tube
28	2	1044	.38" UNC X 1.25" Hex Capscrew
29	2	82794	Bushing
30	As Req'd	1528	.62" SAE Flat Washer
31	2	1611	Cotter Pin
32	1	82796	Linkage
33	1	1982	Shoulder Screw
34	1	1650	Snap Ring

8043 8-24-11-3

MAINFRAME ASSEMBLY
ASSEMBLY #88093
SWING POST



MAINFRAME ASSEMBLY

ASSEMBLY #88093

SWING POST

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	1043	.38" UNC X 1.00" Hex Capscrew
2	2	1503	.38" Lock Washer
3	2	1514	.38" Flat Washer
4	2	81807	Spacer Tube
5	2	81847	Pin
6	1	86201	Swing Post (Includes (2) 82402 Bushings - Installed with Locktite Grade 680)
7	2	1650	Snap Ring
8	As Req'd	83975	Thrust Washer 1.38" X
	As Req'd	83976	Thrust Washer 1.38" X
	As Req'd	83977	Thrust Washer 1.38" X
9	1	86220 ⁽¹⁾	Pivot Pin
10	1	6616	Grease Zerk
11	1	1651	Snap Ring
12	2	6622	Thrust Washer
13	-	82402	Bushing (Included in Swing Post Assembly) (Installed with Locktite Grade 680)
14	1	86227	Pivot Pin
15	1	86149	Spacer Tube
16	1	1516	.50" Flat Washer
17	1	1088	.50" UNC X 1.00" Capscrew (Installed with Locktite Grade 680)

NOTE:

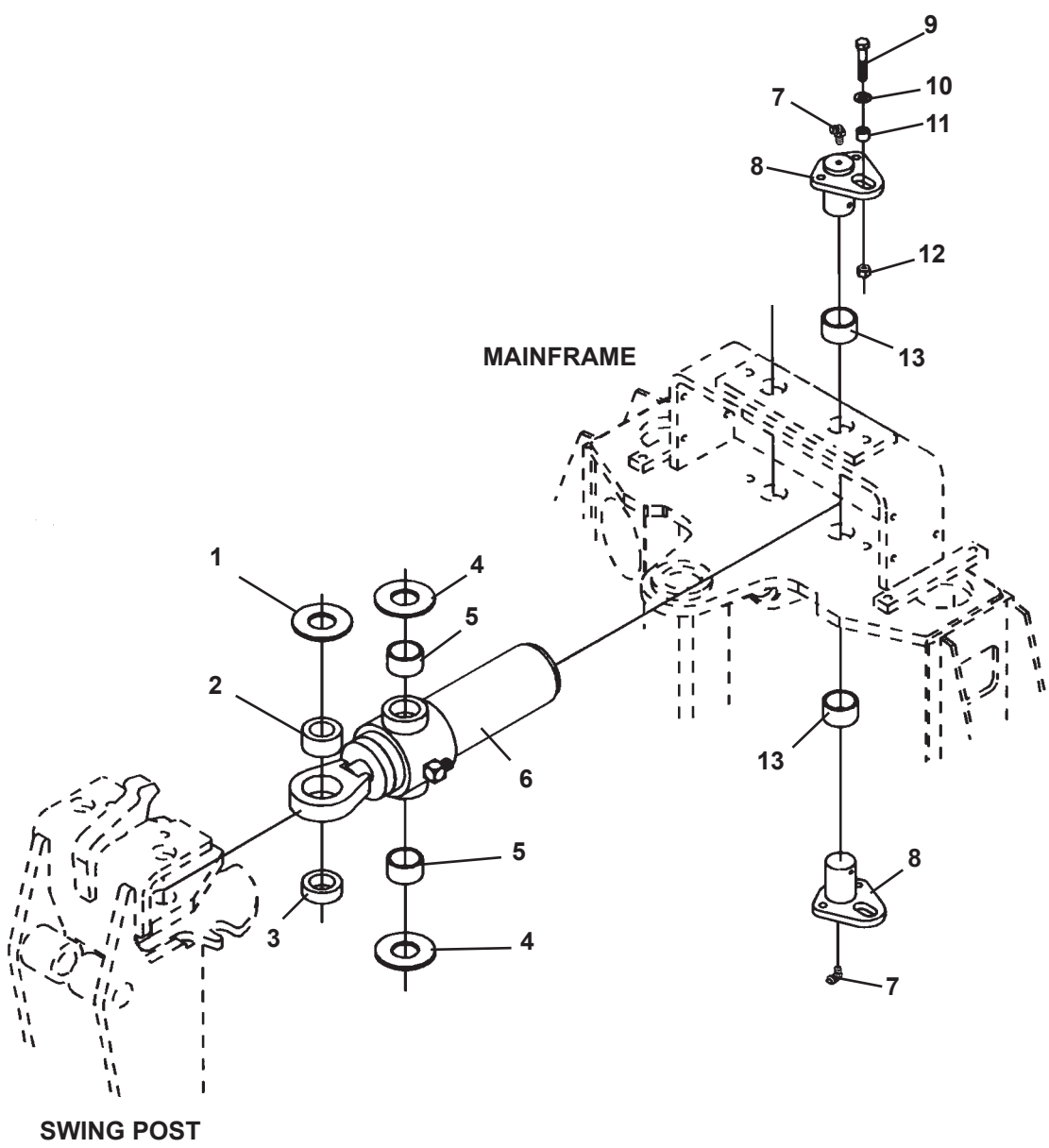
- (1) Pivot Pin #86220 is sold only in Pin Kit #86317. Kit includes one pin #86220, two thrust washers #6623 and two snap rings #1650.

8045 8-24-11-2

MAINFRAME ASSEMBLY

ASSEMBLY #88093

SWING CYLINDER



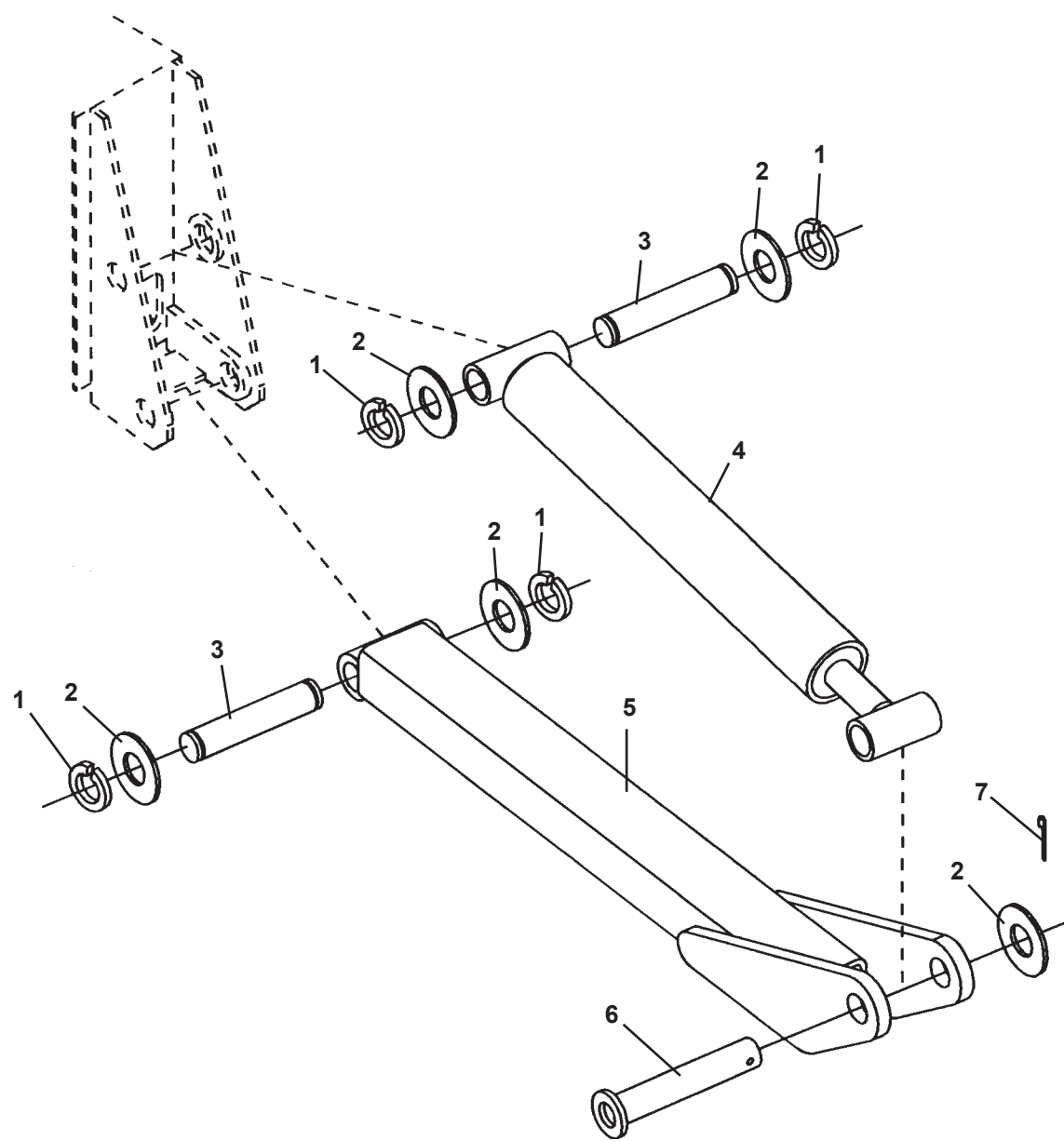
MAINFRAME ASSEMBLY

ASSEMBLY #88093

SWING CYLINDER

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	As Req'd	57693	Thrust Washer 1.25" X .078"
	As Req'd	64727	Thrust Washer 1.25" X .145"
	As Req'd	64728	Thrust Washer 1.25" X .031"
2	-	62523	Self-Aligning Bushing (Included in Swing Cylinder Assembly)
3	2	82827	Spacer
4	4	68057	Thrust Washer
5	-	82441	Needle Bearing (Included in Swing Cylinder Assembly)
6	2	81827	Swing Cylinder Assembly (Includes (2) 82441 Needle Bearings and (1) 62523 Bushings)
	2	6616	Grease Zerk
	2	30164	Tee - Special Lateral Tee
7	4	53031	90° Grease Zerk
8	4	82420	Pin
9	4	1047	.38" UNC X 2.00" Hex Capscrew
10	4	1514	.38" Flat Washer
11	4	81595	Spacer Tube
12	4	1837	.38" UNC Deformed Lock Nut
13	-	83815	Bushing (Included in Mainframe - Installed with Locktite Grade 680)

MAINFRAME ASSEMBLY
ASSEMBLY #88093
STABILIZERS



MAINFRAME ASSEMBLY

ASSEMBLY #88093

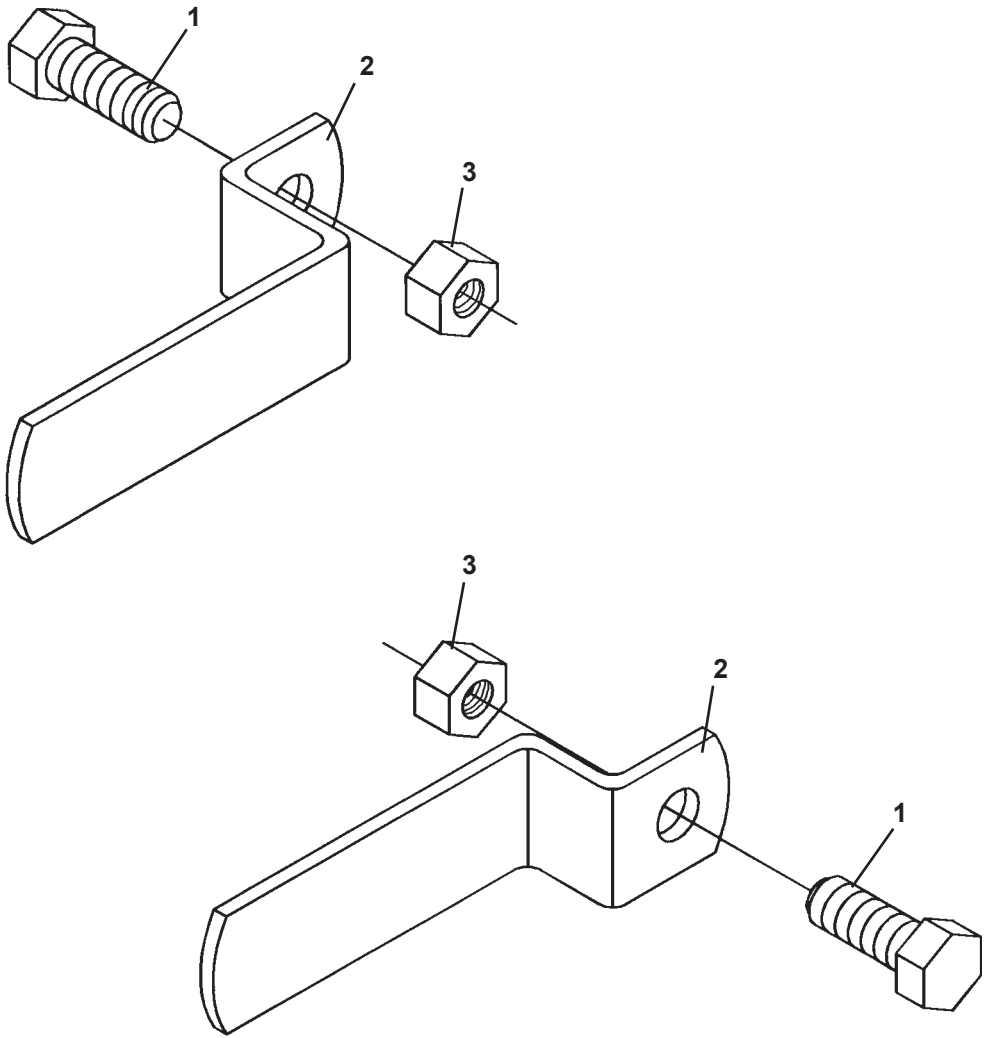
STABILIZERS

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	8	1652	Snap Ring
2	As Req'd	57693	Thrust Washer 1.25" X .078"
	As Req'd	64727	Thrust Washer 1.25" X .145"
	As Req'd	64728	Thrust Washer 1.25" X .031"
3	4	81846 ⁽¹⁾	Pin
4	2	86605 ⁽²⁾	Stabilizer Cylinder Assembly (1.50" Rod)
	4	6616	Grease Zerk
5	2	83393	Stabilzer Arm
6	2	83257	Pin
7	2	1613	Cotter Pin

NOTE:

- (1) Pivot Pin #81846 is sold only in Pin Kit #86314. Kit includes one pin #81846, two thrust washers #64727 and two snap rings #1652.
- (2) Stabilizer Cylinder Assembly #86605 (1.50" Rod Dia.) replaces Stabilizer Cylinder Assembly #83397 (1.25" Rod Dia.). If ordering replacement parts see Assembly Diagram and Parts list for your existing cylinder. If replacing a complete Stabilizer Cylinder, order Assembly #86605.

HOSE BUNDLE CLAMPS

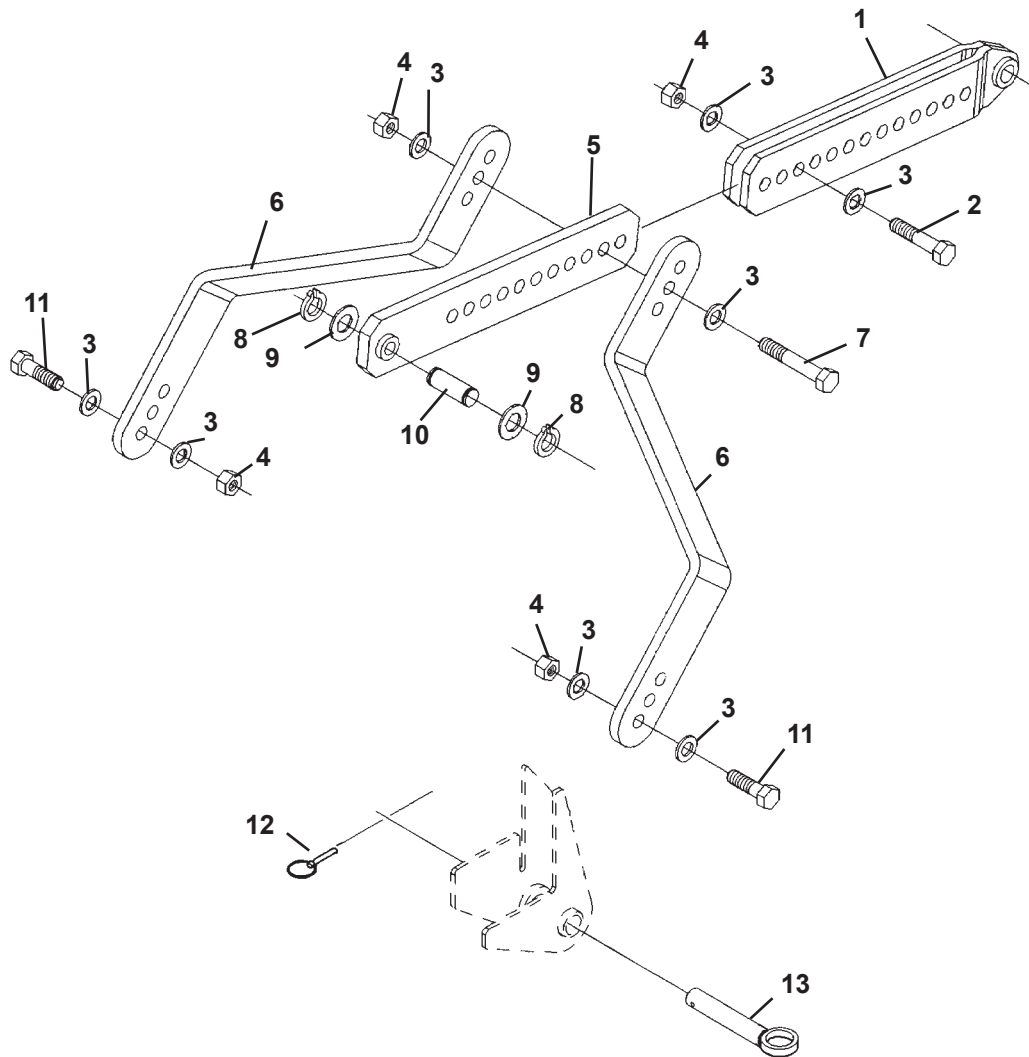


HOSE BUNDLE CLAMPS

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	1043	.38" UNC X 1.00" Hex Capscrew
2	1	84718	Right Hose Bundle Clamp
3	2	1837	.38" UNC Deformed Lock Nut
4	1	84718	Left Hose Bundle Clamp

MOUNTING INSTRUCTIONS

3-POINT HITCH ADAPTER KIT #88623



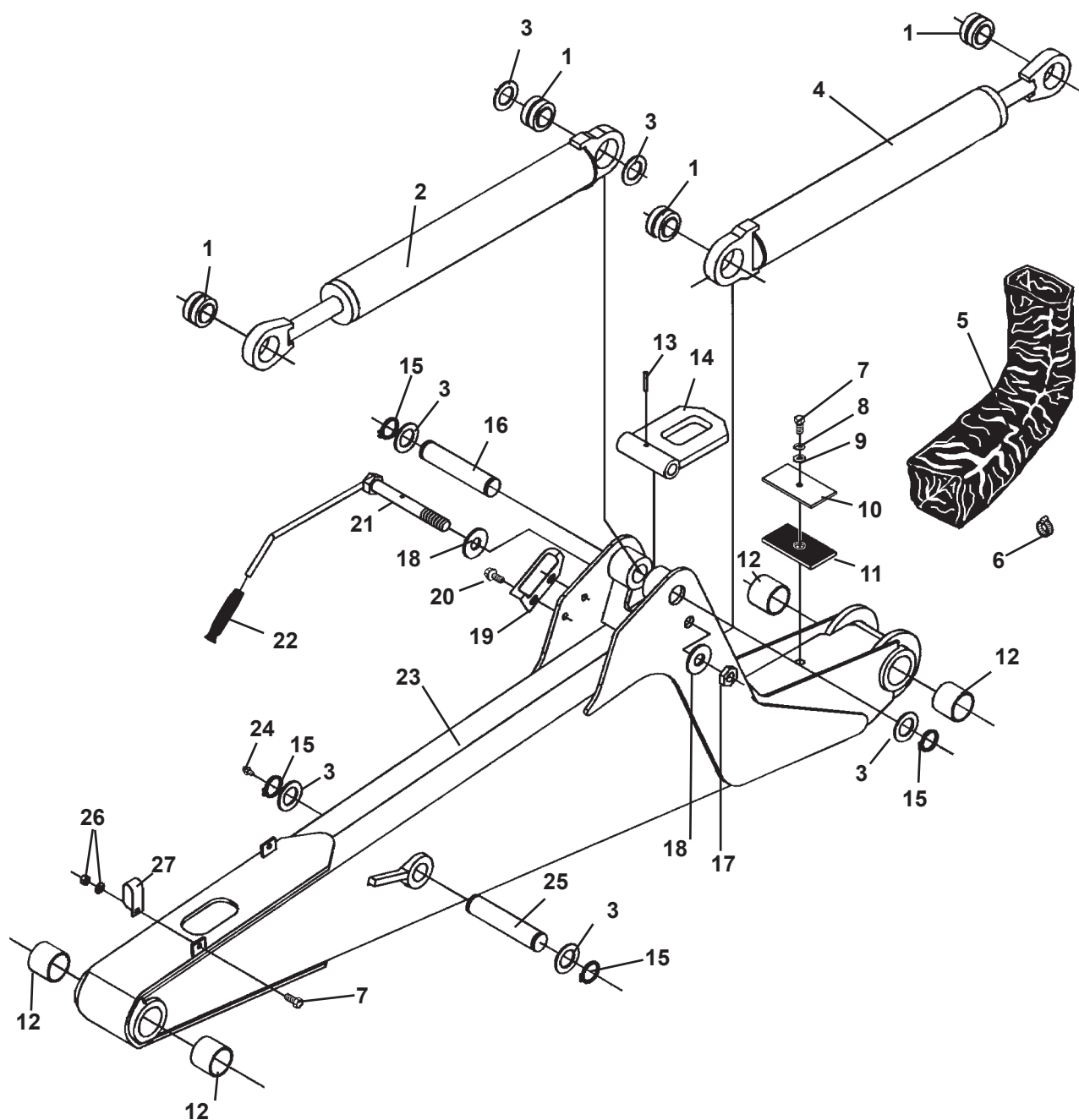
MOUNTING INSTRUCTIONS

3-POINT HITCH ADAPTER KIT #88623

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	87742	Center Double Link
2	1	1145	.75" UNC X 3.50" Hex Capscrew
3	8	1649	.75" Hard Flat Washer
4	4	1534	.75" UNC Hex Locknut
5	1	87743	Center Single Link
6	2	87741	Hitch Lock Out Arm
7	1	1149	.75" UNC X 5.00" Hex Capscrew
8	2	1570	Snap Ring
9	2	57462	Thrust Washer
10	1	87805	Pin
11	2	1142	.75" UNC X 2.75" Hex Capscrew
12	2	6626	Klik Pin
13	2	88117	Pin

NOTE: USE HIGH STRENGTH PIN SUPPLIED BY YOUR TRACTOR MANUFACTURER TO ATTACH CENTER LINK TO TRACTOR.

ASSEMBLY #119069



75747

3511B BOOM & DIPPER ASSEMBLY

ASSEMBLY #119069

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	-	6615	Self Aligning Bushing (Included in Cylinder Assemblies)
2	1	87737	Dipper Cylinder Assembly
	2	6616	Grease Zerk
3	As Req'd	6623	Thrust Washer 1.38" x .031
	As Req'd	64724	Thrust Washer 1.38" x .090
	As Req'd	64725	Thrust Washer 1.38" x .125
4	1	87736	Boom Cylinder Assembly
	2	6616	Grease Zerk
5	1	34120	Hose Sock
6	1	53167	Hose Clamp (Included in Console Assembly)
7	3	1043	.38" UNC X 1.00" Hex Capscrew
8	1	1503	.38" Lock Washer
9	1	1514	.38" Flat Washer
10	1	86221	Hose Clamp Plate
11	1	86222	Rubber Spacer
12	-	86673	Bushing (Included in Boom Assembly) (Installed with Locktite Grade 680)
13	1	1972	Spring Pin
14	1	86366	Boom Lock
15	4	1650	Snap Ring
16	1	86242	Pivot Pin
17	1	1959	.88" UNC Jam Nut
18	2	6562	Spring Washer
19	1	84137	Guide Plate
20	2	1961	.38" UNC X .50" Hex FlangeHead Capscrew
21	1	86230	Handle
22	1	83656	Handle Grip
23	1	86955	Boom Assembly (Includes (4) 86673 Bushings) (Installed with Locktite Grade 680)
24	1	6616	Grease Zerk
25	1	86224	Pivot Pin
26	2	1525	.38" Flat Washer
	2	1837	.38" UNC Deformed Lock Nut
27	2	82859	Double Hose Clamp

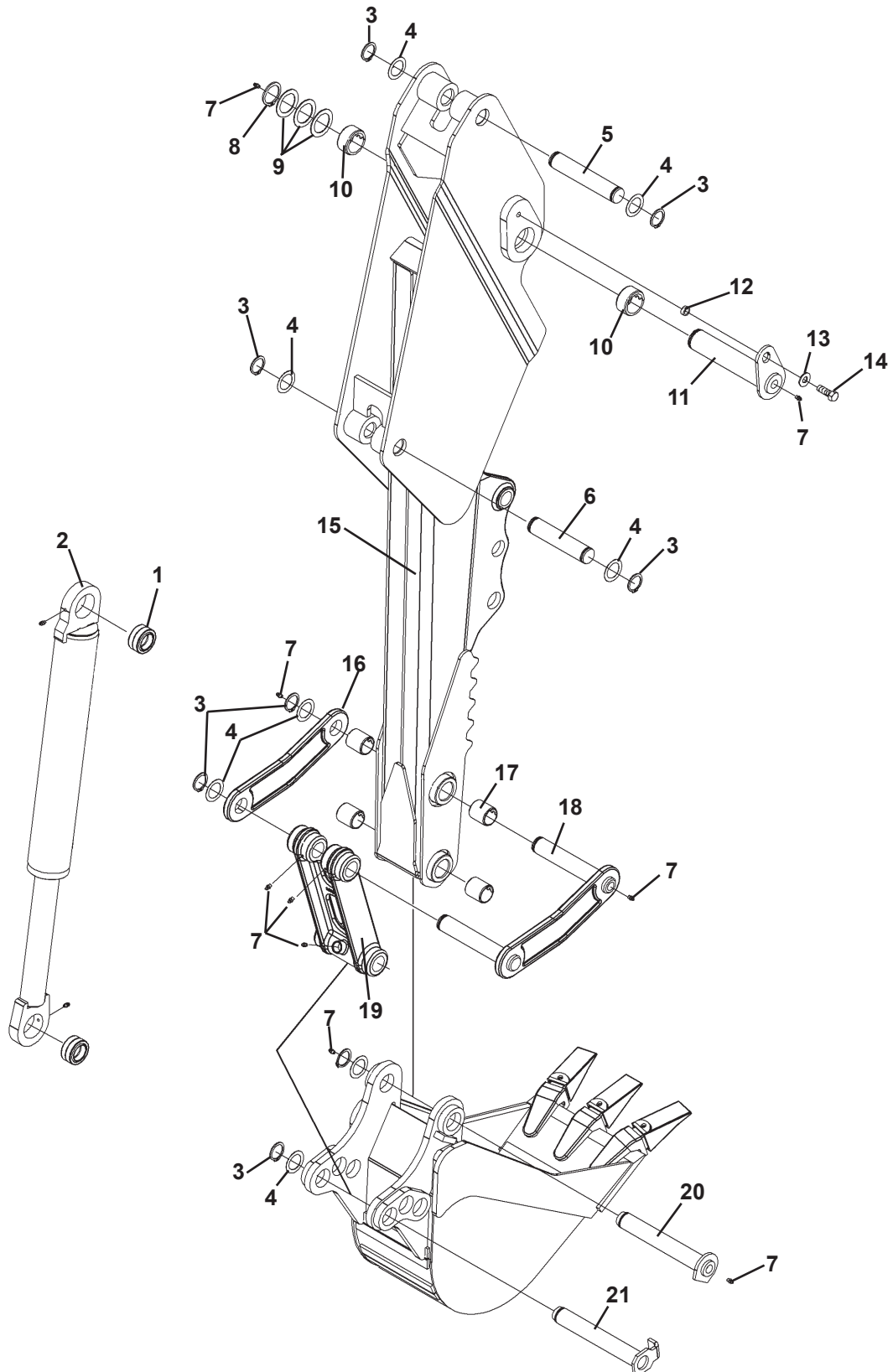
NOTE:

- (1) Pivot Pin #86242 is sold only in Pin Kit #86315. Kit includes one pin #86242, two thrust washers #6623 and two snap rings #1650.
- (2) Pivot Pin #86224 is sold only in Pin Kit #86319. Kit includes one pin #86224, two thrust washers #6623, two snap rings #1650 and one grease zerk #6616.

12625 12-11-13

3511B BOOM & DIPPER ASSEMBLY

ASSEMBLY #119069



12626 12-11-13

3511B BOOM & DIPPER ASSEMBLY

ASSEMBLY #119069

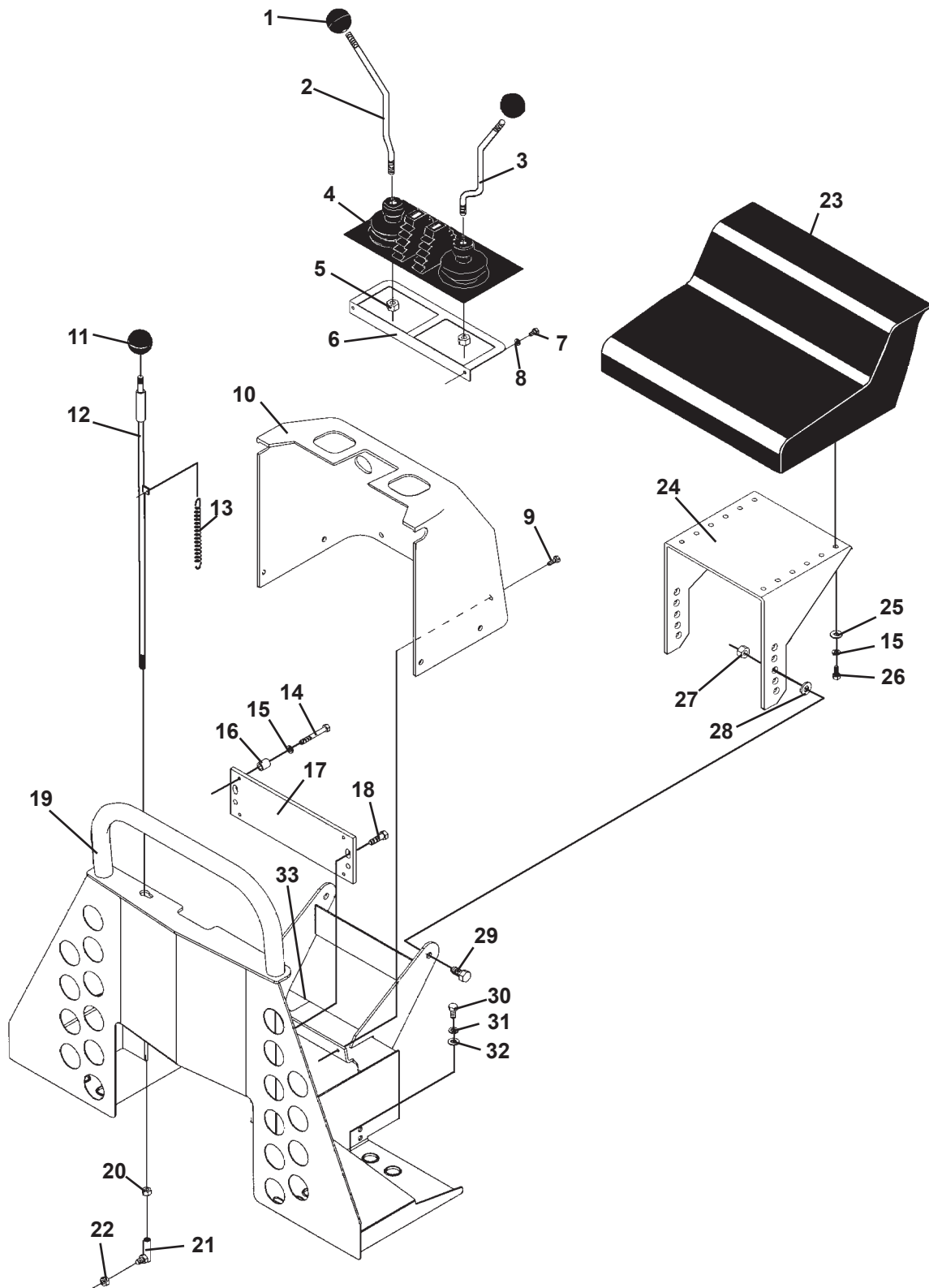
<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	-	85772	Self-Aligning Bushing (Included in Cylinder Assembly)
2	1	119854 (3)	Bucket Cylinder Assembly (SN #379427 & UP)
	2	6616	Grease Zerk
3	8	1650	Snap Ring
4	As Req'd	6623	Thrust Washer 1.38" X .031
	As Req'd	64724	Thrust Washer 1.38" X .090
	As Req'd	64725	Thrust Washer 1.38" X .125
5	1	86226 (1)	Pivot Pin
6	1	86225 (2)	Pivot Pin
7	6	6616	Grease Zerk
8	1	1651	Snap Ring
9	As Req'd	6622	Thrust Washer 1.75 X .082
10	-	82402	Bushing (Included in Dipper Assembly) (Install with Locktite Grade 680)
11	1	86227	Pivot Pin
12	1	86149	Spacer Tube
13	1	1516	.50" Flat Washer
14	1	1090	.50" UNC X 1.50" Hex Capscrew
15	1	118177	Dipper Assembly (Includes (2) 82402 and (2) 81610 Bushings) (Installed with Locktite Grade 680)
16	1	84914	Dipper Link Plate
17	-	81610	Bushing (Included in Dipper Assembly) (Install with Locktite Grade 680)
18	1	109353	Dipper Link
19	1	109326	Bucket Link
20	1	109410	Pivot Pin
21	1	109413	Pivot Pin

NOTE:

- (1) Pivot Pin #86226 is sold only in Pin Kit #86318. Kit Includes one pin #86226, two thrust washers #6623 and two snap rings #1650.
- (2) Pivot Pin #86225 is sold only in Pin Kit #86316. Kit Includes one pin #86226, two thrust washers #6623 and two snap rings #1650.
- (3) When replacing the bucket cylinder on units UP TO SN #379426, two #38766 extension hoses must also be ordered.

CONSOLE ASSEMBLY

ASSEMBLY #104161



12628 12-12-13

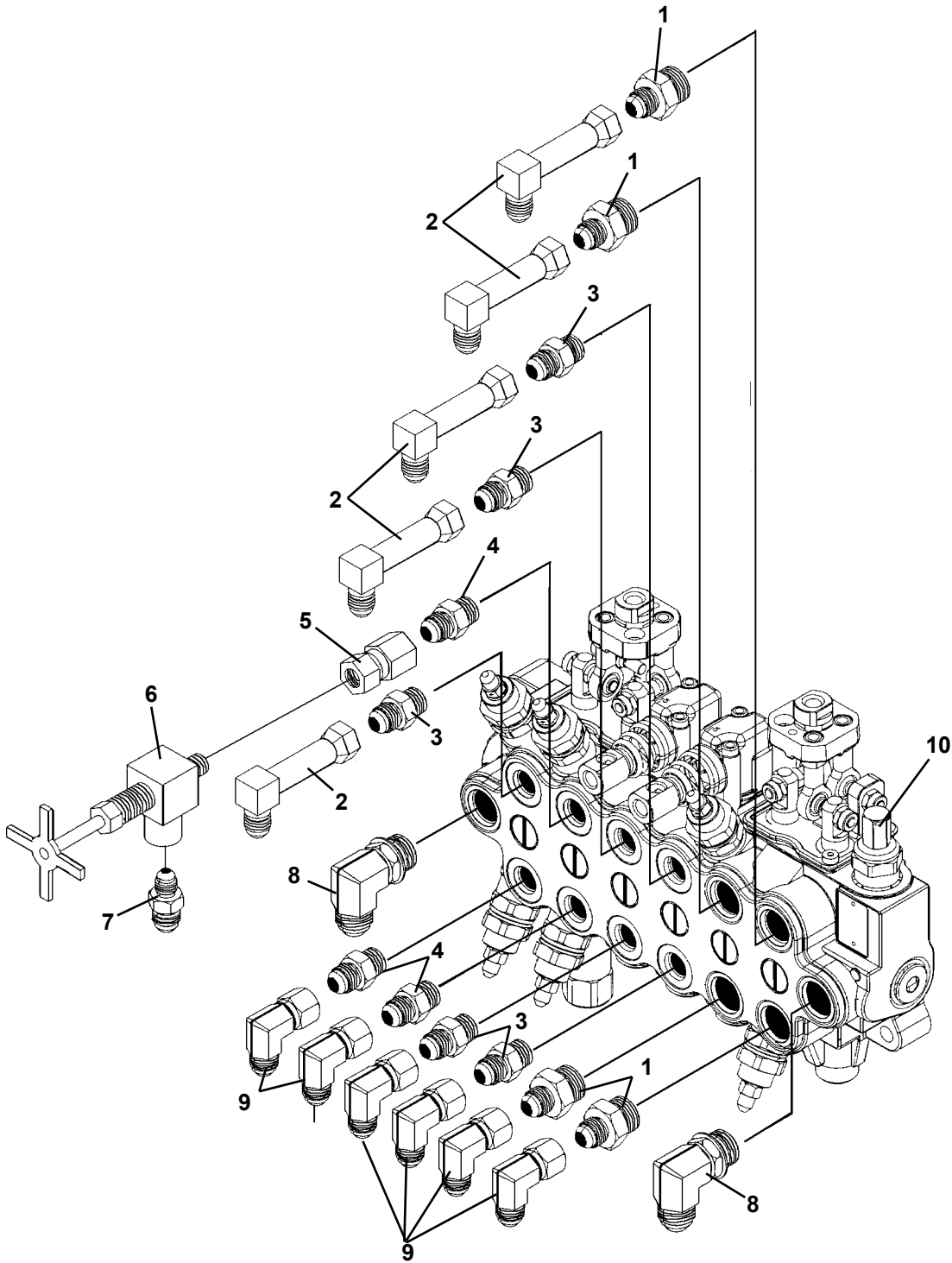
CONSOLE ASSEMBLY

ASSEMBLY #104161

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	85838	Ball Handle
2	1	87952	Right Control Handle
3	1	87951	Left Control Handle
4	1	83235	Rubber Boot
5	2	2558	M10 Hex Nut
6	1	85826	Boot Support
7	2	1001	.25" UNC X .50" Hex Capscrew
8	2	1501	.25" Lock Washer
9	6	1958	.25" UNC X .75" Hex Capscrew
10	1	88622	Console Cover with Decals
11	1	83406	Ball Handle - RED
12	1	83273	Rod
13	1	82795	Spring
14	3	1026	.31" UNC X 2.00" Hex Capscrew
15	7	1502	.31" Lock Washer
16	3	19471	Spacer Tube
17	1	101660	Valve Mounting Plate
18	2	1044	.38" UNC X 1.25" Hex Capscrew
19	1	87288	Console
20	1	1476	.38" UNF Jam Nut
21	1	5545	Balljoint
22	1	1592	.38" UNF Lock Nut
23	1	6980	Seat
24	1	87142	Seat Mounting
25	4	1513	.31" Flat Washer
26	4	1021	.31" UNC X .75" Hex Capscrew
27	2	1542	.50" UNC Nylock Nut
28	2	1516	.50" Flat Washer
29	2	1089	.50" UNC X 1.25" Hex Capscrew
30	4	1042	.38" UNC X .75" Hex Capscrew
31	4	1503	.38" Lock Washer
32	4	1514	.38" Flat Washer
33	1	87147	Cover Plate
	2	1958	.25" UNC X .75" Hex Capscrew

VALVE ASSEMBLY

ASSEMBLY #2261



VALVE ASSEMBLY

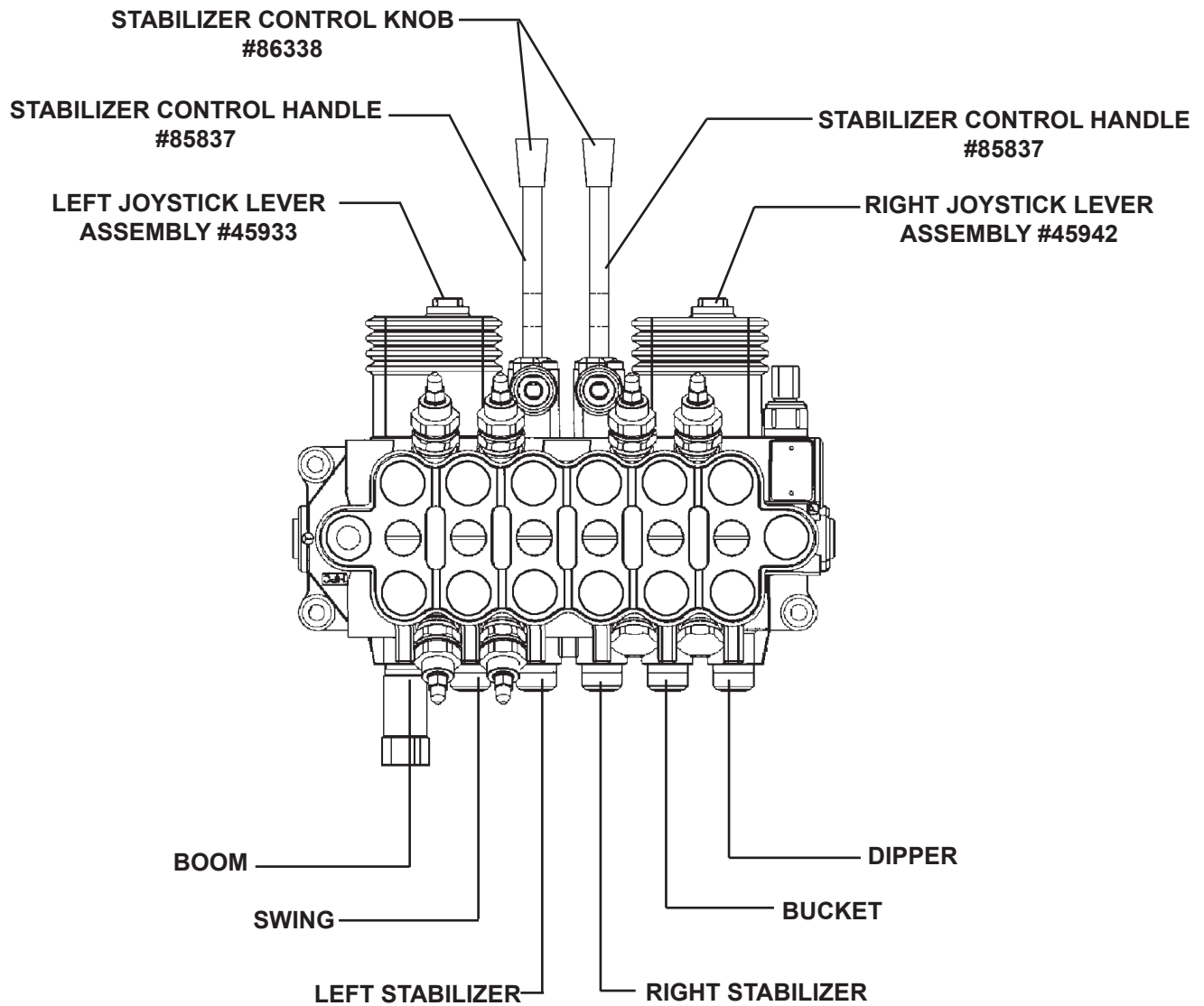
ASSEMBLY #2261

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	3269	Straight Connector 8MBo-6MJ
2	5	30363	90° Elbow - Long 6MJ-6FJX
3	5	3457	Straight Connector 6MBo-6MJ
4	3	30184	Straight Connector 6MBo-6MJ with .109 Restrictor
5	1	30187	Straight Connector 4FP-6FJX
6	1	3185	Needle Valve (Swing Speed Control)
7	1	3137	Straight Connector 4MP-6MJ
8	2	3104	90° Elbow 8MBo-8MJ
9	6	3430	90° Elbow 6MJ-6FJX
10	1	103546	6-Spool Monoblock Valve (Valve includes (2) 85837 stabilizer control levers and (2) 86338 control knobs)

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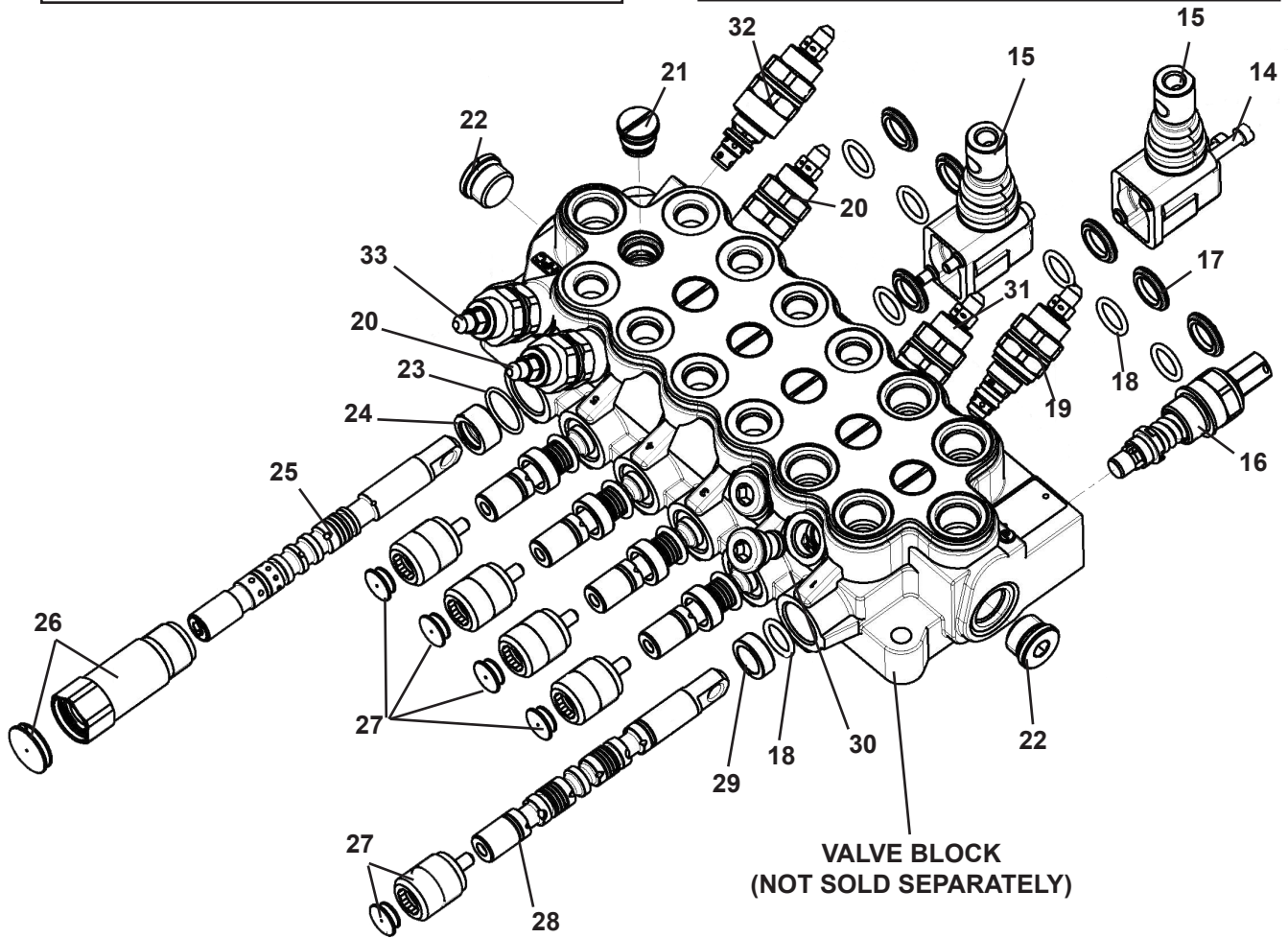
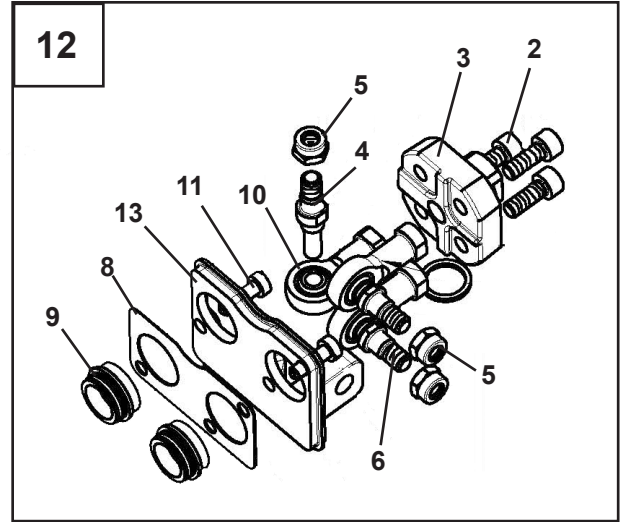
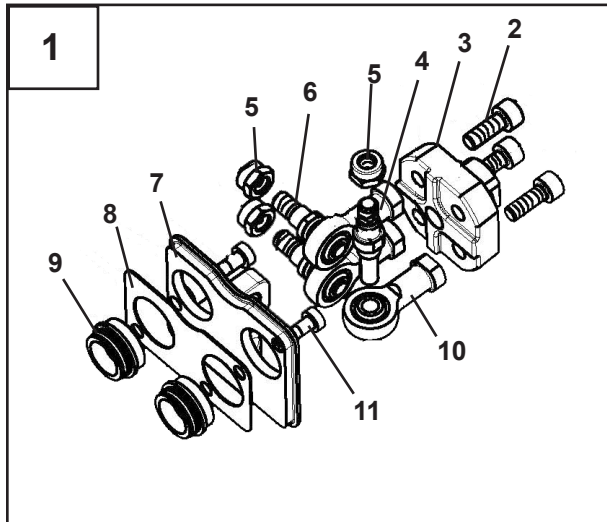
VALVE ASSEMBLY

ASSEMBLY #103546



VALVE ASSEMBLY

VALVE ASSEMBLY #103546 SERVICE PARTS



VALVE ASSEMBLY

VALVE ASSEMBLY #103546 SERVICE PARTS

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	-	45933	Joystick Lever Assembly (Left)
2	-	45932	Screw
3	-	45931	Support
4	-	45929	Pin
5	-	45927	Nut
6	-	45928	Ball Joint
7	-	45925	Support
8	-	45924	Seal
9	-	45923	Spacer
10	-	45930	Ball Joint
11	-	45926	Screw
12	-	45942	Joystick Lever Assembly (Right)
13	-	45941	Support
14	-	45935	Screw
15	-	45934	Lever Cap
16	-	45719	Main Relief (2600 PSI)
17	-	45916	Spacer
18	-	45914	O'Ring
19	-	45716	Circuit Relief Valve (2600 PSI)
20	-	45714	Anti-Cav. Circuit Relief Valve (2600 PSI)
21	-	45922	Check Valve
22	-	45921	O'Ring Plug
23	-	45918	O'Ring
24	-	45919	Spacer
25	-	45920	Spool (Float)
26	-	45730	Float Assembly
27	-	45729	Positioner Assembly
28	-	45917	Valve Spool
29	-	45915	Spacer
30	-	45935	Circuit Relief Plug
31	-	45936	Circuit Relief Valve (2900 PSI)
32	-	45937	Anti-Cav. Circuit Relief Valve (2600 PSI)
33	-	45714	Anti-Cav. Circuit Relief Valve (2900 PSI)

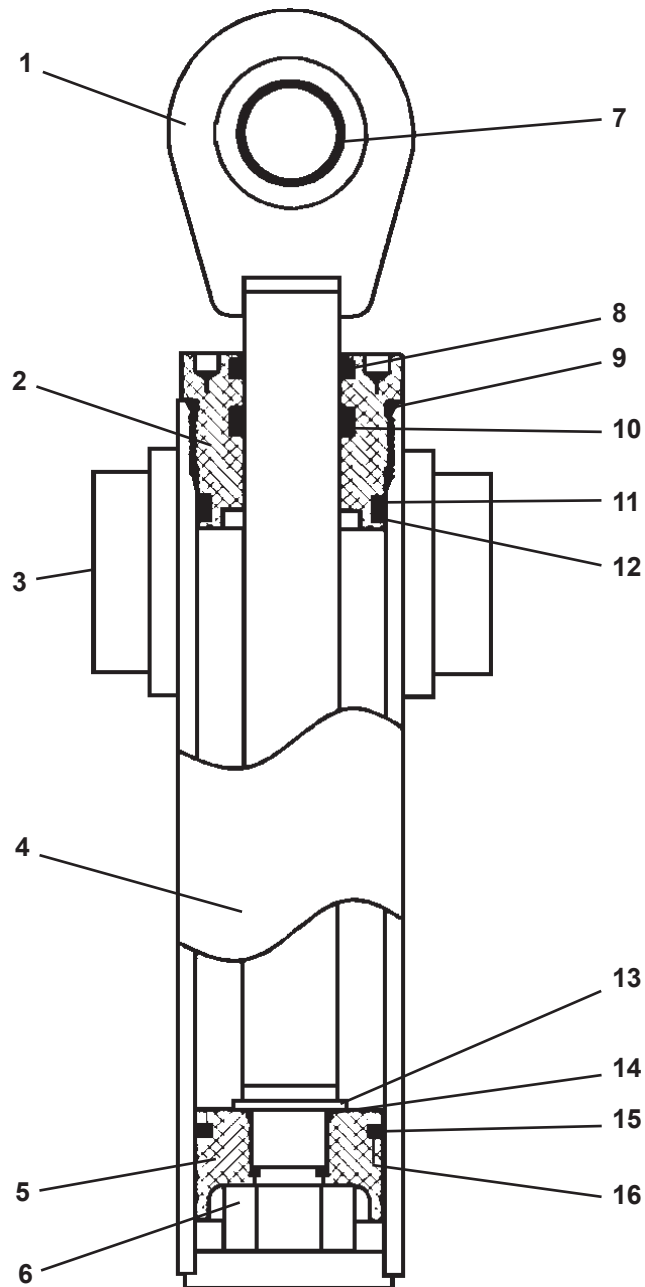
NOT SHOWN - OPTIONAL CLOSED CENTER OR POWER BEYOND

45938 #4 BSPP Plug (Functions as Closed Center Conversion or Power Beyond. See Maintenance and Service instructions in the Operator's manual for installation.)

11822 4-4-13-2

CYLINDER ASSEMBLY

SWING CYLINDER ASSEMBLY #81827



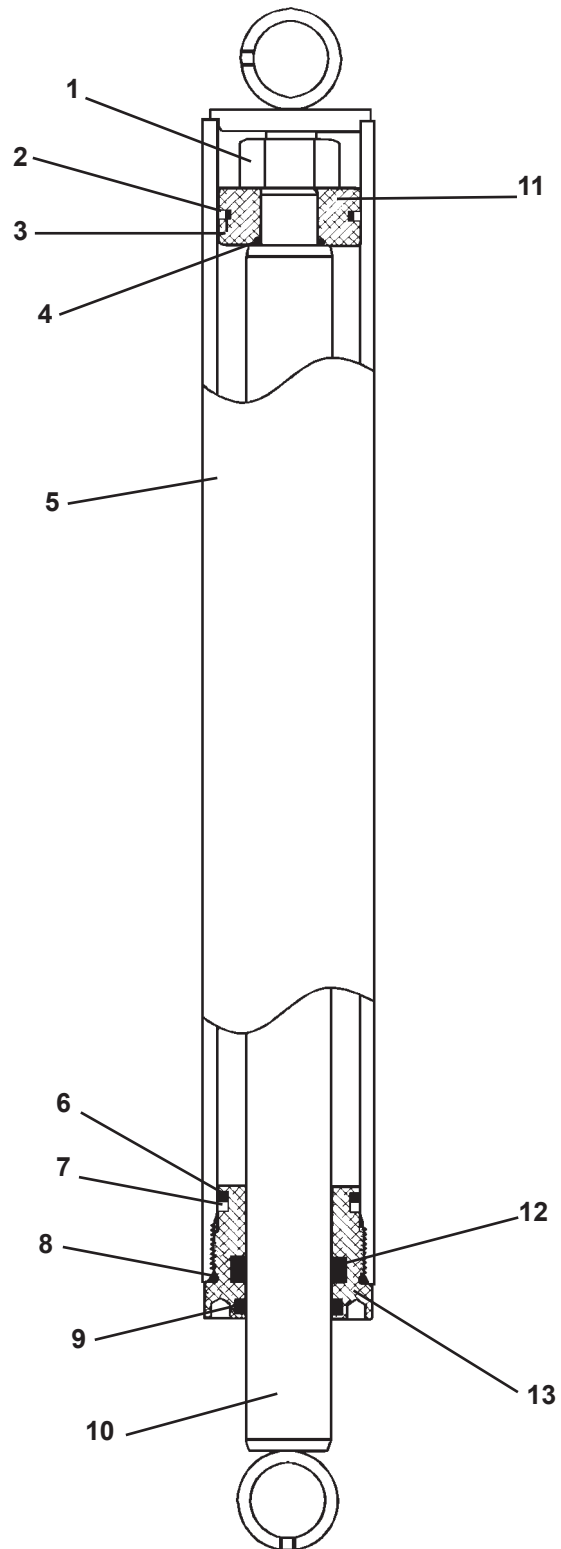
CYLINDER ASSEMBLY

SWING CYLINDER ASSEMBLY #81827

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	81024	Cylinder Rod
2	1	77458	Cylinder Gland
3	2	82441	Needle Bearing
4	1	81960	Cylinder Tube
5	1	81963	Piston
6	1	1483	Hex Nut
7	1	62523	Self Aligning Bushing
8	1	45389*	Rod Wiper
9	1	45250*	O'Ring
10	1	45219*	Poly Pak Seal
11	1	4510*	Back-Up Ring
12	1	4509*	O'Ring
13	1	5421	Washer
14	1	4641*	O'Ring
15	1	4644*	Piston Ring
16	1	4645*	O'Ring

NOTE: Seal Kit #45617 Includes all parts marked with an asterisk (*). Parts are not sold separately.

CYLINDER ASSEMBLY
STABILIZER CYLINDER ASSEMBLY #86605
(1.50" DIAMETER CYLINDER ROD)



CYLINDER ASSEMBLY

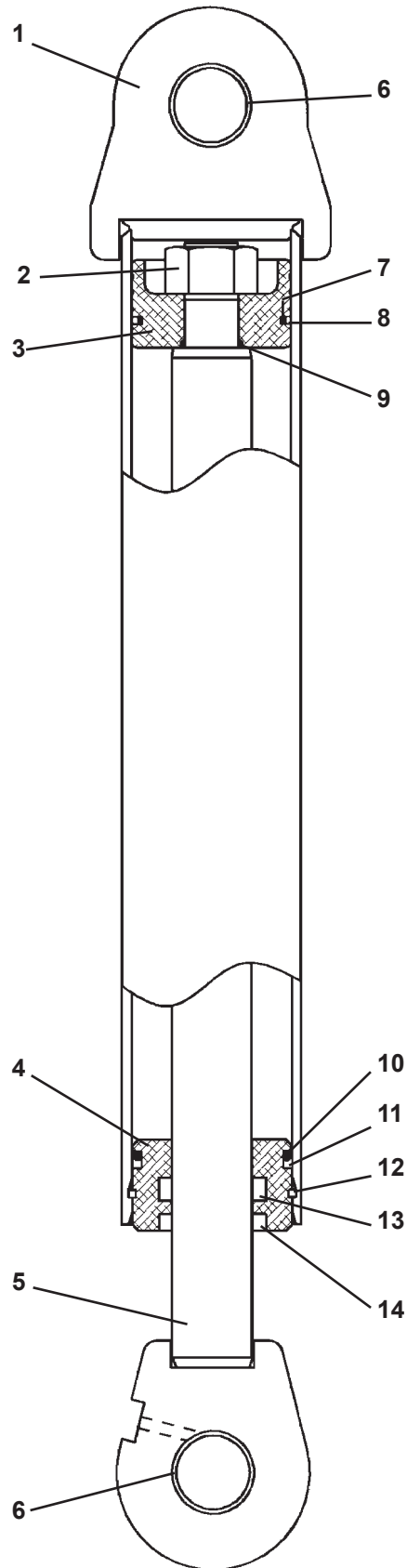
STABILIZER CYLINDER ASSEMBLY #86605
(1.50" DIAMETER CYLINDER ROD)

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	1483	Hex Nut
2	1	4644*	Teflon Piston Ring
3	1	4645*	O'Ring
4	1	4641*	O'Ring
5	1	83398	Cylinder Tube
6	1	4509*	O'Ring
7	1	4510*	Back-Up Ring
8	1	45250*	O'Ring
9	1	45372*	Rod Wiper
10	1	86606	Cylinder Rod
11	1	50252	Piston
12	1	45225*	Poly-Pak Seal
13	1	86609	Cylinder Gland

NOTE: Seal Kit #45738 includes all parts marked with an asterisk (*). Parts are not sold separately.

CYLINDER ASSEMBLY

BOOM CYLINDER ASSEMBLY #87736



CYLINDER ASSEMBLY

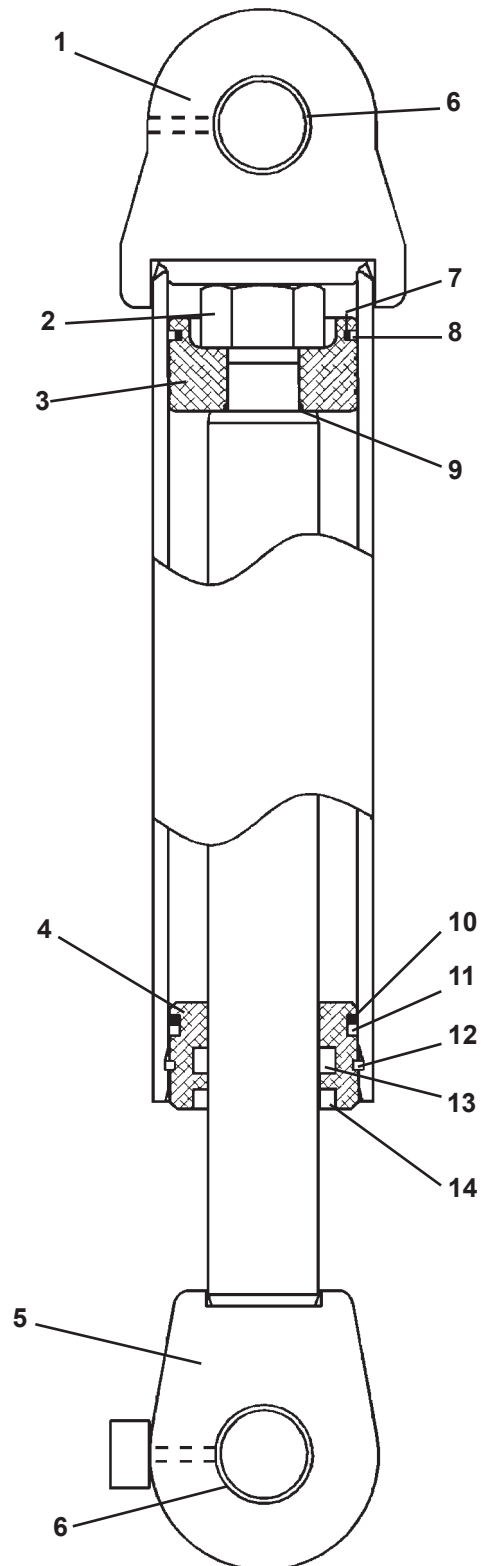
BOOM CYLINDER ASSEMBLY #87736

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	87766	Cylinder Tube
2	1	1483	Hex Nut
3	1	82793	Piston
4	1	63108	Cylinder Gland
5	1	87769	Cylinder Rod
6	2	85772	Bushing
7	1	4570*	O-Ring
8	1	4569*	Teflon Piston Ring
9	1	4641*	O-Ring
10	1	45555*	O-Ring
11	1	4631*	Back-Up Washer
12	1	7166*	Gland Retainer Rod
13	1	45225*	Poly-Pak Seal
14	1	4914*	Rod Wiper

NOTE: Seal Kit #45539 includes all parts marked with an asterisk (*). Parts are not sold separately.

CYLINDER ASSEMBLY

DIPPER CYLINDER ASSEMBLY #87737



CYLINDER ASSEMBLY

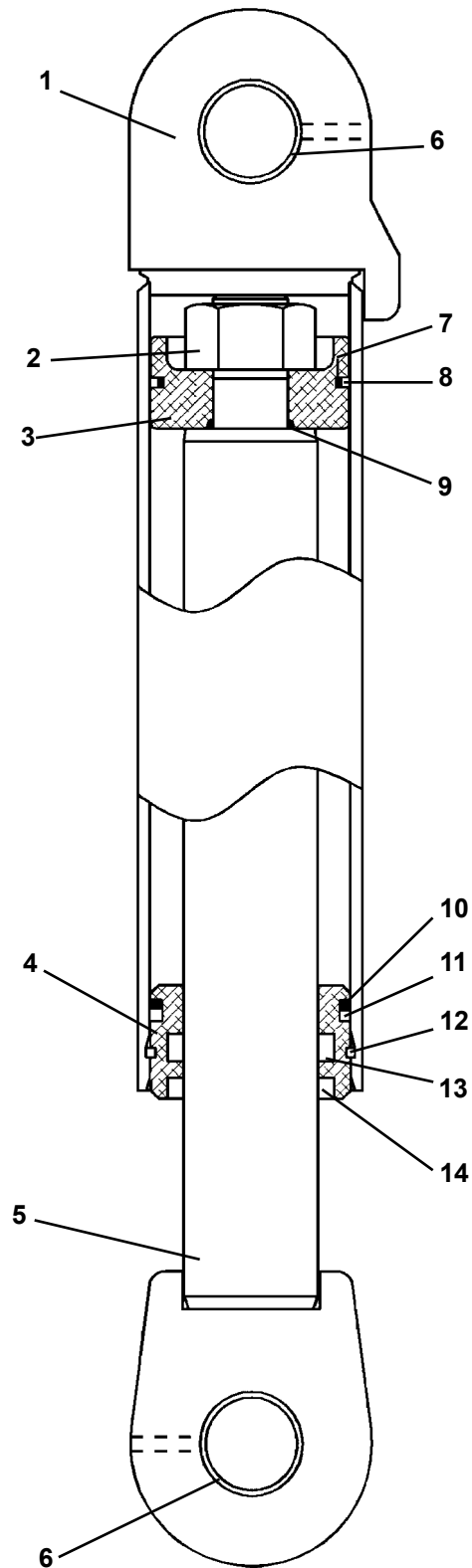
DIPPER CYLINDER ASSEMBLY #87737

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	87762	Cylinder Tube
2	1	1484	Hex Nut
3	1	86241	Piston
4	1	55914	Cylinder Gland
5	1	87764	Cylinder Rod
6	2	85772	Bushing
7	1	4570*	O-Ring
8	1	4569*	Teflon Piston Ring
9	1	4865*	O-Ring
10	1	45555*	O-Ring
11	1	4631*	Back-Up Washer
12	1	7166*	Gland Retainer Rod
13	1	45119*	Poly-Pak Seal
14	1	45118*	Rod Wiper

NOTE: Seal Kit #45541 includes all parts marked with an asterisk (*). Parts are not sold separately.

CYLINDER ASSEMBLY

BUCKET CYLINDER ASSEMBLY #119854



CYLINDER ASSEMBLY

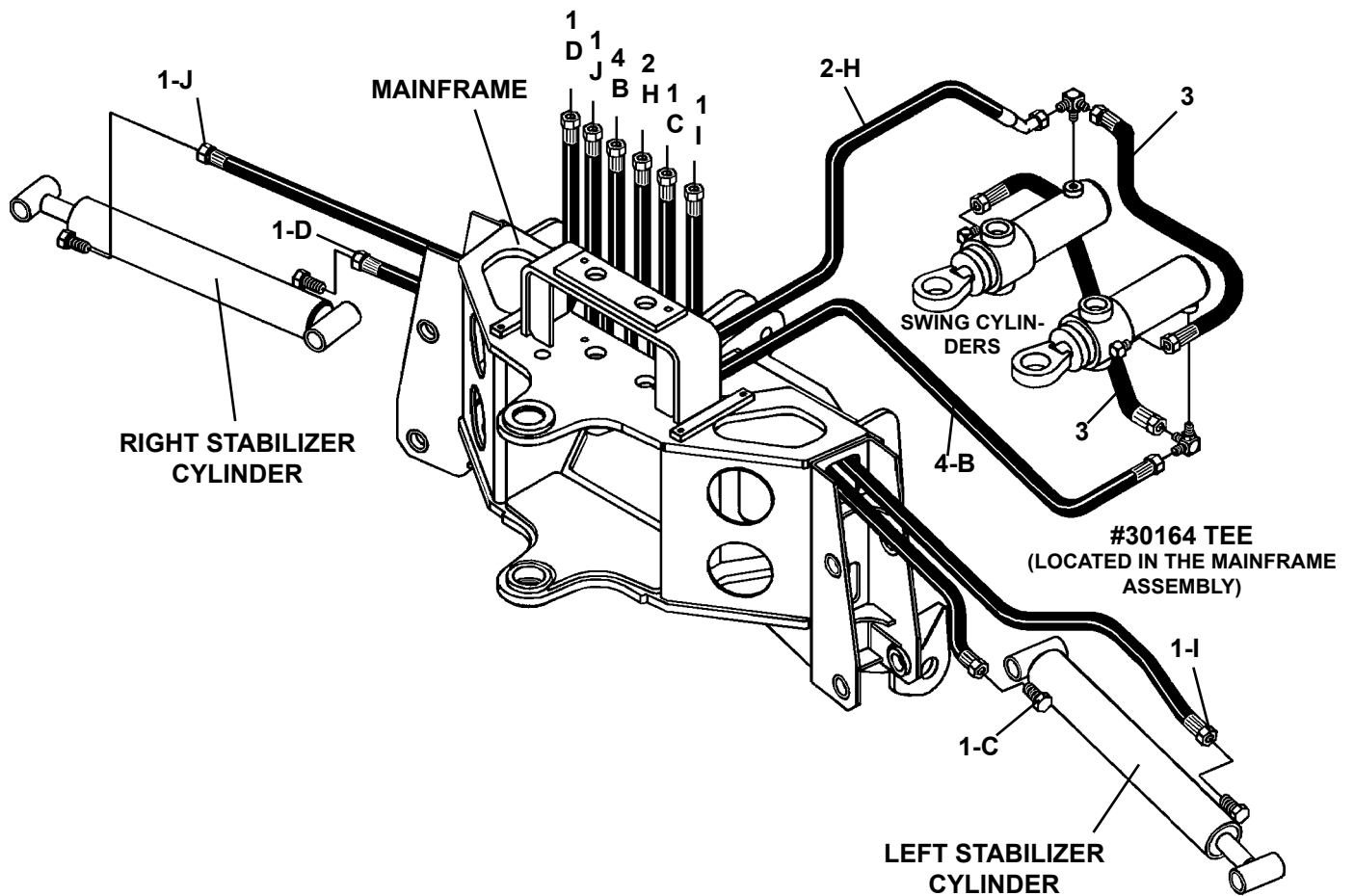
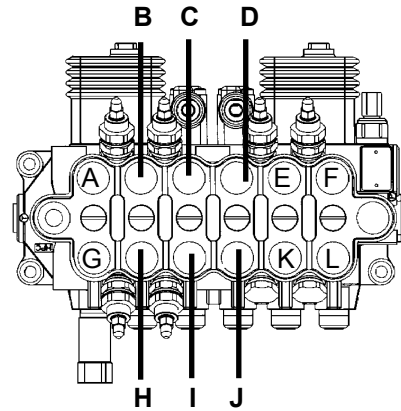
BUCKET CYLINDER ASSEMBLY #119854

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	119855	Cylinder Tube
2	1	1484	Hex Nut
3	1	55904	Piston
4	1	55911	Cylinder Gland
5	1	86287	Cylinder Rod
6	2	85772	Bushing
7	1	4570*	O-Ring
8	1	4569*	Teflon Piston Ring
9	1	4865*	O-Ring
10	1	45555*	O-Ring
11	1	4631*	Back-Up Washer
12	1	7166*	Gland Retainer Rod
13	1	45117*	Poly-Pak Seal
14	1	45105*	Rod Wiper

NOTE: Seal Kit #45542 includes all parts marked with an asterisk (*). Parts are not sold separately.

MAINFRAME HOSE SET BUCHER MONOBLOCK VALVE HOSE KIT #104238

HYDRAULIC CONTROL VALVE



MAINFRAME HOSE SET
BUCHER MONOBLOCK VALVE HOSE KIT #104238

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	35829	Hose Assembly .25" X 60" 6FJX - 6FJX
2	1	37700	Hose Assembly .25" X 13.50" 6FJX - 6FJX 90° Gooseneck
3	2	37552	Hose Assembly .25" X 14.50" 6FJX - 6FJX
4	1	37699	Hose Assembly .25" X 17" 6FJX - 6FJX

NOTE: Refer to the mainframe assembly for the priority valve hoses which are included in this assembly but have been shown in the mainframe assembly for clarity.

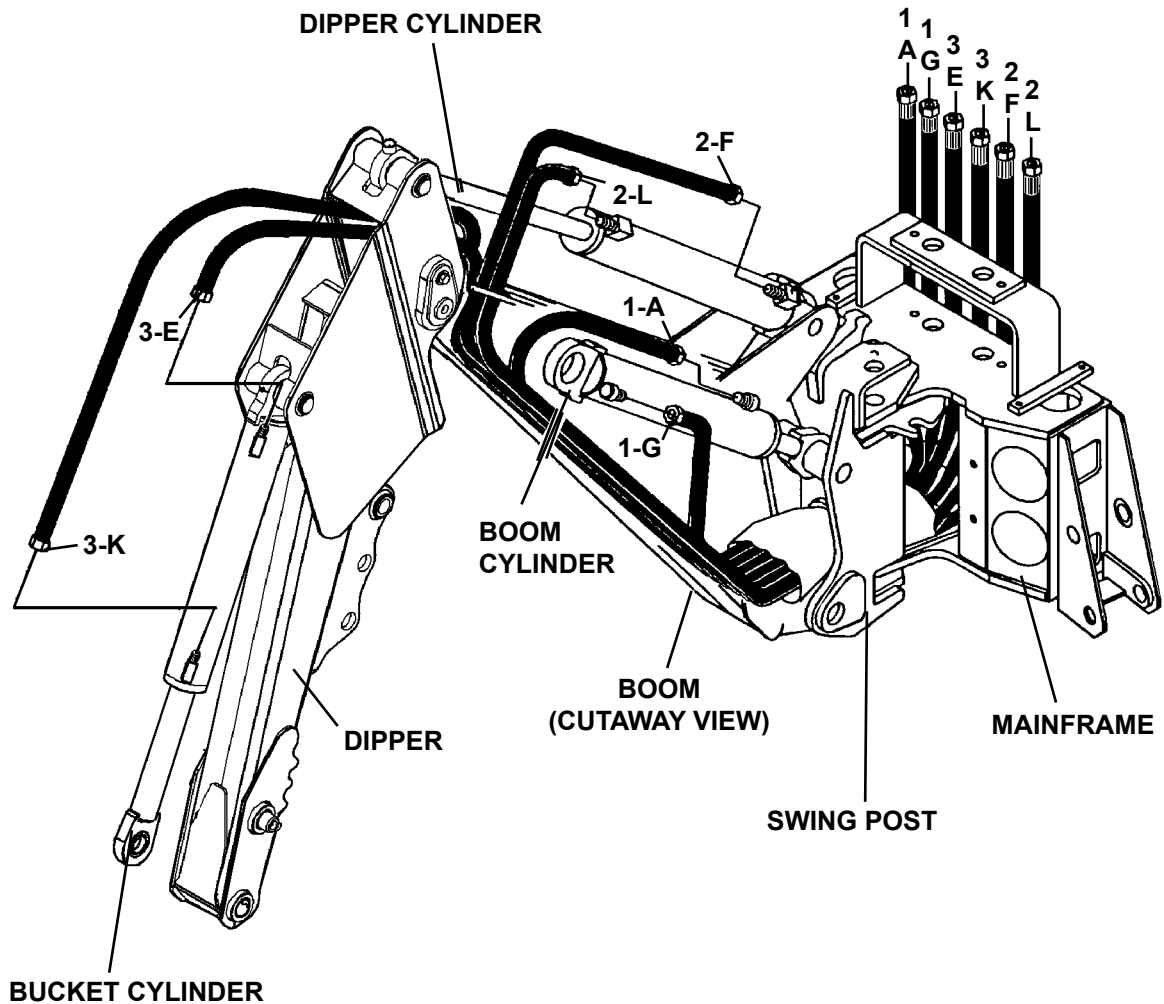
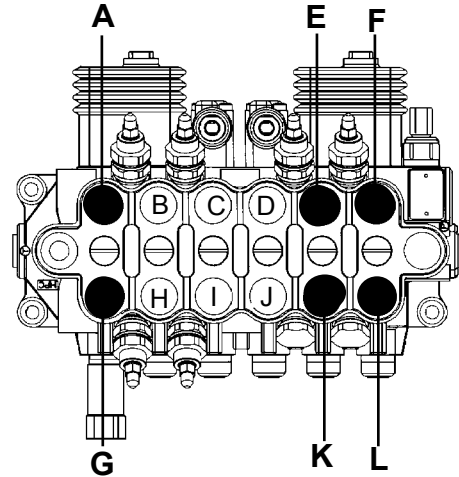
NOTE: Letters on the hose set diagram show the hydraulic hose routing between the backhoe control valve and the various hydraulic cylinders. Simply match the letter on the control valve port to the same letter on the hydraulic hose ends. Example: Hose Assembly labeled "C" runs from the upper Left Stabilizer port on the hydraulic control valve - through the mainframe and to the barrel end fitting on the left stabilizer cylinder.

NOTE: The fittings on the hydraulic cylinders have been altered for clarity purposes. this will assist you in distinguishing between the rod end and the barrel end of the various hydraulic cylinders.

3511B BOOM & DIPPER HOSE SET

ASSEMBLY #86982

HYDRAULIC CONTROL VALVE



12630 10-6-14-2

3511B BOOM & DIPPER HOSE SET

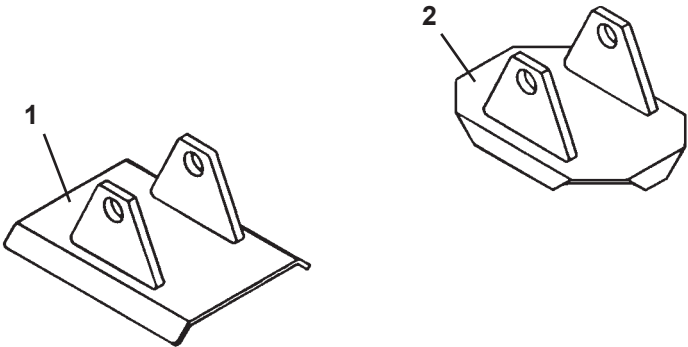
ASSEMBLY #86982

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	37671	Hose Assembly .38" X 93" 6FJX - 6FJX
2	2	37701	Hose Assembly .38" X 157.50" 6FJX - 6FJX
3	2	38762	Hose Assembly .38" X 165.00" 6FJX - 8FJX

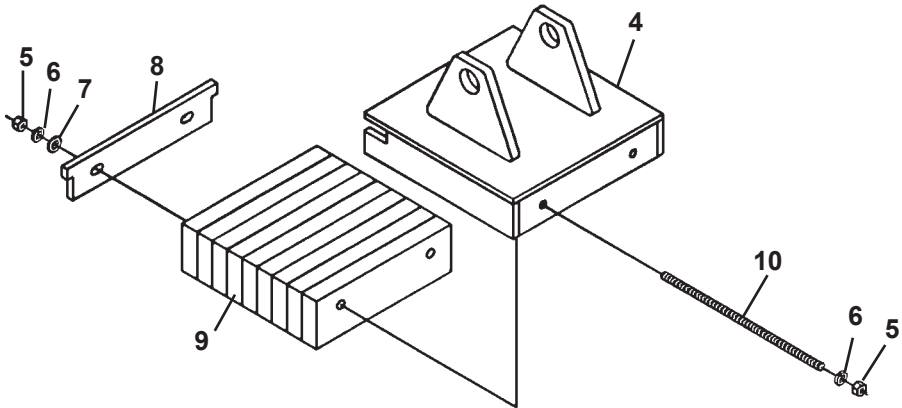
NOTE: Letters on the hose set diagram show the hydraulic hose routing between the backhoe control valve and the various hydraulic cylinders. Simply match the letter on the control valve port to the same letter on the hydraulic hose ends. EXAMPLE: Hose Assembly labeled "G" runs from the lower Boom port of the hydraulic control valve - through the mainframe and swing post and to the barrel end of the boom cylinder.

NOTE: The fittings on the hydraulic cylinders have been altered for clarity purposes. This will assist you in distinguishing between the rod end and the barrel end of the various hydraulic cylinders.

STABILIZER PADS



3

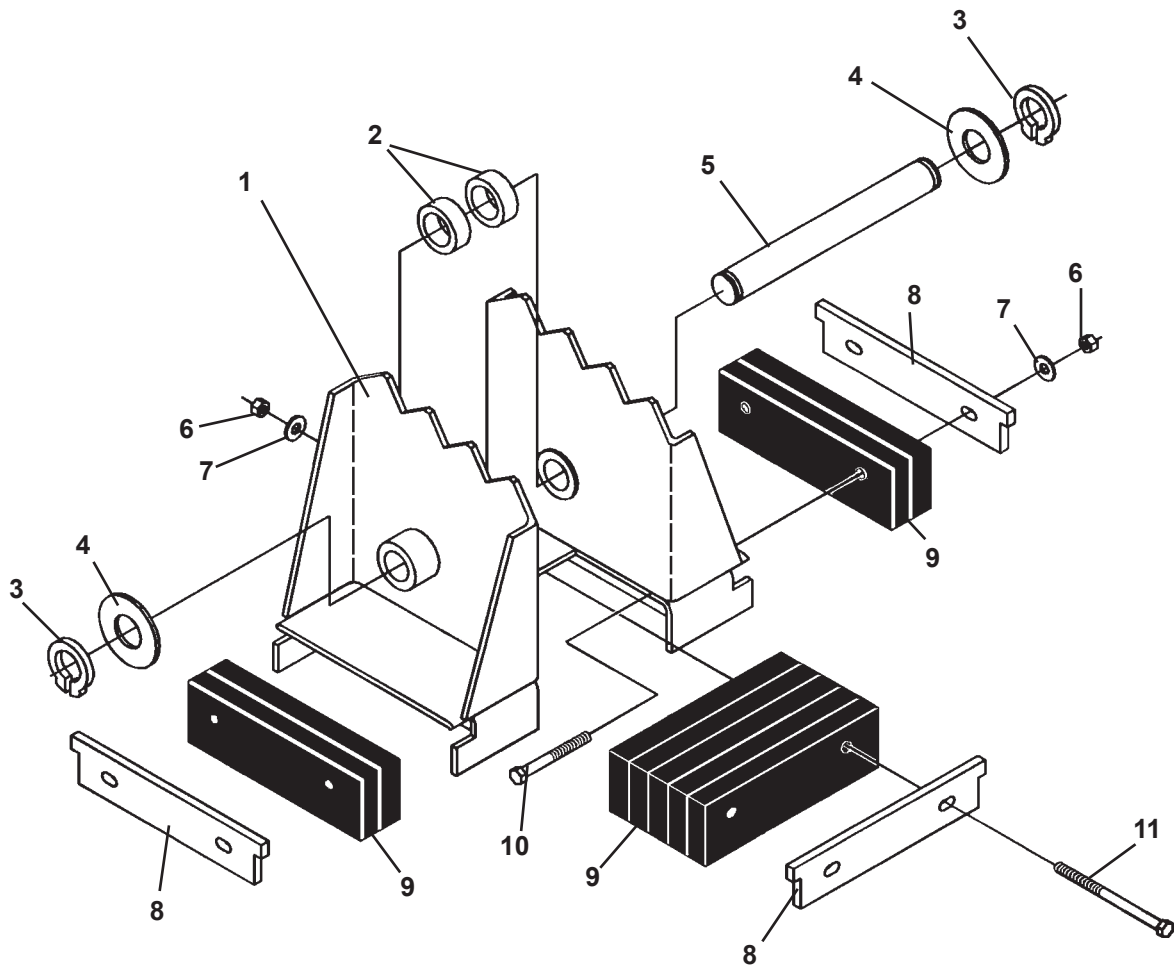


STABILIZER PADS

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
FLAT STABILIZER PAD ASSEMBLY - #81861			
1	2	81865	Flat Stabilizer Pad
GROUSER STABILIZER PAD ASSEMBLY - #81860			
2	2	83421	Grouser Stabilizer Pad
RUBBER STABILIZER PAD ASSEMBLY - #81862			
3	2	83418	Rubber Stabilizer Pad Assembly (Includes Items 4 through 10)
4	1	83419	Stabilizer Pad
5	4	1226	.38" UNC Hex Nut
6	4	1503	.38" Lock Washer
7	2	1514	.38" Flat Washer
8	1	51190	Slide Plate
9	1	64412	Rubber Strip Bundle
10	2	1661	.38" UNC X 11.50" Read Bolt

STABILIZER PADS

FLIP-OVER STABILIZER PAD ASSEMBLY #83091
(COMPLETE SET OF (2) FLIP-OVER PADS - ASSEMBLY #83058)



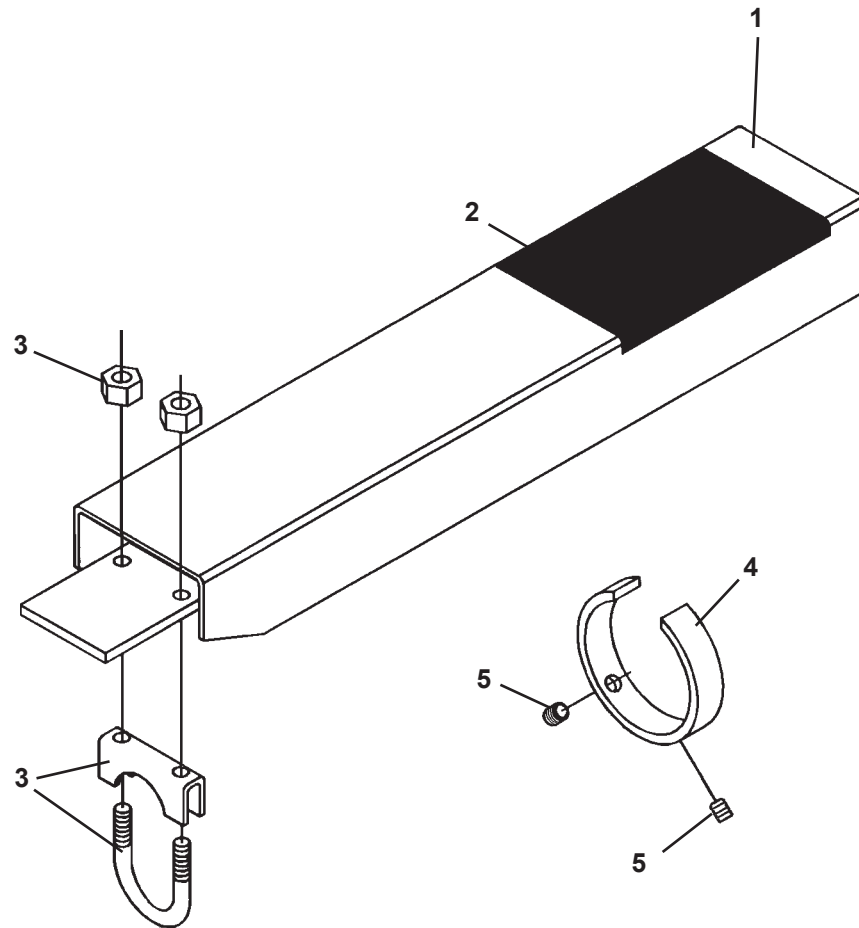
STABILIZER PADS

FLIP-OVER STABILIZER PAD ASSEMBLY #83091
(COMPLETE SET OF (2) FLIP-OVER PADS - ASSEMBLY #83058)

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	84496	Flip-Over Pad
2	2	84495	Spacer
3	2	1652	1.25" Snap Ring
4	VARIES	57693	Thrust Washer 1.25" X .078"
	VARIES	64727	Thrust Washer 1.25" X .125"
5	1	83096	Pin
6	6	1837	.38" UNC Hex Deformed Lock Nut
7	6	1514	.38" Flat Washer
8	3	51190	Slide Plate
9	1	64412	Rubber Strip Bundle
10	4	1053	.38" UNC X 3.50" Hex Capscrew
11	2	1057	.38" UNC X 5.00" Hex Capscrew

OPTIONAL STABILIZER CYLINDER COVER

ASSEMBLY #86706

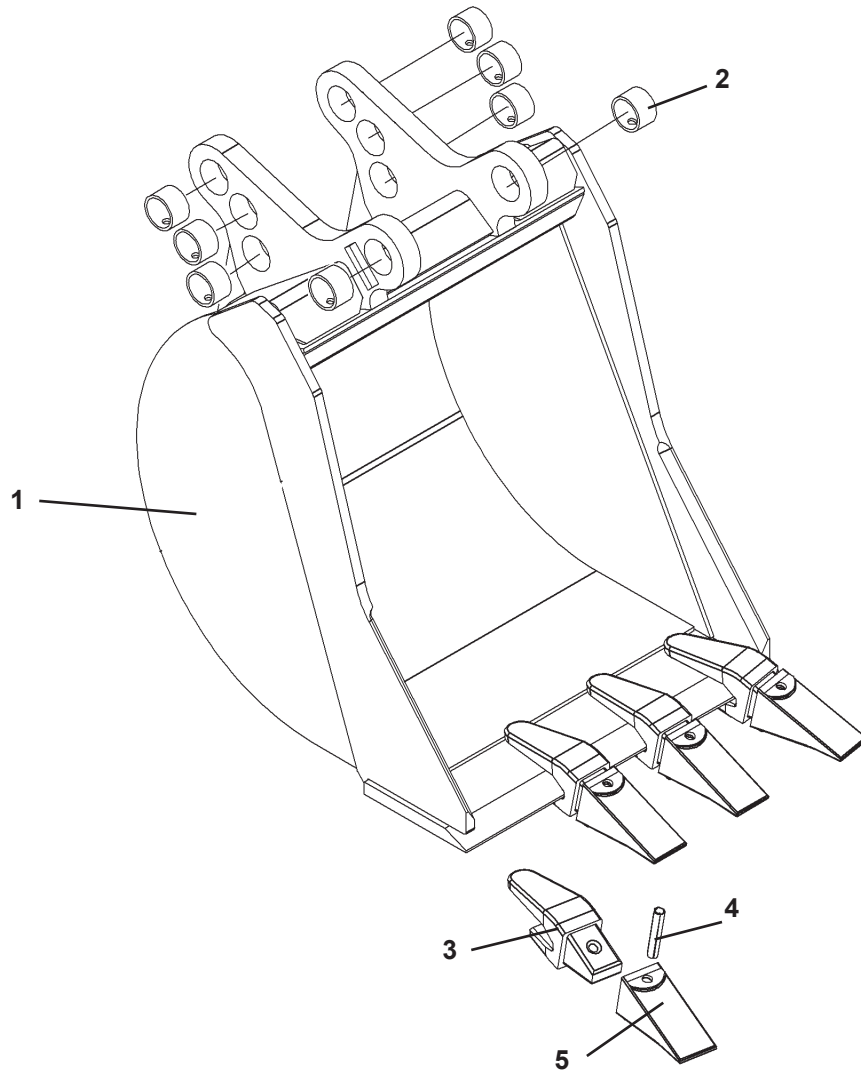


OPTIONAL STABILIZER CYLINDER COVER

ASSEMBLY #86706

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	83915	Stabilizer Cylinder Cover with Decal
2	2	4167	No Step Decal
3	2	83906	1.50" Clamp Assembly
4	2	83911	Guide Ring
5	4	1575	.38" UNC X .50" Set Screw

BUCKET ASSEMBLIES



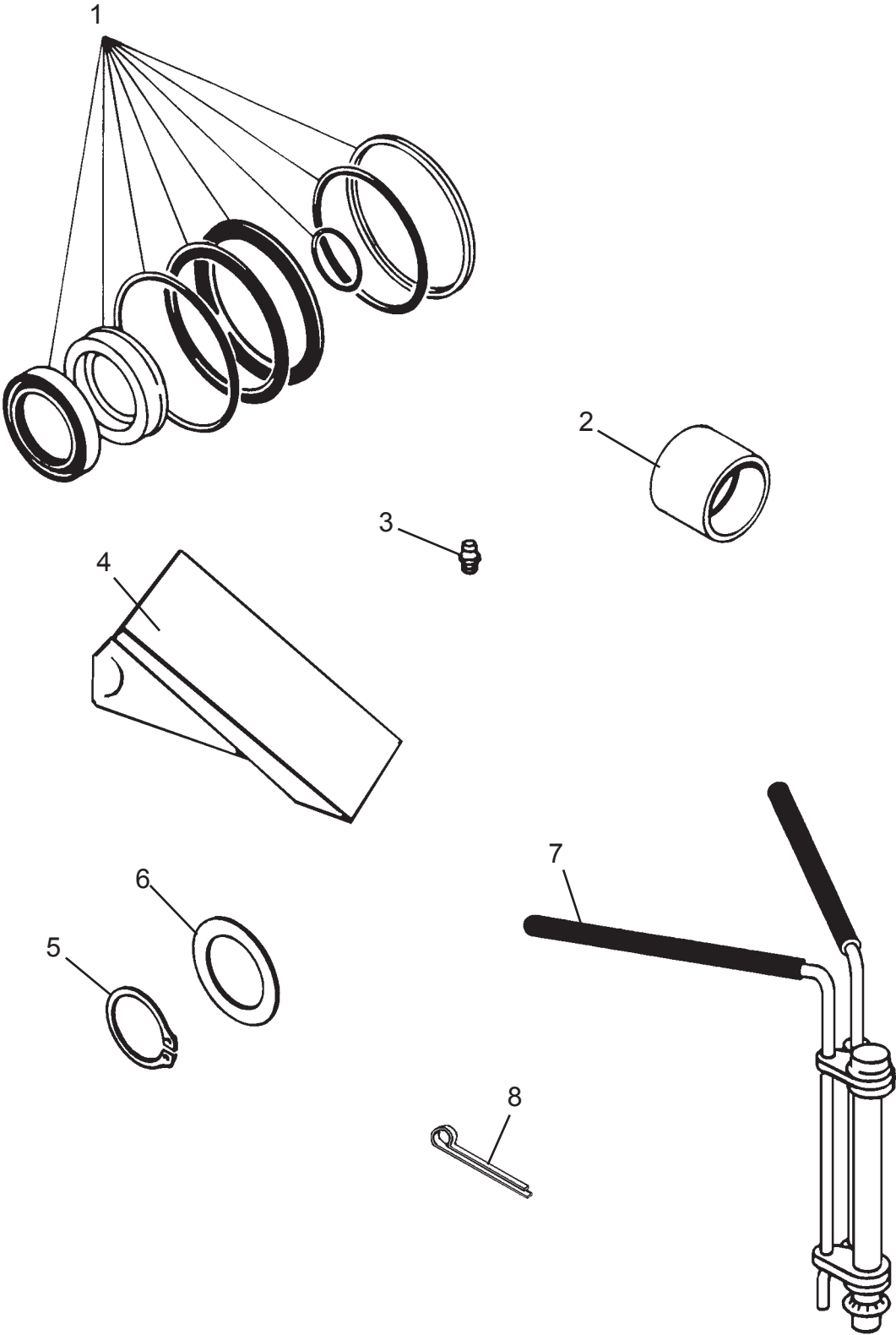
BUCKET ASSEMBLIES

<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	-	110012	12" Bucket (Includes Teeth and Bushings)
		110016	16" Bucket (Includes Teeth and Bushings)
		110018	18" Bucket (Includes Teeth and Bushings)
		110020	20" Bucket (Includes Teeth and Bushings)
		110024	24" Bucket (Includes Teeth and Bushings)
		110034	34" Bucket (Includes Teeth and Bushings)
		110036	36" Bucket (Includes Teeth and Bushings)
		110038	38" Bucket (Includes Teeth and Bushings)
2	8	6355	Replacement Bushing
3	Varies	74228*	Replacement Tooth Shank (Weld On)
4	Varies	74227*	Replacement Spiral Roll Pin
5	Varies	84863*	Replacement Tooth (Bolt On)

BUCKET SPECIFICATIONS				
BUCKET SIZE	TOOTH QTY	WEIGHT	STRUCK CAPACITY	RATED CAPACITY
12	3	125 LBS.	1.25 CU. FT.	1.53 CU. FT.
16	4	148 LBS.	1.72 CU. FT.	2.20 CU. FT.
18	4	156 LBS.	1.95 CU. FT.	2.54 CU. FT.
20	4	165 LBS.	2.16 CU. FT.	2.81 CU. FT.
24	4	180 LBS.	2.65 CU. FT.	3.57 CU. FT.
34	7	238 LBS.	3.82 CU. FT.	5.31 CU. FT.
36	7	246 LBS.	4.05 CU. FT.	5.56 CU. FT.
38	7	255 LBS.	1.28 CU. FT.	5.99 CU. FT.

NOTE: Tooth and Shank Assembly #85003 includes one each of all parts marked with an asterisk (*).

FIRST LINE REPAIR KIT
ASSEMBLY #88627



FIRST LINE REPAIR KIT

ASSEMBLY #88627

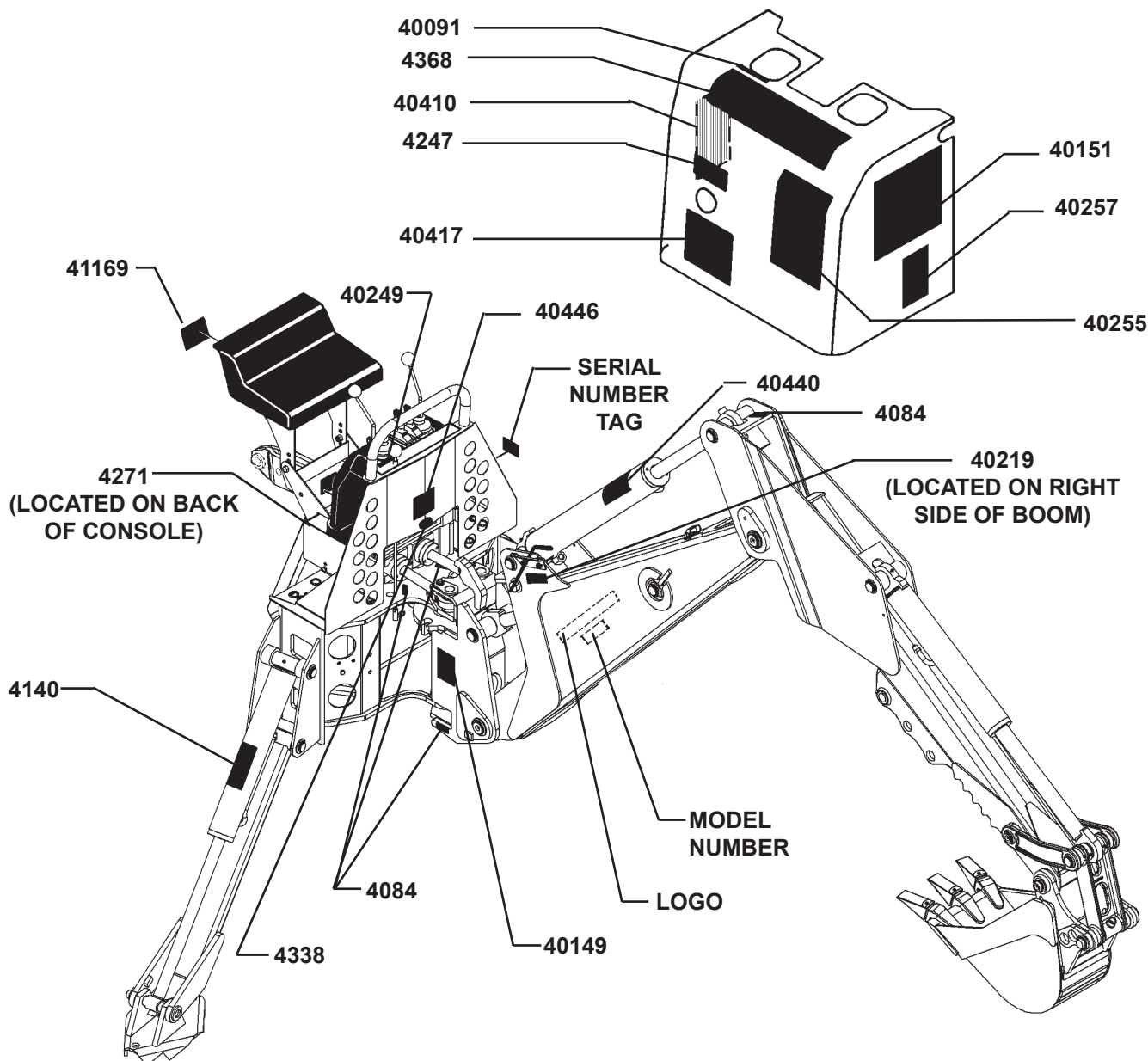
<u>ITEM</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	45539	Seal Kit (Boom Cylinder)
	1	45542	Seal Kit (Bucket Cylinder)
	1	45541	Seal Kit (Dipper Cylinder)
	1	45738	Seal Kit (Stabilizer Cylinders)
	1	45617	Seal Kit (Swing Cylinder)
2	2	6355	Bushing
3	4	6616	Grease Zerk
4	4	84863	Bucket Tooth Point
5	4	1650	Snap Ring 1.38"
	2	1652	Snap Ring 1.25"
6	4	6623	Thrust Washer 1.38" X .031"
	4	64728	Thrust Washer 1.25" X .031"
7	1	65349	Cylinder Seal Install Tool
8	2	1613	Cotter Pin

DECALS

DECAL PLACEMENT

GENERAL INFORMATION

The diagrams on this page shows the location of all the decals used on the backhoes. The decals are identified by their part numbers, with reductions of the actual decals located on the following pages. Use this information to order replacements for lost or damaged decals. Be sure to read all decals before operating the backhoe. They contain information you need to know for both safety and backhoe longevity.



IMPORTANT: Keep all safety decals clean and legible. Replace all missing, illegible or damaged safety decals. When replacing parts with safety decals attached, the safety decals must also be replaced.

REPLACING SAFETY DECALS: Clean the area of application with a nonflammable solvent, then wash the same area with soap and water. Allow the surface to dry. Remove the backing from the safety decal, exposing the adhesive surface. Apply the safety decal to the position shown in the diagram, and smooth out any bubbles.

12632 12-13-13

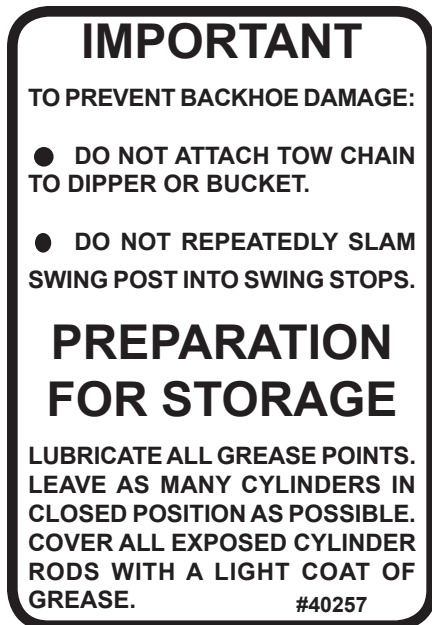
DECALS



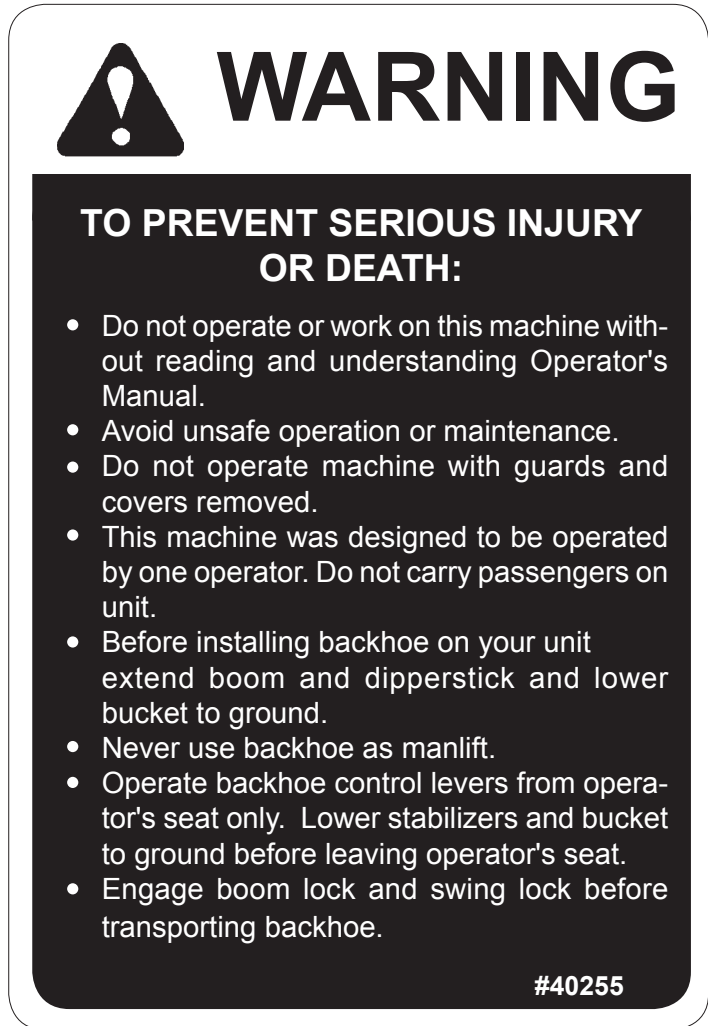
PART #40151
HIGH PRESSURE FLUID DECAL



PART #41169
DANGER! BACKHOE SECURE



PART #40257
IMPORTANT! DECAL

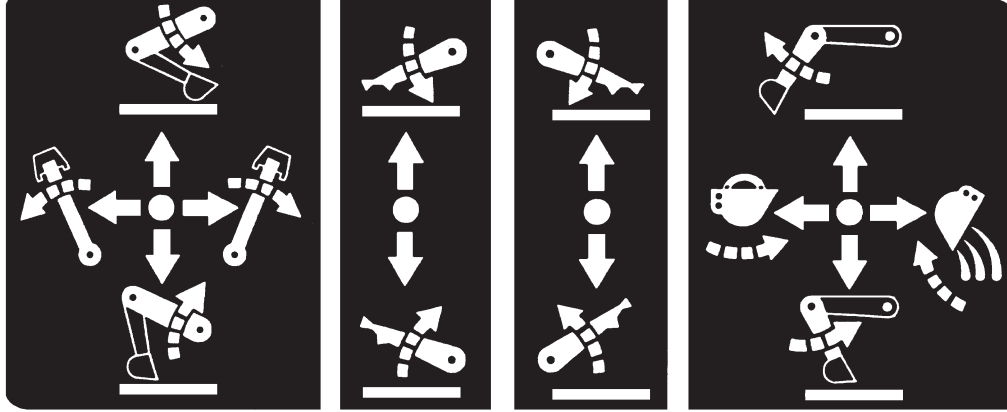


PART #40255
OPERATIONAL WARNING DECAL



PART #40149
DANGER! PINCH POINTS

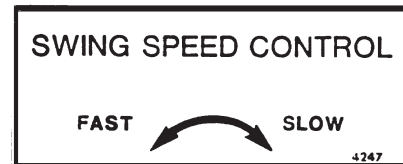
DECALS



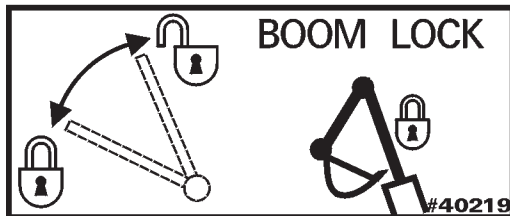
PART #4368
OPERATING CONTROLS DECAL

FLOAT

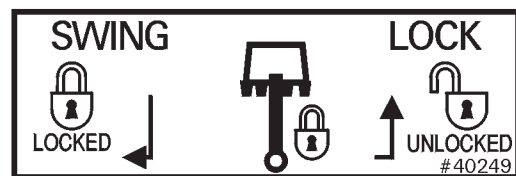
PART #40091
FLOAT DECAL



PART #4247
SWING SPEED CONTROL DECAL



PART #40219
BOOM LOCK DECAL

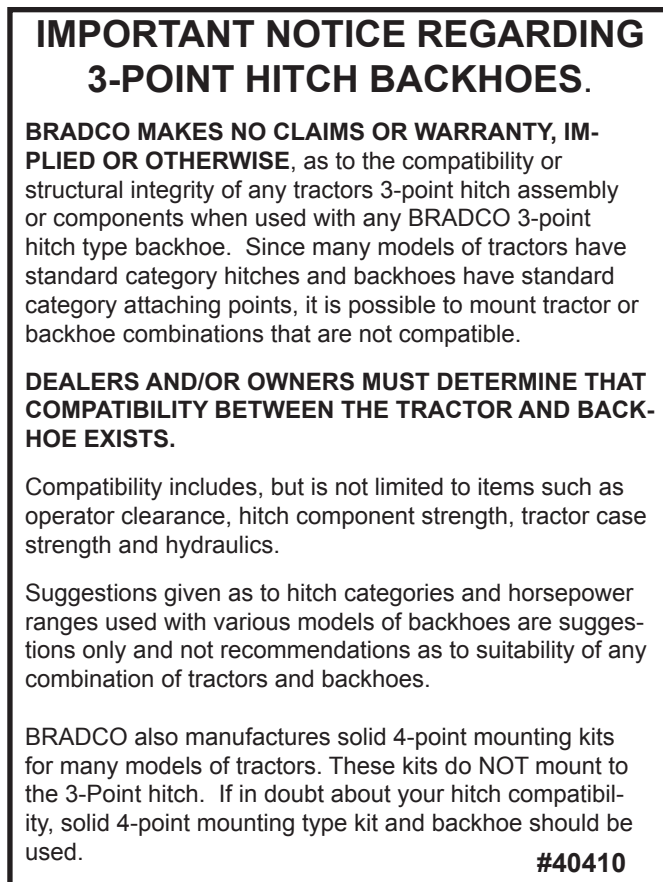


PART #40249
SWING LOCK DECAL

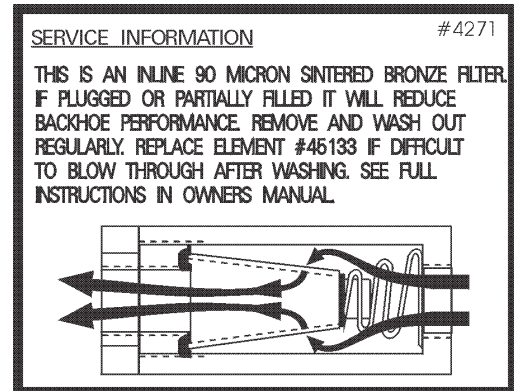
DECALS



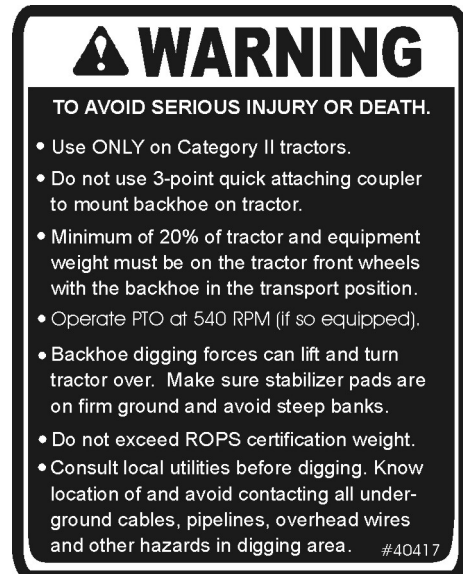
PART #40446
CAUTION! BACKHOE LIMITATIONS



PART #40410
IMPORTANT NOTICE



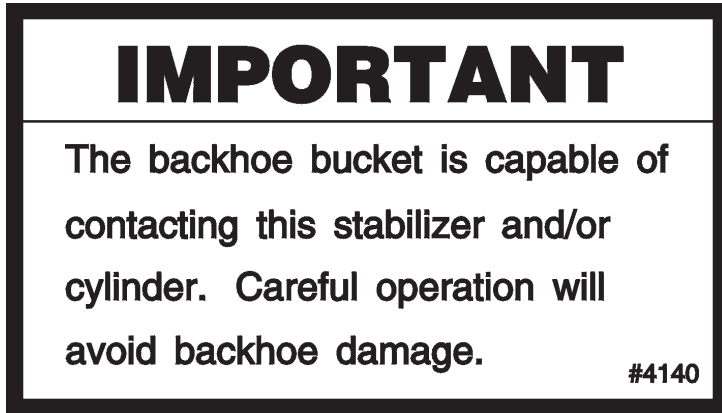
PART #4271
INLINE FILTER DECAL



PART #40417
WARNING!

NOTE: CONTACT PALADIN OR YOUR LOCAL DEALER FOR MODEL NUMBER AND LOGO DECALS.

DECALS



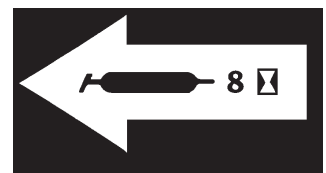
PART #4140
BUCKET CONTACT WARNING DECAL



PART #4338
MADE IN U.S.A. DECAL



PART #40440
CALL BEFORE YOU DIG



PART #4084
GREASE 8 HOURS

