

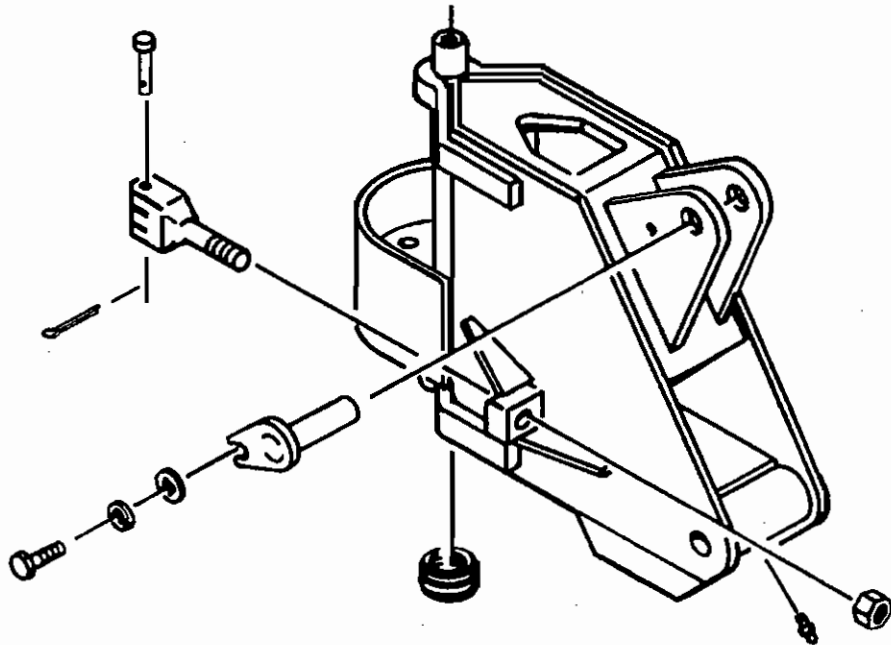
BRADCO®

MD2 SERIES

BACKHOE

PM468
REV. 3

5441 4-17-96-3

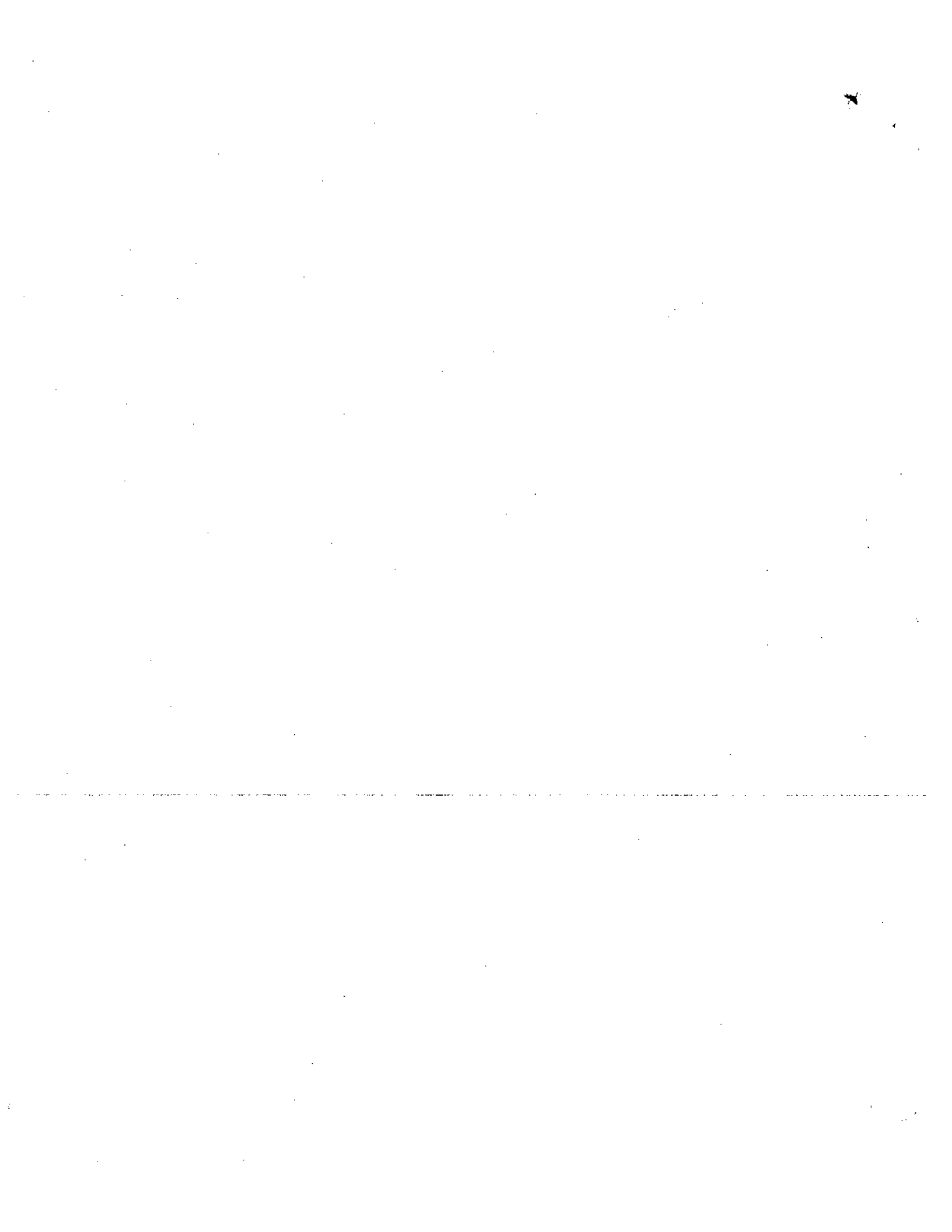


PARTS

MANUAL

75368

BRADCO®
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Fax 319-922-2130
A Division of ATI Global Inc.



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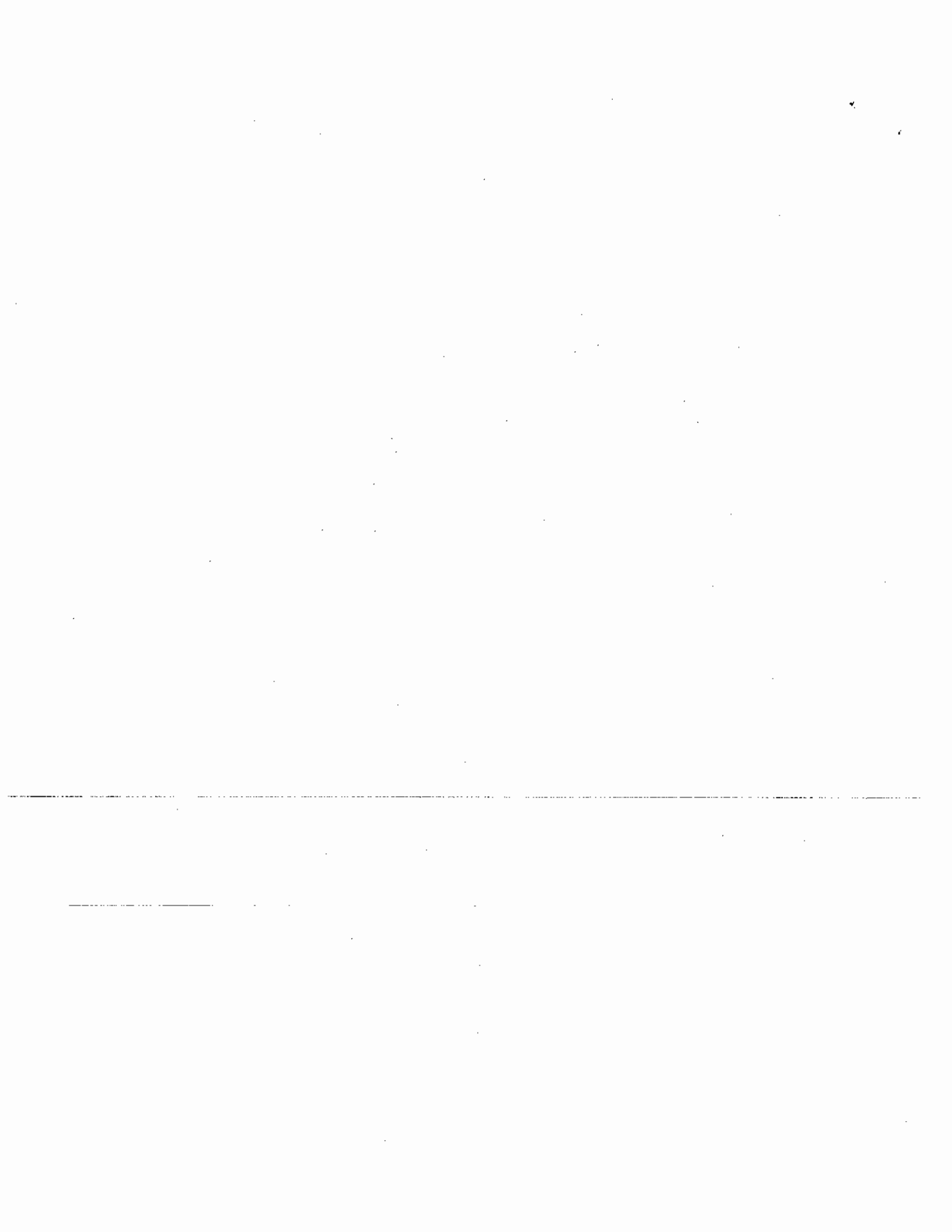
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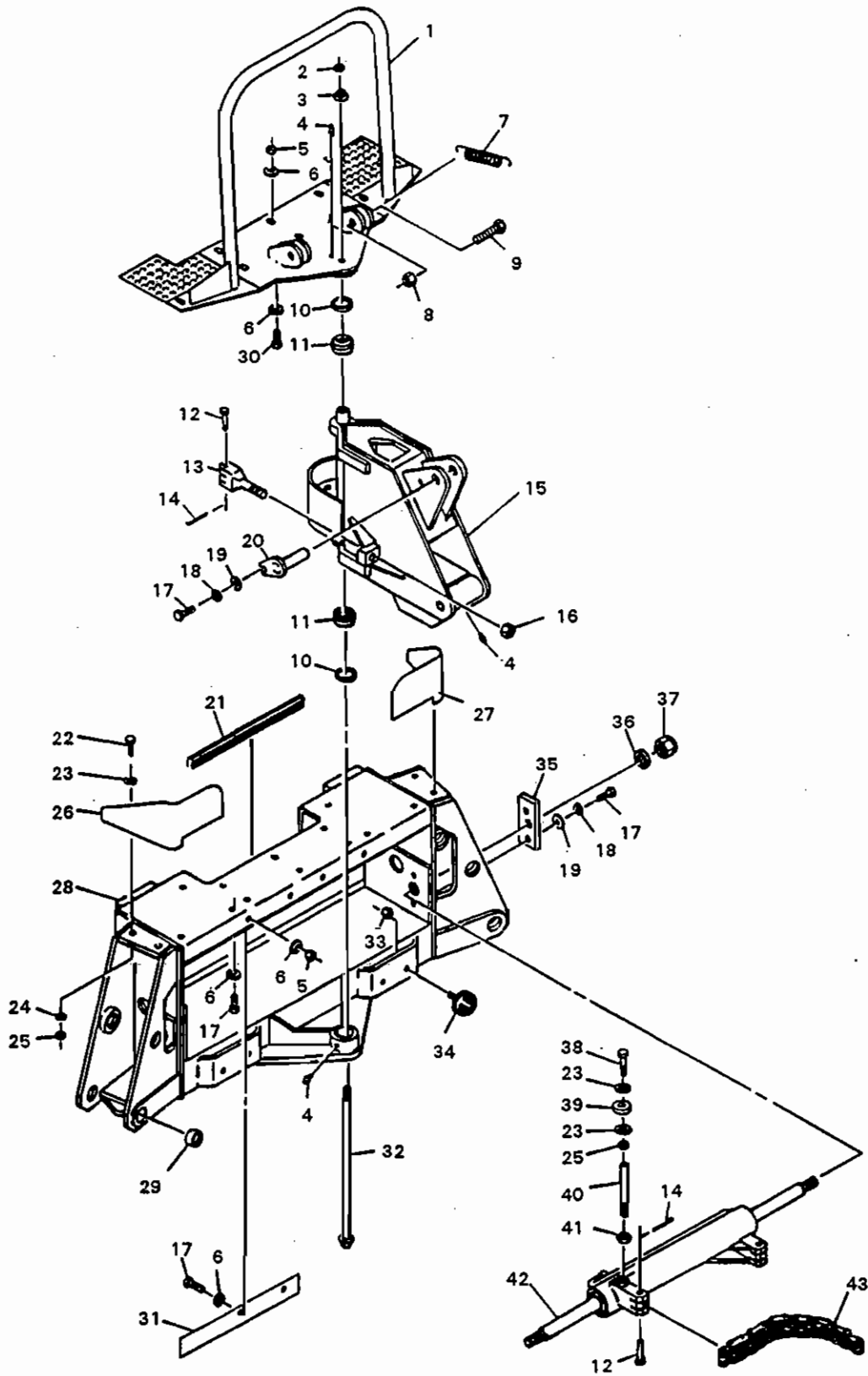
STANDARD DECALS.....	
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5412 2-19-91-2

MAINFRAME ASSEMBLY

MAINFRAME
ASSEMBLY #64896

DIA. 1 OF 2



5128
2-23-94-4

MAINFRAME ASSEMBLY

MAINFRAME
ASSEMBLY #64896

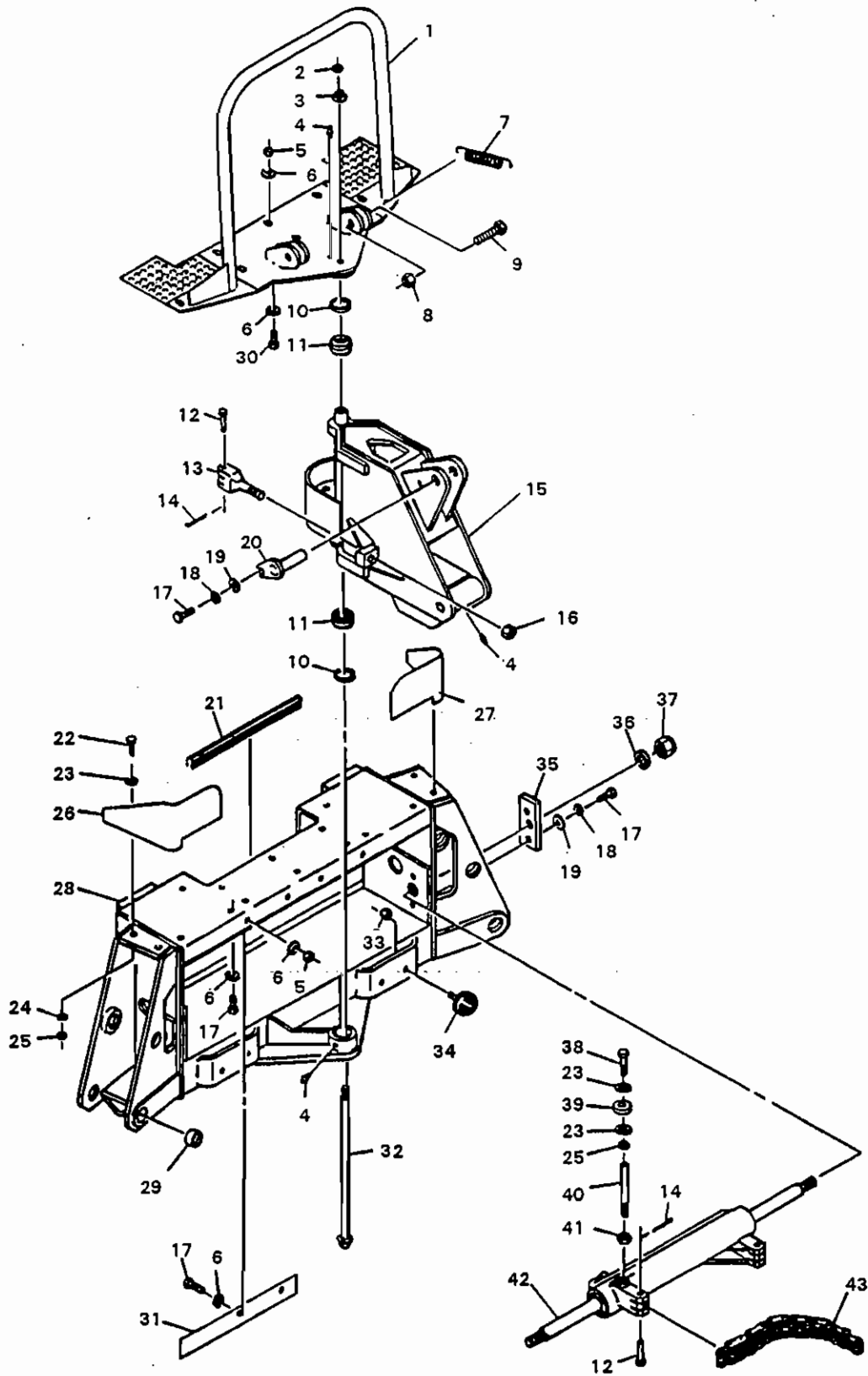
LIST 1 OF 2

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	56411	Top Bearing Cartridge
2	1	1242	.50" UNC Jam Nut
3	1	1790	Serrated Flange Lock Nut
4	3	6616	Grease Zerk
5	14	1228	.50" UNC Hex Nut
6	28	1646	.50" Hard Flat Washer
7	1	7440	Spring
8	2	1642	.62" UNC Nylock Nut
9	2	1116	.62" UNC X 2.00" Capscrew
10	2	50253	Bearing Spacer
11	2	6615	Bearing
12	4	54418	Pin
13	2	61165	Swing Chain Bolt
14	4	1611	Cotter Pin
15	1	64598	Swing Post
16	2	1534	.75" UNC Nylock Nut
17	14	1089	.50" UNC X 1.25" Capscrew
18	3	1505	.50" Lock Washer
19	3	1527	.50" SAE Flat Washer
20	1	9757	Pivot Pin
21	1	34020	Rubber Edge, 14"
22	4	1044	.38" UNC X 1.25" Capscrew
23	6	1514	.38" Flat Washer
24	4	1503	.38" Lock Washer
25	5	1226	.38" UNC Hex Nut
26	1	77989	Right Toe Guard
27	1	77988	Left Toe Guard
28	1	64551	Mainframe (Includes eight #56814 Bushings)
29	8	56814	Bushing
30	3	1090	.50" UNC X 1.50" Capscrew

MAINFRAME ASSEMBLY

MAINFRAME
ASSEMBLY #64896

DIA. 2 OF 2



5130
2-23-94-4

MAINFRAME ASSEMBLY

MAINFRAME
ASSEMBLY #64896

LIST 2 OF 2

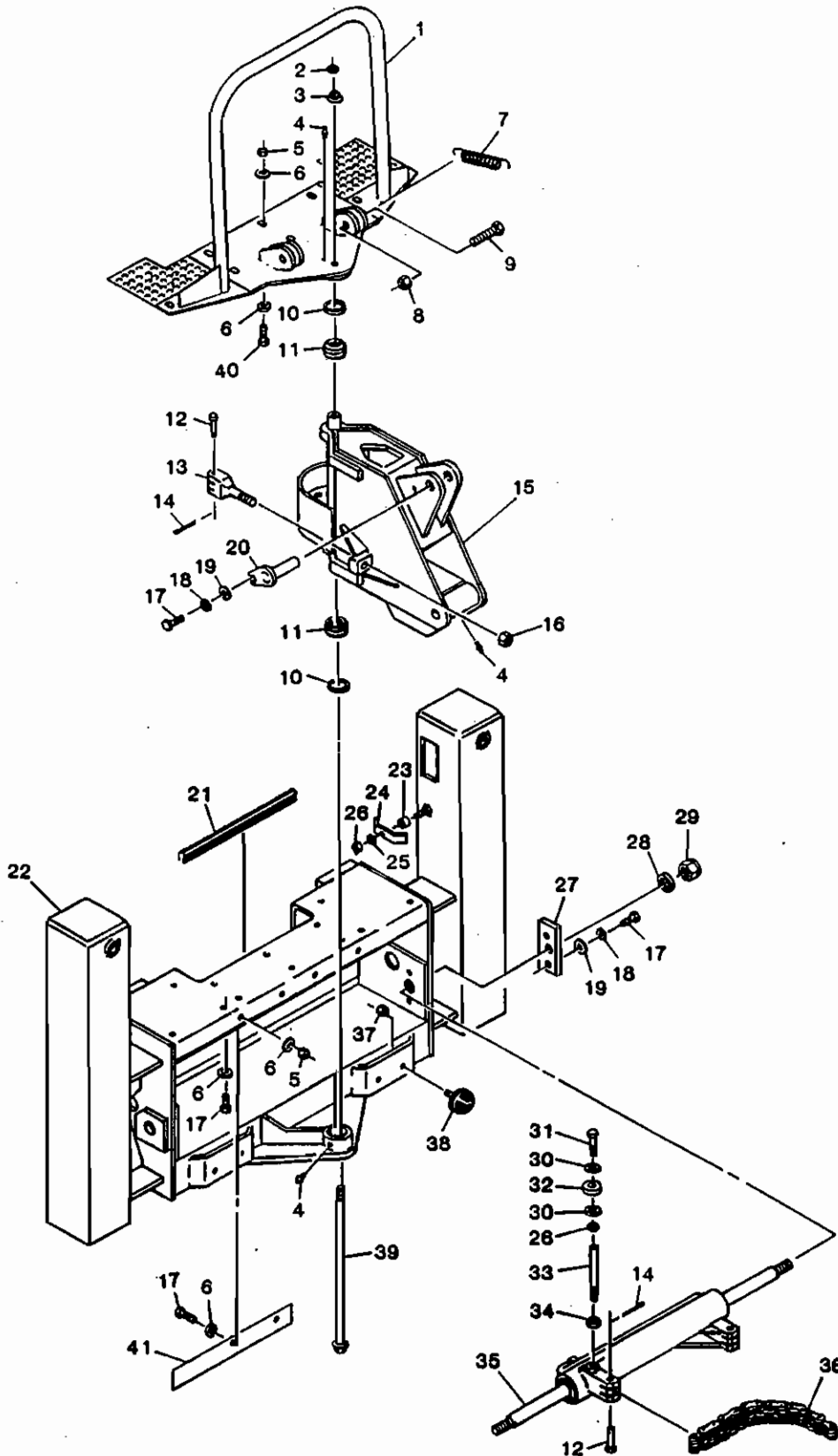
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
31	1	54424	Roller Guide
32	1	69903	Swing Post Bolt
33	4	1542	.50" UNC Nylock Nut
34	4	6886	Rubber Bumper
35	1	6252	Cylinder Mounting Plate
36	2	1509	1.00" Lock Washer
37	2	1904	1.00" - 14 Hex Nut
38	1	1045	.38" UNC X 1.50" Capscrew
39	1	54414	Roller Guide
40	1	54415	Roller Guide Rod
41	1	1244	.62" UNC Jam Nut
42	1	64895	Swing Cylinder Assembly
43	2	64894	Swing Chain

MAINFRAME ASSEMBLY

MAINFRAME WITH WELD ON VERTICAL STABILIZERS
ASSEMBLY #68591

DIA. 1 OF 2

5561 1-17-94-2



MAINFRAME ASSEMBLY

MAINFRAME WITH WELD ON VERTICAL STABILIZERS ASSEMBLY #68591

LIST 1 OF 2

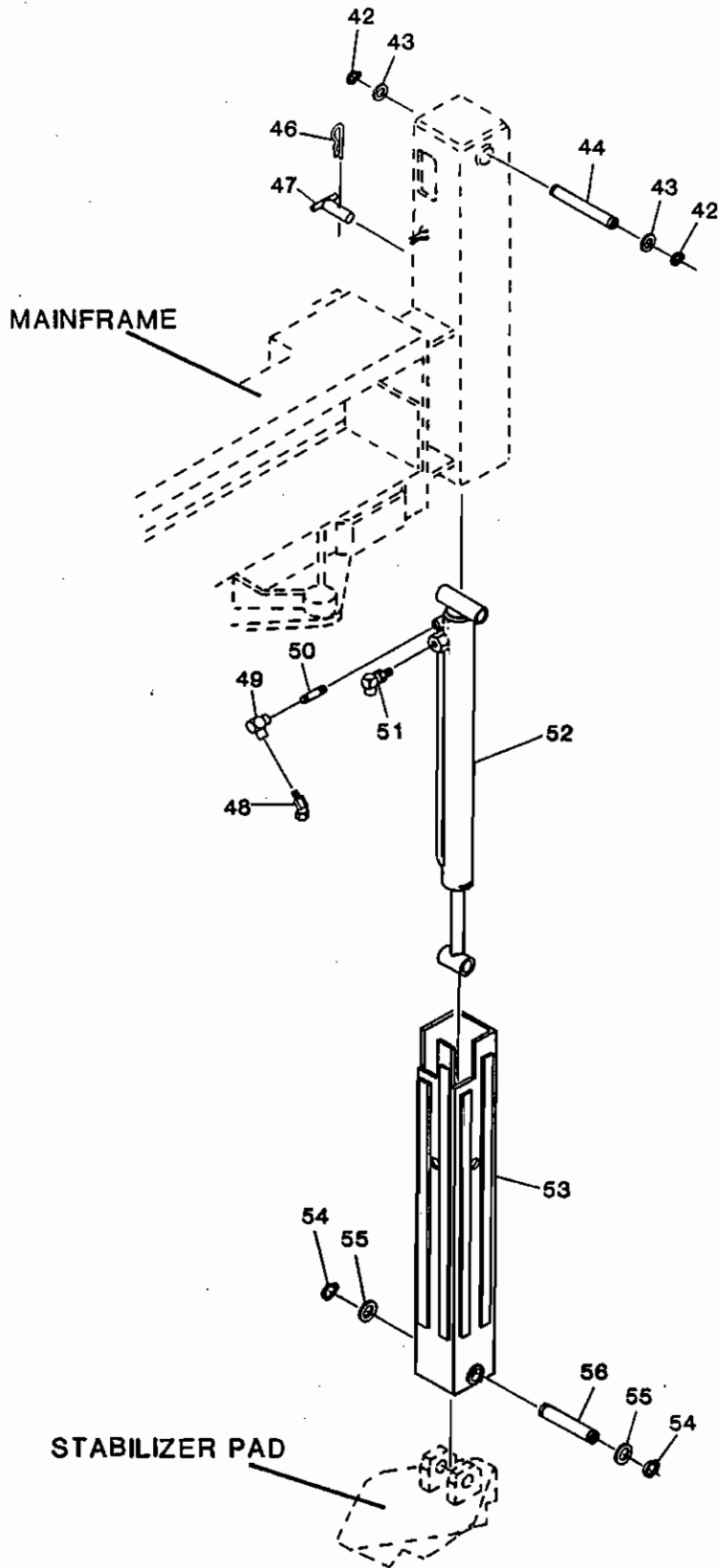
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	56411	Top Bearing Cartridge
2	1	1242	.50" UNC Jam Nut
3	1	1790	Serrated Flange Lock Nut
4	3	6616	Grease Zerk
5	14	1228	.50" UNC Nut
6	28	1646	.50" Hard Flat Washer
7	1	7440	Spring
8	2	1642	.62" UNC Nylock Nut
9	2	1116	.62" UNC X 2.00" Capscrew
10	2	50253	Bearing Spacer
11	2	6615	Bearing
12	4	54418	Pin
13	2	61165	Swing Chain Bolt
14	4	1611	Cotter Pin
15	1	64598	Swing Post
16	2	1534	.75" UNC Nylock Nut
17	14	1089	.50" UNC X 1.25" Capscrew
18	3	1505	.50" Lock Washer
19	3	1527	.50" SAE Flat Washer
20	1	9757	Pivot Pin
21	1	34020	Rubber Edge, 14"
22	1	71445	Mainframe Weldment
23	2	6799	Spacer
24	2	6186	Hose Clamp
25	2	1503	.38" Lock Washer
26	3	1226	.38" Hex Nut
27	1	6252	Cylinder Mounting Plate
28	2	1509	1.00" Lock Washer
29	2	1904	1.00" - 14 Hex Nut
30	2	1514	.38" Flat Washer
31	1	1045	.38" UNC X 1.50" Capscrew
32	1	54414	Roller Guide
33	1	54415	Roller Guide Rod
34	1	1244	.62" UNC Jam Nut
35	1	64895	Swing Cylinder Assembly
36	2	64894	Swing Chain
37	4	1542	.50" Nylock Nut
38	4	6886	Rubber Bumper
39	1	69903	Swing Post Bolt
40	3	1090	.50" UNC X 1.50" Capscrew
41	1	54424	Roller Guide Plate

5562
1-17-94-3

MAINFRAME ASSEMBLY

MAINFRAME WITH WELD ON VERTICAL STABILIZERS
ASSEMBLY #68591

DIA. 2 OF 2



5563 10-18-93-2

MAINFRAME ASSEMBLY

MAINFRAME WITH WELD ON VERTICAL STABILIZERS
ASSEMBLY #68591

LIST 2 OF 2

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
42	4	6612	Snap Ring
43	4	57462	1.00" I.D. Thrust Washer
44	2	69178	1.00" Dia. Pivot Pin
46	2	8264	Hitch Pin - Size 19
47	2	8263	Lock Pin
48	2	3118	45° Adapter 4MP-4FP
49	2	3057	90° Elbow 4FP-4FP
50	2	3193	Nipple 4MP X 2.00" XH
51	2	3392	90° Adapter 4FP-4MPSW
52	2	68568	Stabilizer Cylinder
53	2	71430	Inner Stabilizer Tube
54	4	1652	Snap Ring
55	4	57693	1.25" I.D. Thrust Washer
56	2	68573 (1)	1.25" Dia. Pivot Pin

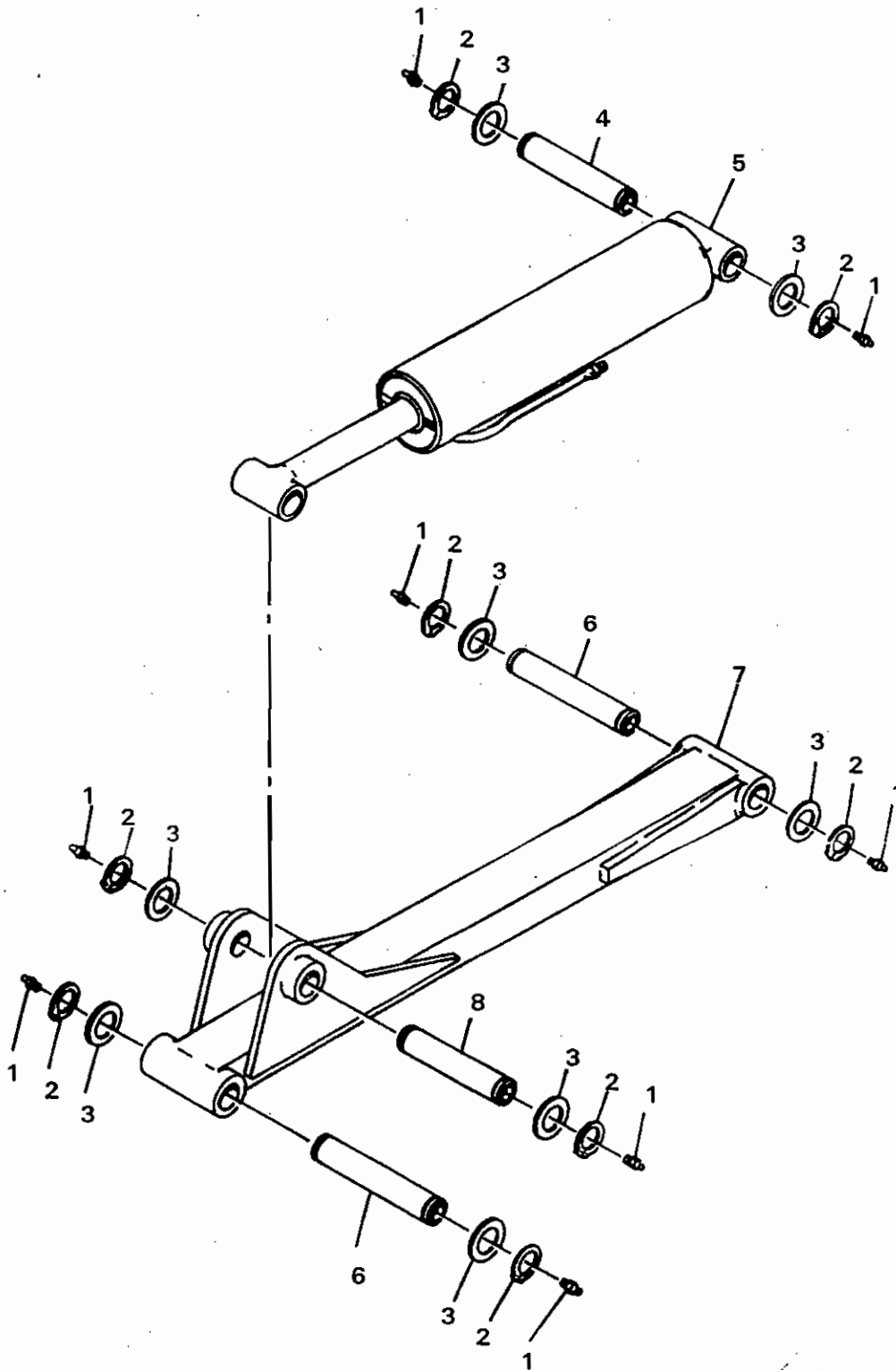
NOTES:

- (1) Pivot Pin #68573 is sold only in pin kit #69873. Kit includes one pin #68573, two thrust washers #64728 and two snap rings #1652. Pins are not sold separately.

5564
4-17-96-4

STABILIZER ASSEMBLY

FOLD DOWN STABILIZER - SHORT
ASSEMBLY #64907



5181
4-17-96-4

STABILIZER ASSEMBLY

FOLD DOWN STABILIZER - SHORT
ASSEMBLY #64907

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	16	6616	Grease Zerk
2	16	1652	Snap Ring
3	VARIES	64728	Thrust Washer 1.25" X .031"
	VARIES	57693	Thrust Washer 1.25" X .078"
	VARIES	64727	Thrust Washer 1.25" X .125"
4	2	57689(3)	Pivot Pin 1.25" Dia. X 6.34"
5	2	61863	Stabilizer Cylinder Assembly
6	4	64549(2)	Pivot Pin 1.25" Dia X 6.89"
7	2	61857	Stabilizer Arm, 32.50" Effective Length
8	2	60784(1)	PivotPin 1.25" Dia. X 6.09"

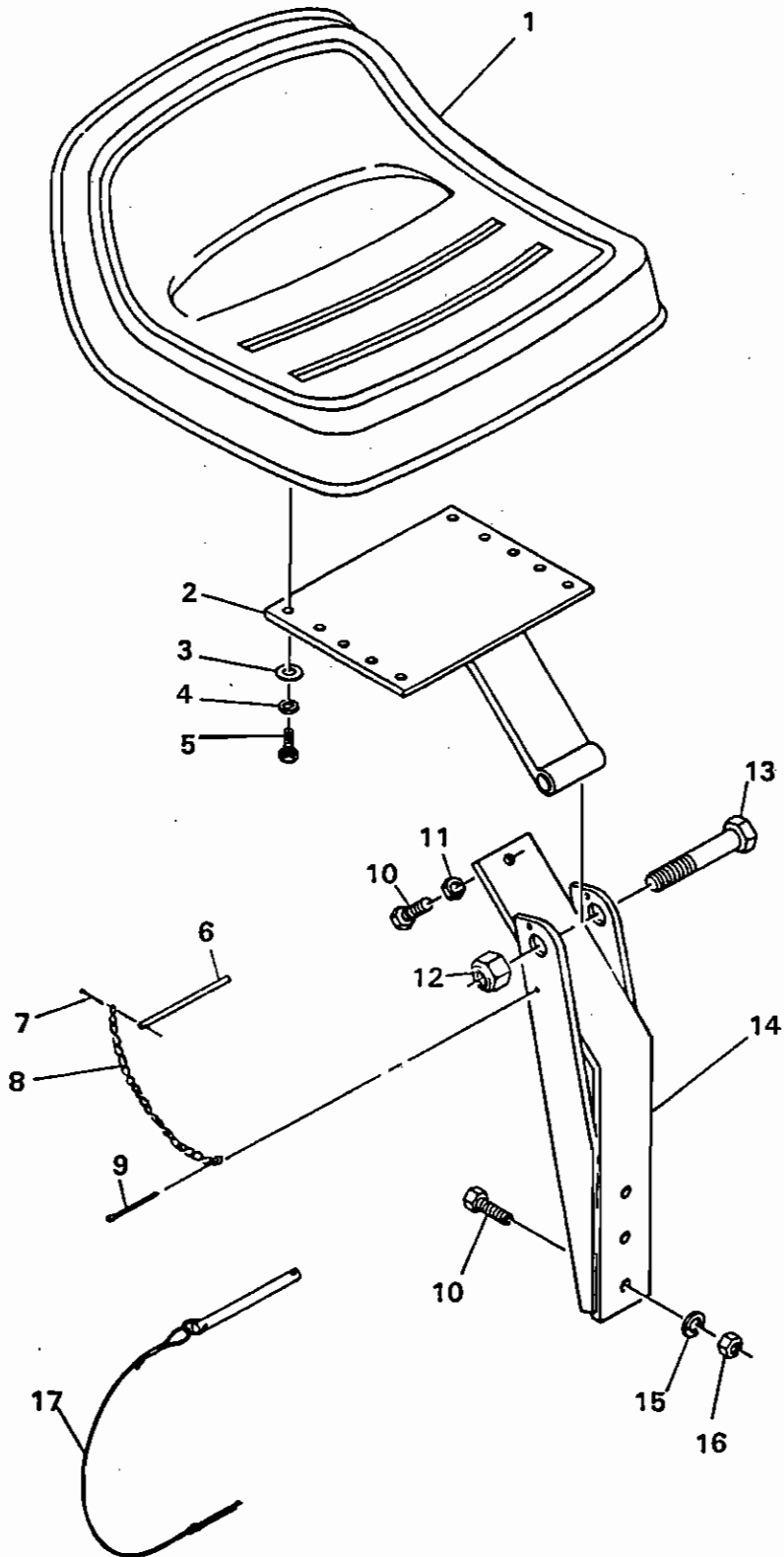
NOTES:

Quantities listed are sufficient to make two stabilizers, enough for one complete backhoe.

- (1) Pivot pin #60784 is sold only in pin kit #74031. Kit includes one pin #60784, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.
- (2) Pivot pin #64549 is sold only in pin kit #74032. Kit includes one pin #64549, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.
- (3) Pivot Pin #57689 is sold only in pin kit #74033. Kit includes one pin #57689. two thrust washers #64728, two snap #1652, and two grease zerks #6616.

SEAT ASSEMBLY

ASSEMBLY #54990



SEAT ASSEMBLY

ASSEMBLY #54990

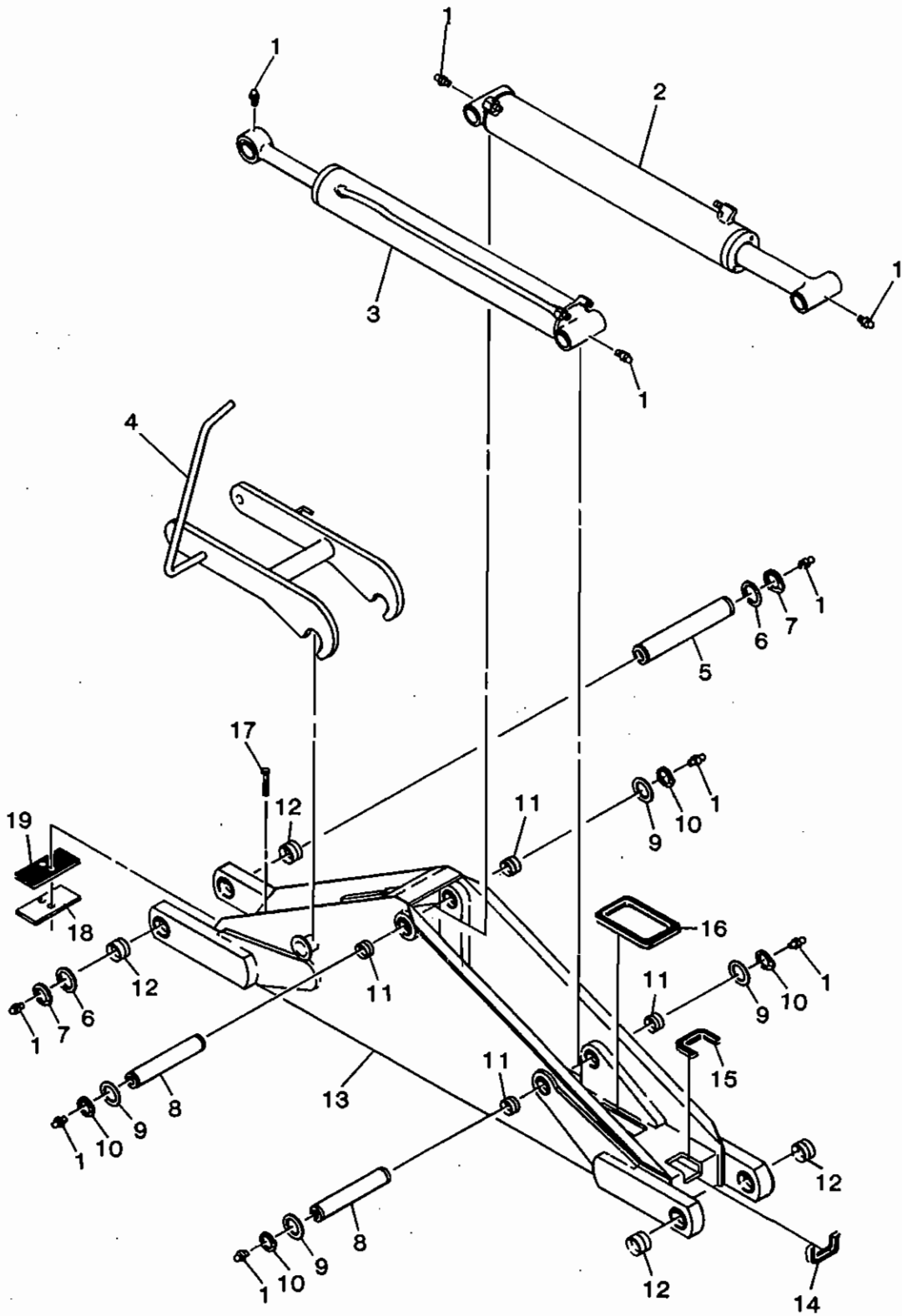
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	6980	Seat
2	1	6979	Seat Pivot
3	4	1513	.31" Flat Washer
4	4	1502	.31" Lock Washer
5	4	1021	.31" UNC X .75" Hex Capscrew
6	1	52713 (1)	Seat Lock Pin
7	1	1659 (1)	.08" X .75" Cotter Pin
8	1	52712 (1)	Chain
9	1	1611 (1)	.12" X 1.00" Cotter Pin
10	3	1090 (1)	.50" UNC X 1.50" Hex Capscrew
11	1	1242	.50" UNC Jam Nut
12	1	1534	.75" UNC Nylock Nut
13	1	1147	.75" UNC X 4.00" Hex Capscrew
14	1	9977	Seat Mounting
15	2	1505	.50" Lock Washer
16	2	1228	.50" UNC Hex Nut
17	1	79280 (1)	.25" Detent Ring Pin
		80727 (2)	.38" Detent Ring Pin

NOTES:

- (1) .25" Detent Ring Pin #79280 replaces Seat Lock Pin #52713, Cotter Pins #1659 & 1611, Chain #52712, and Capscrews #1090 effective 3-4-92.
- (2) .38" Detent Ring Pin #80727 replaces .25" Detent Ring Pin #79280 on production units effective 6-15-93.

BOOM ASSEMBLY

8MD2 BACKHOE
ASSEMBLY #70296



5343 12-11-92-2

BOOM ASSEMBLY

8MD2 BACKHOE
ASSEMBLY #70296

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	10	6616	Grease Zerk
2	1	68269	Dipper Cylinder Assembly
3	1	68266	Boom Cylinder Assembly
4	1	65442	Boom Hook
5	1	51689 (1)	Pivot Pin 1.38" Dia X 8.75"
6	Varies	6623	Thrust Washer 1.38" X .031"
	Varies	64724	Thrust Washer 1.38" X .090"
	Varies	64725	Thrust Washer 1.38" X .125
7	2	1650	Snap Ring 1.38" I.D.
8	2	64549 (2)	Pivot Pin 1.25" Dia. X 6.89"
9	Varies	64728	Thrust Washer 1.25" X .031"
	Varies	57693	Thrust Washer 1.25" X .078"
	Varies	64727	Thrust Washer 1.25" X .125"
10	4	1652	Snap Ring
11	4	51036	Bushing 1.25" I.D.
12	4	6355	Bushing 1.38" I.D.
13	1	64481	Boom Weldment (Includes Four #6355 & Four #51036 Bushings)
14	1	34108	3.5" Rubber Edging
15	1	34107	7" Rubber Edging
16	1	34106	16" Rubber Edging
17	2	1006	.25" UNC X 1.75" Hex Capscrew
	2	1512	.25" Flat Washer
18	1	65236	Clamp Plate
19	1	65237 (3)	Rubber Spacer

NOTES:

- (1) Pivot pin #51689 is sold only in pin kit #52609. Kit includes one pin #51689, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.
- (2) Pivot pin #64549 is sold only in pin kit #69874. Kit includes one pin #64549, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.
- (3) Rubber spacer #65237 has been deleted from Boom Assembly #70296 effective 3-93.

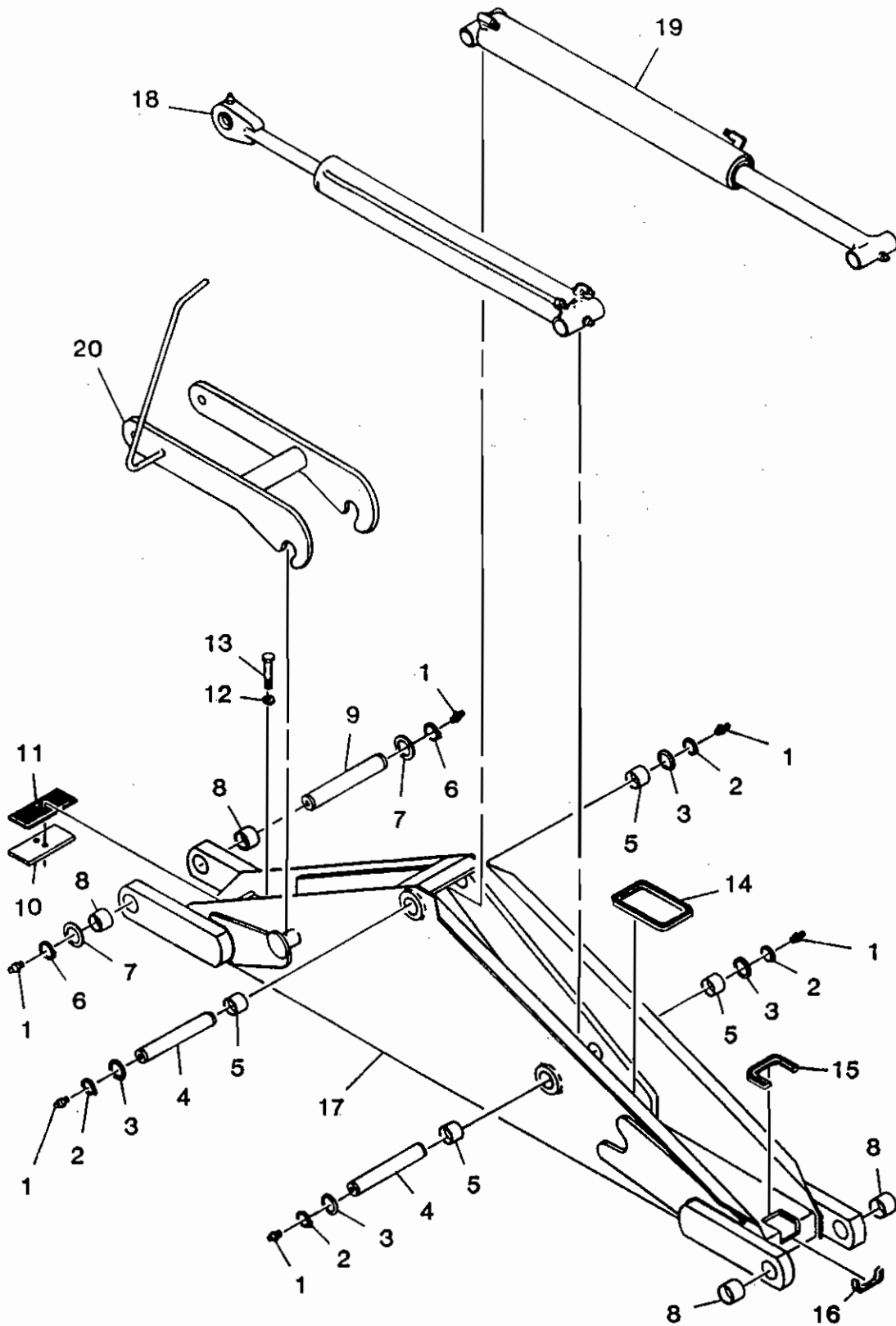
5344

7-21-93-3

BOOM ASSEMBLY

9MD2 BACKHOE
ASSEMBLY #64900

4491 12-11-92-3



BOOM ASSEMBLY

9MD2 BACKHOE
ASSEMBLY #64900

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	6	6616	Grease Zerk
2	4	1652	Snap Ring 1.25" I.D.
3	Varies	64728	Thrust Washer 1.25" X .031"
	Varies	57693	Thrust Washer 1.25" X .078"
	Varies	64727	Thrust Washer 1.25" X .125"
4	2	64549 (1)	Pivot Pin 1.25" Dia. X 6.89"
5	4	51036	Bushing 1.25" I.D.
6	2	1650	Snap Ring 1.38" I.D.
7	Varies	6623	Thrust Washer 1.38" X .031"
	Varies	64724	Thrust Washer 1.38" X .090"
	Varies	64725	Thrust Washer 1.38" X .125"
8	4	6355	Bushing 1.38" I.D.
9	1	51689 (2)	Pivot Pin 1.38" Dia. X 8.75"
10	1	65236	Clamp Plate
11	1	65237 (5)	Rubber Spacer
12	2	1512	.25" Flat Washer
13	2	1007	.25" UNC X 2.00" Hex Capscrew
14	1	34106	16" Rubber Edging
15	1	34107	7" Rubber Edging
16	1	34108	3.5" Rubber Edging
17	1	64652	Boom (Includes 4 #6355 and 4 #51036 Bushings)
18	1	68267 (3)	Boom Cylinder
19	1	68270 (4)	Dipper Cylinder
20	1	65477	Boom Hook

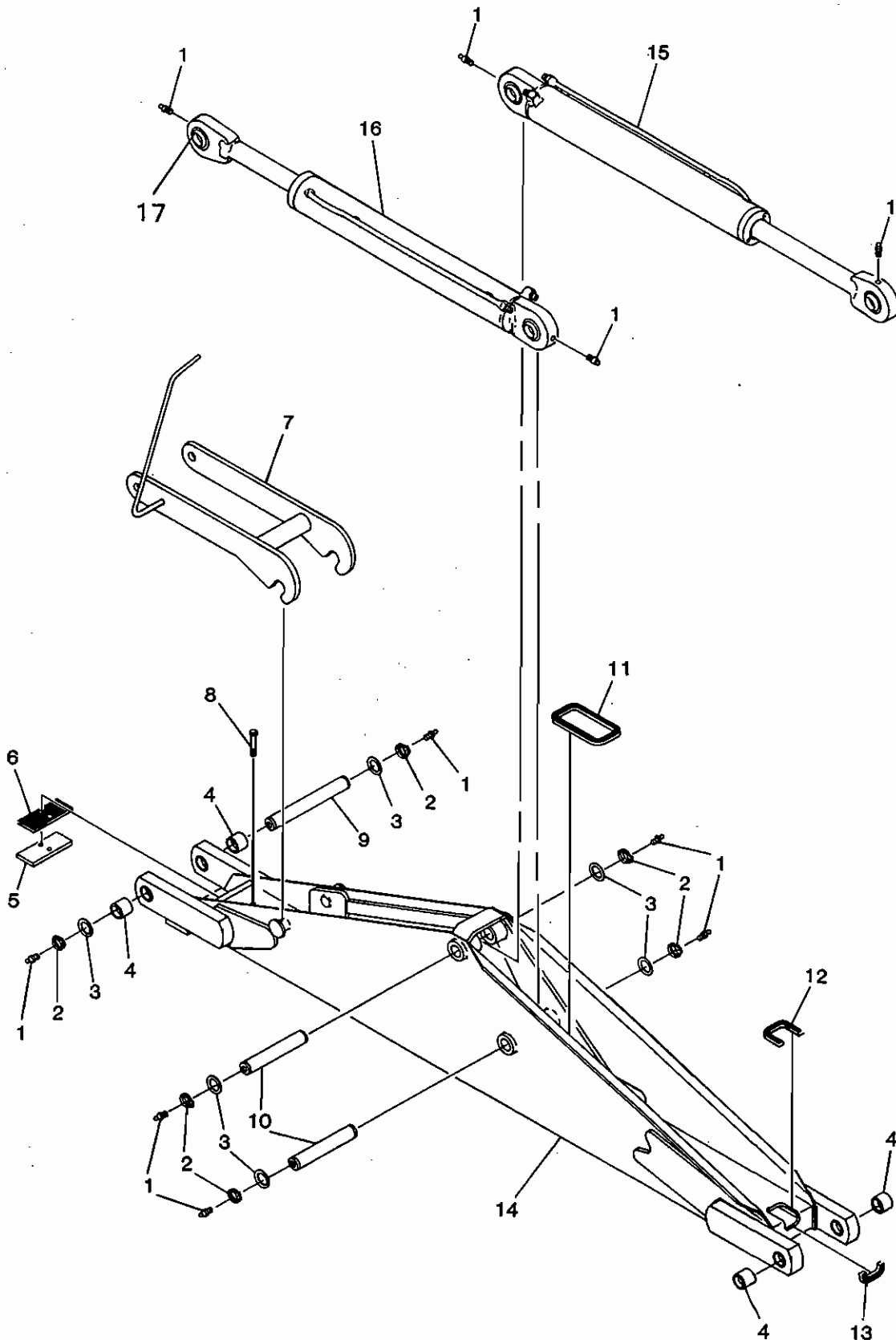
NOTES:

- (1) Pivot pin #64549 is sold only in pin kit #69874. Kit includes one pin #64549, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.
- (2) Pivot pin #51689 is sold only in pin kit #52609. Kit includes one pin #51689, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.
- (3) Threaded gland boom cylinder #68267 replaced retaining ring style boom cylinder #64660 effective 12-88.
- (4) Threaded gland dipper cylinder #68270 replaced retaining ring style dipper cylinder #65018 effective 6-89.
- (5) Rubber spacer #65237 has been deleted from Boom Assembly #64900 effective 3-93.

4492
7-21-93-6

BOOM ASSEMBLY

11MD2 BACKHOE
ASSEMBLY #70297



5345 7-21-93-3

BOOM ASSEMBLY

11MD2 BACKHOE
ASSEMBLY #70297

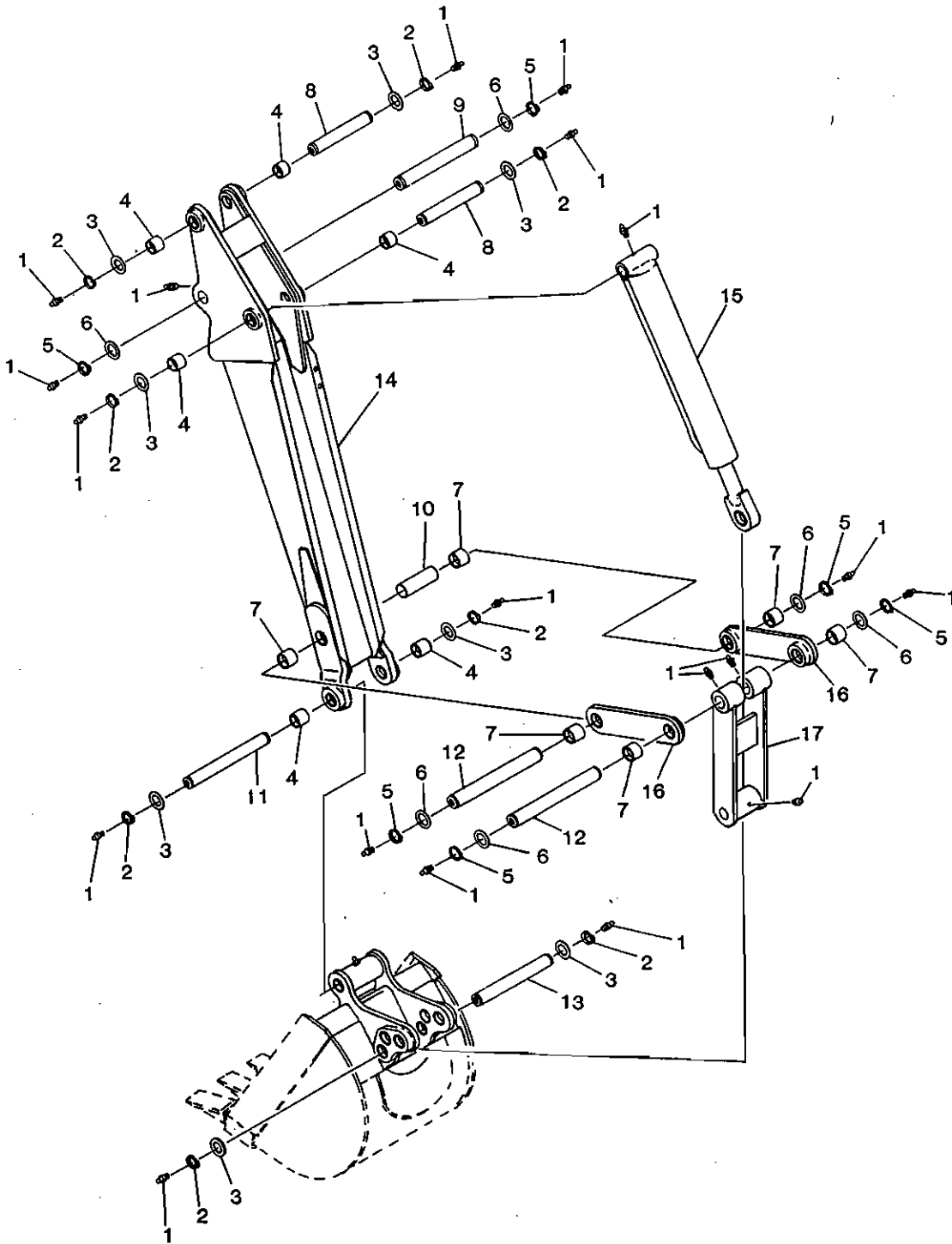
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	10	6616	Grease Zerk
2	6	1650	Snap Ring 1.38" I.D.
3	Varies	6623	Thrust Washer 1.38" X .031"
	Varies	64724	Thrust Washer 1.38" X .090"
	Varies	64725	Thrust Washer 1.38" X .125
4	4	6355	Bushing 1.38" I.D.
5	1	65236	Clamp Plate
6	1	65237 (3)	Rubber Spacer
7	1	65668	Boom Hook
8	2	1006	.25" UNC X 1.75" Hex Capscrew
	2	1512	.25" Flat Washer
9	1	51689 (1)	Pivot Pin 1.38" Dia. X 8.75"
10	2	61234 (2)	Pivot Pin 1.38" Dia. X 6.81"
11	1	34106	16" Rubber Edging
12	1	34107	7" Rubber Edging
13	1	34110	2" Rubber Edging
14	1	64558	Boom (Includes 4 #6355 Bushings)
15	1	68271	Dipper Cylinder Assembly
16	1	68268	Boom Cylinder Assembly
17	4	6615	Bushing

NOTES:

- (1) Pivot pin #51689 is sold only in pin kit #52609. Kit includes one pin #51689, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.
- (2) Pivot pin #61234 is sold only in pin kit #69875. Kit includes one pin #61234, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.
- (3) Rubber spacer #65237 has been deleted from Boom Assembly #70297 effective 3-93.

DIPPER ASSEMBLY

8MD2 BACKHOE
ASSEMBLY #64899



4495 12-11-92-3

DIPPER ASSEMBLY

8MD2 BACKHOE
ASSEMBLY #64899

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	19	6616	Grease Zerk
2	8	1652	Snap Ring 1.25" I.D.
3	VARIES	64728	Thrust Washer 1.25" X .031"
	VARIES	57693	Thrust Washer 1.25" X .078"
	VARIES	64727	Thrust Washer 1.25" X .125"
4	6	51036	Bushing 1.25" I.D.
5	6	1650	Snap Ring 1.38" I.D.
6	VARIES	6623	Thrust Washer 1.38" X .031"
	VARIES	64724	Thrust Washer 1.38" X .090"
	VARIES	64725	Thrust Washer 1.38" X .125"
7	6	6355	Bushing 1.38" I.D.
8	2	64549(1)	Pivot Pin 1.25" Dia. X 6.89"
9	1	51689(2)	Pivot Pin 1.38" Dia. X 8.75"
10	1	64845	Spacer Tube
11	1	62198(3)	Pivot Pin 1.25" Dia. X 9.47"
12	2	6896(4)	Pivot Pin 1.38" Dia. X 10.00"
13	1	62197(5)	Pivot Pin 1.25" Dia. X 8.34"
14	1	64482	Dipper (Includes 6 #51036 Bushings, 2 #6355 Bushings, and 1 #64845 Spacer Tube)
15	1	64521	Bucket Cylinder Assembly
16	2	6912	Dipper Link (Includes 2 #6355 Bushings)
17	1	64596	Bucket Link

NOTES:

(1) Pivot pin #64549 is sold only in pin kit #69874. Kit includes one pin #64549, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

(2) Pivot pin #51689 is sold only in pin kit #52609. Kit includes one pin #51689, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.

(3) Pivot pin #62198 is sold only in pin kit #69876. Kit includes one pin #62198, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

(4) Pivot Pin #6896 is sold only in pin kit #52613. Kit includes one pin #6896, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.

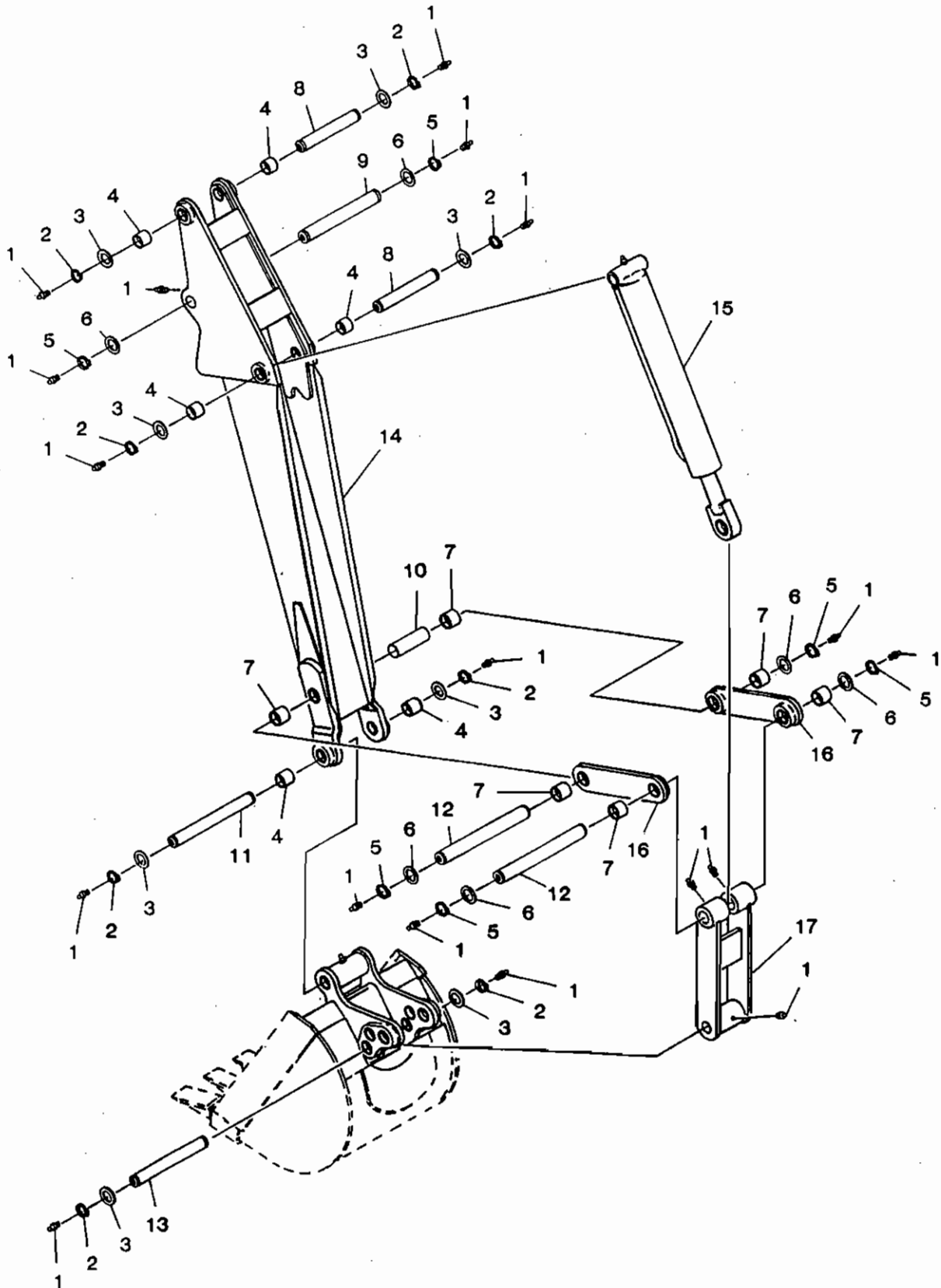
(5) Pivot pin #62197 is sold only in pin kit #69877. Kit includes one pin #62197, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

4496

12-11-92-4

DIPPER ASSEMBLY

9MD2 BACKHOE
ASSEMBLY #64901



4497 12-11-92-3

DIPPER ASSEMBLY

9MD2 BACKHOE
ASSEMBLY #64901

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	19	6616	Grease Zerk
2	8	1652	Snap Ring 1.25" I.D.
3	VARIES	64728	Thrust Washer 1.25" X .031"
	VARIES	57693	Thrust Washer 1.25" X .078"
	VARIES	64727	Thrust Washer 1.25" X .125"
4	6	51036	Bushing 1.25" I.D.
5	6	1650	Snap Ring 1.38" I.D.
6	VARIES	6623	Thrust Washer 1.38" X .031"
	VARIES	64724	Thrust Washer 1.38" X .090"
	VARIES	64725	Thrust Washer 1.38" X .125"
7	6	6355	Bushing 1.38" I.D.
8	2	64549(1)	Pivot Pin 1.25" Dia. X 6.89"
9	1	51689(2)	Pivot Pin 1.38" Dia. X 8.75"
10	1	64845	Spacer Tube
11	1	62198(3)	Pivot Pin 1.25" Dia. X 9.47"
12	2	6896(4)	Pivot Pin 1.38" Dia. X 10.00"
13	1	62197(5)	Pivot Pin 1.25" Dia. X 8.34"
14	1	64643	Dipper (Includes 6 #51036 Bushings, 2 #6355 Bushings, and 1 #64845 Spacer Tube)
15	1	64521	Bucket Cylinder Assembly
16	2	6912	Dipper Link (Includes 2 #6355 Bushings)
17	1	64596	Bucket Link

NOTES:

(1) Pivot pin #64549 is sold only in pin kit #69874. Kit includes one pin #64549, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

(2) Pivot pin #51689 is sold only in pin kit #52609. Kit includes one pin #51689, two thrust washers #6623, two snap rings #1650, two grease zerks #6616.

(3) Pivot pin #62198 is sold only in pin kit #69876. Kit includes one pin #62198, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

(4) Pivot pin #6896 is sold only in pin kit #52613. Kit includes one pin #6896, two thrust washers #6623, two snap rings #1650, two grease zerks #6616.

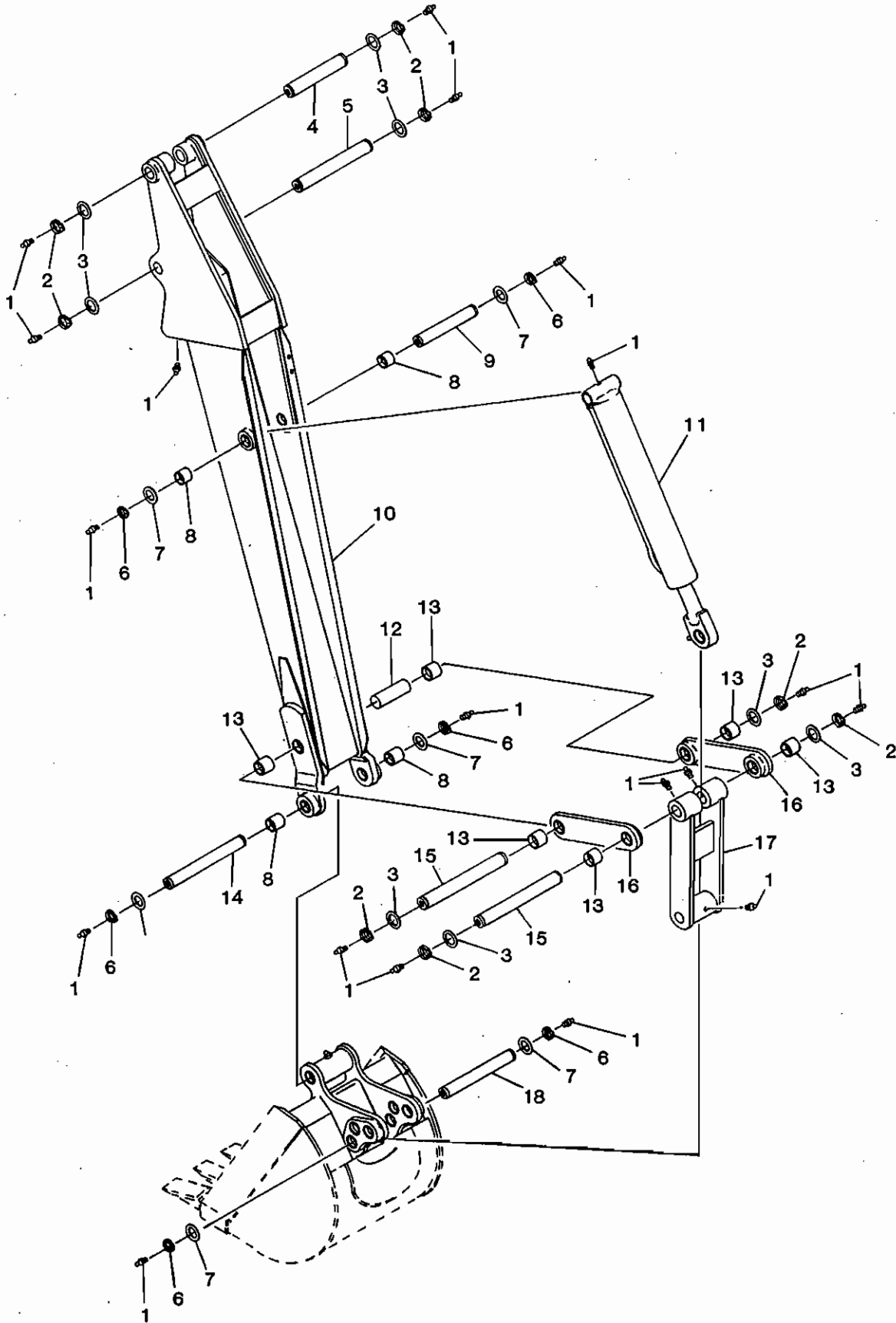
(5) Pivot pin #62197 is sold only in pin kit #69877. Kit includes one pin #62197, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

4498

7-21-93-6

DIPPER ASSEMBLY

11MD2 BACKHOE
ASSEMBLY #64903



4499 12-11-92-3

DIPPER ASSEMBLY

11MD2 BACKHOE
ASSEMBLY #64903

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	19	6616	Grease Zerk
2	8	1650	Snap Ring 1.38" I.D.
3	VARIES	6623	Thrust Washer 1.38" X .031"
	VARIES	64724	Thrust Washer 1.38" X .090"
	VARIES	64725	Thrust Washer 1.38" X .125"
4	1	61234(1)	Pivot Pin 1.38" Dia. x 6.81"
5	1	51689(2)	Pivot Pin 1.38" Dia. x 8.75"
6	6	1652	Snap Ring 1.25" I.D.
7	VARIES	64728	Thrust Washer 1.25" x .031"
	VARIES	57693	Thrust Washer 1.25" x .078"
	VARIES	64727	Thrust Washer 1.25" x .125"
8	4	51036	Bushing 1.25" I.D.
9	1	64549(3)	Pivot Pin 1.25" Dia. x 6.89"
10	1	64567	Dipper (Includes 4 #51036 Bushings, 2 #6355 Bushings, and 1 #64845 Spacer Tube)
11	1	64521	Bucket Cylinder Assembly
12	1	64845	Spacer Tube
13	6	6355	Bushing 1.38" I.D.
14	1	62198(4)	Pivot Pin 1.25" Dia. x 9.47"
15	2	6896(5)	Pivot Pin 1.38" Dia. x 10.00"
16	2	6912	Dipper Link (Includes 2 #6355 Bushings)
17	1	64596	Bucket Link
18	1	62197(6)	Pivot Pin 1.25" Dia. x 8.34"

NOTES:

(1) Pivot Pin #61234 is sold only in pin kit #69875. Kit includes one pin #61234, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.

(2) Pivot pin #51689 is sold only in pin kit #52609. Kit includes one pin #51689, two thrust washers #6623, two snap rings #1650, and two grease zerks #6616.

(3) Pivot pin #64549 is sold only in pin kit #69874. Kit includes one pin #64549, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

(4) Pivot Pin #62198 is sold only in pin kit #69876. Kit includes one pin #62198, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

(5) Pivot pin #6896 is sold only in pin kit #52613. Kit includes one pin #6869, two thrust washers #6623, two snap rings #1650, and two greese zerks #6616.

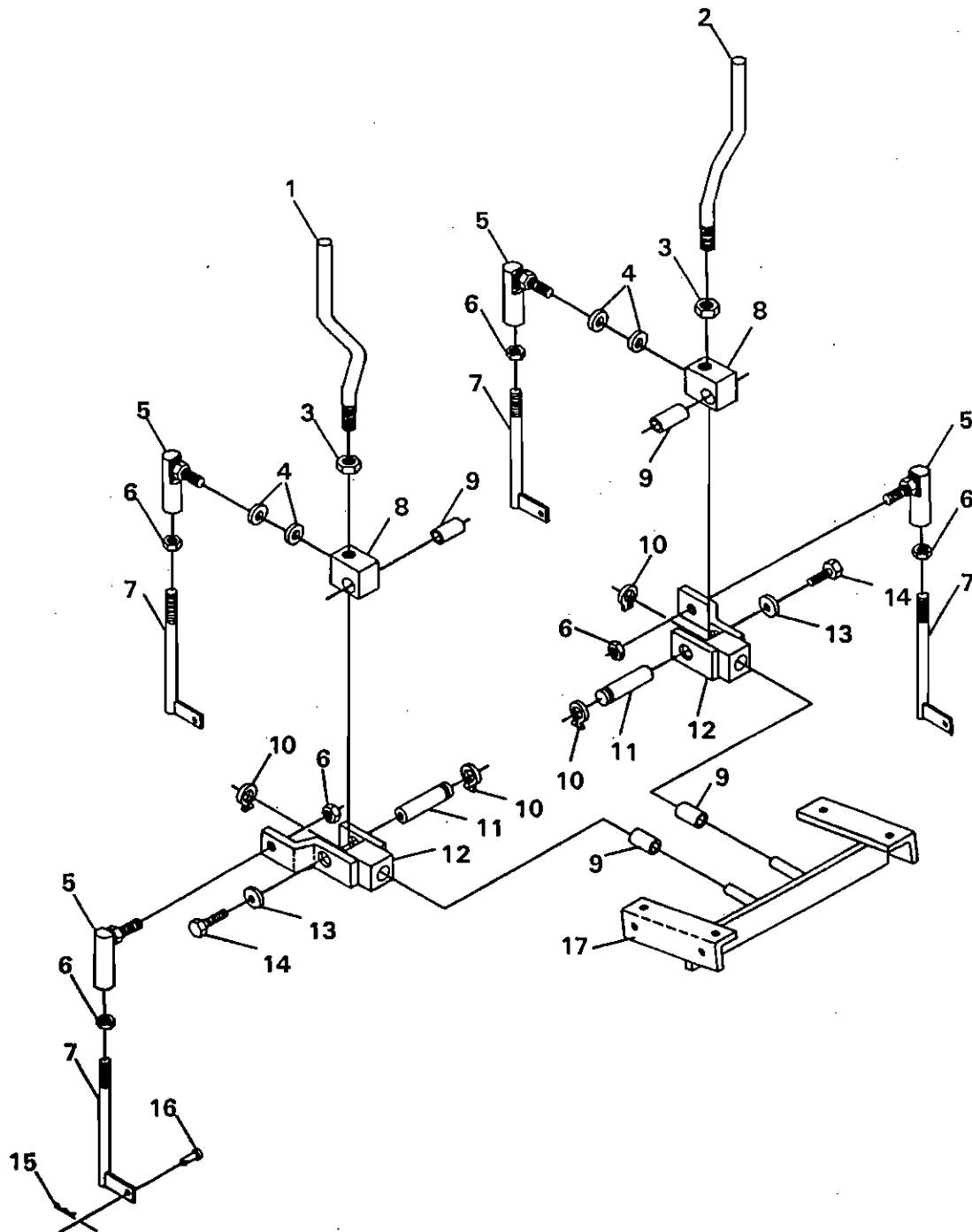
(6) Pivot pin #62197 is sold only in pin kit #69877. Kit includes one pin #62197, two thrust washers #64728, two snap rings #1652, and two grease zerks #6616.

4500
12-11-92-4

CONSOLE ASSEMBLY

ASSEMBLY #65293

DIA. 1 OF 2



CONSOLE ASSEMBLY

ASSEMBLY #65293

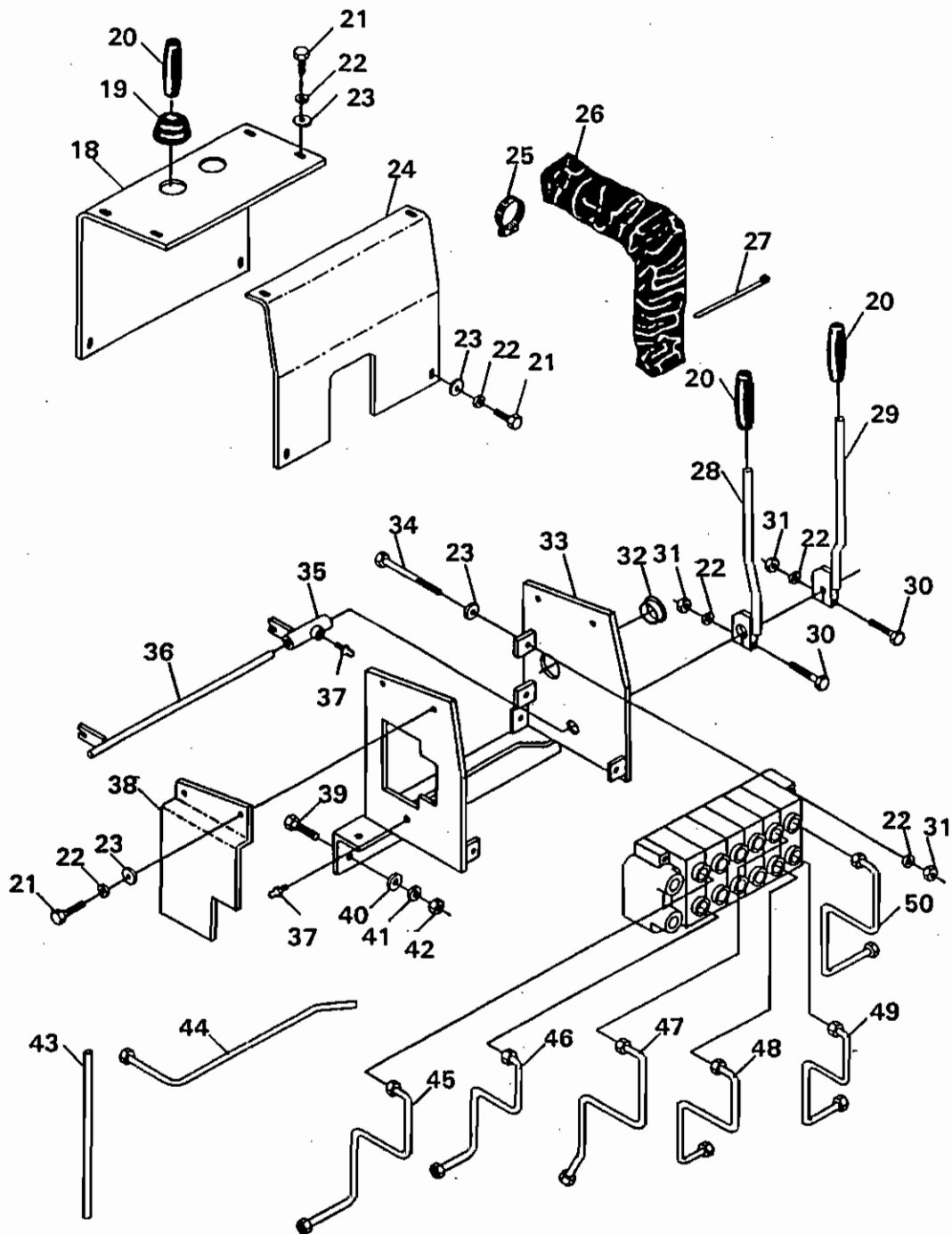
LIST 1 OF 2

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	61162	Dipper & Bucket Control Lever
2	1	61161	Boom & Swing Control Lever
3	2	1244	.62" UNC Hex Nut
4	4	1527	.50" SAE Flat Washer
5	4	54099	Ball Joint
6	6	1492	.50" UNF Jam Nut
7	4	54314	Push Rod
8	2	54310	Pivot Block (Includes one #6961 Bushing)
9	2	6961	Bushing
10	4	6274	Snap Ring
11	2	6271	Pivot Pin .62" Dia. X 2.12"
12	2	54311	Pivot Yoke (Includes two #6961 Bushings)
13	2	1525	.38" SAE Flat Washer
14	2	1292	.38" UNF X .75" Hex Capscrew
15	6	1659	Cotter Pin
16	6	6776	Clevis Pin
17	1	54313	Control Bracket

CONSOLE ASSEMBLY

ASSEMBLY #65293

DIA. 2 OF 2



CONSOLE ASSEMBLY

ASSEMBLY #65293

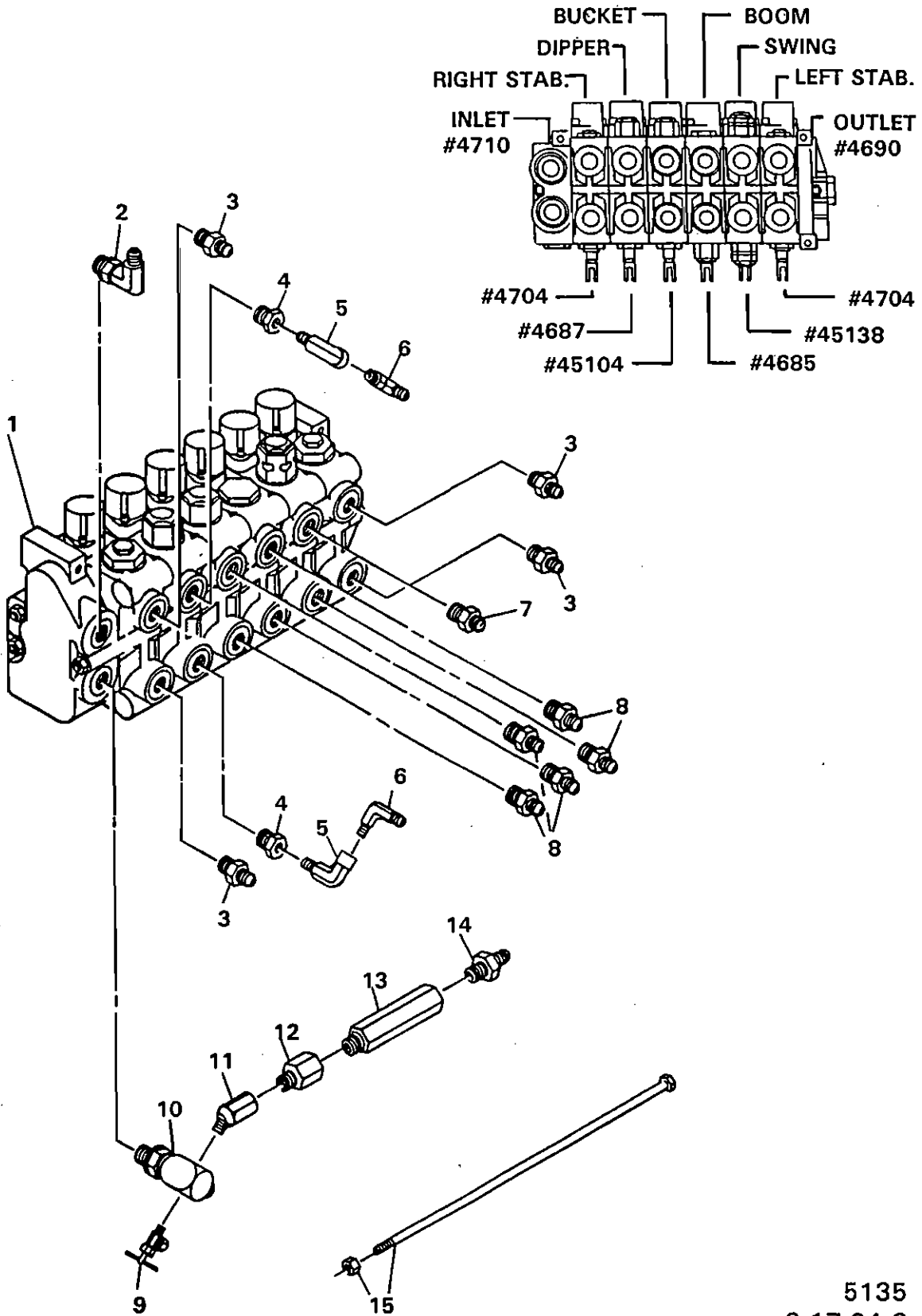
LIST 2 OF 2

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
18	1	54519	Back Console Cover
19	2	9010	Rubber Boot
20	4	5655	Handle Grip
21	12	1021	.31" UNC X .75" Hex Capscrew
22	17	1502	.31" Lock Washer
23	15	1513	.31" Flat Washer
24	1	54518	Front Console Cover
25	2	53167	Hose Clamp
26	1	34101	Hose Sock 4" Dia. X 45"
27	1	7104	Hose Tie
28	1	54305	Left Stabilizer Control Lever
29	1	54304	Right Stabilizer Control Lever
30	2	1025	.31" UNC X 1.75" Hex Capscrew
31	5	1225	.31" UNC Hex Nut
32	1	7096	Button Plug
33	1	54500	Console
34	3	1030	.31" UNC x 3.00" Hex Capscrew
35	1	54317	Linkage
36	1	54320	Pivot Linkage
37	2	6616	Grease Zerk
38	1	57501	Valve End Cover
39	4	1045	.38" UNC X 1.50" Hex Capscrew
40	4	1514	.38" Flat Washer
41	4	1503	.38" Lock Washer
42	4	1226	.38" UNC Hex Nut
43	1	35110	.25" X 20" Plastic Drain Tube
44	1	57515	Hydraulic Relief Tube
45	1	54527	Hydraulic Tube Stabilizer-Right Top
46	1	54528	Hydraulic Tube Stabilizer-Right Bottom
47	1	54868	Hydraulic Tube Swing-Top
48	1	65294	Hydraulic Tube Swing-Bottom
49	1	54529	Hydraulic Tube Stabilizer-Left Bottom
50	1	54530	Hydraulic Tube Stabilizer-Left Top

5180
2-16-94-3

VALVE ASSEMBLY

GRESEN VALVE
ASSEMBLY #2214



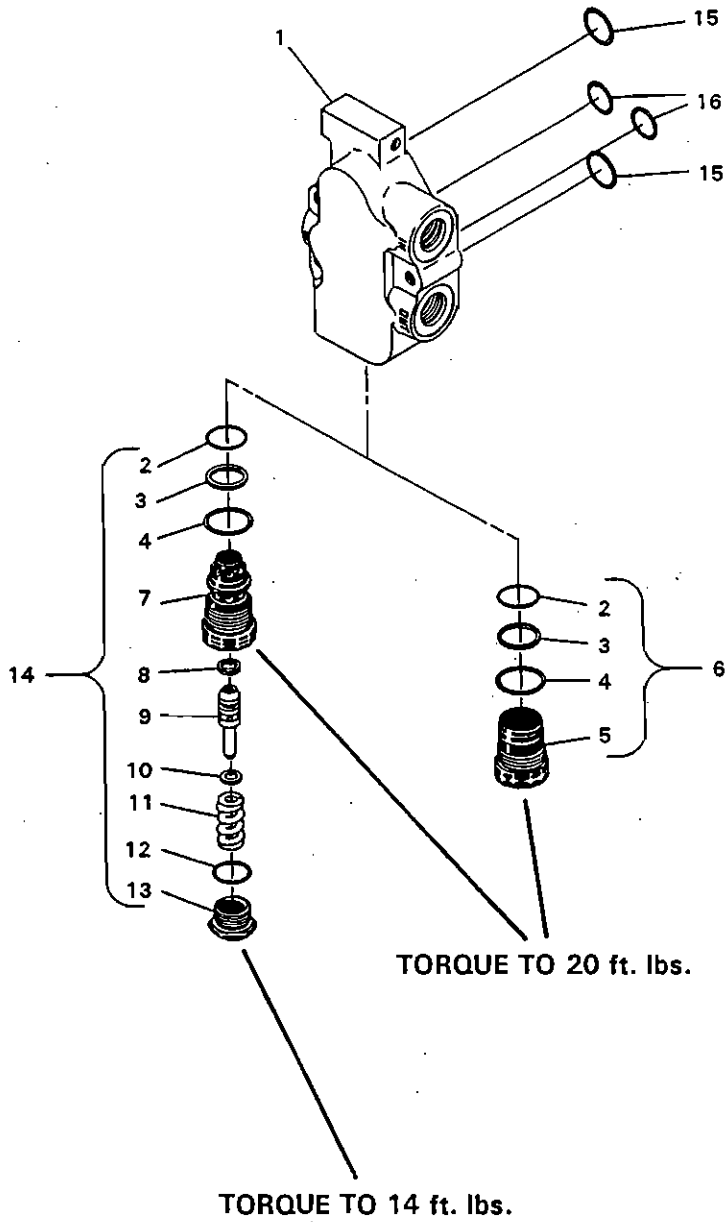
VALVE ASSEMBLY

GRESEN VALVE
ASSEMBLY #2214

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	54332	6 Spool Gresen V20 Valve
2	1	30068	90° Male Connector (Long) 10MBo-8MJ
3	4	3269	O-Ring Boss Adapter 8MBo-6MJ
4	2	3336	O-Ring Boss Adapter 10MBo-4FP
5	2	3430	90° Street Elbow 6FJX-6MJ
6	2	30043	90° Elbow (Long) 4MP-6MJ
7	1	62208	SAE O-Ring Boss .06" Dia. 10MBo-6MJ
8	5	3362	O-Ring Boss Adapter 10MBo-6MJ
9	1	3360	Needle Valve
10	1	79575	90° Custom Fitting
11	1	3393	45° Street Elbow 4MP-4FP
12	1	3394	Pipe Expander 4MP-6FP
13	1	57547	.38" NPT Relief Valve
14	1	3138	Male Connector
15	3	4726	Replacement Tie Rod Assembly

VALVE ASSEMBLY

GRESEN INLET COVER



VALVE ASSEMBLY

GRESEN INLET COVER

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	4710	Inlet Cover (#10 Ports)
2	1		Inner O-Ring Seal
3	1		Inner Back-Up Washer
4	1		Main O-Ring Seal
5	1		Main Relief Plug
6		45141	Main Relief Plug Assembly (Includes One Each Of Items 2 - 5.)
7	1		WH Main Relief Body
8	1		Relief Poppet Piston Ring
9	1		Relief Poppet
10	VARIES		Shim(s)
11	1		Relief Spring
12	1		Relief Cap O-Ring Seal
13	1		Relief Cap
14		45148*	Optional WH Main Relief Valve Assembly (Includes One Each Of Items 2, 3, 4, and 7 - 13.)
15	2		Exhaust Passage O-Ring Seal
16	2		Pressure Passage O-Ring Seal

* PLEASE STATE BACKHOE MODEL NUMBER WHEN ORDERING MAIN RELIEF VALVE ASSEMBLY.

NOTE: Items without part numbers are not sold separately. These parts are only available in the various subassemblies shown on the diagram, or in the seal kits listed below.

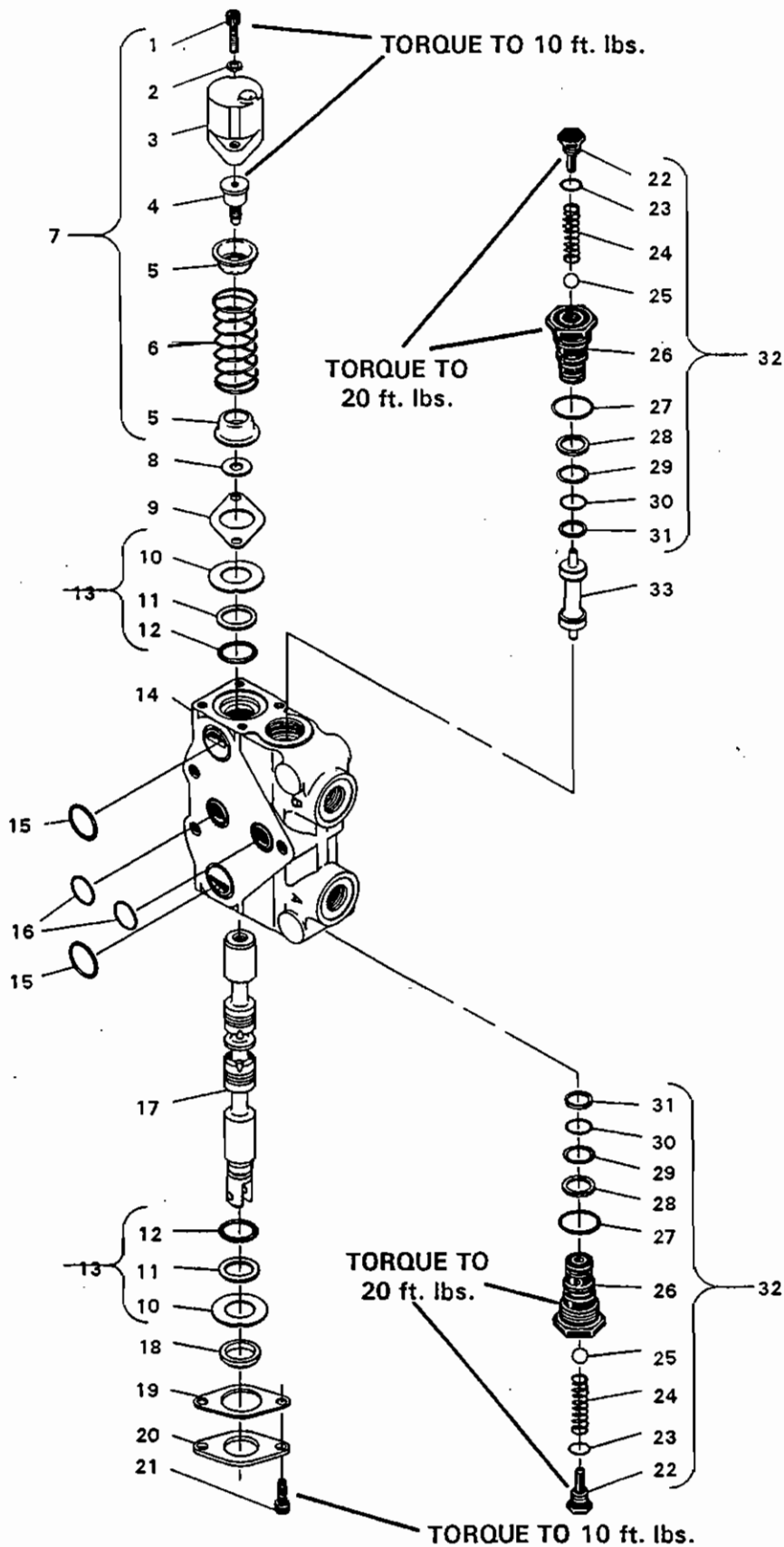
Valve Section Seal Kit #4653 contains two each of items 15 & 16.

Main Relief Assembly Seal Kit #45142 contains one each of items 2, 3, 4, & 12.

VALVE ASSEMBLY

GRESEN STABILIZER SECTION

ASSEMBLY #4704



VALVE ASSEMBLY

GRESEN STABILIZER SECTION ASSEMBLY #4704

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2		.25" X .88" Screw
2	2		.25" Lock Washer
3	1		Bonnet
4	1		Collar Spool
5	2		Collar Stop
6	1		Collar Spring
7		4717	Spool Positioner Assembly (Includes Items 1-6)
8	1		Washer
9	1	45287	Upper Retainer Plate
10	2		Retainer Plate Washer
11	2		Back-Up Washer
12	2		Spool O-Ring Seal
13		4688	Spool Seal Kit (Includes One Each Of Items 10, 11 & 12)
14	1		Lockout Valve Section Casting
15	2		Exhaust Passage O-Ring Seal
16	2		Pressure Passage O-Ring Seal
17	1		Spool
18	1	4793	Spool Wiper
19	1	45288	Seal Plate
20	1	54631	Lower Retainer Plate
21	2	4658	.25" X .75" Screw
22	2		Check Cap
23	2		Check Cap O-Ring Seal
24	2		Spring
25	2		Steel Ball
26	2		Lockout Check Body
27	2		Main O-Ring Seal
28	2		Outer Back-Up Ring
29	2		Outer O-Ring Seal
30	2		Inner O-Ring Seal
31	2		Inner Back-Up Ring
32		4819	Lockout Check Assembly (Includes One Of Items 22 - 31)
33	1		Unlocking Piston

NOTE:

Items without part numbers are not sold separately.

Spool Seal Kit #4688 contains one of items 10, 11, & 12.

Valve Section Seal Kit #4653 contains two of items 15 & 16.

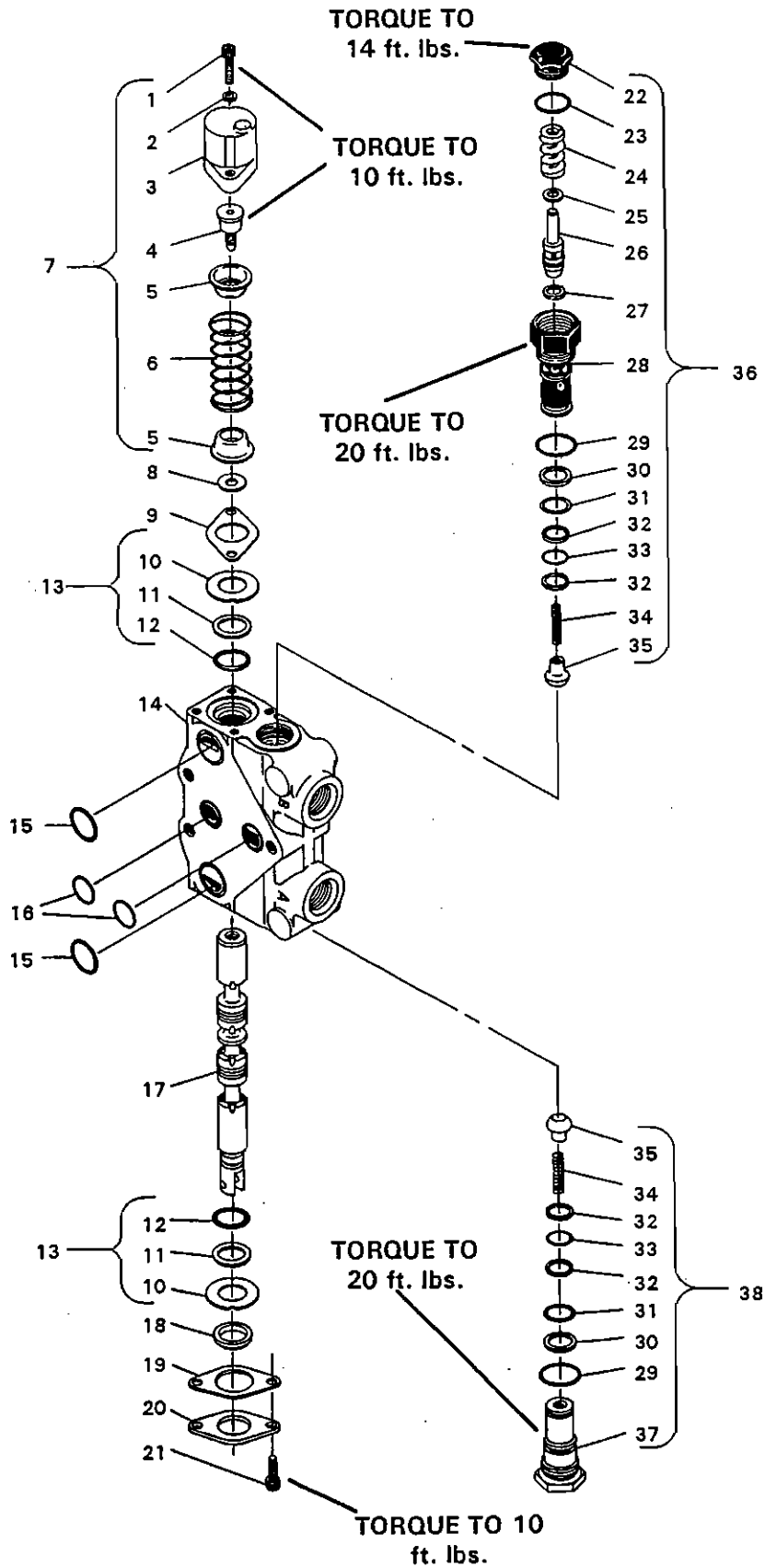
Lockout Check Assembly Seal Kit #4829 contains one of items 23, and 27 - 31.

Complete Stabilizer Section Seal Kit #45102 contains two of seal kits #4688 & #4829, and one seal kit #4653 & item 18.

VALVE ASSEMBLY

GRESEN VALVE SECTION

ASSEMBLY #4687



VALVE ASSEMBLY

GRESEN VALVE SECTION

ASSEMBLY #4687

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2		.25" X .88" Screw
2	2		.25" Lock Washer
3	1		Bonnet
4	1		Collar Spool
5	2		Collar Stop
6	1		Collar Spring
7		4717	Spool Positioner Assembly (Includes Items 1-6)
8	1		Washer
9	1	45287	Upper Retainer Plate
10	2		Retainer Plate Washer
11	2		Back-Up Washer
12	2		Spool O-Ring Seal
13		4688	Spool Seal Kit (Includes One Each Of Items 10, 11, & 12)
14	1		Valve Section Casting
15	2		Exhaust Passage O-Ring Seal
16	2		Pressure Passage O-Ring Seal
17	1		Spool
18	1	4793	Spool Wiper
19	1	45288	Seal Plate
20	1	54631	Lower Retainer Plate
21	2	4658	.25" X .75" Screw
22	1		Relief Cap
23	1		Relief Cap O-Ring Seal
24	1		Relief Spring
25	VARIABLES		Shim(s)
26	1		Relief Poppet
27	1		Relief Poppet Piston Ring
28	1		Relief Body
29	2		Main O-Ring Seal
30	2		Outer Back-Up Washer
31	2		Outer O-Ring Seal
32	4		Inner Back-Up Washer
33	2		Inner O-Ring Seal
34	2		Check Spring
35	2		Check Poppet
36		4665	Cylinder Port Relief Assembly (Includes Items 22-35)
37	1		Load Check Plug
38		4673	Load Check Plug Assembly (Includes Items 29, 35, & 37)

NOTE:

Items without part numbers are not sold separately.

Valve Section Seal Kit #4653 contains two of items 15 & 16.

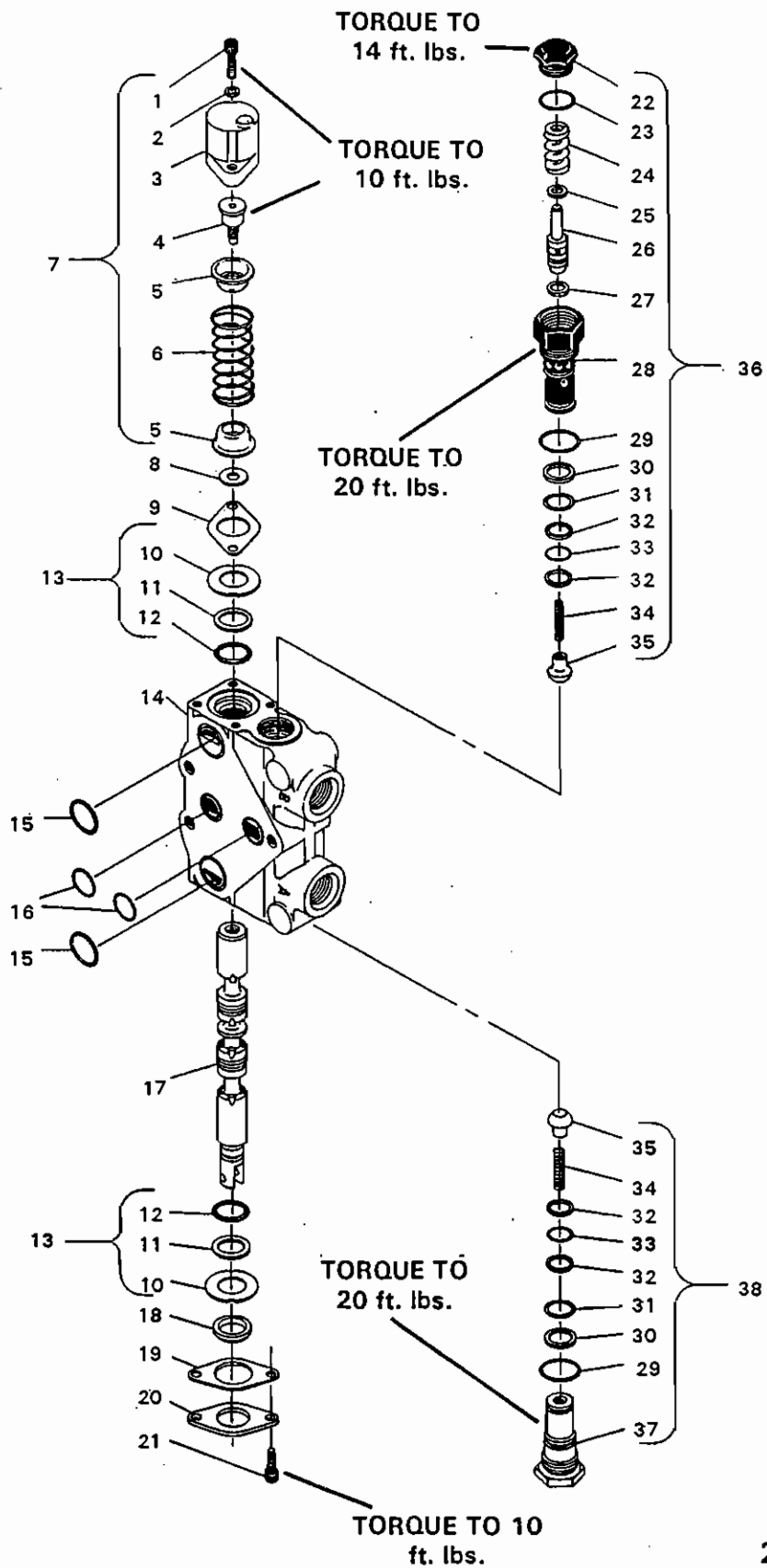
Port Relief/Load Check Assembly Seal Kit #4666 includes one each of items 23, 27, 29, 30, 31, 33 and two of item 32.

Complete Dipper Section Seal Kit #45103 includes two of seal kits #4666, #4688, and one of seal kit #4653 and item 18.

VALVE ASSEMBLY

GRESEN BUCKET SECTION

ASSEMBLY #45104



VALVE ASSEMBLY

GRESEN BUCKET SECTION

ASSEMBLY #45104

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2		.25" X .88" Screw
2	2		.25" Lock Washer
3	1		Bonnet
4	1		Collar Spool
5	2		Collar Stop
6	1		Collar Spring
7		4717	Spool Positioner Assembly (Includes Items 1 - 6)
8	1		Washer
9	1	45287	Upper Retainer Plate
10	2		Retainer Plate Washer
11	2		Back-Up Washer
12	2		Spool O-Ring Seal
13		4688	Spool Seal Kit (Includes One Each Of Items 10, 11, & 12)
14	1		Valve Section Casting
15	2		Exhaust Passage O-Ring Seal
16	2		Pressure Passage O-Ring Seal
17	1		Spool
18	1	4793	Spool Wiper
19	1	45288	Seal Plate
20	1	54631	Lower Retainer Plate
21	2	4658	.25" X .75" Screw
22	1		Relief Cap
23	1		Relief Cap O-Ring Seal
24	1		Relief Spring
25	VARIABLES		Shim(s)
26	1		Relief Poppet
27	1		Relief Poppet Piston Ring
28	1		Relief Body
29	2		Main O-Ring Seal
30	2		Outer Back-Up Washer
31	2		Outer O-Ring Seal
32	4		Inner Back-Up Washer
33	2		Inner O-Ring Seal
34	2		Check Spring
35	2		Check Poppet
36		45100	Cylinder Port Relief Assembly (Includes Items 22 - 35)
37	1		Load Check Plug
38		4673	Load Check Plug Assembly (Includes Items 29 - 35, & 37)

NOTE:

Items without part numbers are not sold separately.

Valve Section Seal Kit #4653 contains two of items 15 & 16.

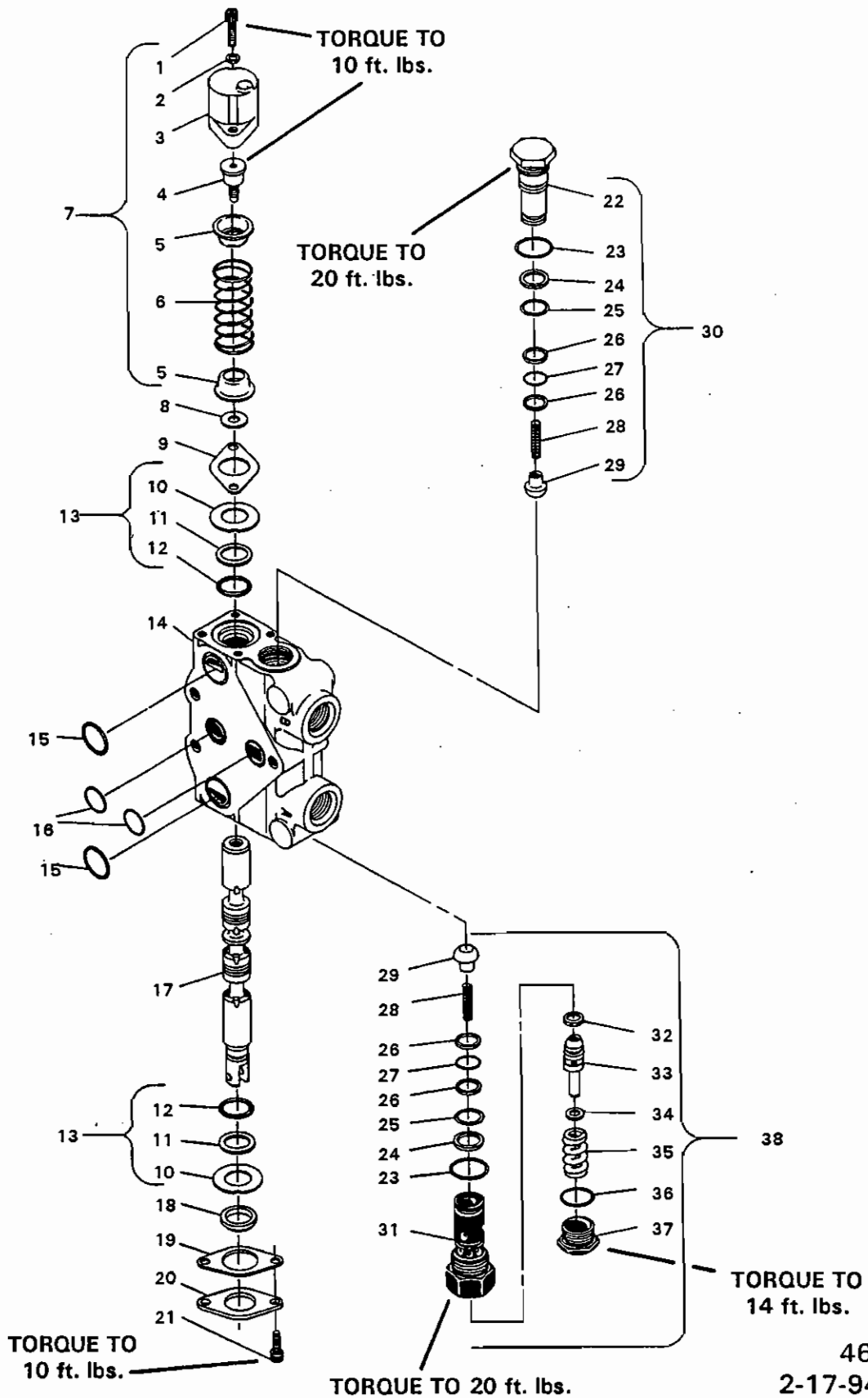
Port Relief/Load Check Assembly Seal Kit #4666 includes one each of items 23, 27, 29, 30, 31, 33 and two of item 32.

Complete Bucket Section Seal Kit #45103 includes two of seal kits #4666, #4688, and one of seal kit #4653 and item 18.

4634
2-18-94-2

VALVE ASSEMBLY

GRESEN VALVE SECTION
ASSEMBLY #4685



4637

2-17-94-4

VALVE ASSEMBLY

GRESEN VALVE SECTION

ASSEMBLY #4685

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2		.25" X .88" Screw
2	2		.25" Lock Washer
3	1		Bonnet
4	1		Collar Spool
5	2		Collar Stop
6	1		Collar Spring
7		4717	Spool Positioner Assembly (Includes Items 1-6)
8	1		Washer
9	1	45287	Upper Retainer Plate
10	2		Retainer Plate Washer
11	2		Back-Up Washer
12	2		Spool O-Ring Seal
13		4688	Spool Seal Kit (Includes One Each Of Items 10, 11, & 12)
14	1		Valve Section Casting
15	2		Exhaust Passage O-Ring Seal
16	2		Pressure Passage O-Ring Seal
17	1		Spool
18	1	4793	Spool Wiper
19	1	45288	Seal Plate
20	1	54631	Lower Retainer Plate
21	2	4658	.25" X .75" Screw
22	1		Load Check Plug
23	2		Main O-Ring Seal
24	2		Outer Back-Up Washer
25	2		Outer O-Ring Seal
26	4		Inner Back-Up Washer
27	2		Inner O-Ring Seal
28	2		Check Spring
29	2		Check Poppet
30		4673	Load Check Plug Assembly (Includes Items 22-29)
31	1		Relief Body
32	1		Relief Poppet Piston Ring
33	1		Relief Poppet
34	VARIES		Shim(s)
35	1		Relief Spring
36	1		Relief Cap O-Ring Seal
37	1		Relief Cap
38	1	4665	Cylinder Port Relief Assembly (Includes Items 23-29, & 31-33)

NOTE:

Items without part numbers are not sold separately.

Valve Section Seal Kit #4653 contains two of items 15 & 16.

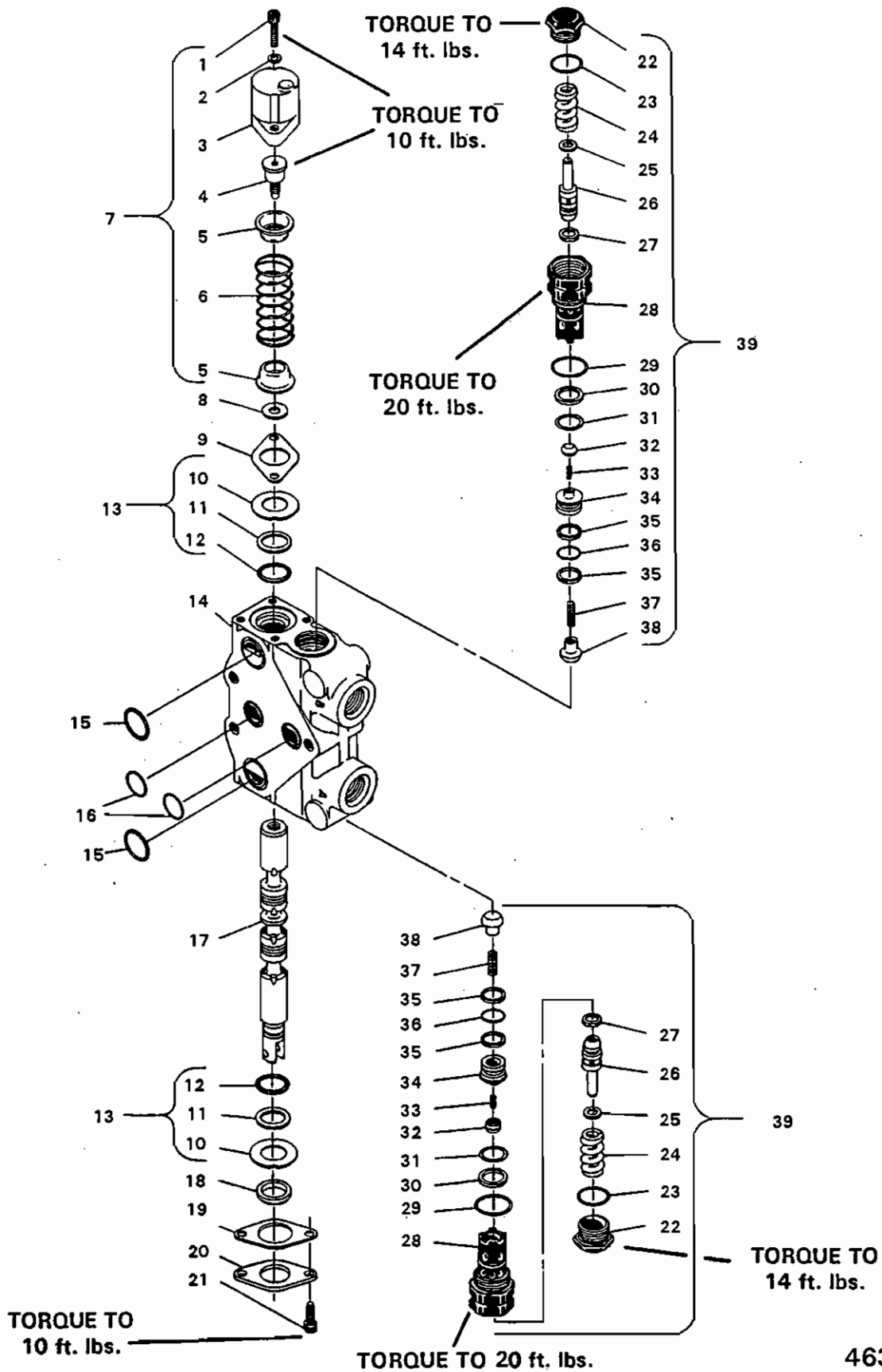
Cylinder Port Relief/Load Check Assembly Seal Kit #4666 includes one of items 23 - 25, 27, 32, 36, and two of item 26.

Complete Boom Section Seal Kit #45103 includes two of seal kits #4666, #4688, and one of seal kit #4653 and item 18.

VALVE ASSEMBLY

GRESEN SWING SECTION

ASSEMBLY #45138



VALVE ASSEMBLY

GRESEN SWING SECTION

ASSEMBLY #45138

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2		.25" X .88" Screw
2	2		.25" Lock Washer
3	1		Bonnet
4	1		Collar Spool
5	2		Collar Stop
6	1		Collar Spring
7		4717	Spool Positioner Assembly (Includes Items 1-6)
8	1		Washer
9	1	45287	Upper Retainer Plate
10	2		Retainer Plate Washer
11	2		Back-Up Washer
12	2		Spool O-Ring Seal
13		4688	Spool Seal Kit (Includes One Each Of Items 10,11, & 12)
14	1		Valve Section Casting
15	2		Exhaust Passage O-Ring Seal
16	2		Pressure Passage O-Ring Seal
17	1		Spool
18	1	4793	Spool Wiper
19	1	45288	Seal Plate
20	1	54631	Lower Retainer Plate
21	2	4658	.25" X .75" Screw
22	2		Relief Cap
23	2		Relief Cap O-Ring Seal
24	2		Relief Spring
25	VARIABLES		Shim(s)
26	2		Relief Poppet
27	2		Relief Poppet Piston Ring
28	2		Relief/Anti-Cav. Check Body
29	2		Main O-Ring Seal
30	2		Outer Back-Up Washer
31	2		Outer O-Ring Seal
32	2		Anti-Cavitation Poppet
33	2		Anti-Cavitation Spring
34	2		Poppet Retainer
35	4		Inner Back-Up Washer
36	2		Inner O-Ring Seal
37	2		Check Spring
38	2		Check Poppet
39		45139	Relief/Anti-Cav. Check Assy. (Includes One Of Items 22-38)

NOTE:

Items without part numbers are not sold separately.

Valve Section Seal Kit #4653 contains two of items 15, & 16.

Relief/Anti-Cavitation Check Assembly Seal Kit #4666 contains one of items 23, 27, 29, 30, 31, 36, and two of item 35.

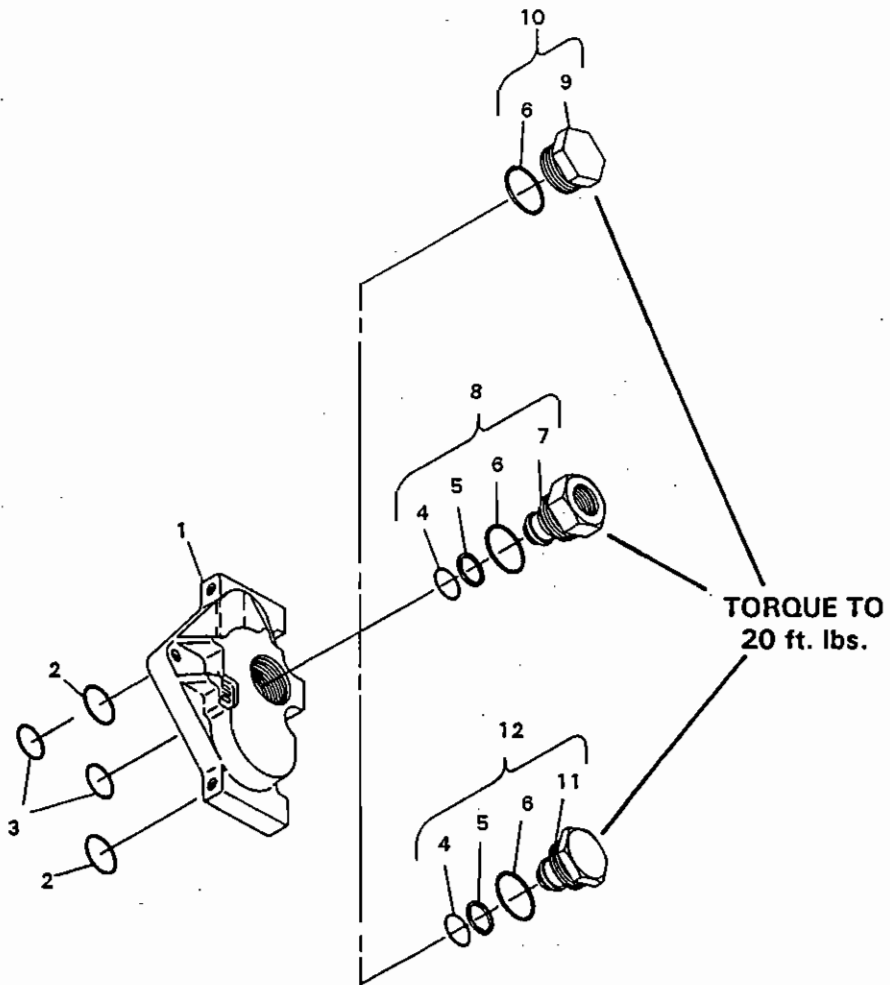
Complete Swing Section Seal Kit #45103 contains two of seal kits #4666, and #4688, and one of seal kit #4653 and item 18.

4640

2-18-94-2

VALVE ASSEMBLY

GRESEN OUTLET COVER



VALVE ASSEMBLY

GRESEN OUTLET COVER

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	4690	Outlet Cover Casting
2	2		Exhaust Passage O-Ring Seal
3	2		Pressure Passage O-Ring Seal
4	1		Inner O-Ring Seal
5	1		Inner Back-Up Washer
6	1	4693	Main O-Ring Seal
7	1		Power Beyond Sleeve
8		4698	Power Beyond Sleeve Assembly (Includes Items 4, 5, 6, & 7)
9	1		Open-Center Plug
10		4691	Open-Center Plug Assembly (Includes Items 9 & 10)
11	1		Close-Center Plug
12		6977	Close-Center Plug Assembly (Includes Items 4, 5, 6, & 11)

NOTE:

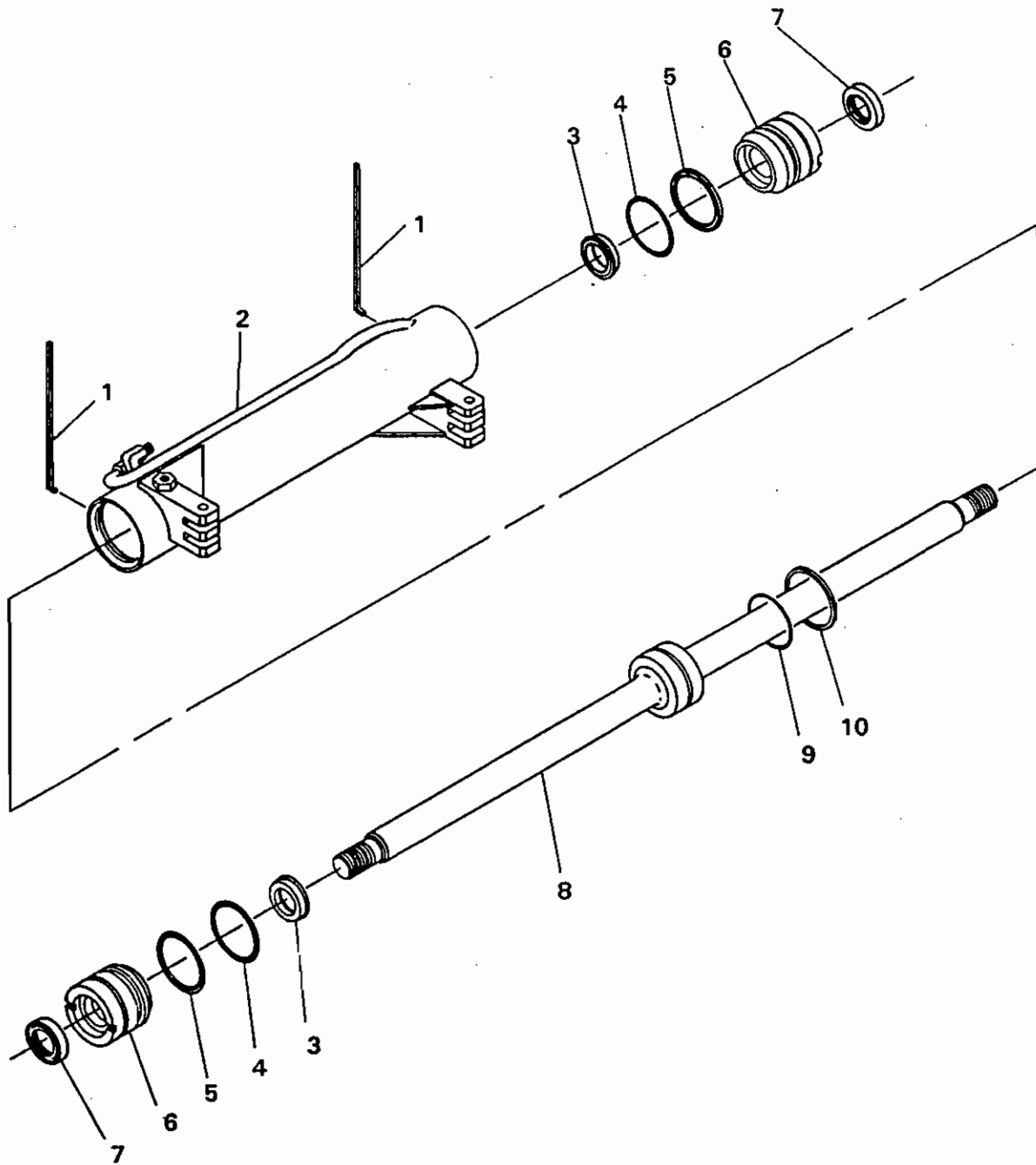
Items without part numbers are not sold separately. These parts are only available in the various subassemblies noted on the diagram, or in the seal kits listed below.

Valve Section Seal Kit #4653 contains two each of items 2 & 3.

Outlet Cover Port Seal Kit #4966 contains one each of items 4, 5, & 6.

CYLINDER ASSEMBLY

SWING CYLINDER
ASSEMBLY #64895



CYLINDER ASSEMBLY

SWING CYLINDER
ASSEMBLY #64895

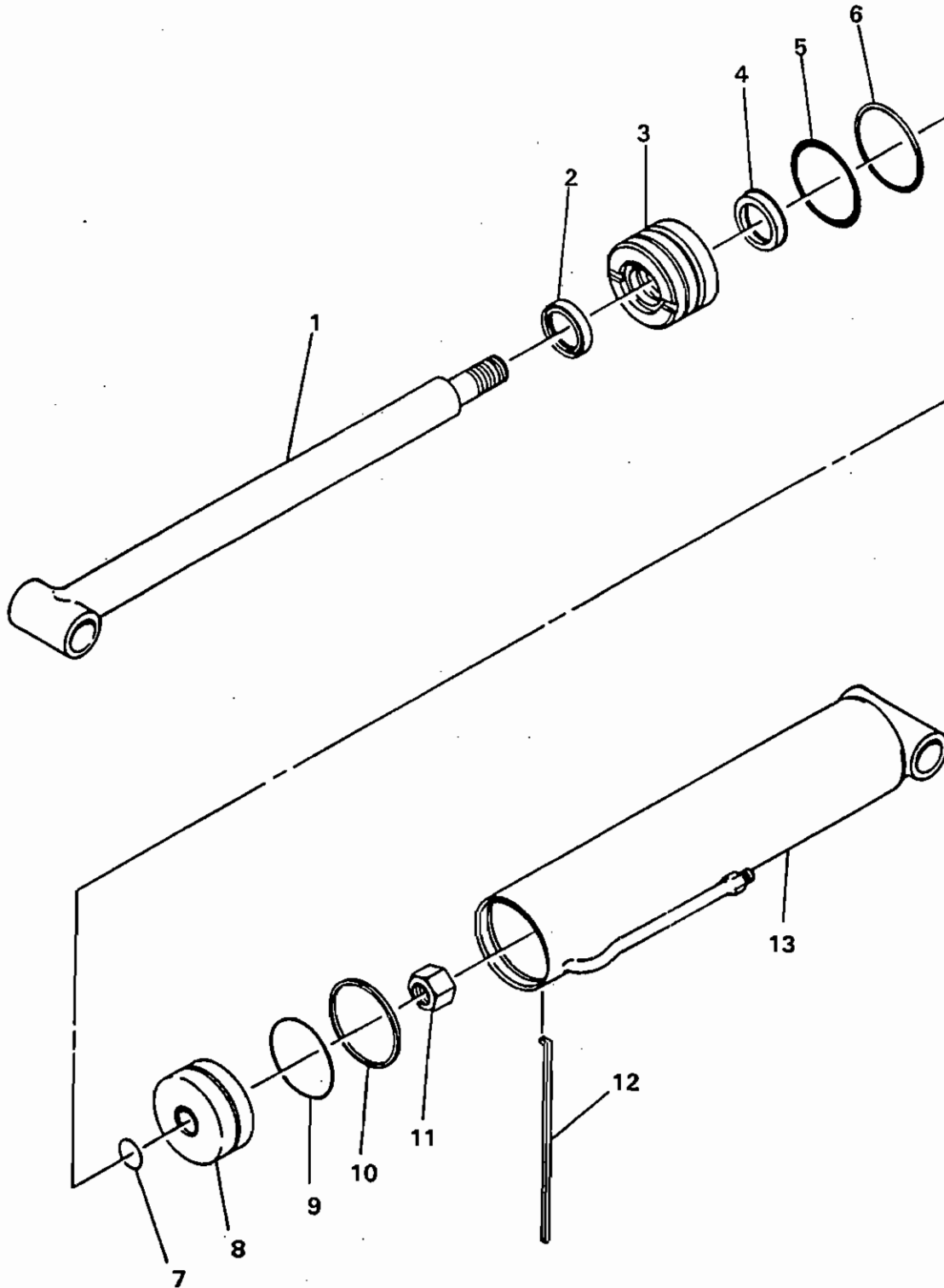
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	7165*	Gland Retainer Rod/Ring
2	1	64925	Cylinder Tube
3	2	45219*	Cylinder Rod Seal
4	2	4509*	O-Ring
5	2	4510*	Back-Up Washer
6	2	62770	Cylinder Gland
7	2	4974*	Rod Wiper
8	1	50207	Cylinder Rod
9	1	4645*	O-Ring
10	1	4544*	Teflon Piston Ring

NOTE: Seal Kit #45263 includes all parts marked with an asterisk (*).
Parts are not sold separately.

4392
2-18-94-2

CYLINDER ASSEMBLY

ASSEMBLY #61863



CYLINDER ASSEMBLY

ASSEMBLY #61863

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	61864	Cylinder Rod
2	1	4914*	Rod Wiper
3	1	63367	Cylinder Gland
4	1	45225*	Cylinder Rod Seal
5	1	4790*	Back-Up Washer
6	1	4791*	O-Ring
7	1	4641*	O-Ring
8	1	9677	Piston
9	1	4908*	O-Ring
10	1	4909*	Teflon Piston Ring
11	1	1483	Hex Nut
12	1	9679*	Gland Retainer Rod/Ring
13	1	61865	Cylinder Tube

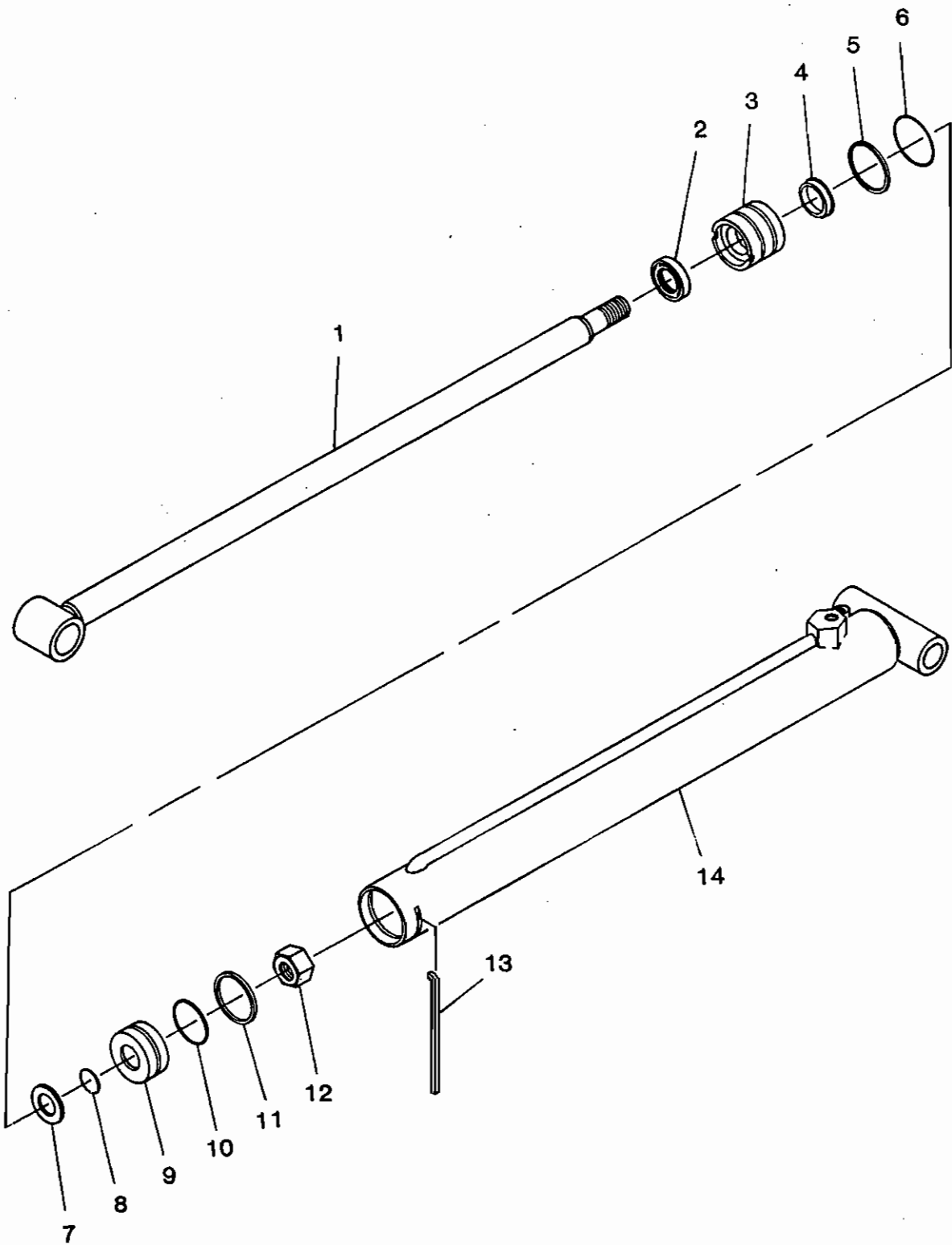
NOTE: Seal Kit #45256 includes all parts marked with an asterisk (*).
Parts are not sold separately.

5137
4-17-96-4

CYLINDER ASSEMBLY

VERTICAL STABILIZER CYLINDER

ASSEMBLY #68568



4389 2-7-91-2

CYLINDER ASSEMBLY

VERTICAL STABILIZER CYLINDER
ASSEMBLY #68568

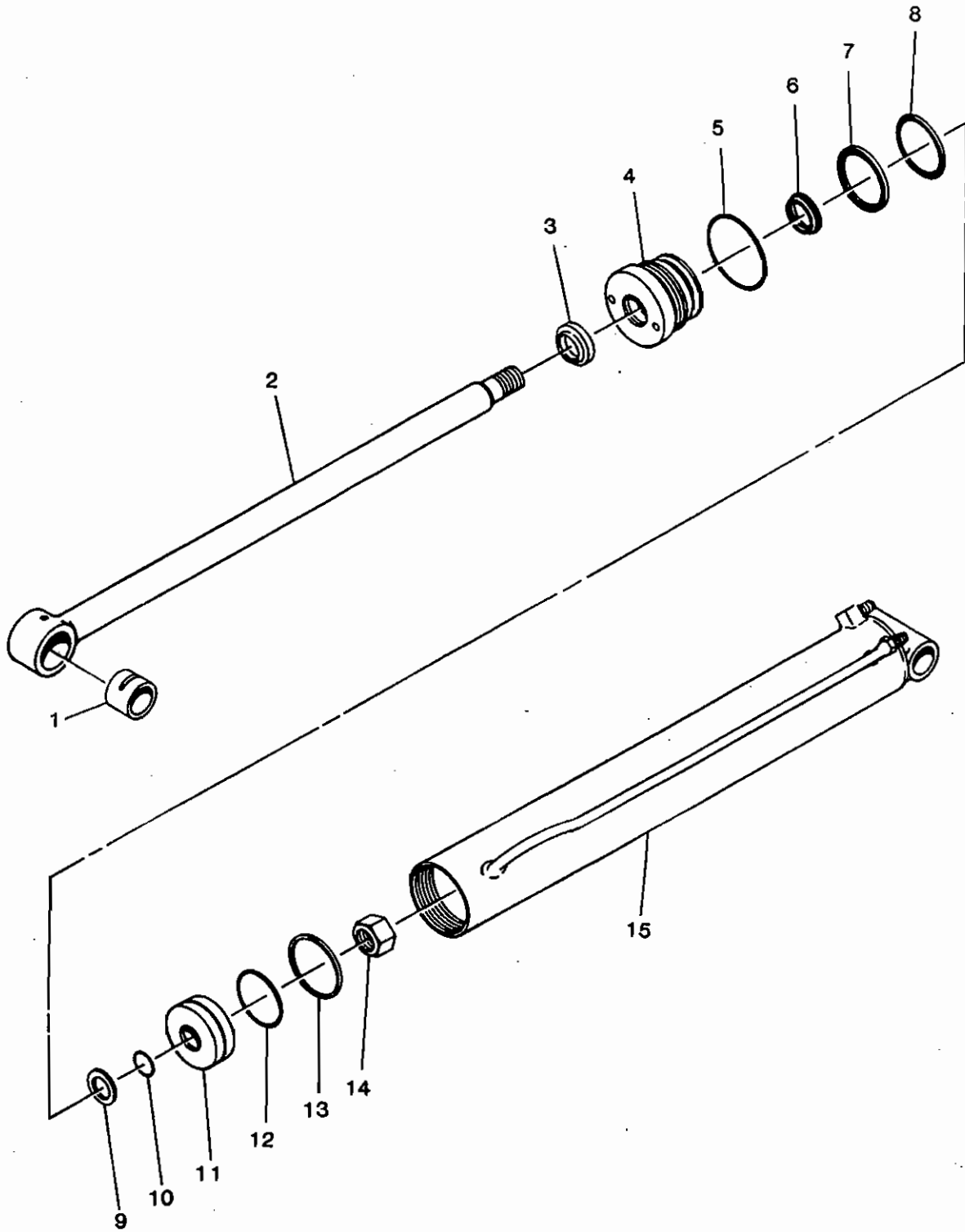
<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	68569	Cylinder Rod
2	1	4981*	Rod Wiper
3	1	64891	Cylinder Gland
4	1	45262*	Cylinder Rod Seal
5	1	4634*	Back-Up Washer
6	1	4633*	O-Ring
7	1	52644	Washer
8	1	4635*	O-Ring
9	1	6992	Piston
10	1	4637*	O-Ring
11	1	4636*	Teflon Piston Ring
12	1	1482	Hex Nut
13	1	7164*	Gland Retainer Rod/Ring
14	1	60036	Cylinder Tube

4390 2-7-91-2

NOTE: Seal Kit #45260 includes all parts marked with an asterisk (*). Parts are not sold separately.

CYLINDER ASSEMBLY

ASSEMBLY #68266



5337 8-24-90

CYLINDER ASSEMBLY

ASSEMBLY #68266

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	65353	Bushing
2	1	64826	Cylinder Rod
3	1	45389*	Rod Wiper
4	1	77441 (1)	Cylinder Gland
5	1	4570*	O-Ring
6	1	45219*	Cylinder Rod Seal
7	1	45249* (2)	Back-Up Washer
8	1	45557* (2)	O-Ring
9	1	5421	Washer
10	1	4641*	O-Ring
11	1	64525	Piston
12	1	45250*	O-Ring
13	1	45251*	Piston Ring
14	1	1483	Hex Nut
15	1	69373	Cylinder Tube

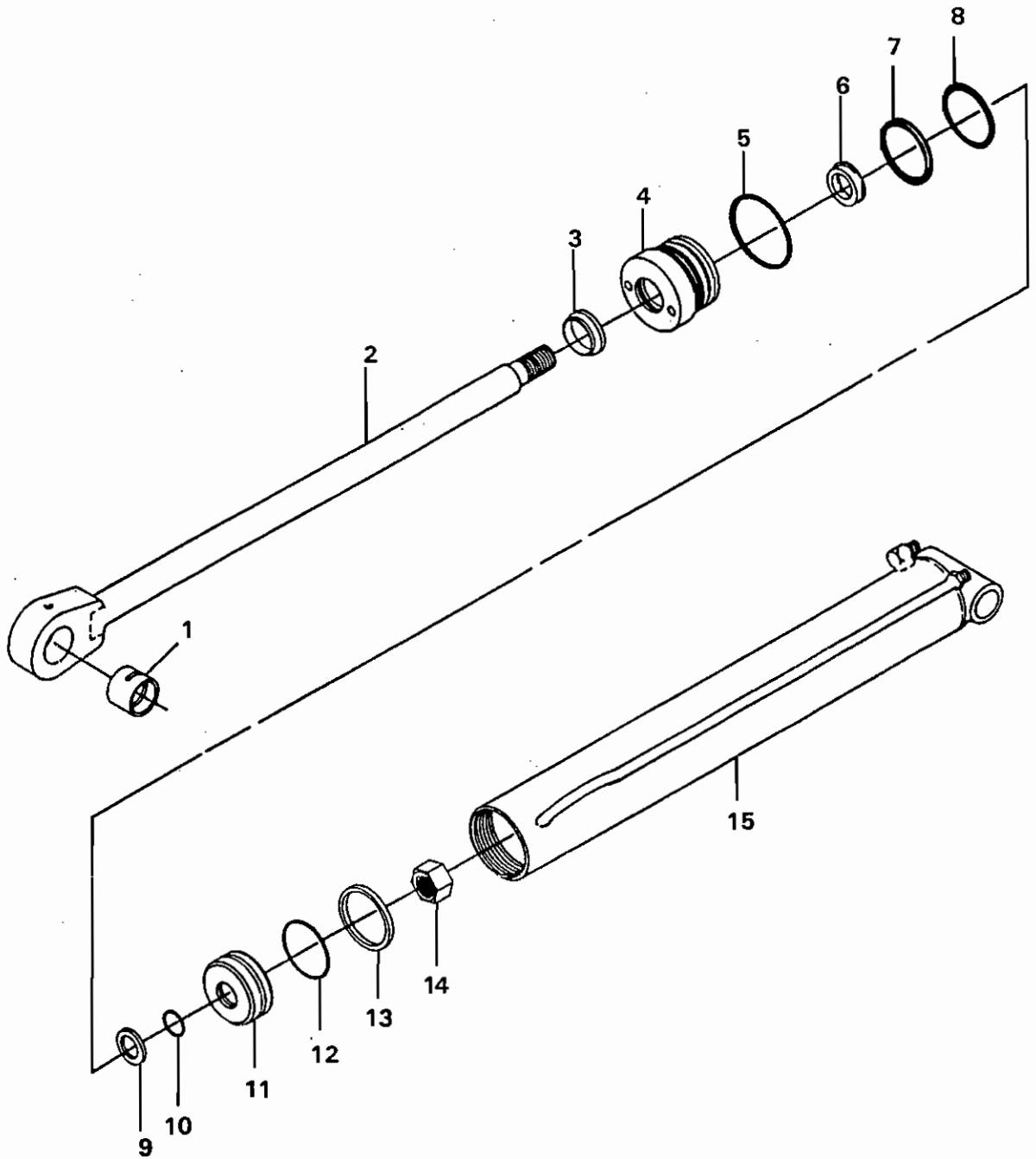
NOTE:

- (1) Cylinder gland #77441 replaced cylinder gland #67957 effective 1-11-91. The part number is stamped on cylinder gland #77441.
- (2) O-Ring #45557 and back-up washer #45249 replaced poly pack seal #45533 to coincide with new cylinder gland #77441 effective 1-11-91.
- (3) Seal Kit #45538 includes all parts marked with an asterisk (*). Parts are not sold separately.

5338
4-17-96-3

CYLINDER ASSEMBLY

ASSEMBLY #68267



4875
2-21-94-4

CYLINDER ASSEMBLY

ASSEMBLY #68267

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	65353	Bushing
2	1	64667	Cylinder Rod
3	1	45389*	Rod Wiper
4	1	77441 (1)	Cylinder Gland
5	1	4570*	O-Ring
6	1	45219*	Cylinder Rod Seal
7	1	45249* (2)	Back-Up Washer
8	1	45557* (2)	O-Ring
9	1	5421	Washer
10	1	4641*	O-Ring
11	1	64525	Piston
12	1	45250*	O-Ring
13	1	45251*	Piston Ring
14	1	1483	Hex Nut
15	1	69347	Cylinder Tube

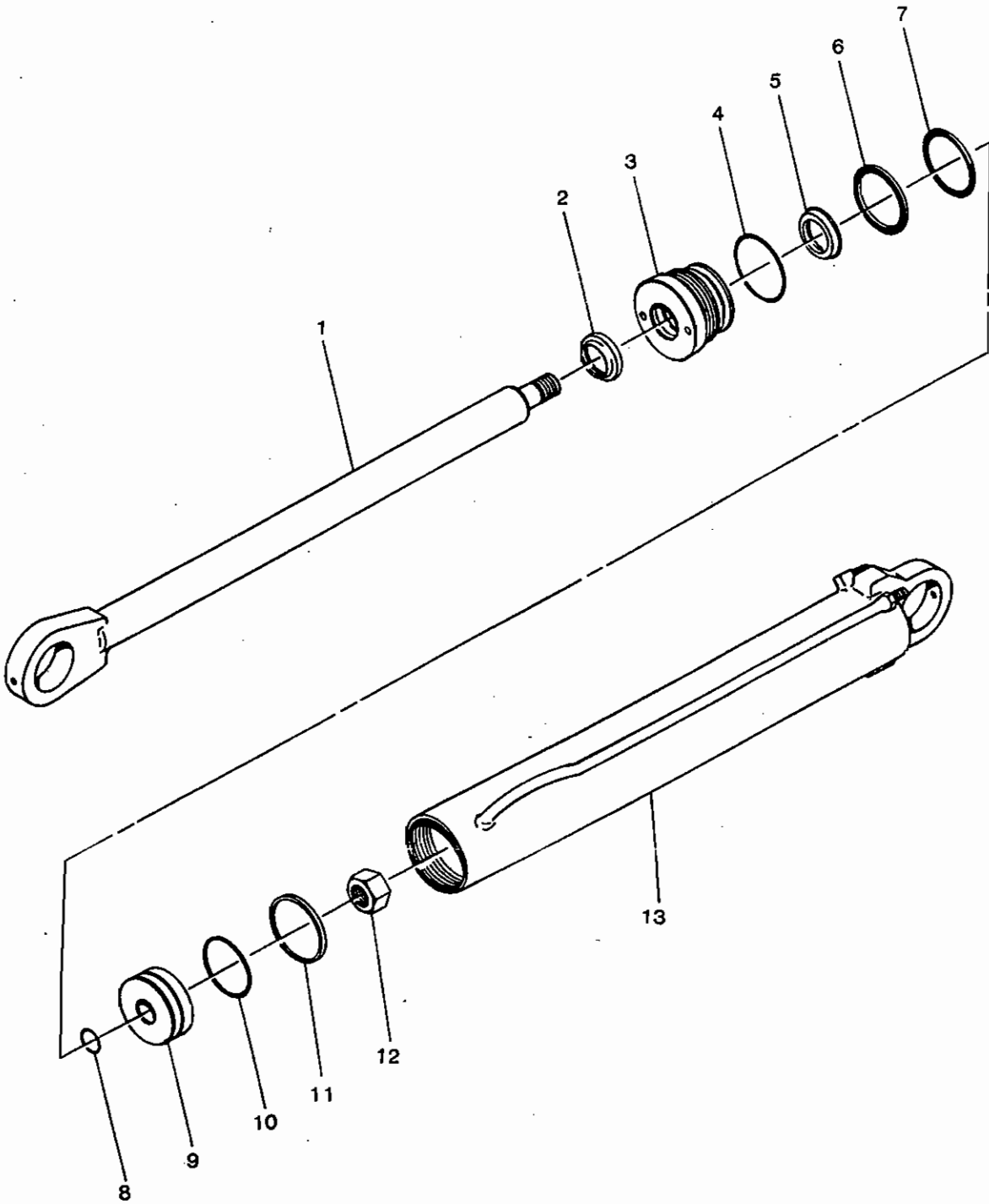
NOTE:

- (1) Cylinder gland #77441 replaced cylinder gland #67957 effective 1-11-91. The part number is stamped on cylinder gland #77441.
- (2) O-Ring #45557 and back-up washer #45249 replaced poly pack seal #45533 to coincide with new cylinder gland #77441 effective 1-11-91.
- (3) Seal Kit #45538 includes all parts marked with an asterisk (*). Parts are not sold separately.

4876
4-17-96-6

CYLINDER ASSEMBLY

ASSEMBLY #68268



5341 8-24-90

CYLINDER ASSEMBLY

ASSEMBLY #68268

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	69359	Cylinder Rod
2	1	45372*	Rod Wiper
3	1	77445 (1)	Cylinder Gland
4	1	4908*	O-Ring
5	1	45225*	Cylinder Rod Seal
6	1	4631* (2)	Back-Up Washer
7	1	45555* (2)	O-Ring
8	1	4641*	O-Ring
9	1	6731	Piston
10	1	4570*	O-Ring
11	1	4569*	Piston Ring
12	1	1483	Hex Nut
13	1	69356	Cylinder Tube

NOTE:

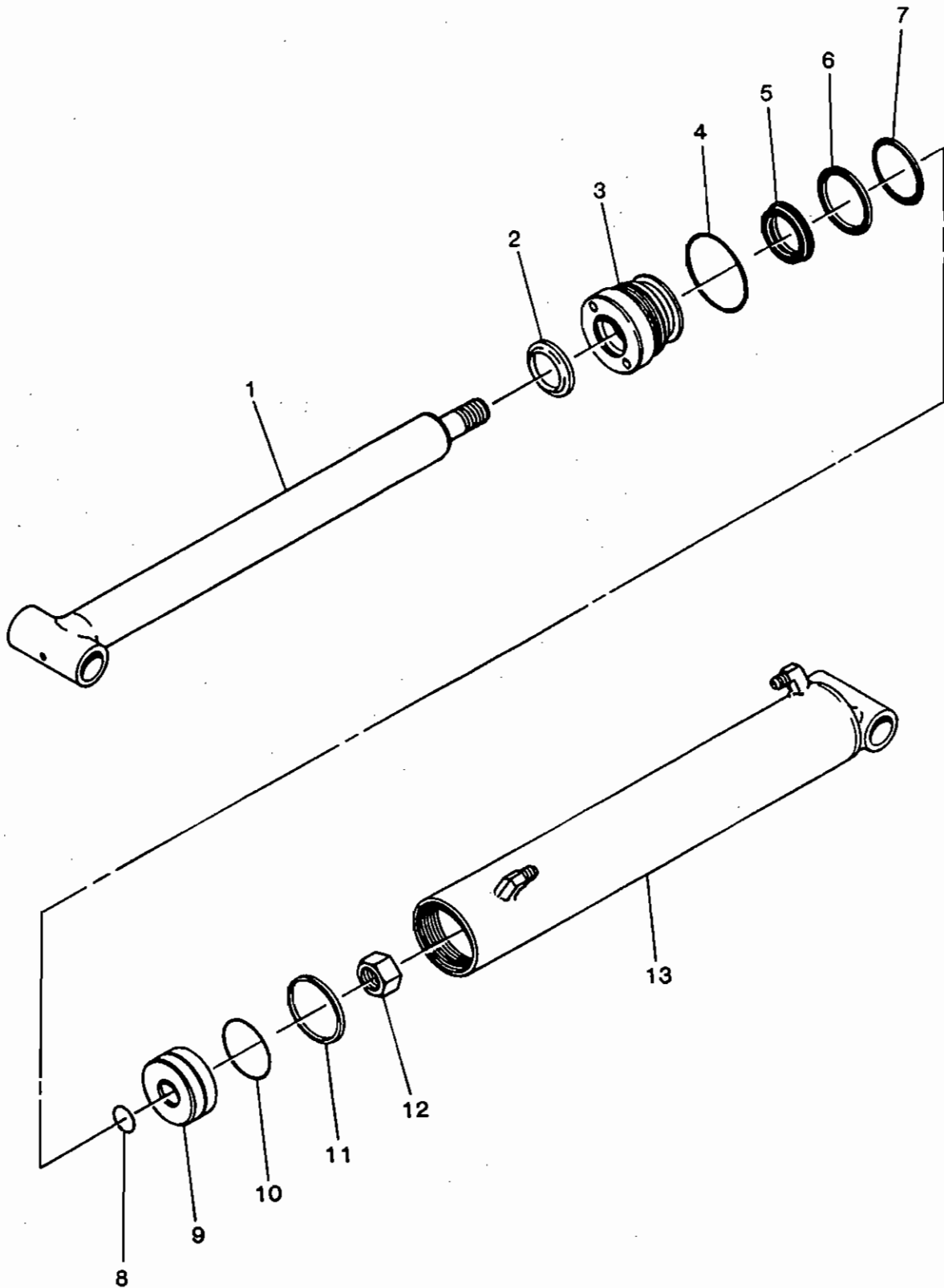
- (1) Cylinder gland #77445 replaced cylinder gland #67771 effective 1-11-91. The part number is stamped on cylinder gland #77445.
- (2) O-Ring #45555 and back-up washer #4631 replaced poly pack seal #45534 to coincide with new cylinder gland #77445 effective 1-11-91.
- (3) Seal Kit #45539 includes all parts marked with an asterisk (*). Parts are not sold separately.

5342

4-17-96-4

CYLINDER ASSEMBLY

ASSEMBLY #68269



5335 8-24-90

CYLINDER ASSEMBLY

ASSEMBLY #68269

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	64675	Cylinder Rod
2	1	45370*	Rod Wiper
3	1	77442 (1)	Cylinder Gland
4	1	4570*	O-Ring
5	1	45119*	Cylinder Rod Seal
6	1	45249* (2)	Back-Up Washer
7	1	45557* (2)	O-Ring
8	1	4641*	O-Ring
9	1	64525	Piston
10	1	45250*	O-Ring
11	1	45251*	Piston Ring
12	1	1483	Hex Nut
13	1	69366	Cylinder Tube

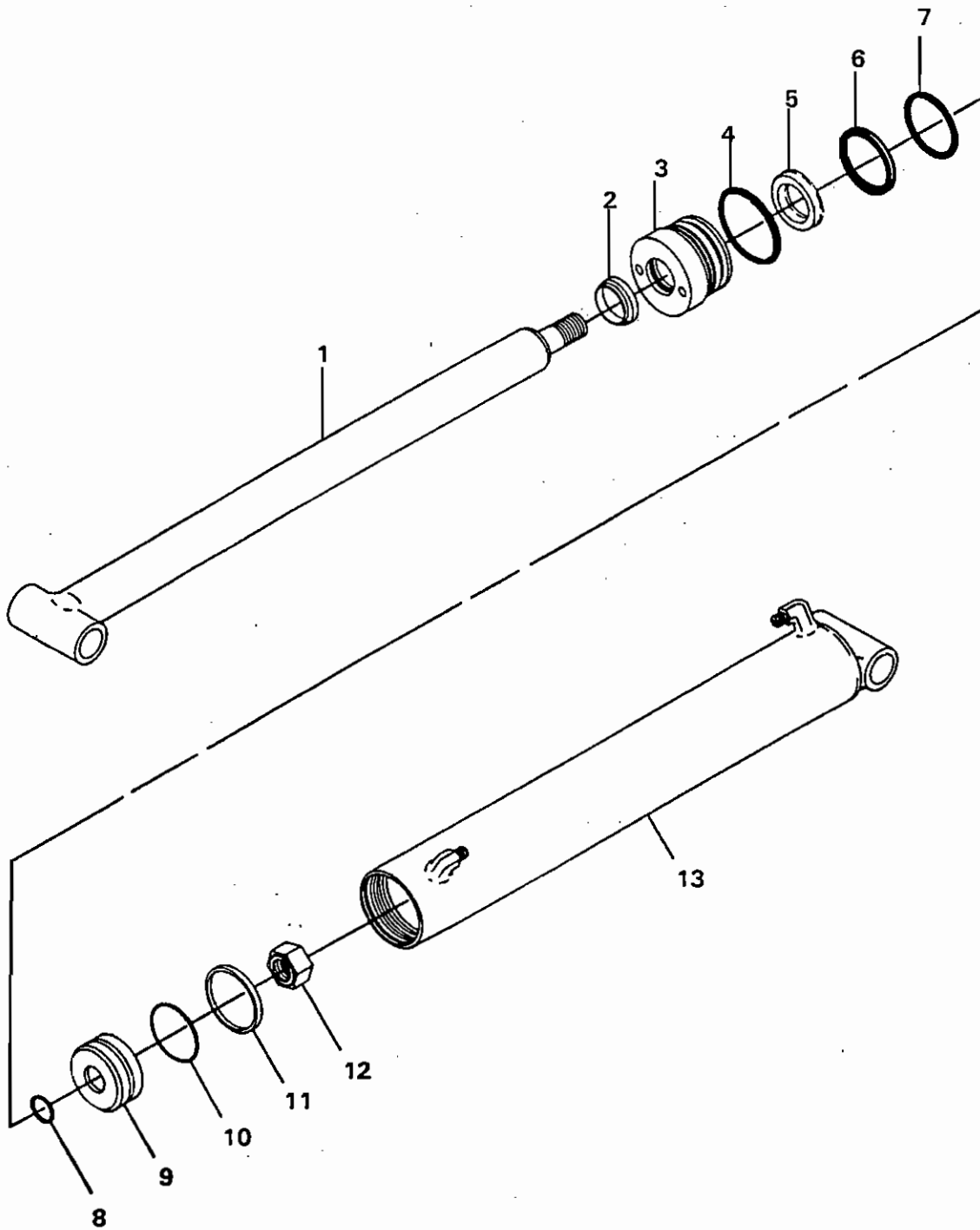
NOTE:

- (1) Cylinder gland #77442 replaced cylinder gland #67770 effective 1-11-91. The part number is stamped on cylinder gland #77442.
- (2) O-Ring #45557 and back-up washer #45249 replaced poly pack seal #45533 to coincide with new cylinder gland #77442 effective 1-11-91.
- (3) Seal Kit #45537 includes all parts marked with an asterisk (*).
Parts are not sold separately.

5336
4-17-96-3

CYLINDER ASSEMBLY

ASSEMBLY #68270



CYLINDER ASSEMBLY

ASSEMBLY #68270

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	65020	Cylinder Rod
2	1	45370*	Rod Wiper
3	1	77442 (1)	Cylinder Gland
4	1	4570*	O-Ring
5	1	45119*	Cylinder Rod Seal
6	1	45249* (2)	Back-Up Washer
7	1	45557* (2)	O-Ring
8	1	4641*	O-Ring
9	1	64525	Piston
10	1	45250*	O-Ring
11	1	45251*	Piston Ring
12	1	1483	Hex Nut
13	1	69349	Cylinder Tube

NOTE:

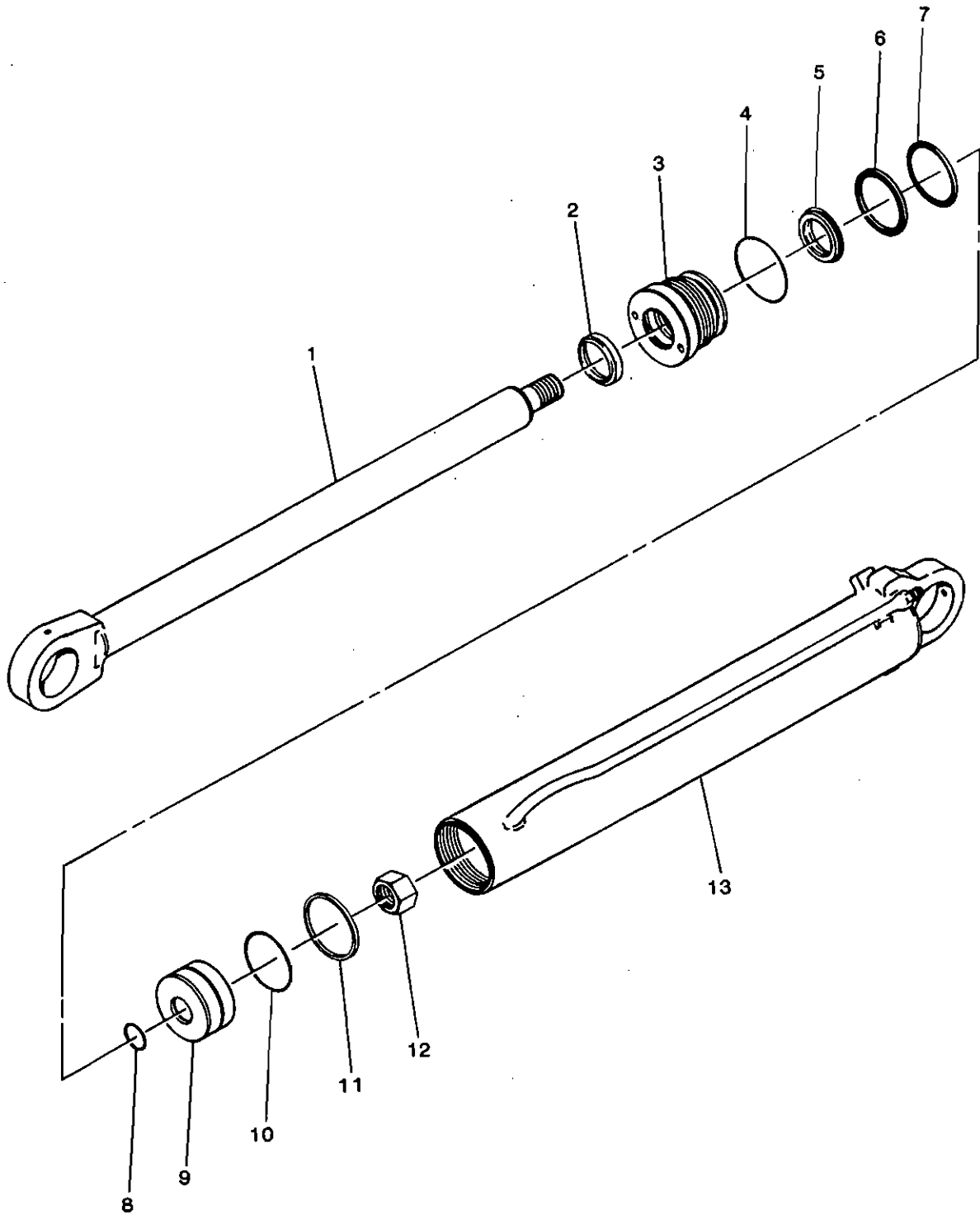
- (1) Cylinder gland #77442 replaced cylinder gland #67770 effective 1-11-91. The part number is stamped on cylinder gland #77442.
- (2) O-Ring #45557 and back-up washer #45249 replaced poly pack seal #45533 to coincide with new cylinder gland #77442 effective 1-11-91.
- (3) Seal Kit #45537 includes all parts marked with an asterisk (*).
Parts are not sold separately.

4878

4-17-96-5

CYLINDER ASSEMBLY

ASSEMBLY #68271



5339 8-24-90

CYLINDER ASSEMBLY

ASSEMBLY #68271

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	69364	Cylinder Rod
2	1	45370*	Rod Wiper
3	1	77443 (1)	Cylinder Gland
4	1	4908*	O-Ring
5	1	45119*	Cylinder Rod Seal
6	1	4631* (2)	Back-Up Washer
7	1	45555* (2)	O-Ring
8	1	4865*	O-Ring
9	1	55904	Piston
10	1	4570*	O-Ring
11	1	4569*	Piston Ring
12	1	1484	Hex Nut
13	1	69356	Cylinder Tube

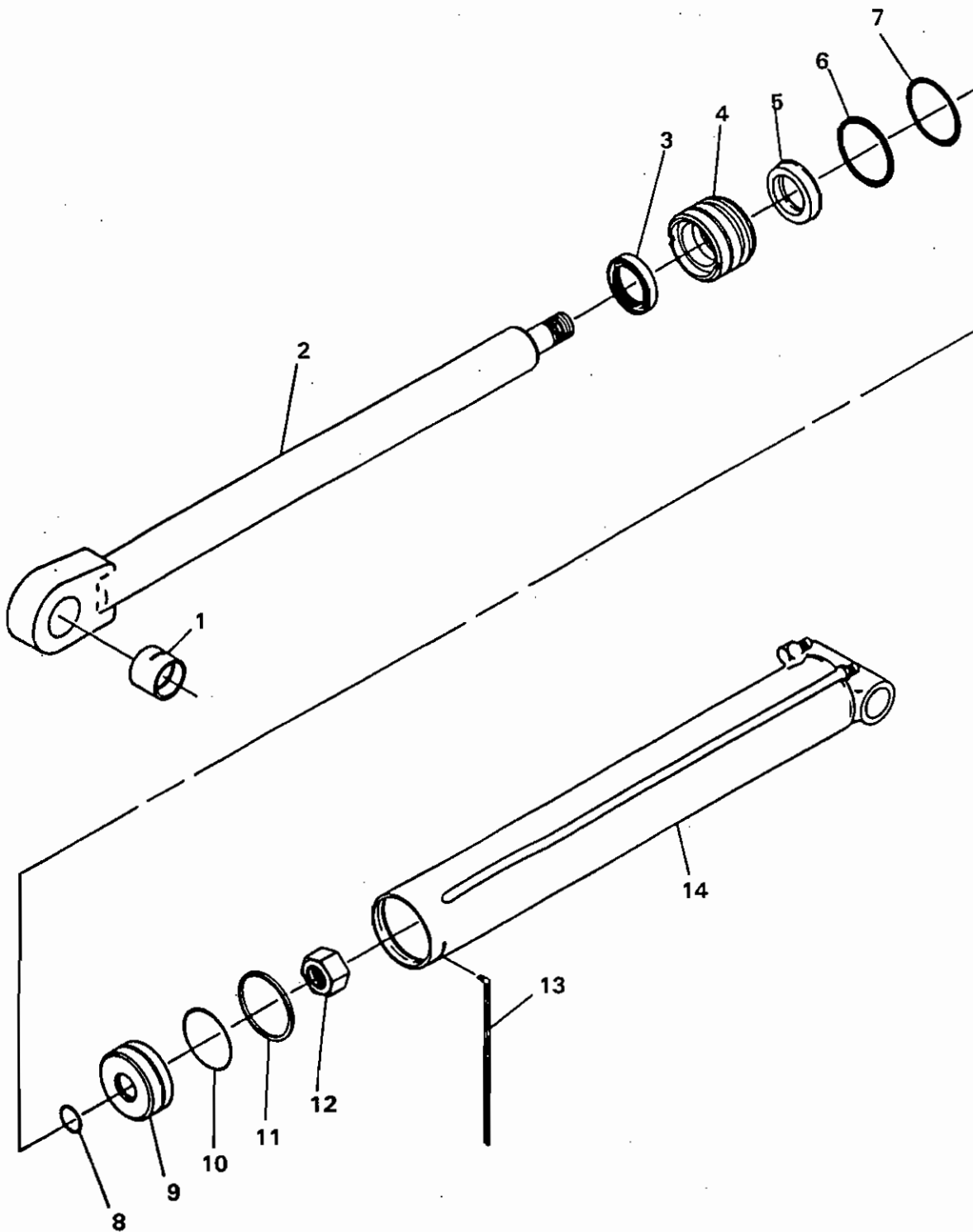
NOTE:

- (1) Cylinder gland #77443 replaced cylinder gland #67958 effective 1-11-91. The part number is stamped on cylinder gland #77443.
- (2) O-Ring #45555 and back-up washer #4631 replaced poly pack seal #45534 to coincide with new cylinder gland #77443 effective 1-11-91.
- (3) Seal Kit #45541 includes all parts marked with an asterisk (*). Parts are not sold separately.

5340
4-17-96-3

CYLINDER ASSEMBLY

ASSEMBLY #64521



CYLINDER ASSEMBLY

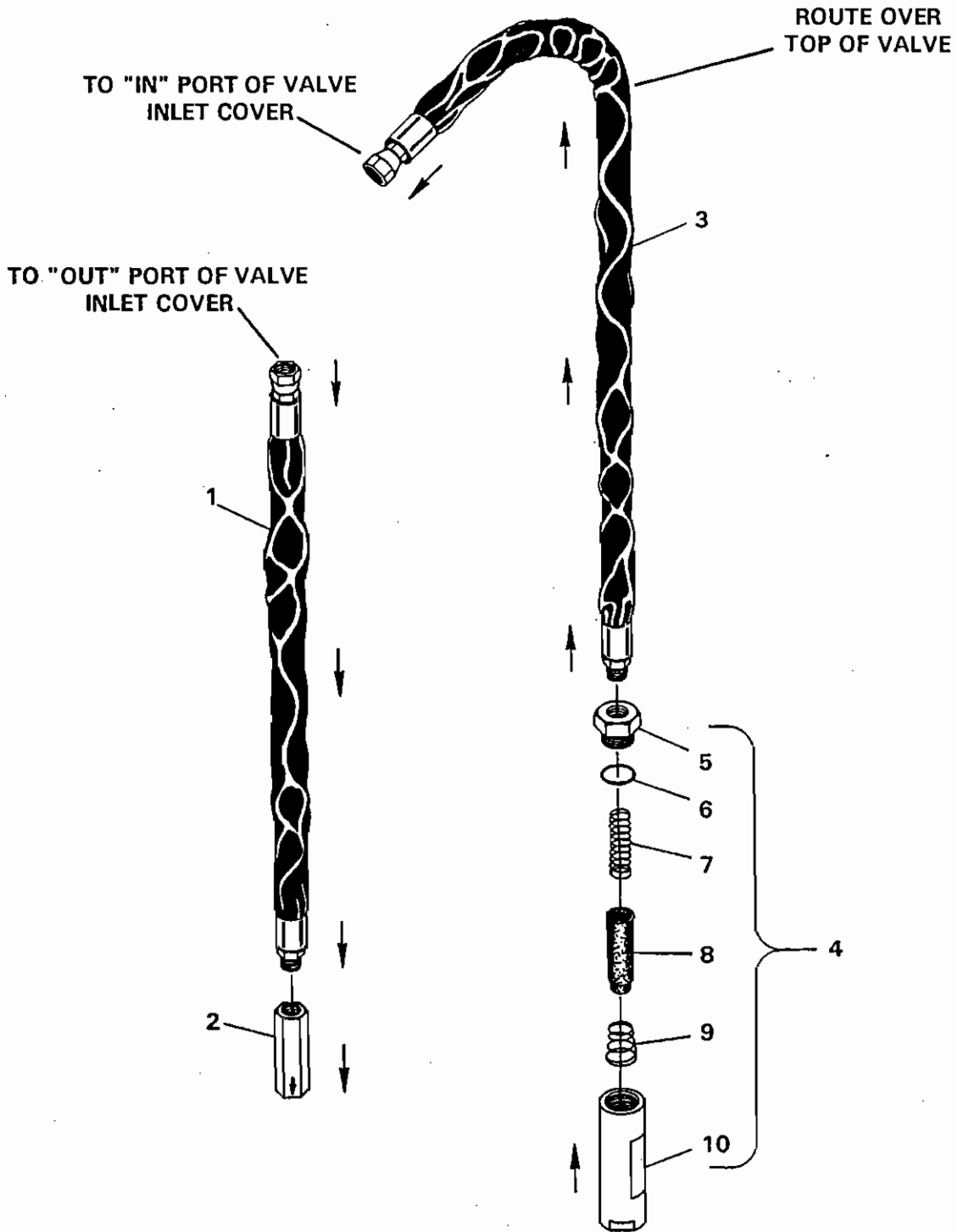
ASSEMBLY #64521

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	65353	Bushing
2	1	64537	Cylinder Rod
3	1	45118*	Rod Wiper
4	1	64524	Cylinder Gland
5	1	45119*	Cylinder Rod Seal
6	1	45249*	Back-Up Washer
7	1	45248*	O-Ring
8	1	4641*	O-Ring
9	1	64525	Piston
10	1	45250*	O-Ring
11	1	45251*	Piston Ring
12	1	1483	Hex Nut
13	1	65465*	Gland Retainer Rod/Ring
14	1	64522	Cylinder Tube

NOTE: Seal Kit #45537 includes all parts marked with an asterisk (*).
Parts are not sold separately.

SUB HYDRAULIC KIT

ASSEMBLY #64420



SUB HYDRAULIC KIT

ASSEMBLY #64420

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	35281	Hose Assembly .50" X 28" (SAE 100R2-2Wire) 8FJX-8MP-HS
2	1	45137	Check Valve
3	1	35287	Hose Assembly .50" X 36" (SAE 100R2-2Wire) 8FJX-8MP-HS
4	1	45132	Inline Filter (Includes Items 5 - 10)
5	1		End Plug
6	1	45405	O-Ring Seal
7	1	45135	Support Spring
8	1	45133	Filter Element (25 Micron)
9	1	45094	Spring
10	1		Filter Housing

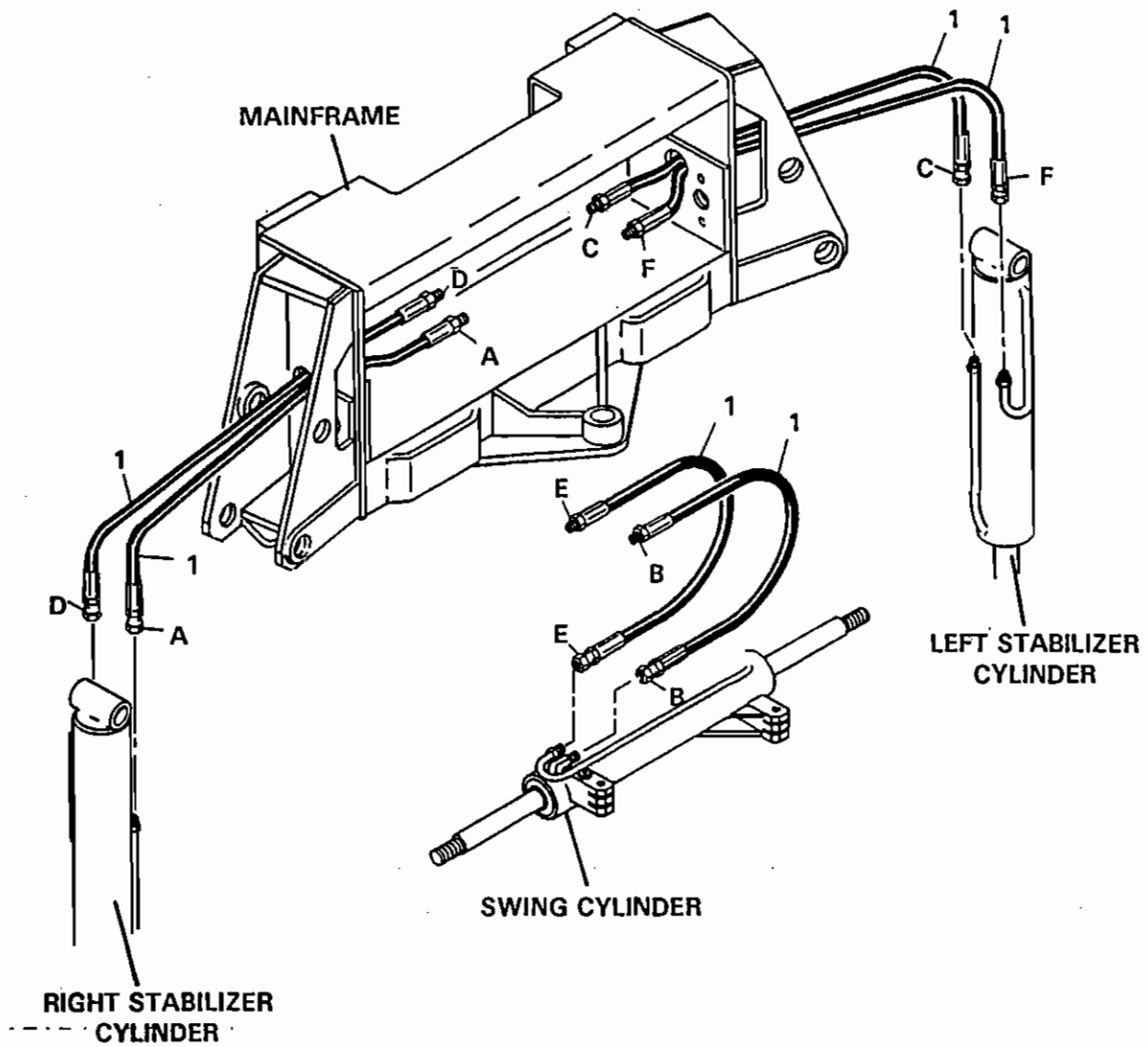
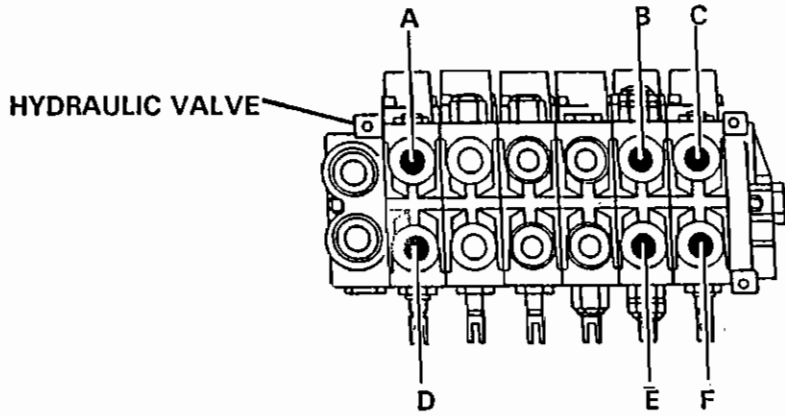
IMPORTANT: The arrows used on this diagram show the direction of hydraulic flow through the hydraulic kit. This flow pattern must be maintained for proper operation of the backhoe. Improper hose routing could result in possible damage to the backhoe or vehicle.

NOTE: Items without part numbers are not sold separately. These parts are only available in the complete inline filter assembly #45132.

4644
2-22-94-2

HOSE SET

MAINFRAME HOSES
ASSEMBLY #64919



HOSE SET

MAINFRAME HOSES
ASSEMBLY #64919

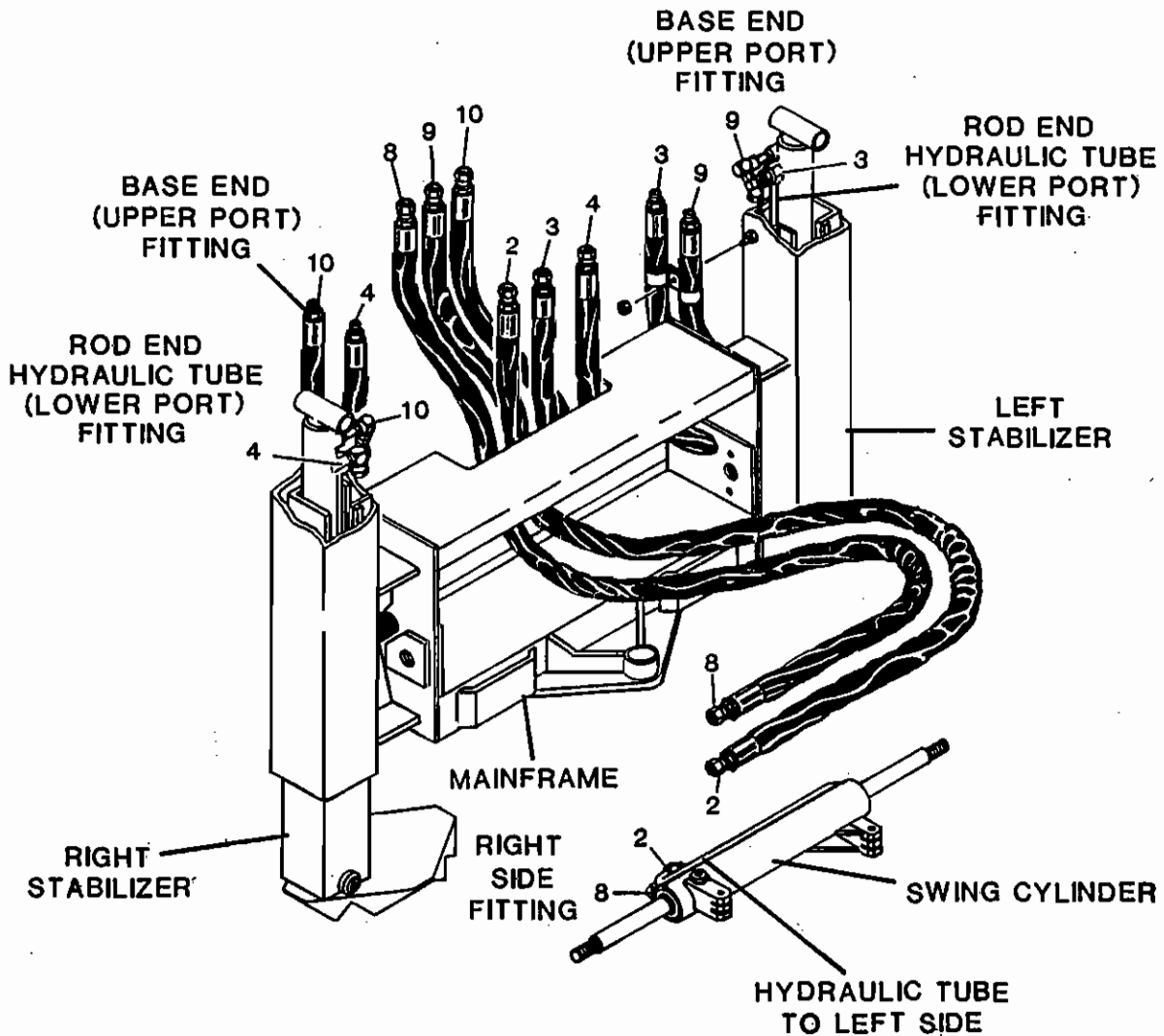
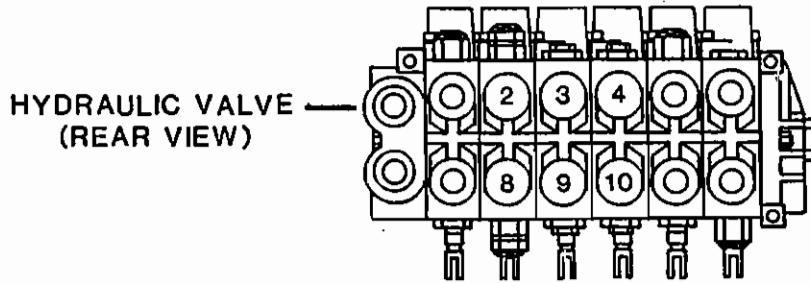
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	6	35754	Hose .25" X 24" (SAE 100R2-2Wire) 6FJX-6MJ

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 "B" runs from the hydraulic tube of the upper swing port "B" on the hydraulic valve, through the mainframe, and to the right side fitting of the swing cylinder.

5215
2-22-94-2

HOSE SET

MD2 MAINFRAME WITH VERTICAL STABILIZERS
ASSEMBLY #67456



5565 2-7-91

HOSE SET

MD2 MAINFRAME WITH VERTICAL STABILIZERS ASSEMBLY #67456

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	1	35754	Hose .25" X 24.00" (SAE 100R2-2 Wire) 6FJX-6MJ
3	1	35921	Hose Assembly .25" X 32.00" (SAE 100R2-2 Wire) 6MJ-4MP-HS
4	1	35921	Hose Assembly .25" X 32.00" (SAE 100R2-2 Wire) 6MJ-4MP-HS
8	1	35754	Hose .25" X 24.00" (SAE 100R2-2 Wire) 6FJX-6MJ
9	1	35921	Hose Assembly .25" X 32.00" (SAE 100R2-2 Wire) 6MJ-4MP-HS
10	1	35921	Hose Assembly .25" X 32.00" (SAE 100R2-2 Wire) 6MJ-4MP-HS

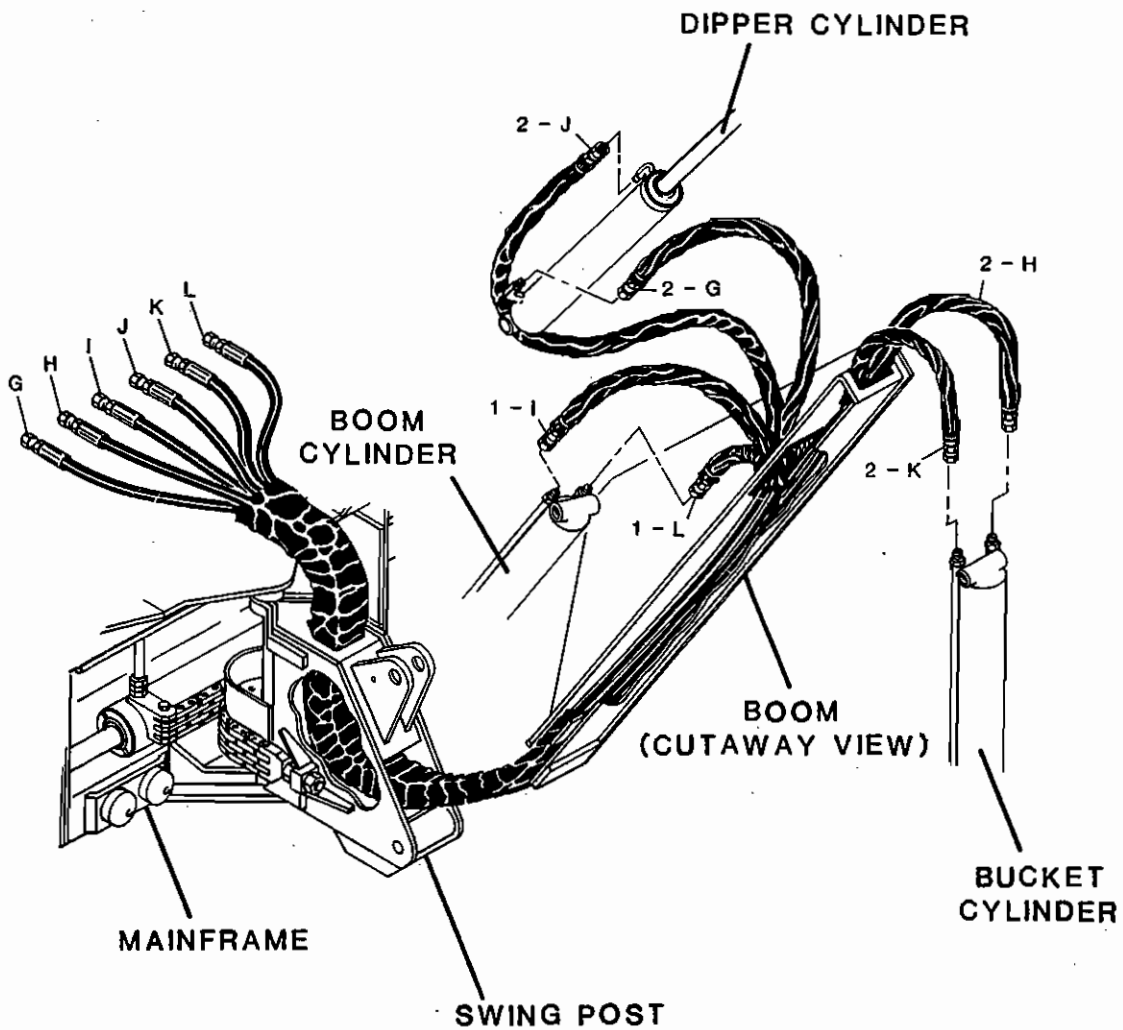
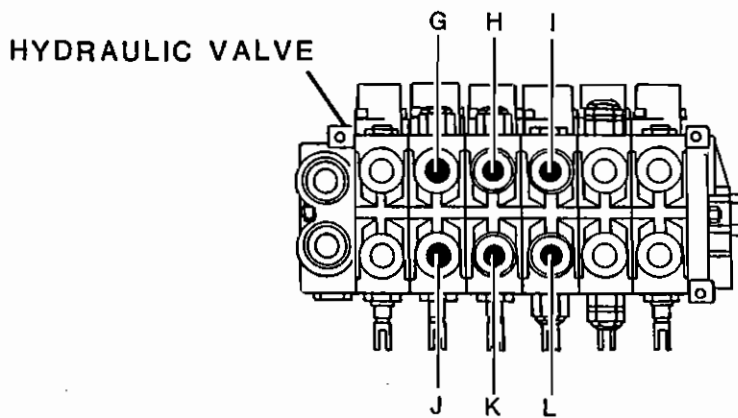
5566 2-7-91

NOTE: The diagrams indicate the hose routing through the backhoe, and the hose hookup to the cylinders. Valve port numbers correspond to the hose numbers.

HOSE SET

BOOM & DIPPER HOSES
ASSEMBLY #64904

5347 8-30-90



HOSE SET

BOOM & DIPPER HOSES
ASSEMBLY #64904

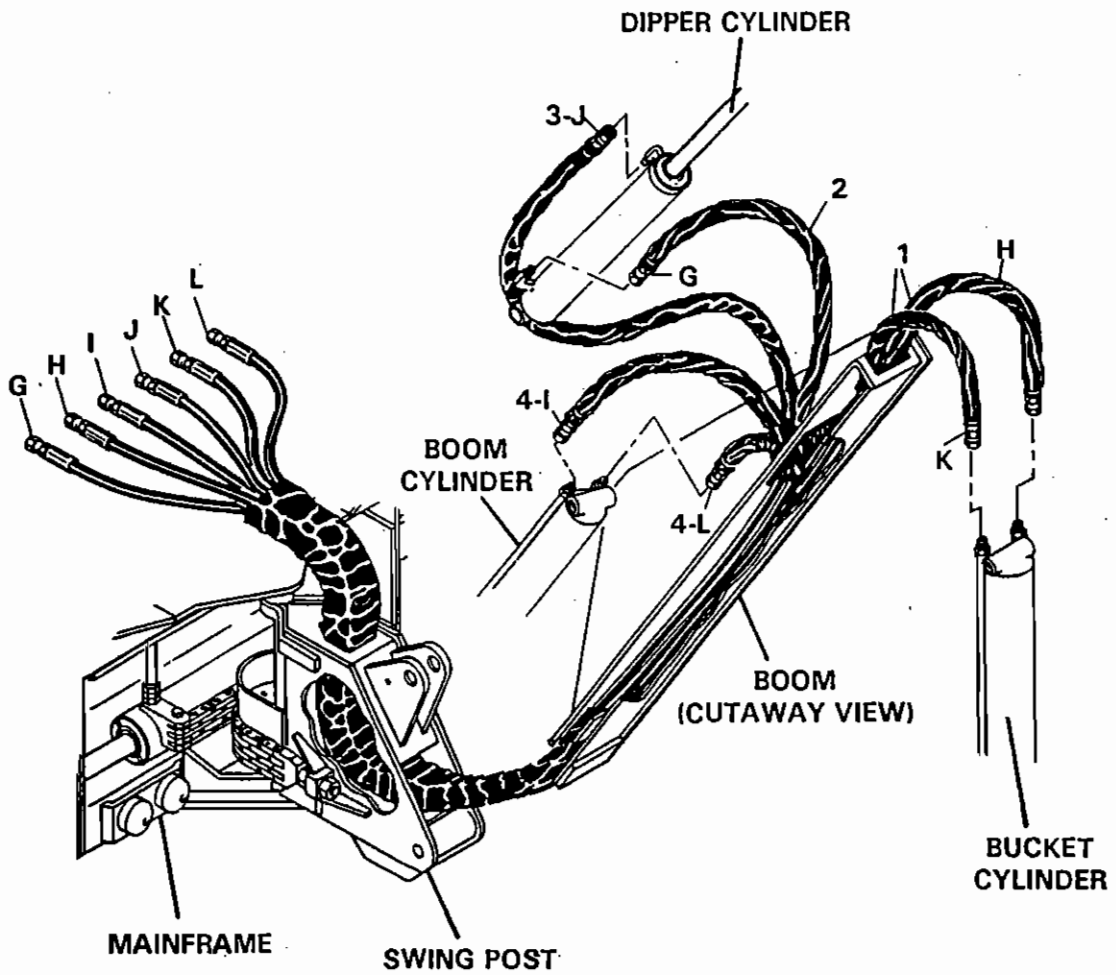
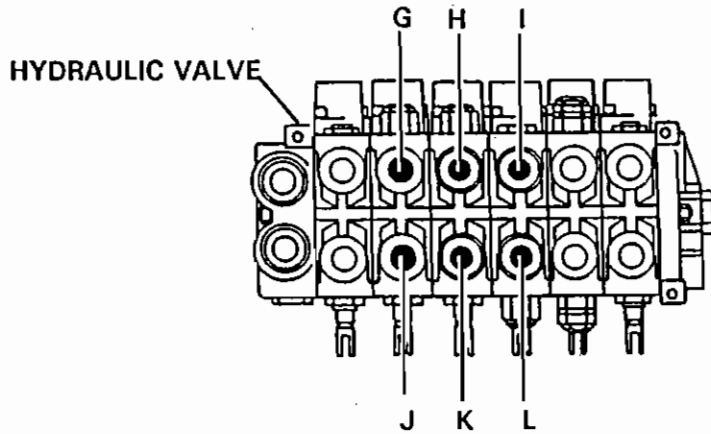
<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	35782	Hose .38" X 84" (SAE 100R2-2Wire) 6FJX-6FJX
2	4	35783	Hose .38" X 98" (SAE 100R2-2Wire) 6FJX-6FJX

5348 8-30-90

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 "I" runs from the upper boom port "I" on the hydraulic valve, over the main-frame, through the swing post, and to the rod end fitting of the boom cylinder.

HOSE SET

BOOM & DIPPER HOSES
ASSEMBLY #64905



HOSE SET

BOOM & DIPPER HOSES
ASSEMBLY #64905

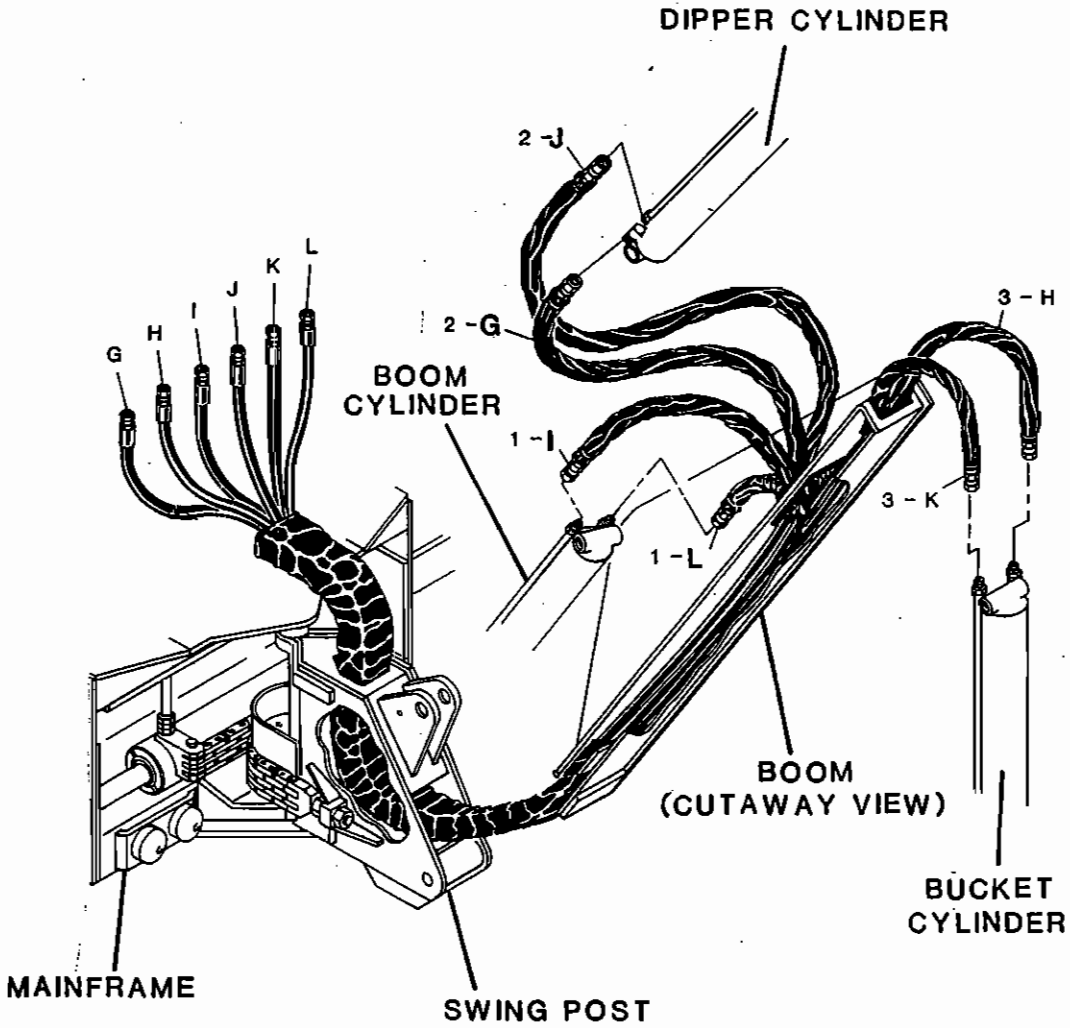
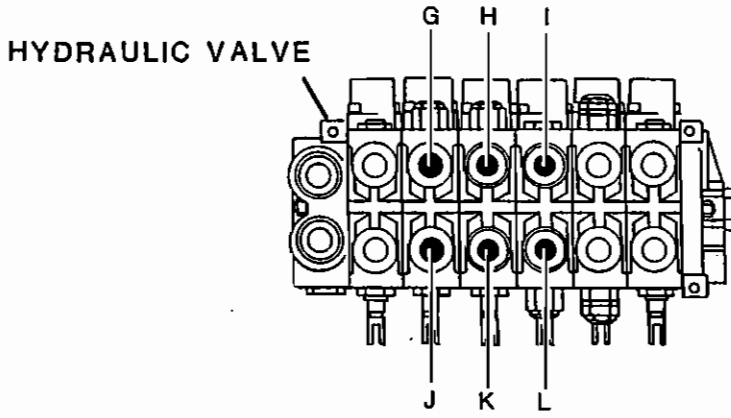
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	35764	Hose .38" X 112" (SAE 100R2-2Wire) 6FJX-6FJX
2	1	35783	Hose .38" X 98" (SAE 100R2-2Wire) 6FJX-6FJX
3	1	35763	Hose .38" X 102" (SAE 100R2-2Wire) 6FJX-6FJX
4	2	35762	Hose .38" X 85" (SAE 100R2-2Wire) 6FJX-6FJX

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 "1" runs from the upper boom port "1" on the hydraulic valve, over the mainframe, through the swing post, and to the rod end fitting of the boom cylinder.

5217
2-22-94-2

HOSE SET

BOOM & DIPPER HOSES
ASSEMBLY #64906



5350 1-18-94-2

HOSE SET

BOOM & DIPPER HOSES
ASSEMBLY #64906

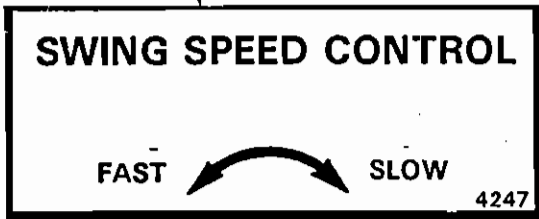
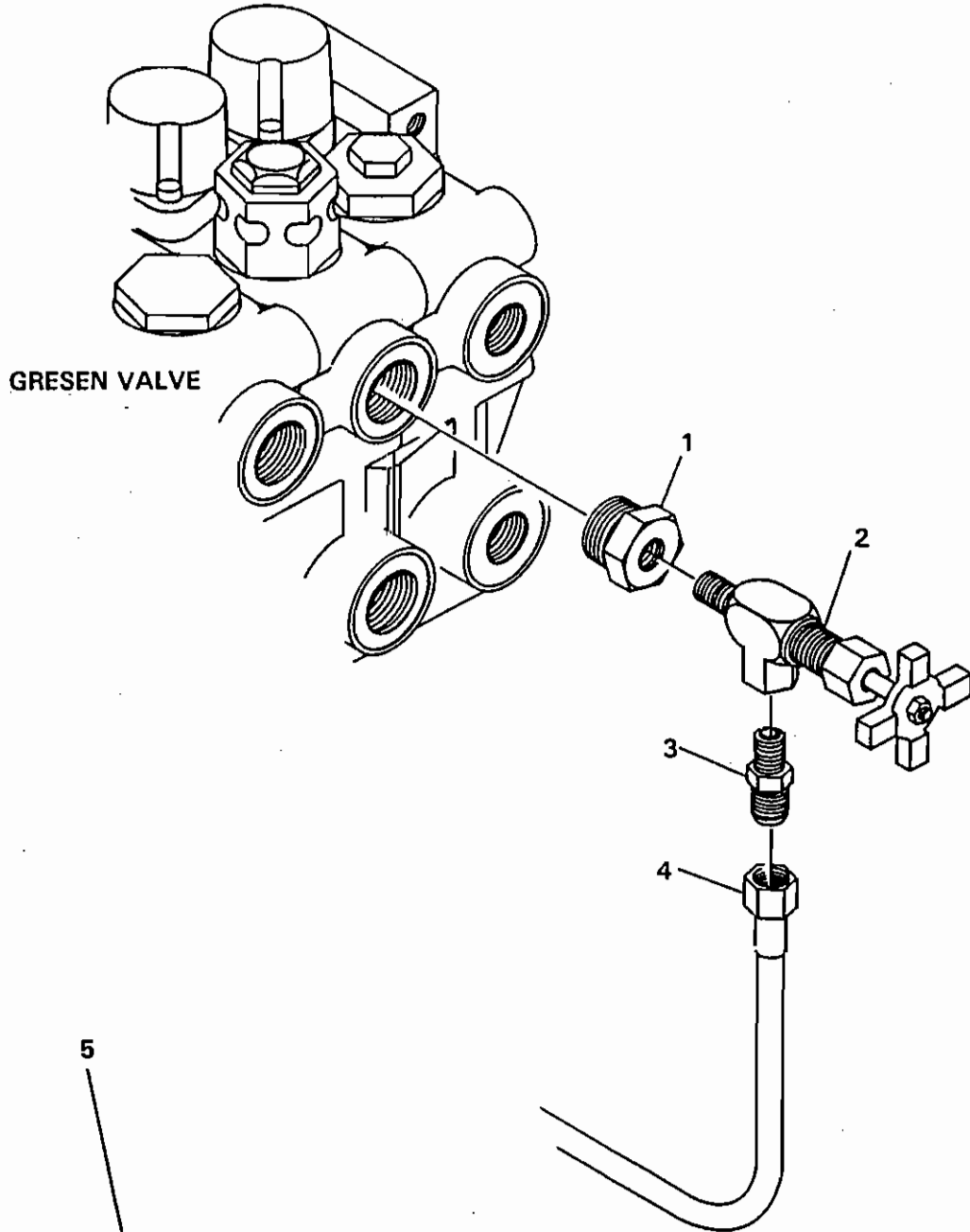
<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	35758	Hose .38" X 96" (SAE 100R2-2Wire) 6FJX-6FJX
2	2	35757	Hose .38" X 114" (SAE 100R2-2Wire) 6FJX-6FJX
3	2	35759	Hose .38" X 138" (SAE 100R2-2Wire) 6FJX-6FJX

5349 8-30-90

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 "I" runs from the upper boom port "I" on the hydraulic valve, over the main-frame, through the swing post, and to the rod end fitting of the boom cylinder.

SWING SPEED CONTROL

GRESEN VALVE
ASSEMBLY #58219



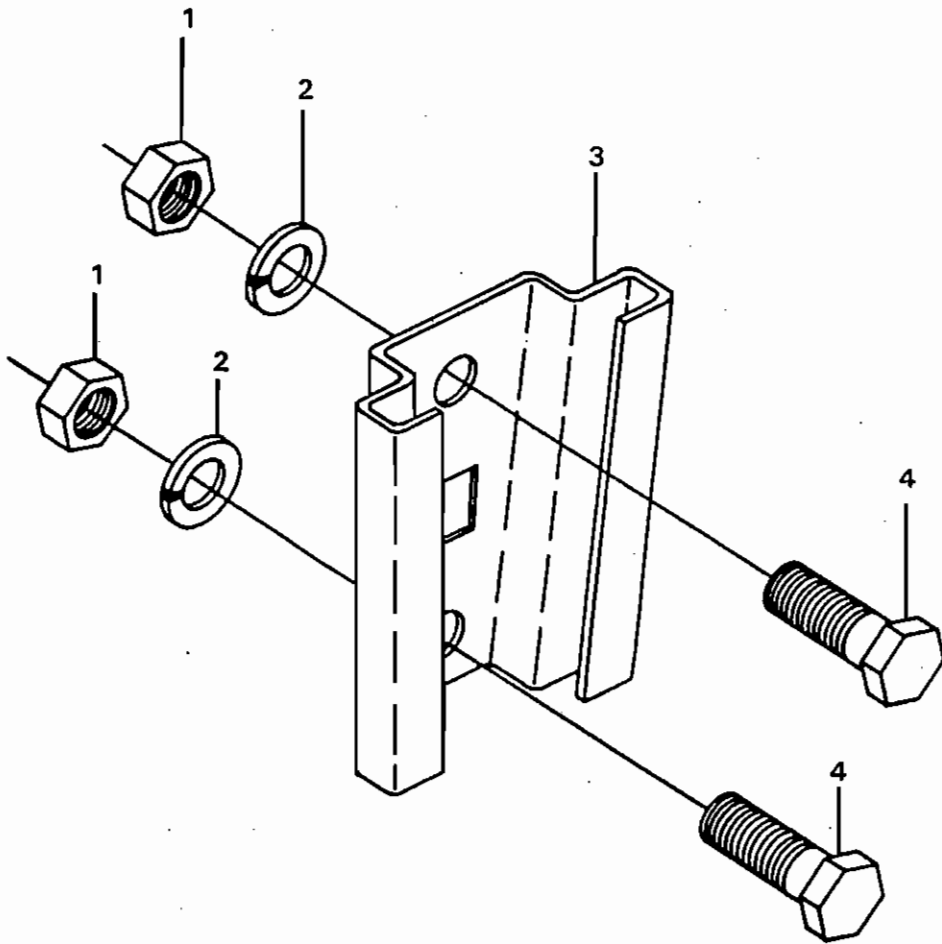
SWING SPEED CONTROL

GRESEN VALVE
ASSEMBLY #58219

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	3336	SAE O-Ring Boss 10MP-4FP
2	1	3185	Needle Valve
3	1	3137	Male Connector 4MP-6MJ
4	1	58220	Hydraulic Tube
5	1	4247	Decal

SMV CLIP ASSEMBLY

ASSEMBLY #65435



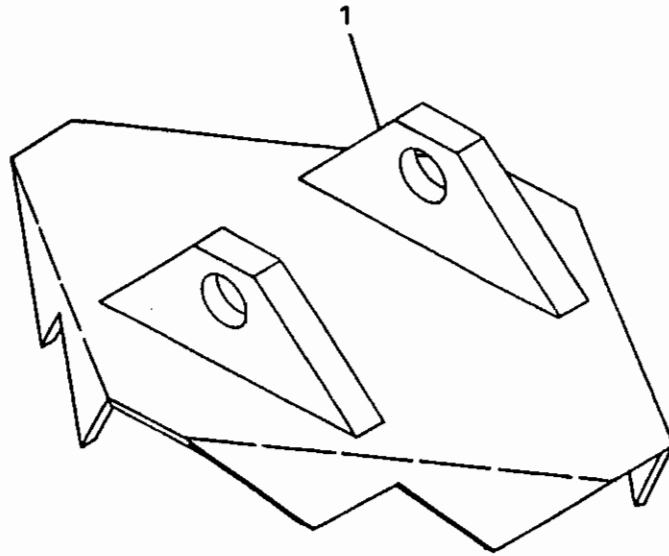
SMV CLIP ASSEMBLY

ASSEMBLY #65435

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	1225	.31" UNC Hex Nut
2	2	1502	.31" Lock Washer
3	1	7448	Slow Moving Vehicle Clip
4	2	1021	.31" UNC X .75" Hex Capscrew

STABILIZER PAD OPTIONS

GROUSER STABILIZER PAD
ASSEMBLY #64912



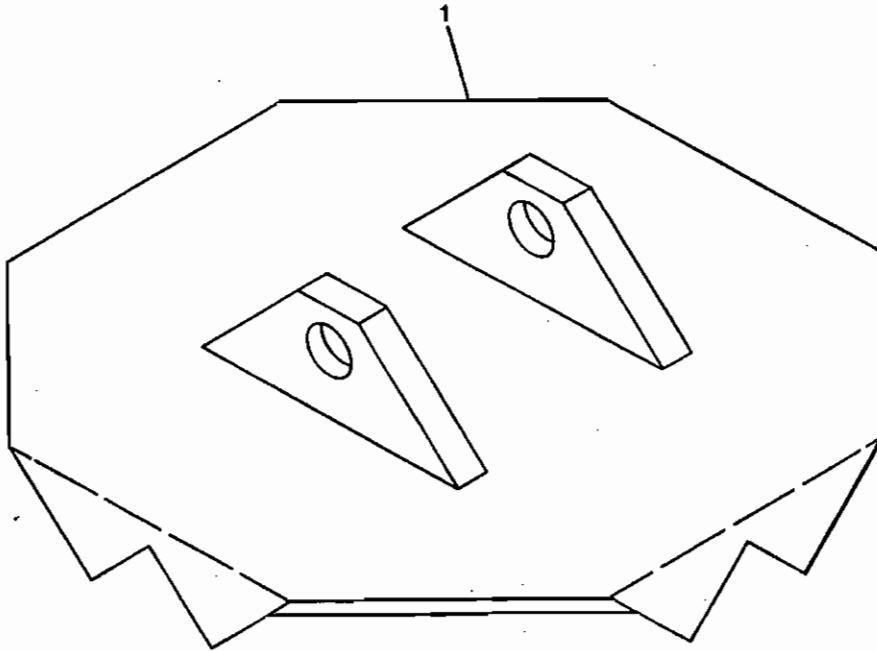
STABILIZER PAD OPTIONS

GROUSER STABILIZER PAD
ASSEMBLY #64912

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	64590	Grouser Stabilizer Pad

STABILIZER PAD OPTIONS

LARGE GROUSER STABILIZER PAD
ASSEMBLY #71306



5124 3-29-90

STABILIZER PAD OPTIONS

LARGE GROUSER STABILIZER PAD
ASSEMBLY #71306

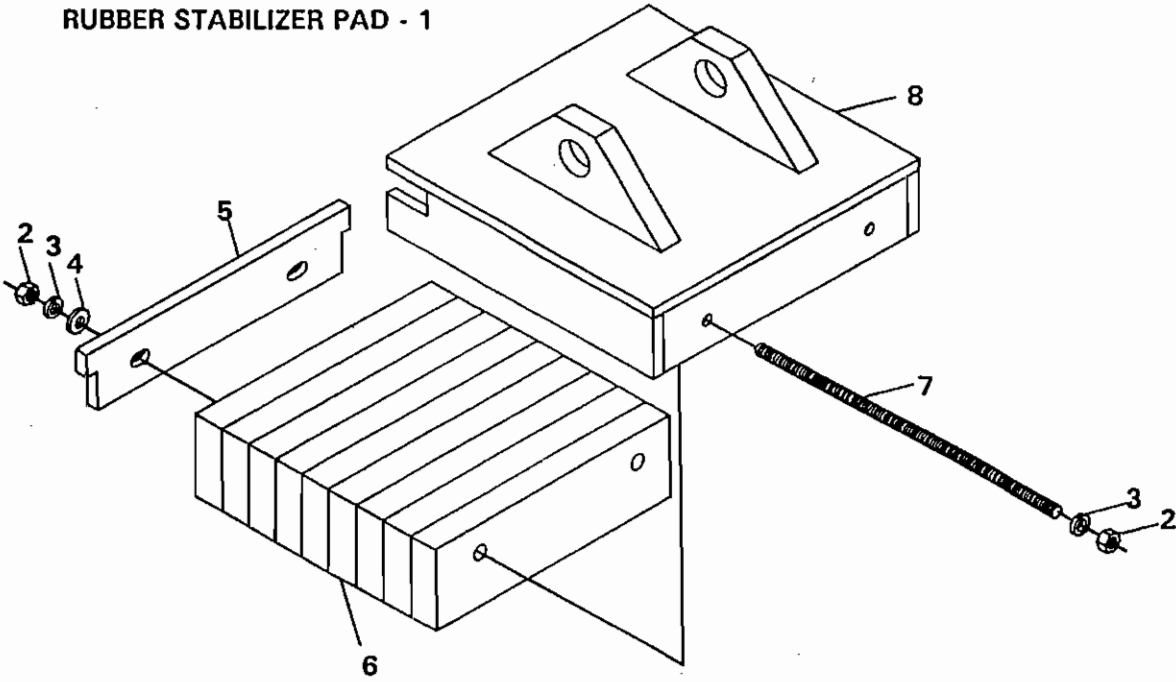
<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	71309	Large Grouser Stabilizer Pad

5125 3-29-90

STABILIZER PAD OPTIONS

RUBBER STABILIZER PAD
ASSEMBLY #64913

RUBBER STABILIZER PAD - 1



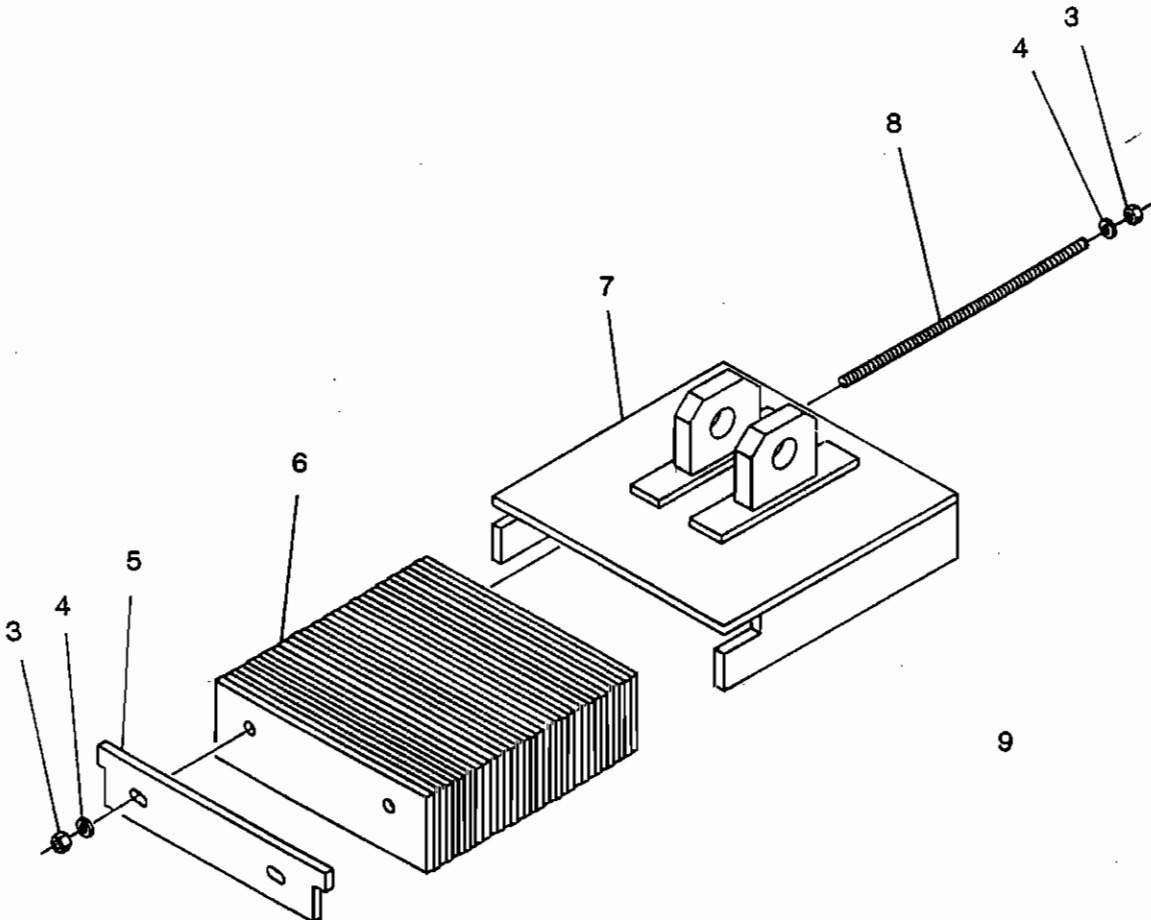
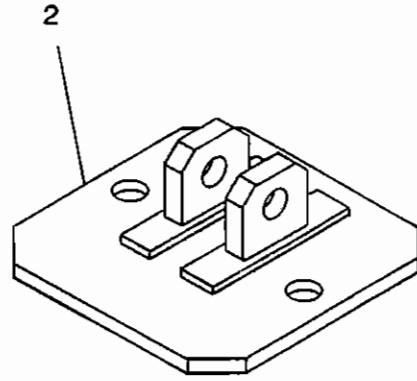
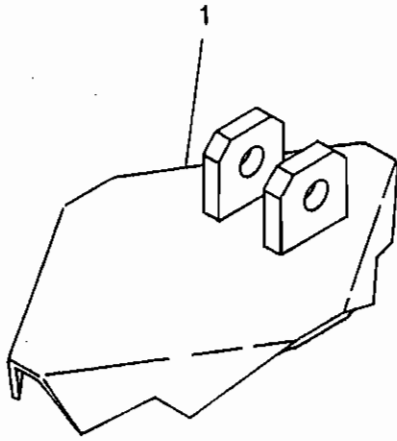
STABILIZER PAD OPTIONS

RUBBER STABILIZER PAD
ASSEMBLY #64913

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	64917	Rubber Stabilizer Pad (Includes Items 2 - 8)
2	4	1226	.38" UNC Hex Nut
3	4	1503	.38" Lock Washer
4	2	1514	.38" Flat Washer
5	1	51190	Slide Plate
6	1	64412	Rubber Strip Bundle
7	2	1661	Readi Rod
8	1	64918	Stabilizer Pad

STABILIZER PAD OPTIONS

VERTICAL STABILIZER PADS



4399 2-13-91-3

STABILIZER PAD OPTIONS

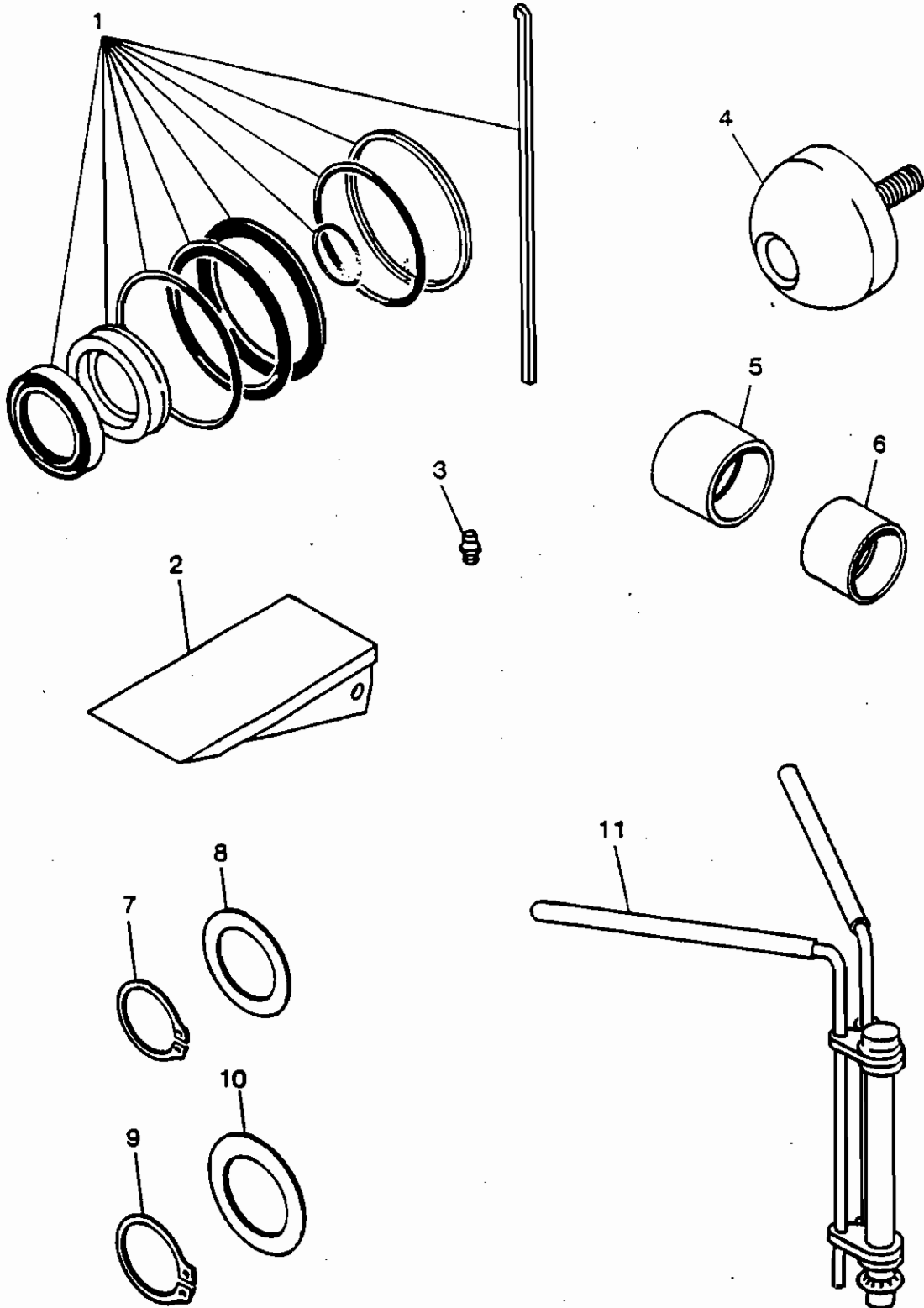
VERTICAL STABILIZER PADS

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	68576	Grouser Stabilizer Pad
2	2	68585	Flat Stabilizer Pad
3	4	1226	.38" UNC Hex Nut
4	4	1503	.38" Lock Washer
5	1	51190	Slide Plate
6	1	64412	Rubber Strip Bundle
7	1	68584	Stabilizer Pad
8	2	1661	.38" UNC X 10.50" Redi Rod
9	2	68588	Complete Rubber Stabilizer Pad Assembly - Includes Items 3 through 8

4400 2-13-91-3

FIRST LINE REPAIR KIT

ASSEMBLY #68723



5403 10-15-90

FIRST LINE REPAIR KIT

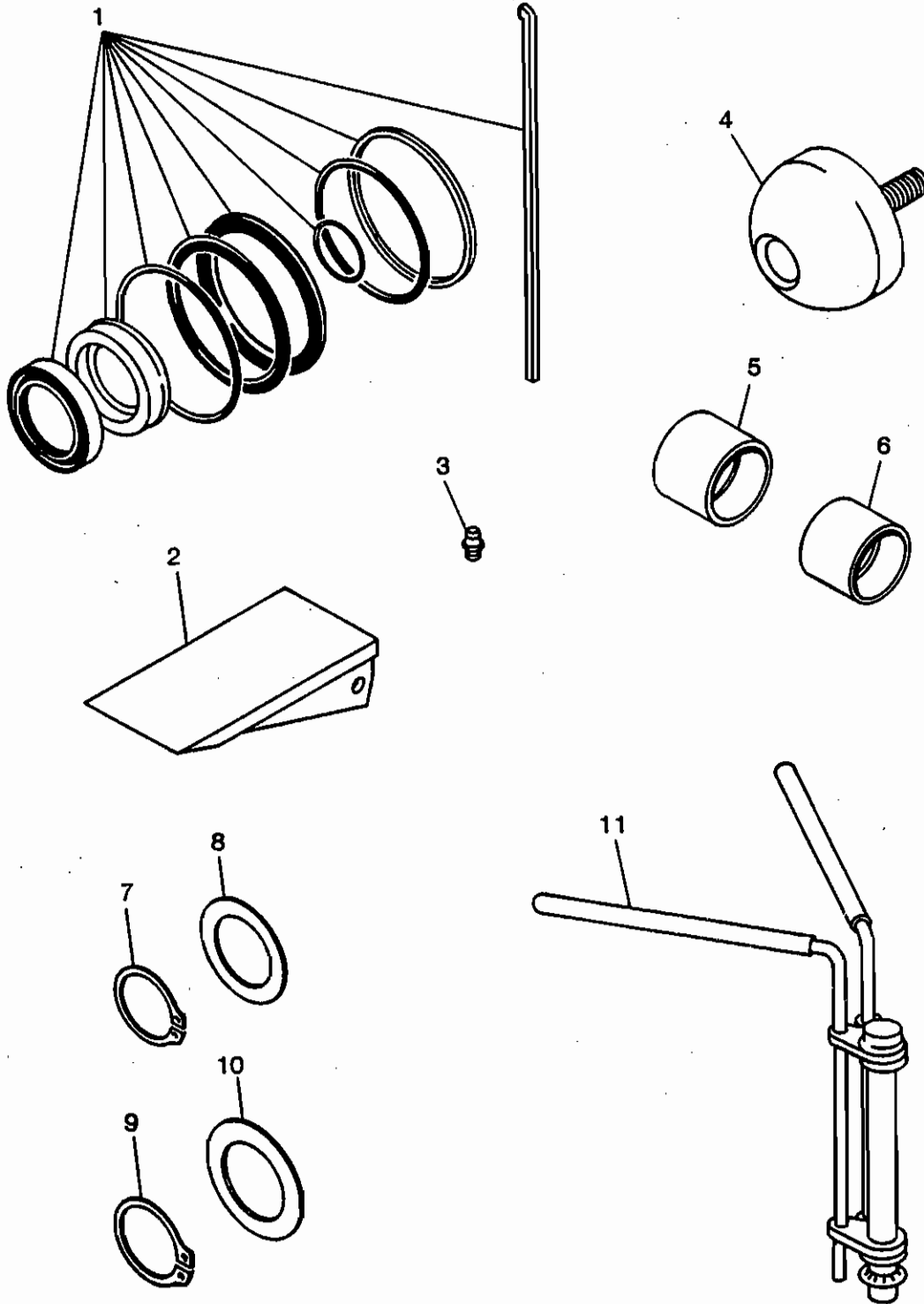
ASSEMBLY #68723

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	45263	Swing Cylinder Seal Kit
	1	45540	Stabilizer Cylinder Seal Kit
	1	45538	Boom Cylinder Seal Kit
	2	45537	Bucket/Dipper Cylinder Seal Kit
2	4	55088	Bucket Tooth
3	4	6616	Grease Zerk
4	1	6886	Rubber Bumper
5	2	6355	Bushing 1.38" I.D.
6	2	51036	Bushing 1.25" I.D.
7	4	1652	Snap Ring 1.25" I.D.
8	4	57693	Thrust Washer 1.25" X .078"
9	4	1650	Snap Ring 1.38" I.D.
10	4	6623	Thrust Washer 1.38" X .031"
11	1	65349	Cylinder Seal Install-Tool

5404 1-30-91-2

FIRST LINE REPAIR KIT

ASSEMBLY #68724



5218 5-23-90

FIRST LINE REPAIR KIT

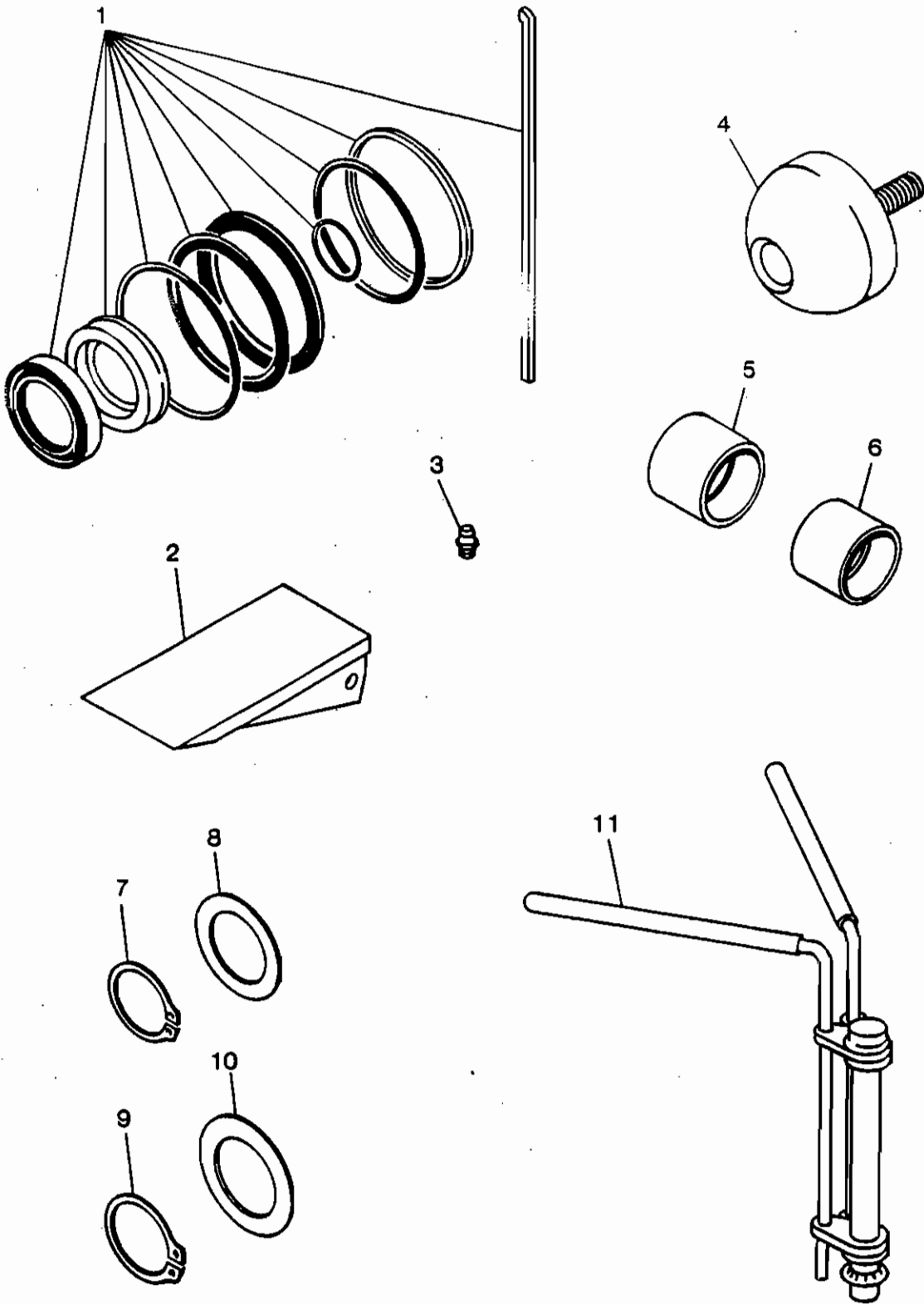
ASSEMBLY #68724

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	45263	Swing Cylinder Seal Kit
	1	45540	Stabilizer Cylinder Seal Kit
	1	45538	Boom Cylinder Seal Kit
	2	45537	Bucket/Dipper Cylinder Seal Kit
2	4	55088	Bucket Tooth
3	4	6616	Grease Zerk
4	1	6886	Rubber Bumper
5	2	6355	Bushing 1.38" I.D.
6	2	51036	Bushing 1.25" I.D.
7	4	1652	Snap Ring 1.25" I.D.
8	4	57693	Thrust Washer 1.25" X .078"
9	4	1650	Snap Ring 1.38" I.D.
10	4	6623	Thrust Washer 1.38" X .031"
11	1	65349	Cylinder Seal Install-Tool

5219 1-30-91-2

FIRST LINE REPAIR KIT

ASSEMBLY #68725



5405 10-15-90

FIRST LINE REPAIR KIT

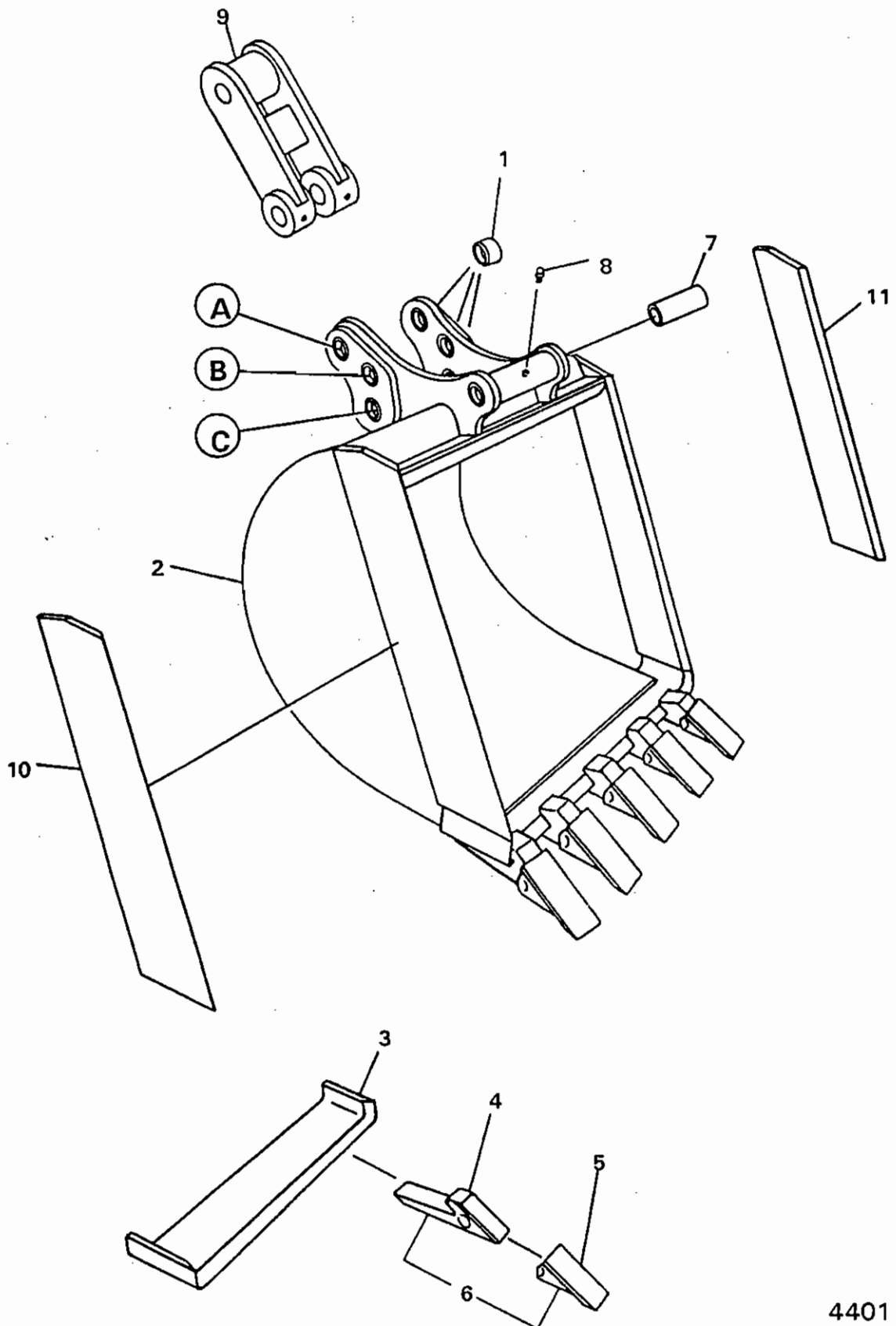
ASSEMBLY #68725

<u>NO.</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	45263	Swing Cylinder Seal Kit
	1	45540	Stabilizer Cylinder Seal Kit
	1	45539	Boom Cylinder Seal Kit
	1	45541	Dipper Cylinder Seal Kit
	1	45537	Bucket Cylinder Seal Kit
2	4	55088	Bucket Tooth
3	4	6616	Grease Zerk
4	1	6886	Rubber Bumper
5	2	6355	Bushing 1.38" I.D.
6	2	51036	Bushing 1.25" I.D.
7	4	1652	Snap Ring 1.25" I.D.
8	4	57693	Thrust Washer 1.25" X .078"
9	4	1650	Snap Ring 1.38" I.D.
10	4	6623	Thrust Washer 1.38" X .031"
11	1	65349	Cylinder Seal Install-Tool

5406 1-30-91-2

BUCKET ASSEMBLIES

POWER DIG BUCKETS



4401
2-22-94-6

BUCKET ASSEMBLIES

POWER DIG BUCKETS

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	8	68043	Bushing
2	1	67412	12" Bucket Weldment
		67416	16" Bucket Weldment
		67418	18" Bucket Weldment
		67420	20" Bucket Weldment
		67424	24" Bucket Weldment
		67436	36" Bucket Weldment
3	1	67399	12" Replacement Front Cutter Edge
		67393	16" Replacement Front Cutter Edge
		67387	18" Replacement Front Cutter Edge
		67338	20" Replacement Front Cutter Edge
		66387	24" Replacement Front Cutter Edge
		69415	36" Replacement Front Cutter Edge
4	Varies	55090	Replacement Tooth Shank
5	Varies	55088	Replacement Tooth Point
6	Varies	56073	Replacement Tooth Point and Shank Assembly
7	1	68482	Spacer
8	1	6616	Grease Zerk
9	Optional	51540	8.5" Bell Hole Bucket Link (Requires 3 Grease Zerks #6616)
10	1	67152	Replacement Right Side Cutter
11	1	67151	Replacement Left Side Cutter

NOTE:

Power dig buckets have three different bucket link positions for different digging needs.

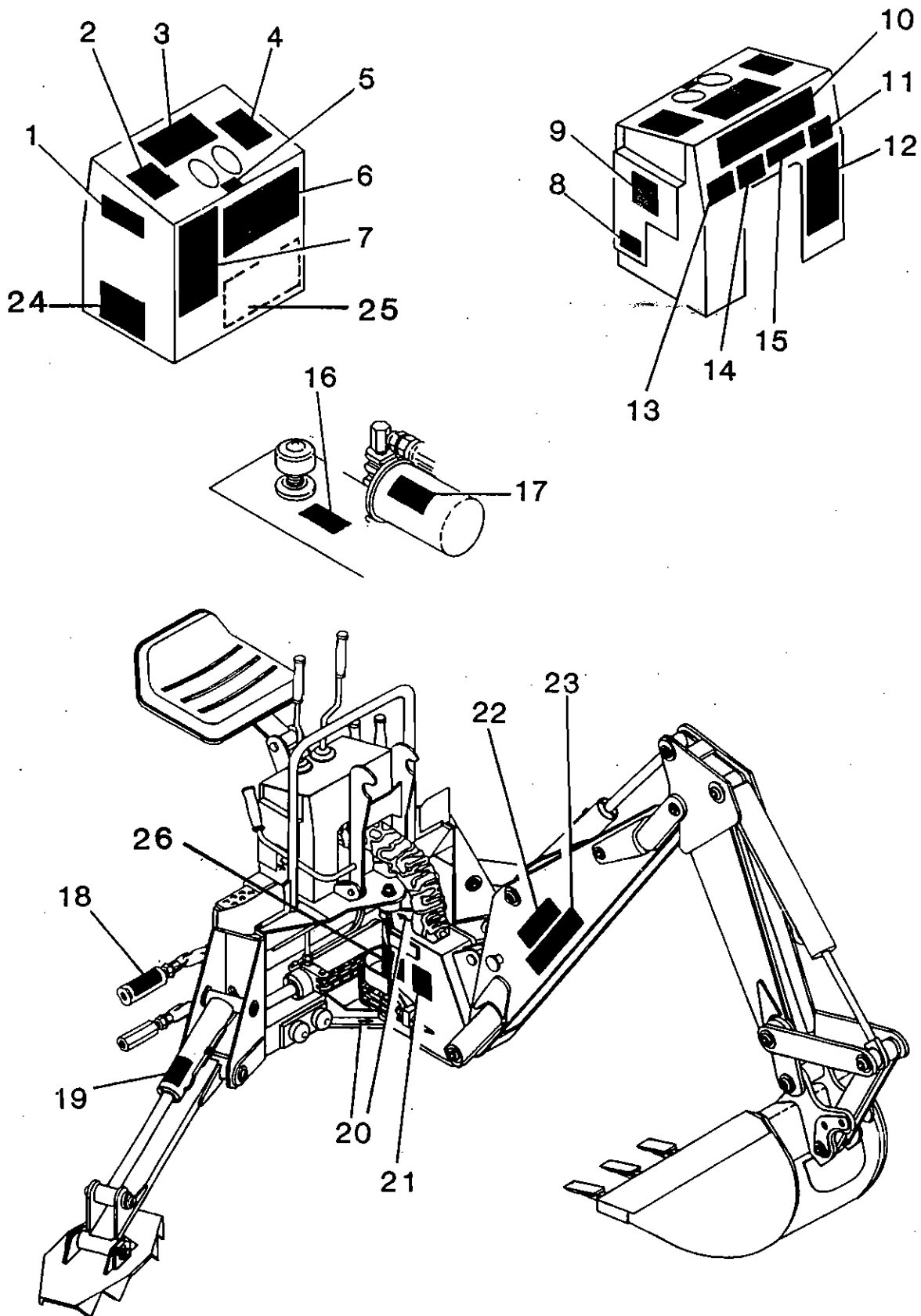
Position "A" power digging position for added digging force in hard ground.

Position "B" truck loading position for greater ease of spoil removal and higher dump height.

Position "C" standard digging position with a good balance of digging force and bucket rotation for general digging use.

DECALS

MD2 SERIES BACKHOES



5435 11-5-92-2

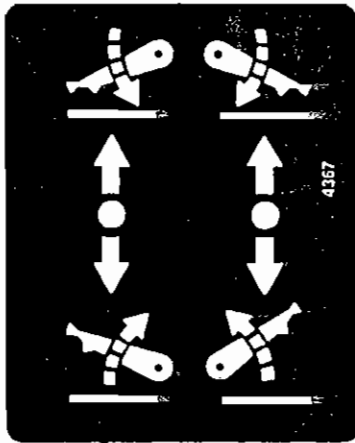
DECALS

MD2 SERIES BACKHOES

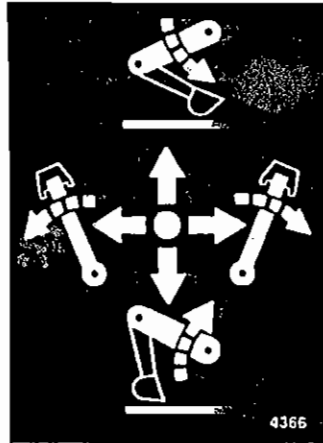
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	4350	ATI Serial No. Tag
2	1	4367	Stabilizer Controls Decal
3	1	4366	Operating Controls Decal
4	1	4493	Manlift Warning Decal
5	1	4338	Made In USA Decal
6	1	40150	Read Operator's Manual Warning Decal
7	1	4291	Quick-Coupler Decal
8	OPTIONAL	4170	Petcock Operation Decal
9	OPTIONAL	4270	Backhoe Owner's Notice Decal
10	1	4497	Bodily Injury Warning Decal
11	1	4496	Swing Post Caution Decal
12	1	4494	Operator's Warning Decal
13	1	4075	Tow Chain Caution Decal
14	1	4150	Preparation For Storage Decal
15	OPTIONAL	4247	Swing Speed Control Decal
16	OPTIONAL	4137	Change Oil Filter Decal
17	OPTIONAL	4138	Original Filter Decal
18	1	4271	Inline Filter Service Decal
19	2	4140	Bucket Contact Warning Decal
20	2	4084	Grease 8 Hours Decal
21	1	4136	Swing Chain Adjustment Decal
22	2	40083	Bradco Logo Decal - Black
		40092	Bradco Logo Decal - White
23	2	4326	8MD2 Model No. Decal - Black
		4358	8MD2 Model No. Decal - White
	2	4327	9MD2 Model No. Decal - Black
		4359	9MD2 Model No. Decal - White
	2	4328	11MD2 Model No. Decal - Black
		4360	11MD2 Model No. Decal - White
24	1	40151	High-Pressure Fluid Hazard Warning Decal
25	1	4141	Hose Hook-up Decal
26	2	40149	Pinch Points Danger Decal

5436

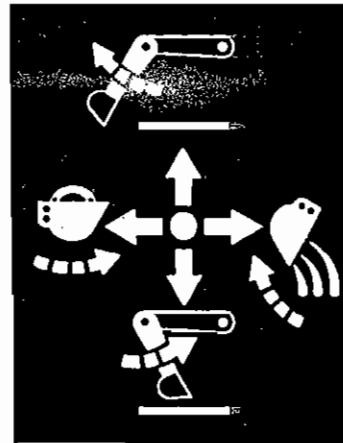
11-5-92-2



STABILIZER CONTROLS
PART #4367




OPERATING CONTROLS
PART #4366



5252 9-5-90-2

**HYDRAULIC QUICK COUPLER HOOK-UP
RECOMMENDED PRACTICE AND DEFINITIONS.**

1. Always install quick couplers so the oil flows out of the male tip and into the female coupler.

FEMALE SHOWN CLEAR  **FLOW DIRECTION**
MALE SHOWN SHADED

2. Quick couplers must be fully engaged to provide full freeflow. There are several reasons that may cause the coupler not to fully engage.

- A. Dirt may block the male tip from engaging.
- B. The coupler or male tip may be damaged or worn.
- C. The coupler halves may not be matched to fully open the valve when the coupler is engaged. (The dimension from the face of a male tip to the locking groove must match the corresponding coupler.)
- D. Some couplers with poppet style valve may not connect with ball type.

3. Coupler lock-up--Some quick couplers which may not have a "positive valve stop" or "Valve shield" feature may have a problem called "Lock Up" or "Flow Checking." This occurs when a valve closes during flow conditions, usually in return lines subjected to high surge flows, such as when quickly lowering a backhoe boom.

Surge flows -- A dramatic, almost instantaneous increase in fluid flow

NOTE: All couplers or halves supplied with our units have positive valve stop feature. Both coupler and male tip must have the feature or lock up may occur.

SUGGESTED PRACTICE

1. If possible, always use quick couplers, pairs of identical make (brand) and model or style numbers when coupling hoses.
2. Be sure the brand or model used does not include the design feature to prevent "flow checking", or "lock up" during surge flow conditions.
3. Always be scrupulously clean when coupling quick couplers.
4. After coupling, perform first backhoe operations at engine idle to ascertain proper flow exists. NOTE: Many of our models of backhoes include a relief valve vented to atmosphere (small tube down the back) which will vent excessive return flow oil pressure to the air. If you see oil squirting out of the vent, check for a restricted return flow coupling.

What if: 4291
In the event the coupler is blocked, even for just a instant, causing excessive back pressure build up in the valve assembly, you may experience valve failure. This will usually show up as stretched tie bolts, leaking spool seals or a ruptured casting.

QUICK-COUPLER
PART #4291



MADE IN USA
PART #4338

! WARNING

**NEVER USE A BACKHOE AS
A MANLIFT**

**Bradco backhoe geometry
and valving are not
suitable for manlifting
purposes. Do not under
any circumstances use your
backhoe for manlifting
purposes. Serious injury
or death may result.**

#4493

MANLIFT WARNING
PART #4493

DECALS

5251 9-5-90-2

WARNING

To avoid bodily injury:
Read Operator's Manual and follow instructions.
Operate backhoe control levers only from operator's seat.
Lower stabilizers and bucket to ground before leaving operator's seat.
Prevent instability or tipover of backhoe during attaching or detaching by first extending boom and dipperstick and lowering bucket to the ground.
Prevent accidental backhoe movement during transport by first engaging boom latch and swing pin lock.

#4497

BODILY INJURY WARNING
PART #4497

IMPORTANT
DO NOT ATTACH TOW CHAIN TO DIPPER OR BUCKET. DAMAGE TO BACKHOE MAY OCCUR.

4075

TOW CHAIN CAUT.
PART #4075

PREPARATION FOR STORAGE
LUBRICATE ALL GREASE POINTS.
LEAVE AS MANY CYLINDERS IN CLOSED POSITION AS POSSIBLE.
COVER ALL EXPOSED CYLINDER RODS WITH A LIGHT COAT OF GREASE.

4150

PREP. FOR STORAGE
PART #4150

NOTICE!
REPEATED SLAMMING OF SWING POST INTO STOPS WILL DAMAGE THE RUBBER BUMPERS WHICH ARE PROVIDED FOR INADVERTENT CONTACT ONLY.

#4496

SWING POST CAUTION
PART #4496

IMPORTANT
The backhoe bucket is capable of contacting this stabilizer and/or cylinder. Carefull operation will avoid backhoe damage.

4140

BUCKET CONTACT CAUTION
PART #4140 (2 REQ.)



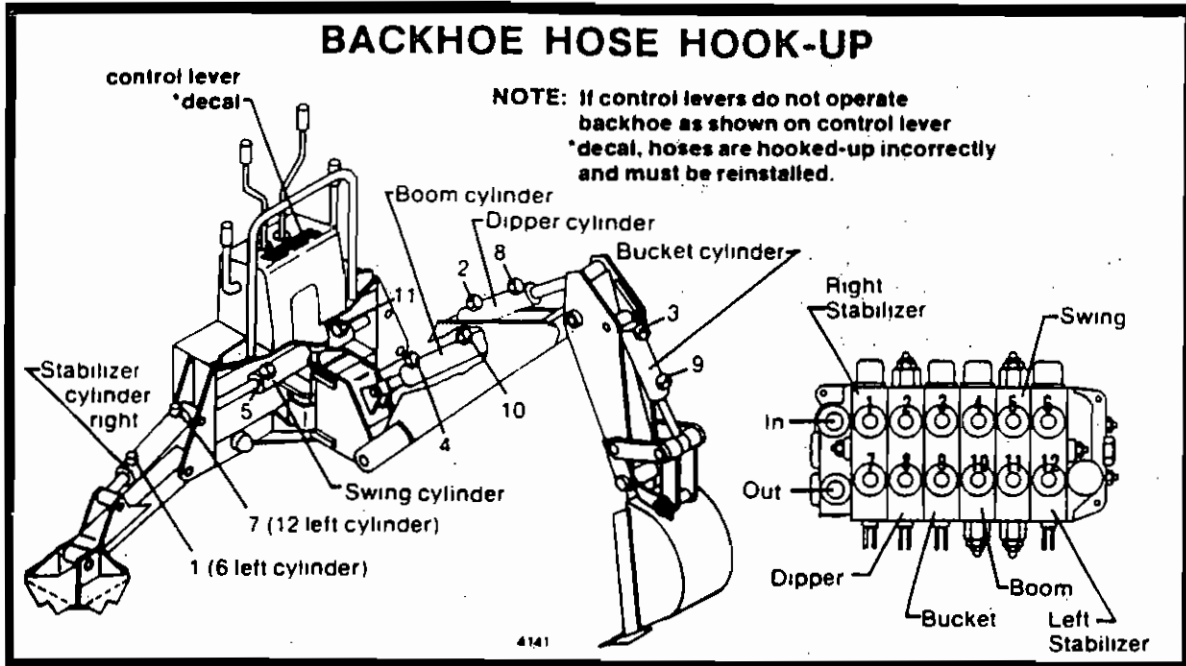
GREASE 8 HOURS
PART #4084
(2 REQ.)

WARNING

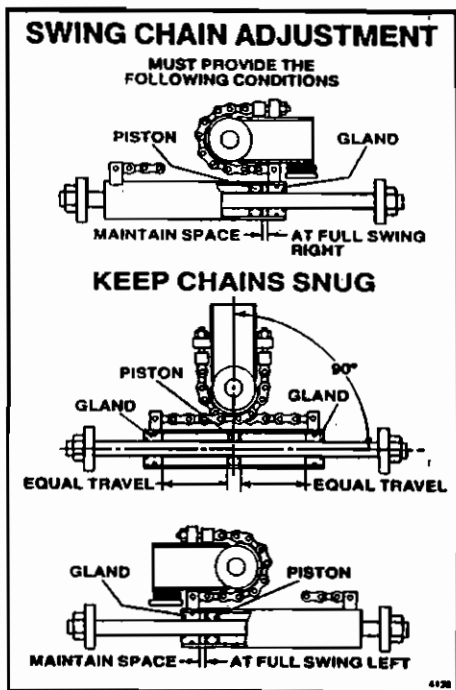
- THIS MACHINE IS DESIGNED TO BE OPERATED BY ONE OPERATOR. DO NOT CARRY PASSENGERS ON THIS UNIT.
- DO NOT OPERATE THIS MACHINE WITH GUARDS AND COVERS REMOVED.
- ALL OPERATORS SHOULD READ OPERATORS INSTRUCTION MANUAL OR BE THOROUGHLY TRAINED BEFORE OPERATING MACHINE.

#4494

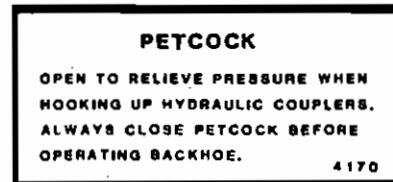
OPERATOR'S WARNING
PART #4494



**BACKHOE HOSE HOOK-UP
PART #4141**



**SWING CHAIN ADJUSTMENT
PART #4136**



**PETCOCK OPERATION
PART #4170 (OPTIONAL)**



**SWING SPEED CONTROL
PART #4247 (OPTIONAL)**

8MD2

8MD2 MODEL NO. (2 REQ.)
PART #4326 - BLACK
PART #4358 - WHITE

9MD2

9MD2 MODEL NO. (2 REQ.)
PART #4327 - BLACK
PART #4359 - WHITE

11MD2

11MD2 MODEL NO. (2 REQ.)
PART #4328 - BLACK
PART #4360 - WHITE

5442

11-4-92-2

BRADCO

5443 11-4-92-2

BRADCO LOGO (2 REQ.)
PART #40083 - BLACK
PART #40092 - WHITE

NOTICE
TO BACKHOE OWNERS
 Backhoes are heavy and impose heavy loads to the axle and wheel assemblies. Always keep wheel tread setting at the narrowest setting available.
 -To avoid premature failure of axles or wheels. 4270

IMPORTANT
ORIGINAL FILTER
REPLACE AFTER
2½ HOURS USE

BACKHOE OWNER'S
NOTICE
PART #4270

ORIGINAL FILTER
PART #4138

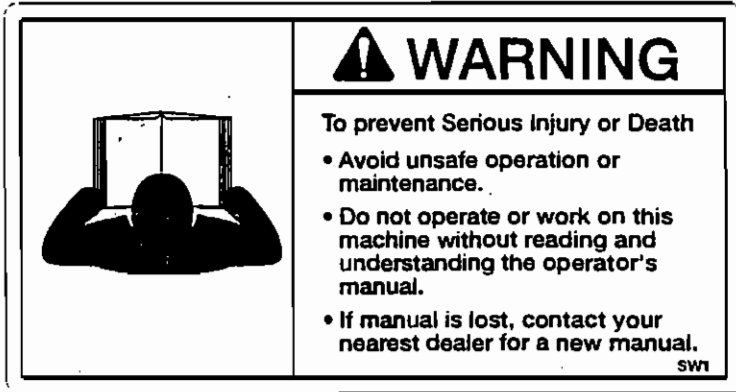
MANUFACTURED BY
 MODEL
 SER
AMERICAN TRENCHER INC.
 DELHI, IOWA 52223

ATI SERIAL NO. TAG
PART #4350

IMPORTANT
CHANGE OIL FILTER
EVERY 75 HOURS USE

CHANGE OIL FILTER
PART #4137

DECALS



**WARNING! READ MANUAL
PART #40150**

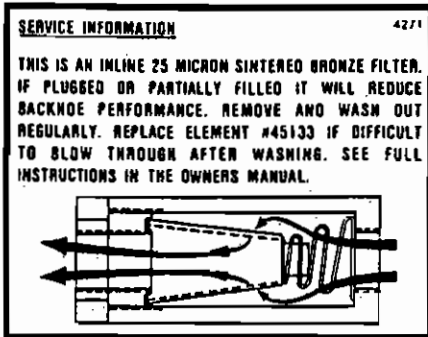


**WARNING! HIGH PRESSURE FLUID
PART #40151**



**DANGER! PINCH POINTS
PART #40149 (2 req'd)**

DECALS



**INLINE FILTER SERVICE
PART #4271**

5260 6-13-90