

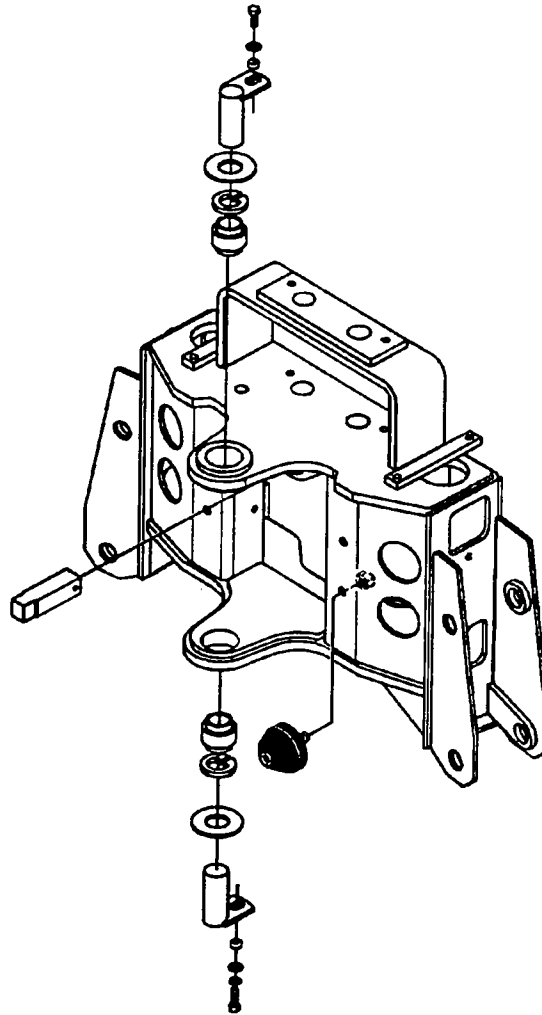
BRADCO®

408N

POWER BACKHOE

PM556
Rev. 1

6823 8-28-96-2



PARTS MANUAL

75456

BRADCO®
P.O. Box 266 · Delhi, Iowa 52223 USA
(319) 922-2981 · (800) 922-2981
Fax 319-922-2130
A Division of ATI Incorporated
Construction Machinery Since 1964

BRADCO

A DIVISION OF ATI INCORPORATED

LIMITED WARRANTY

EFFECTIVE MARCH 1, 1986

All new Bradco products are warranted by ATI Incorporated (formerly American Trencher Inc.) to be free from defects in materials or workmanship which may cause failure under normal usage and service when used for the purpose intended.

In the event of failure within twelve (12) months from initial retail sale, lease or rental date (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, and blade cutting edges), if after examination, ATI determines failure was due to defective material and/or workmanship, parts will be repaired or replaced by ATI Incorporated. ATI may request defective part or parts be returned prepaid to them for inspection at their place of business at Delhi, Iowa, or to a location specified by ATI.

Any claims under this warranty must be made within fifteen (15) days after the Buyer learns of the facts upon which such claim is based. All claims not made in writing and received by ATI within the time period specified above shall be deemed waived.

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ATI'S LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES TO BUYER, RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING ATI'S NEGLIGENCE, IRRESPECTIVE OF WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PARTICULAR PRODUCTS WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED, OR, AT THE ELECTION OF ATI, THE REPAIR OR REPLACEMENT OF DEFECTIVE OR DAMAGED PRODUCTS.

3924

3-15-93-4

P.O. BOX 266 · DELHI, IOWA 52223 USA

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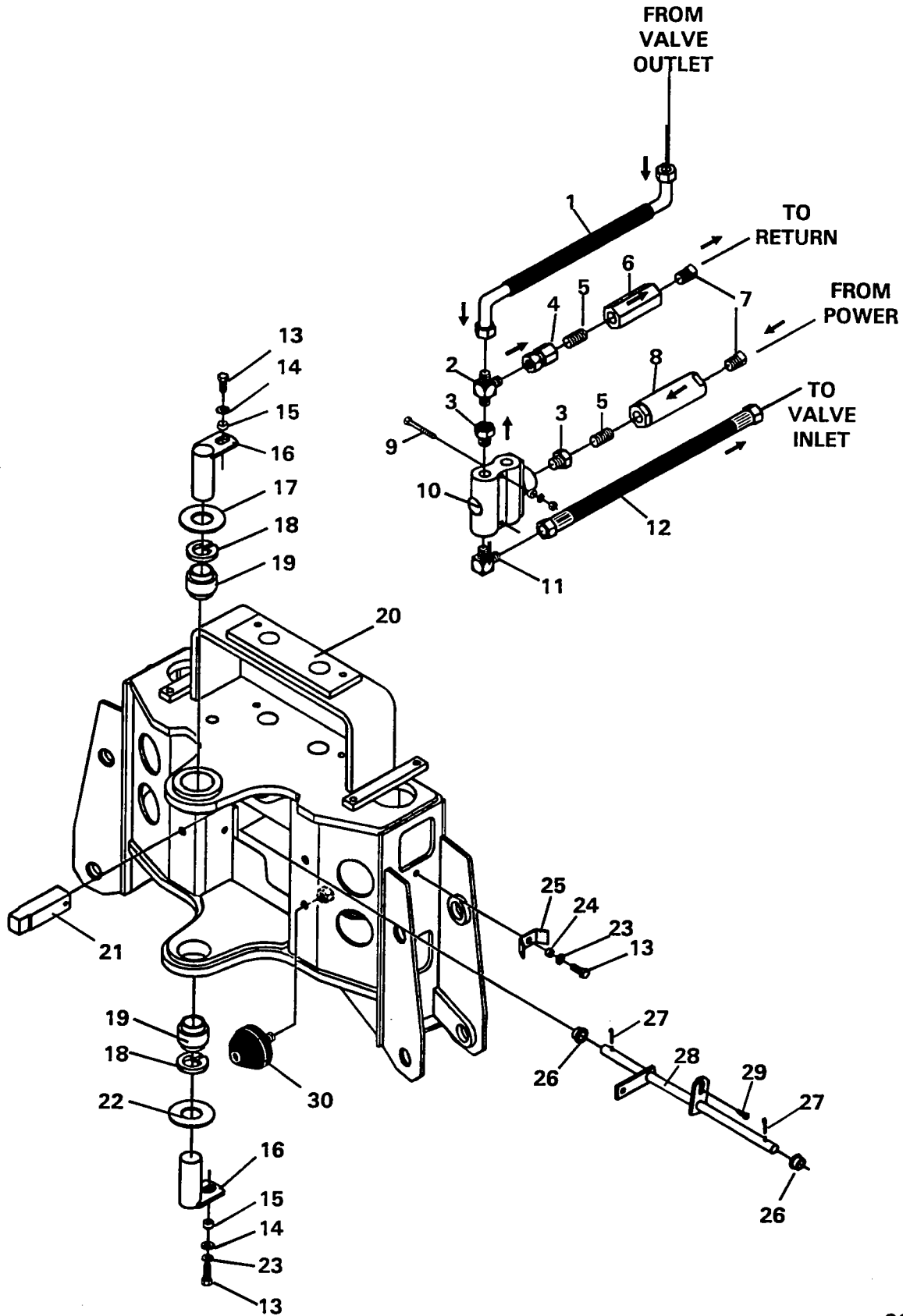
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MAINFRAME ASSEMBLY

ASSEMBLY #81812

MAINFRAME



MAINFRAME ASSEMBLY

ASSEMBLY #81812

MAINFRAME

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	37554	Hose .50" X 36" 8FJX 90° Short Gooseneck - 8FJX 90° Short Gooseneck
2	1	3327	Tee
3	2	3049	Bushing 12MP-8FP
4	1	3273	Coupling 8FP-8FJX
5	2	3211	Close Nipple .50" NPT
6	1	45137	Check Valve
7	2	3189	Square Head Plug
8	1	45132	Inline Filter
9	2	1010	.25" UNC X 2.75" Hex Capscrew
	2	81595	Spacer
	8	1512	.25" Flat Washer
	2	1501	.25" Lock Washer
	2	1224	.25" UNC Hex Nut
10	1	82837	Priority Flow Divider
11	1	3139	90° Adapter 6MP-8MJ
12	1	37577	Hose .50" X 35" 8FJX-8FJX
13	4	1043	.38" UNC X 1.00" Hex Capscrew (Two pin retaining capscrews installed with Locktite Grade 242)
14	2	1514	.38" Flat Washer
15	2	81807	Spacer Tube
16	2	81592	Pin
	2	6616	Grease Zerk
17	1	83977	Thrust Washer 1.38" X .125"
18	2	1929	Snap Ring
19	2	6615	Bearing
20	1	82834	Mainframe (Includes (4) #83815 Bushings Installed with Locktite Grade 680)
21	1	82090	Swing Lock Pin
22	As Req'd	83975	Thrust Washer 1.38" X .031"
	As Req'd	83976	Thrust Washer 1.38" X .090"
	As Req'd	83977	Thrust Washer 1.38" X .125"
23	3	1503	.38" Lock Washer
24	2	6799	Spacer
25	2	6186	Hose Clamp
26	2	82794	Bushing
27	2	1611	Cotter Pin .12 X 1.00"
28	1	82796	Linkage
29	1	1924	Shoulder Screw
30	4	6886	Rubber Bumpers
	4	1542	.50" UNC Lock Nut

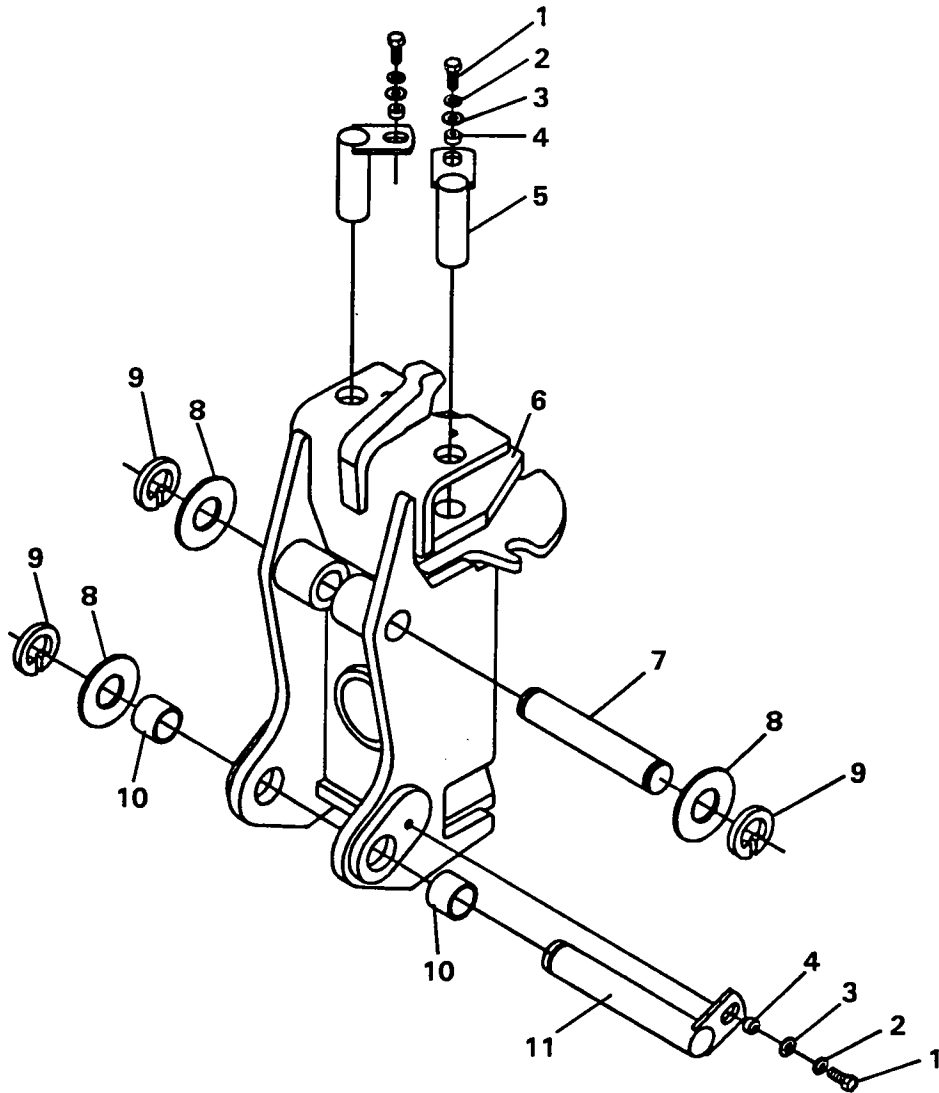
NOTE: Use thrust washers (Item #22) to adjust mainframe / swing post to minimum free play.

6811

8-28-96-2

MAINFRAME ASSEMBLY

ASSEMBLY #81812
SWING POST



MAINFRAME ASSEMBLY

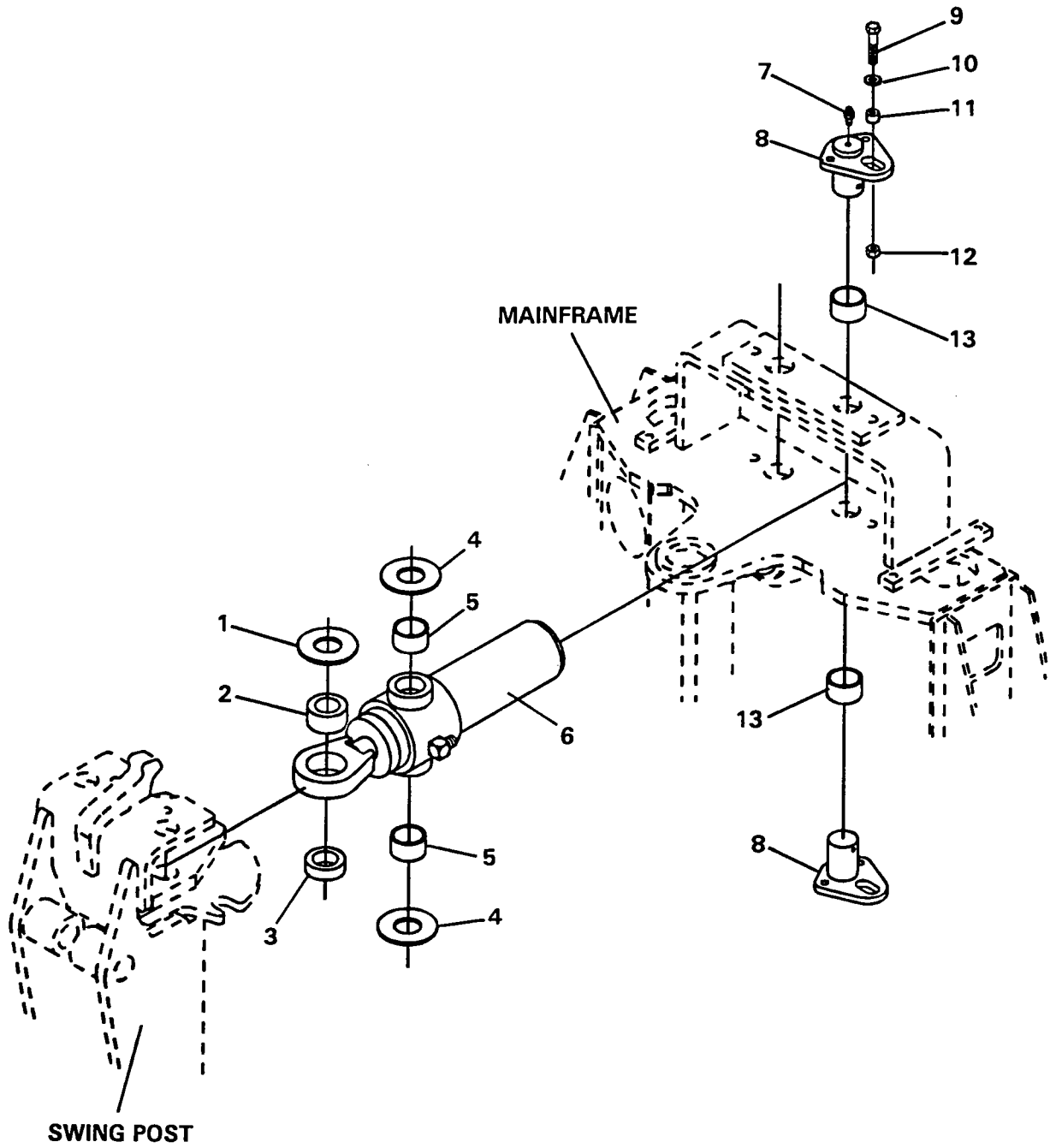
ASSEMBLY #81812
SWING POST

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	3	1043	.38" UNC X 1.00" Hex Capscrew (Installed with Locktite Grade 242)
2	3	1503	.38" Lock Washer
3	3	1514	.38" Flat Washer
4	3	81807	Spacer Tube
5	2	81847	Pin
6	1	83648	Swing Post (Includes (2) 81828 Bushings Installed with Locktite Grade 680)
7	1	82534	Pin
8	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"
9	3	1650	Snap Ring
10	-	81828	Bushing (Included in Swing Post) (Installed with Locktite Grade 680)
11	1	82321	Pin

MAINFRAME ASSEMBLY

ASSEMBLY #81812

SWING CYLINDER



MAINFRAME ASSEMBLY

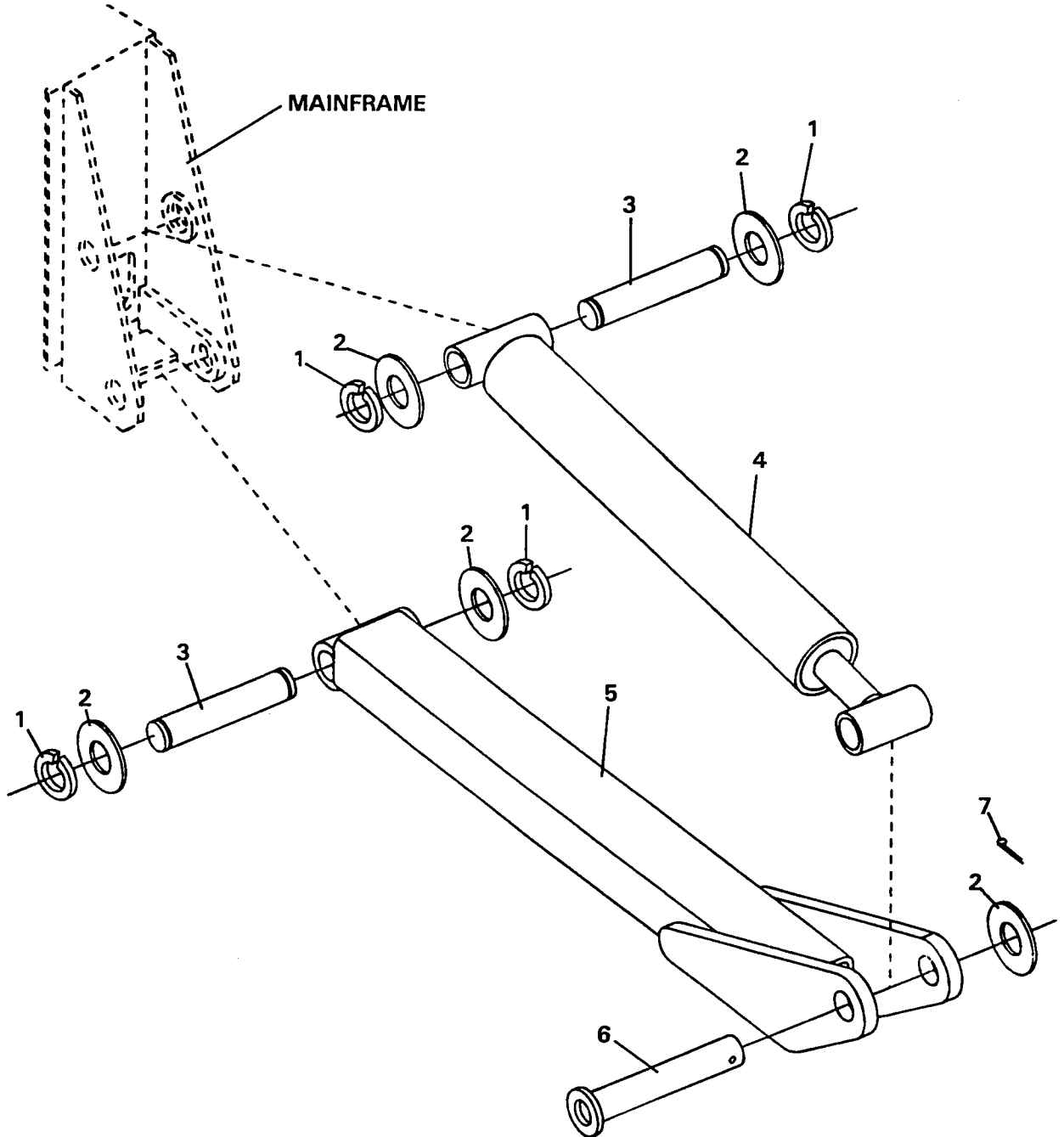
ASSEMBLY #81812

SWING CYLINDER

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	1521	1.25" Flat Washer
2	-	62523	Self Aligning Bushing (Included in Swing Cylinder Assembly)
3	2	81585	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 (2) #62523 Bushings)
	2	6616	Grease Zerk
	2	30137	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 Hex Lock Nut
13	-	83815	Bushing (Included in Mainframe - Installed with Loctite Grade 680)

MAINFRAME ASSEMBLY

ASSEMBLY #81812
STABILIZERS



MAINFRAME ASSEMBLY

ASSEMBLY #81812

STABILIZERS

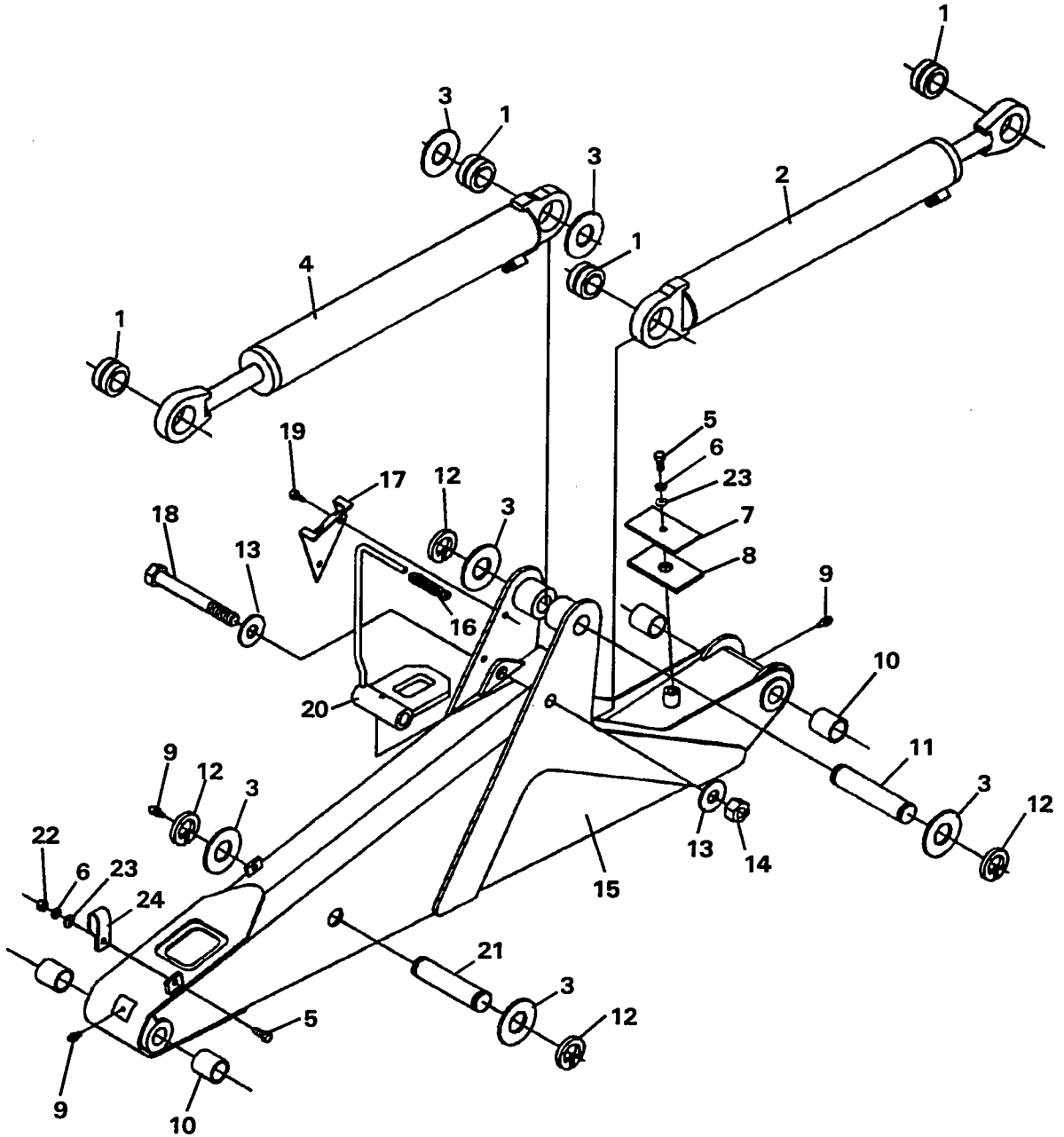
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	8	1652	Snap Ring
2	As Req'd	57693	Thrust Washer 1.25" X .078"
	As Req'd	64727	Thrust Washer 1.25" X .145"
	As Req'd	64728	Thrust Washer 1.25" X .031"
3	4	81846	Pin
4	2	83397	Stabilizer Cylinder Assembly
	4	6616	Grease Zerk
5	2	83393	Stabilizer Arm
6	2	83257	Pin
7	2	1613	Cotter Pin .25" X 2.00"

6817

1-25-96

BOOM & DIPPER ASSEMBLY

ASSEMBLY #81813



BOOM & DIPPER ASSEMBLY

ASSEMBLY #81813

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	-	6615	Self Aligning Bushing (Included in Cylinder Assemblies)
2	1	81611	Boom Cylinder Assembly
	1	53031	90° 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	81641	Dipper Cylinder Assembly
	2	6616	Grease Zerk
5	3	1043	.38" UNC X 1.00" Hex Capscrew
6	3	1503	.38" Lock Washer
7	1	81881	Clamp Plate
8	1	81882	Rubber Spacer
9	3	6616	Grease Zerk
10	-	81610	Bushing (Included in Boom) (Install with Locktite Grade 680)
11	1	81678	Pin
12	4	1650	Snap Ring
13	2	6562	Spring Washer
14	1	1739	.88" UNC Lock Nut
15	1	82223	Boom (Includes (4) 81610 Bushings)
16	1	83656	Handle Grip
17	1	83606	Swing Lock Bracket
18	1	1176	.88" UNC X 7.00" Hex Capscrew
19	2	1953	.38" UNC X .75" Flange Head Hex Capscrew
20	1	83410	Boom Lock
	1	1575	.38" X .50" Set Screw
21	1	81677	Pin
22	2	1226	.38" UNC Hex Nut
23	3	1514	.38" Flat Washer
24	2	82859	Double Hose Clamp

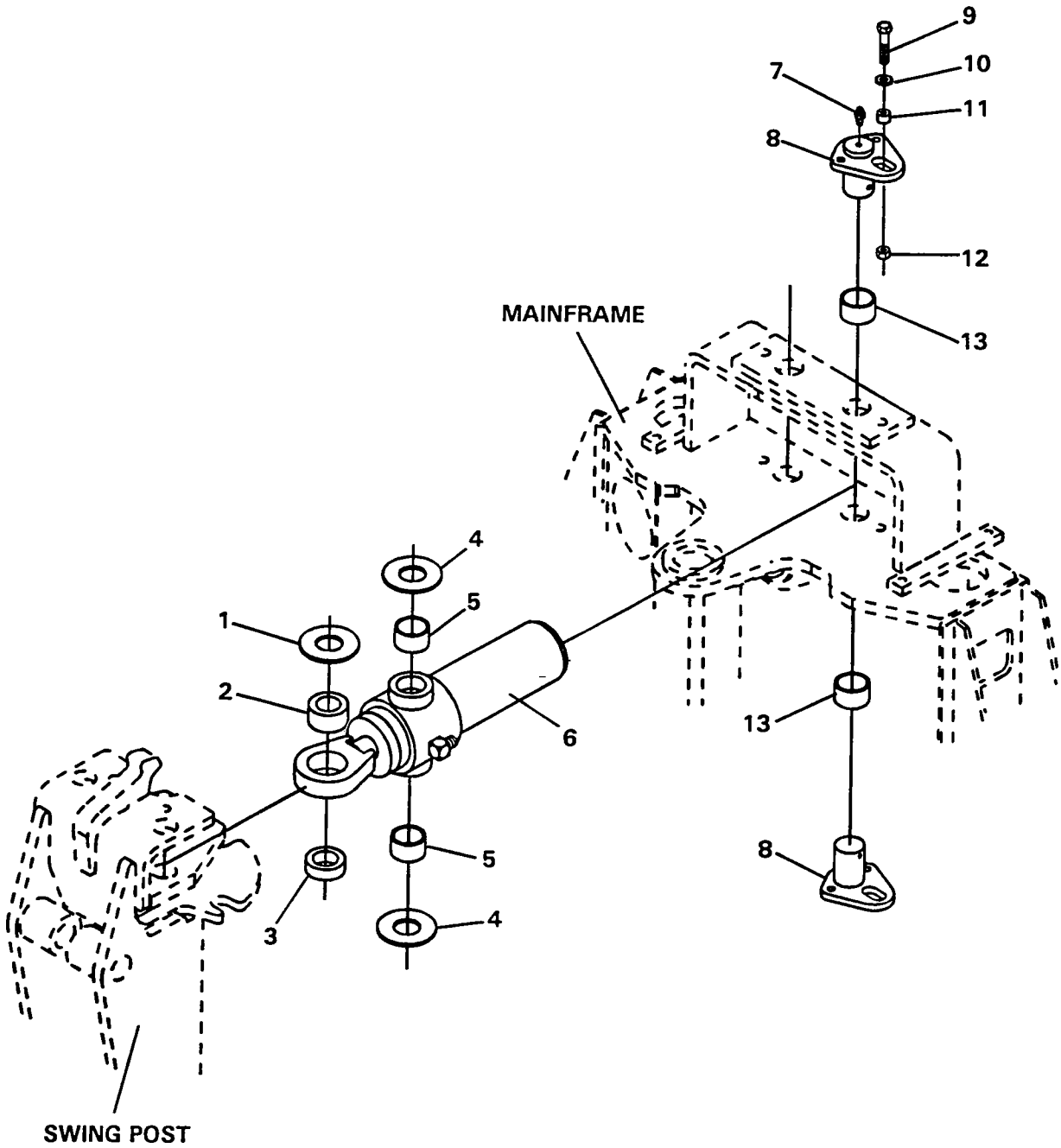
6713

8-28-96-3

MAINFRAME ASSEMBLY

ASSEMBLY #81812

SWING CYLINDER



MAINFRAME ASSEMBLY

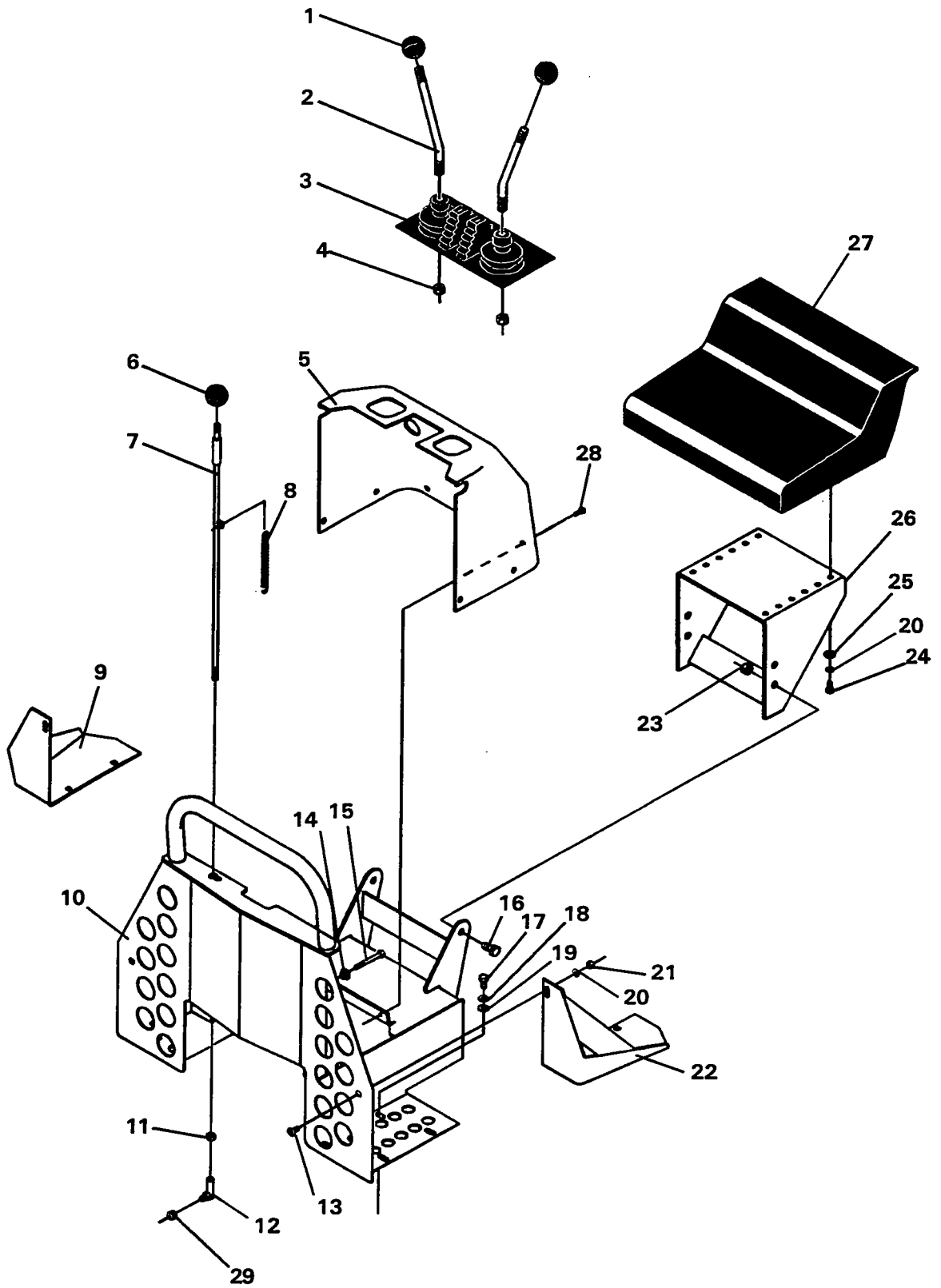
ASSEMBLY #81812

SWING CYLINDER

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	1521	1.25" Flat Washer
2	-	62523	Self Aligning Bushing (Included in Swing Cylinder Assembly)
3	2	81585	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 (2) #62523 Bushings)
	2	6616	Grease Zerk
	2	30137	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 Hex Lock Nut
13	-	83815	Bushing (Included in Mainframe - Installed with Loctite Grade 680)

408N CONSOLE ASSEMBLY

ASSEMBLY #81816



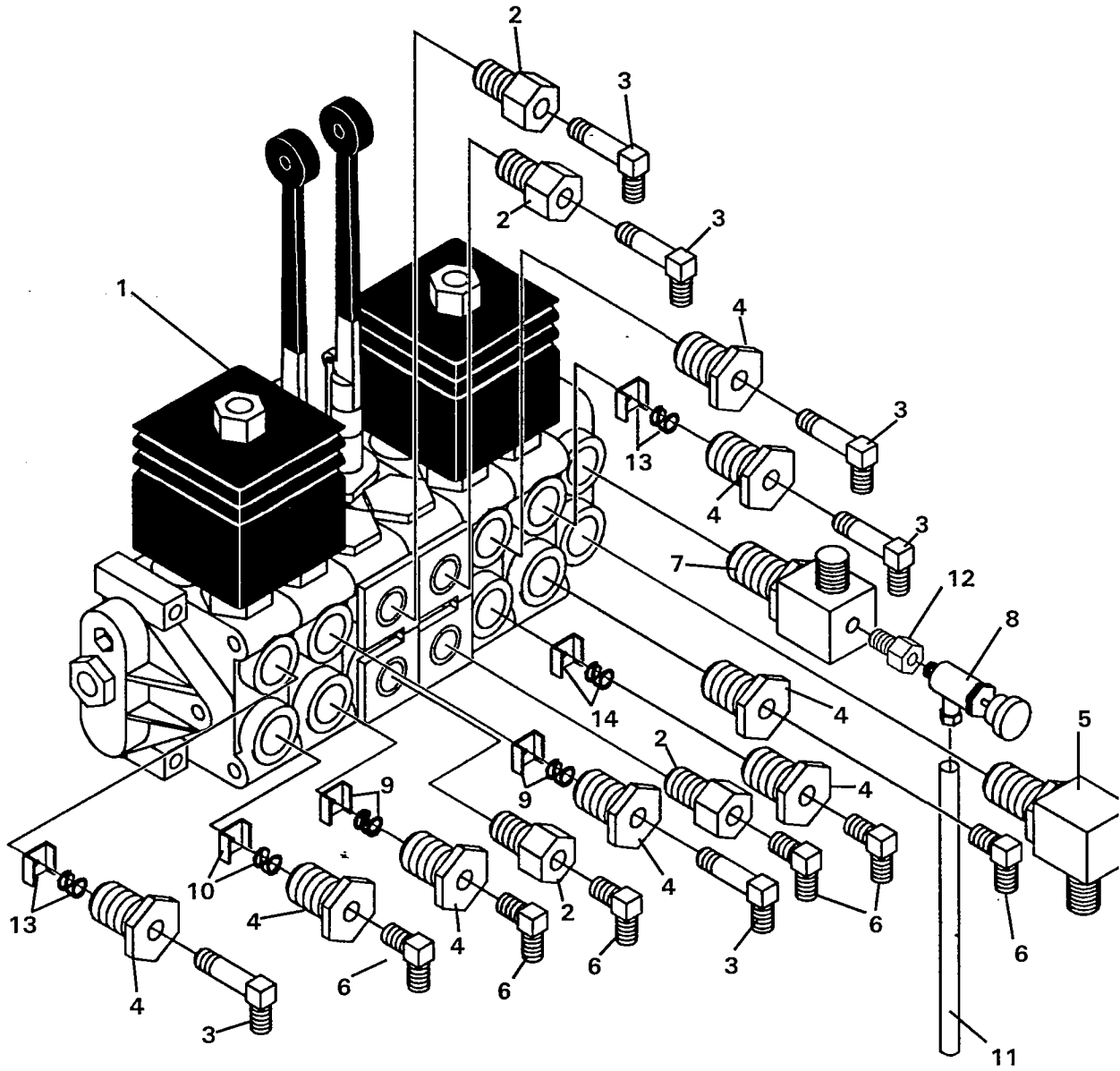
CONSOLE ASSEMBLY

ASSEMBLY #81816

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	83063	Ball Handle
2	2	81871	Control Handle
3	1	83235	Control Lever Boot
4	2	1242	.50" UNC Jam Nut
5	1	83409	Console Cover with Decals
6	1	83406	Ball Handle - RED
7	1	83273	Rod
8	1	82795	Spring
9	1	82818	Right Step (Located in Mainframe Assembly)
10	1	82804	Console
11	1	1476	.38-24" UNF Jam Nut
12	1	5545	Balljoint
13	6	1925	.31" UNC X .75" Carriage Bolt
14	3	1926	.31" UNC U-Nut
15	3	1029	.31" UNC X 2.75" Hex Capscrew
16	2	1089	.50" UNC X 1.25" Hex Capscrew
17	4	1042	.38" UNC X .75" Hex Capscrew
18	4	1503	.38" Lock Washer
19	4	1514	.38" Flat Washer
20	10	1502	.31" Lock Washer
21	6	1225	.31" UNC Hex Nut
22	1	82819	Left Step (Located in Mainframe Assembly)
23	2	1542	.50" UNC Lock Nut
24	4	1021	.31" UNC X .75" Hex Capscrew
25	4	1513	.31" Flat Washer
26	1	82999	Seat Mounting
27	1	6980	Seat
28	6	1958	.25" UNC X .75" Hex Head Body Bolt
29	1	1592	.38" UNF Lock Nut
30	2	1516	.50" Flat Washer

VALVE ASSEMBLY

ASSEMBLY #2225



VALVE ASSEMBLY

ASSEMBLY #2225

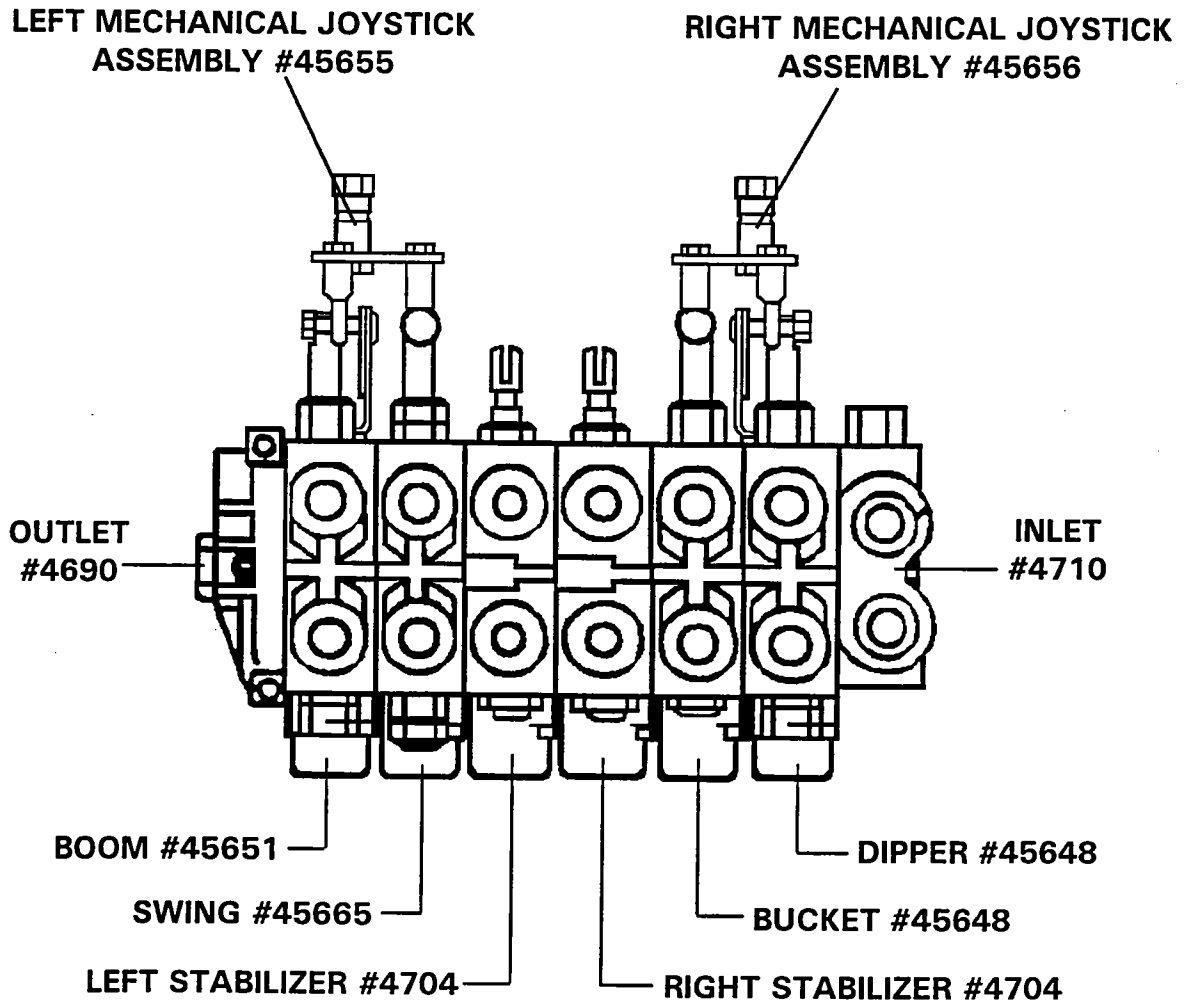
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	81517	Valve - 6 Spool - Gresen
2	4	3368	O'Ring Adapter 8MBo-4FP
3	5	3088	90° Adapter 4MP-6MJ
4	8	3336	O'Ring Adapter 10MBo-4FP
5	1	3283	90° Adapter 10MBo-8MJ
6	6	3001	90° Adapter 4MP-6MJ
7	1	82094	Special Fitting
8	1	3360	Needle Valve
9	-	45633	Restrictor with Spring - .076 Dia. Orifice (Included in Valve)
10	-	45643	Restrictor with Spring - .109 Dia. Orifice (Included in Valve)
11	1	37578	Plastic Tube .25" X 30" (Located in Console Assembly)
12	1	30151	Straight Adapter
13	-	45546*	Restrictor with Spring - .095 Dia. Orifice (Included in Valve)
14	-	45633*	Restrictor with Spring - .076 Dia. Orifice (Included in Valve)

* NOTE: Items #13 and #14 are effective on SN # ___954 and up built after August 8, 1997.

6803
8-11-97-3

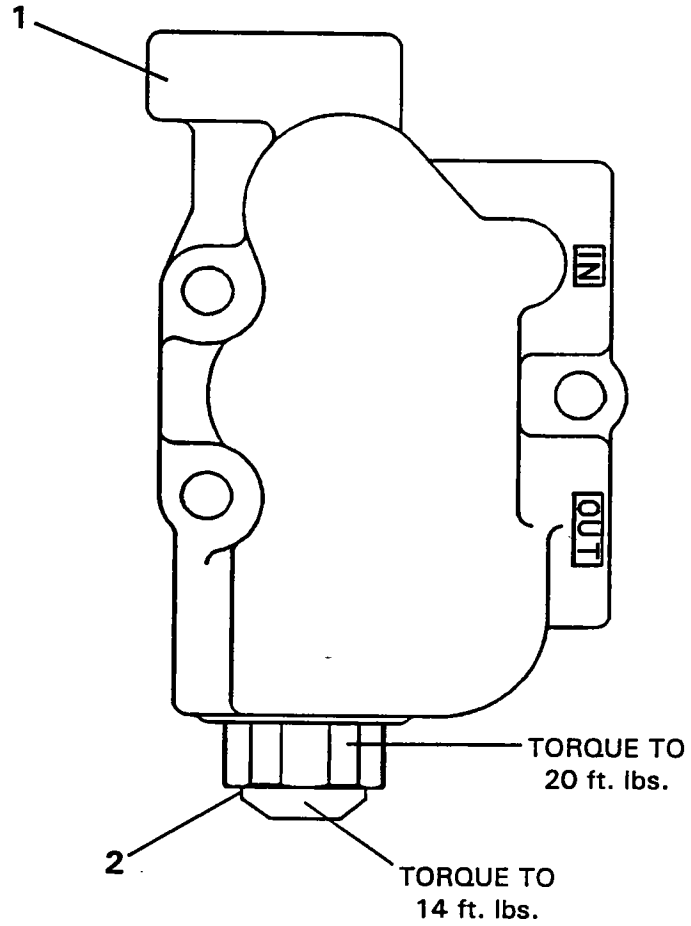
VALVE ASSEMBLY

408 BACKHOE VALVE 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	45148	WH Main Relief Valve Assembly @ 2250 PSI

NOTES:

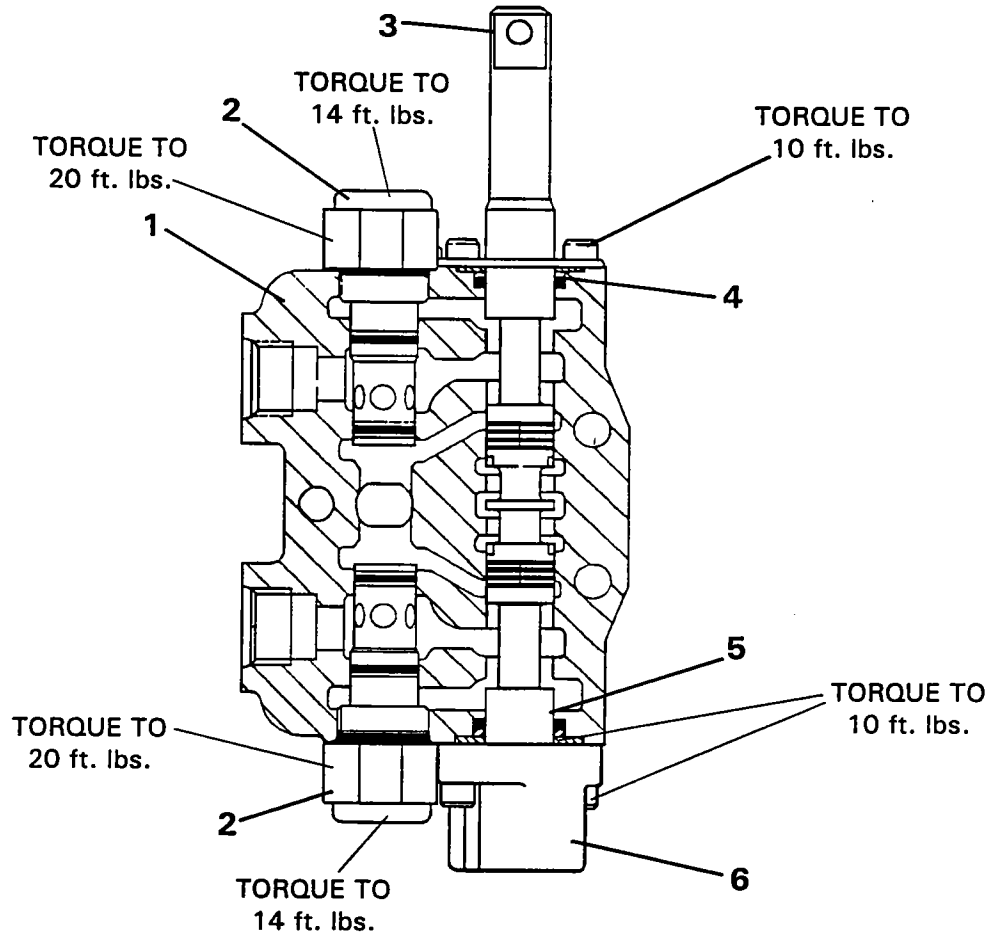
Valve Section Seal Kit #4653 contains (3) Exhaust Passage O-Ring Seals and (2) Pressure Passage O-Ring Seals

VALVE ASSEMBLY

GRESEN VALVE SECTION ASSEMBLY #45648

408 Dipper & Bucket Section

609 & 611 Dipper Section



VALVE ASSEMBLY

GRESEN VALVE SECTION ASSEMBLY #45648
408 Dipper & Bucket Section
609 & 611 Dipper Section

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1		Valve Section Housing
2	2	45667	Cylinder Port Relief Assembly @ 2500 PSI
3	1	45653	Spool Clevis Adapter
4	2	45652	Spool Seal Kit
5	1		Spool
6	1	45282	Spool Positioner Assembly

NOTES:

Items without part numbers are not sold separately.

Valve Section Seal Kit #4653 contains (3) Exhaust Passage O-Ring Seals and (2) Pressure Passage O-Ring Seals.

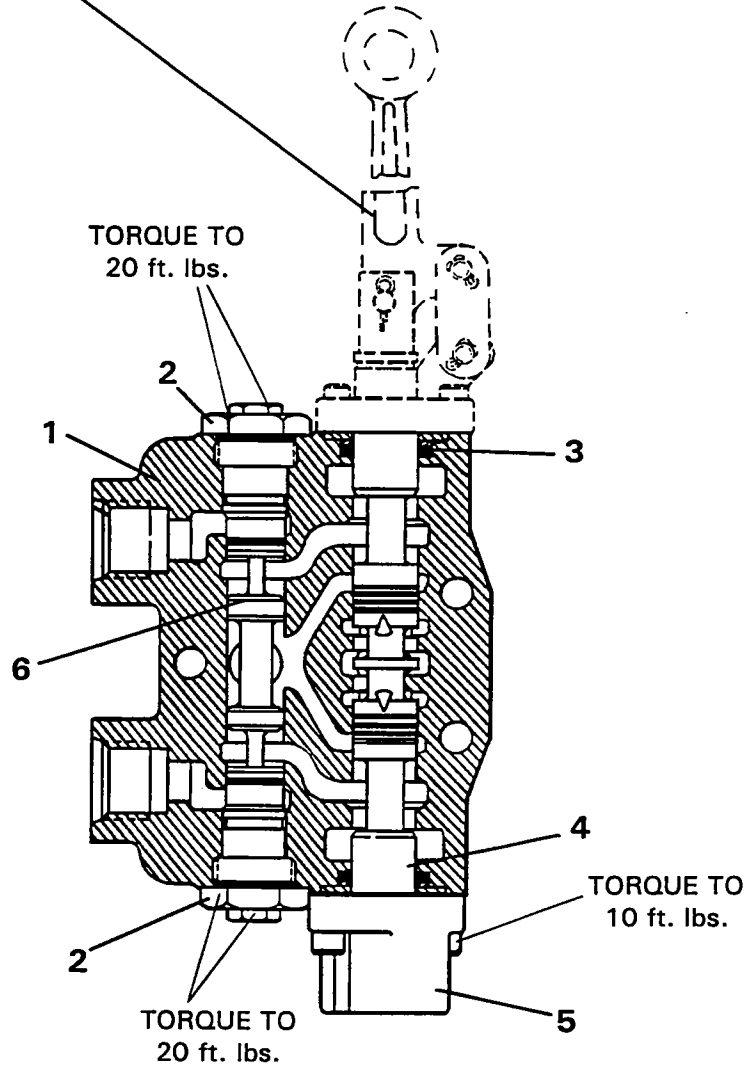
Complete Section Service Seal Kit #4719 includes ALL seals needed to service one complete valve section.

6944
5-20-96

VALVE ASSEMBLY

GRESEN VALVE STABILIZER SECTION
ASSEMBLY #4704

Horizontal Handle Assembly #45586
(Not included in Valve Section Assembly #4704)



VALVE ASSEMBLY

GRESEN VALVE STABILIZER SECTION ASSEMBLY #4704

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1		Valve Section Housing
2	2	4819	Lockout Check Assembly
3	2	45652	Spool Seal Kit
4	1		Spool
5	1	45282	Spool Positioner Assembly
6	1	45654	Unlocking Piston

NOTES:

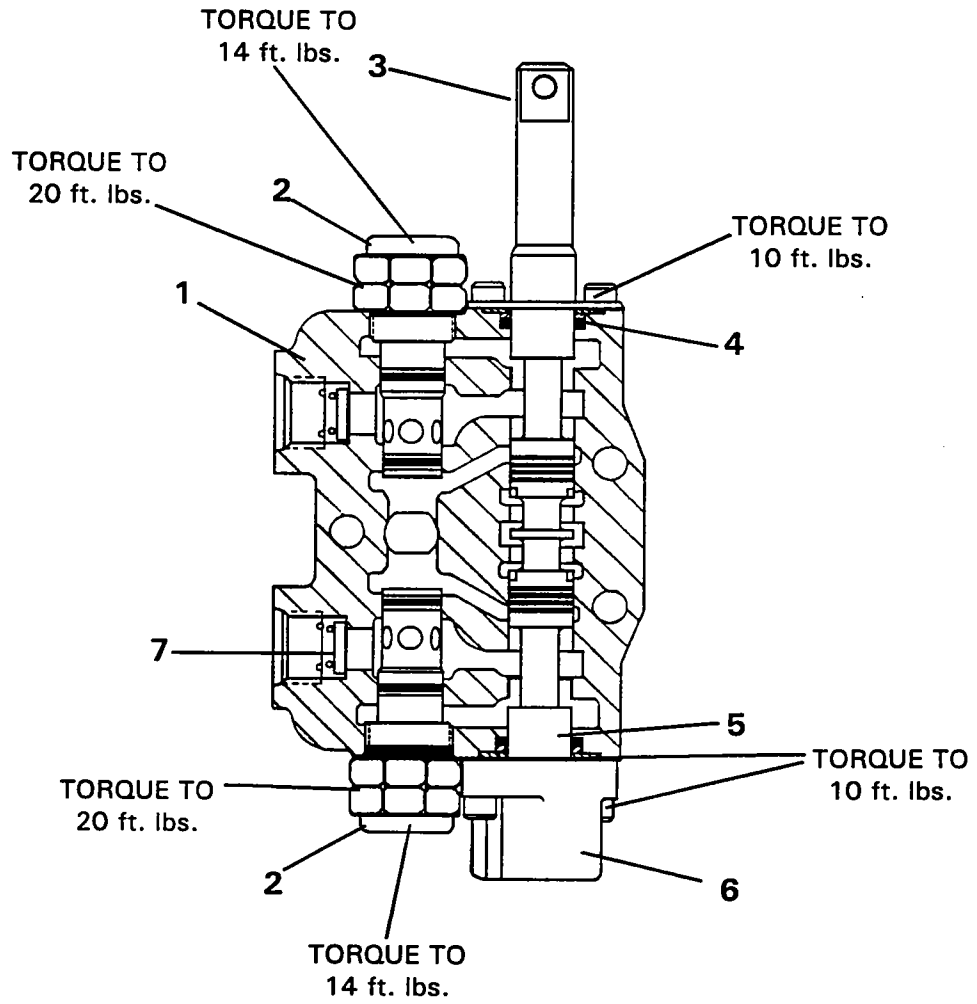
Items without part numbers are not sold separately.

Valve Section Seal Kit #4653 contains (3) Exhaust Passage O-Ring Seals and (2) Pressure Passage O-Ring Seals.

Complete Section Service Seal Kit #4719 includes ALL seals needed to service one complete valve section.

VALVE ASSEMBLY

GRESEN VALVE SECTION ASSEMBLY #45665
408 Swing Section



VALVE ASSEMBLY

GRESEN VALVE SECTION ASSEMBLY #45665
408 Swing Section

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1		Valve Section Housing
2	2	45139	Cylinder Port Relief / Anti-Cav. Check Assembly @ 2250 PSI
3	1	45653	Spool Clevis Adapter
4	2	45652	Spool Seal Kit
5	1		Spool
6	1	45282	Spool Positioner Assembly
7	2	45633	Port Restrictor with Spring .076 Dia. Orifice

NOTES:

Items without part numbers are not sold separately.

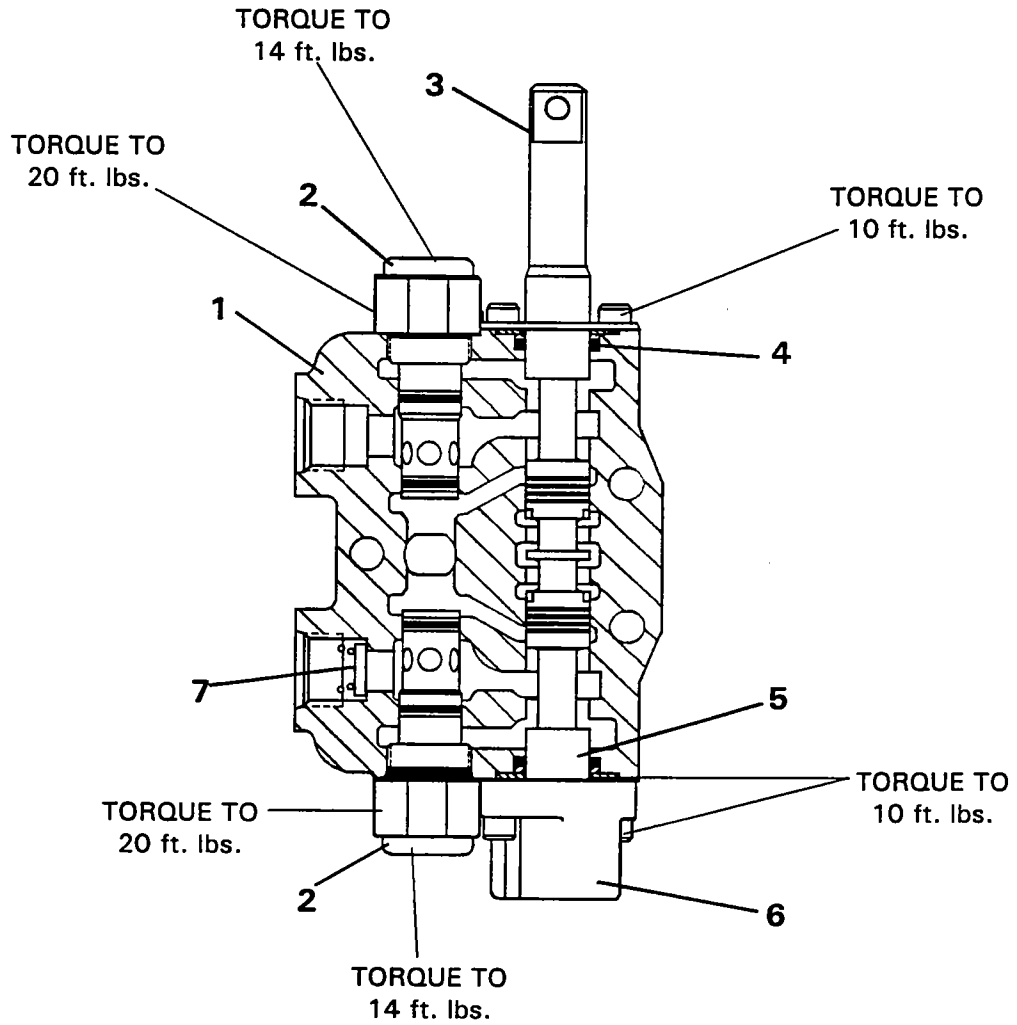
Valve Section Seal Kit #4653 contains (3) Exhaust Passage O-Ring Seals and (2) Pressure Passage O-Ring Seals.

Complete Section Service Seal Kit #4719 includes ALL seals needed to service one complete valve section.

6970
5-22-96

VALVE ASSEMBLY

GRESEN VALVE SECTION ASSEMBLY #45651
408 Boom Section



VALVE ASSEMBLY

GRESEN VALVE SECTION ASSEMBLY #45651
408 Boom Section

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1		Valve Section Housing
2	2	45667	Cylinder Port Relief Assembly @ 2500 PSI
3	1	45653	Spool Clevis Adapter
4	2	45652	Spool Seal Kit
5	1		Spool
6	1	45282	Spool Positioner Assembly
7	2	45643	Port Restrictor with Spring .109 Dia. Orifice

NOTES:

Items without part numbers are not sold separately.

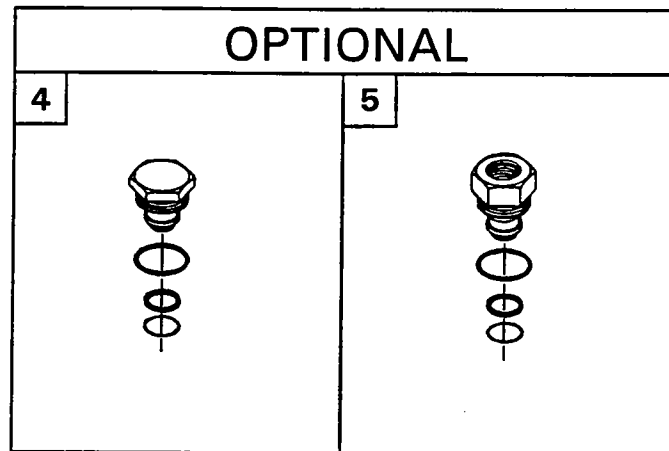
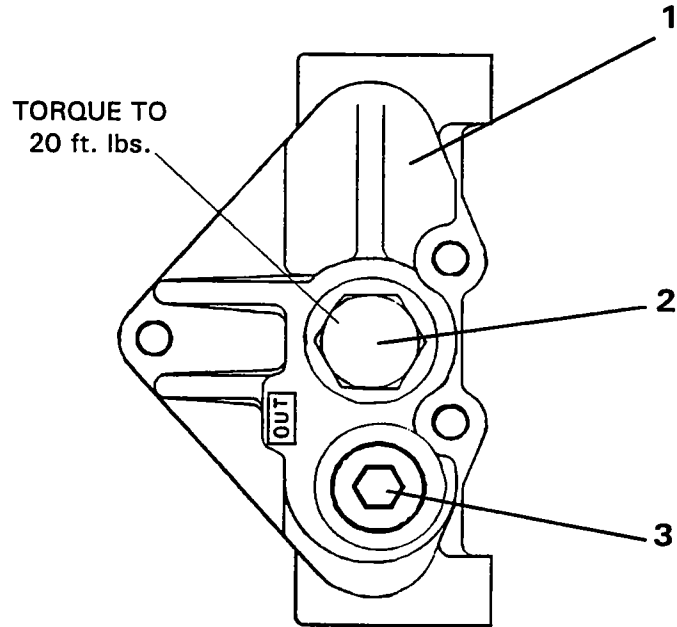
Valve Section Seal Kit #4653 contains (3) Exhaust Passage O-Ring Seals and (2) Pressure Passage O-Ring Seals.

Complete Section Service Seal Kit #4719 includes ALL seals needed to service one complete valve section

6972
5-22-96

VALVE ASSEMBLY

GRESEN OUTLET COVER



TORQUE TO 20 ft. lbs.

6955
5-20-96

VALVE ASSEMBLY

GRESEN OUTLET COVER

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	4690	Outlet Cover
2	1	4691	Open Center Plug Assembly (Includes Open Center Plug & Main O-Ring Seal #4693)
3	1	3234	Plug

OPTIONAL

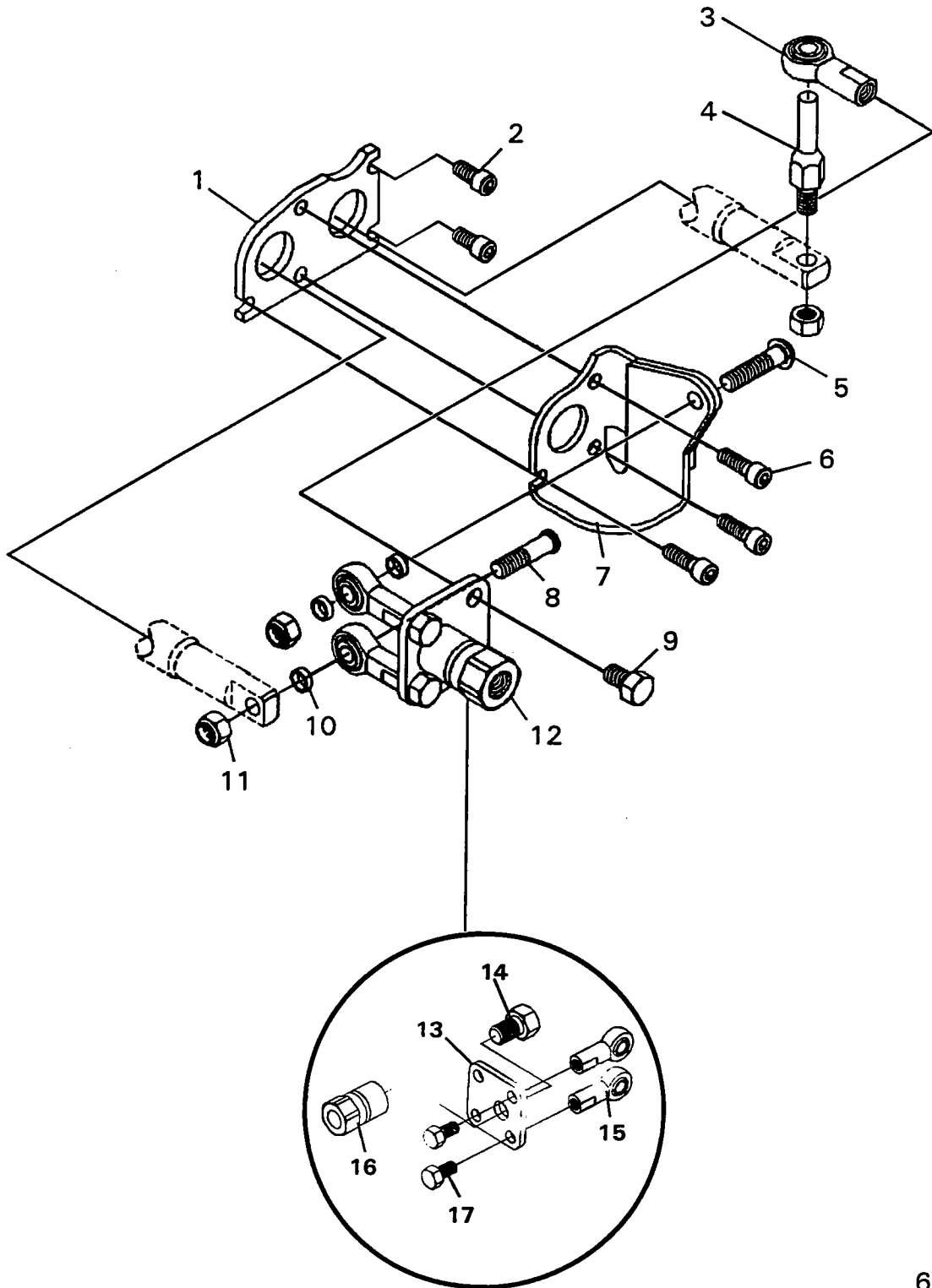
4	-	6977	Closed Center Plug Assembly (Includes Main O-Ring Seal #4693)
5	-	4698	Power Beyond Sleeve Assembly (Includes Main O-Ring Seal #4693)

NOTES:

Valve Section Seal Kit #4653 contains (3) Exhaust Passage O-Ring Seals and (2) Pressure Passage O-Ring Seals.

VALVE ASSEMBLY

LEFT MECHANICAL JOYSTICK ASSEMBLY #45655
RIGHT MECHANICAL JOYSTICK ASSEMBLY #45656



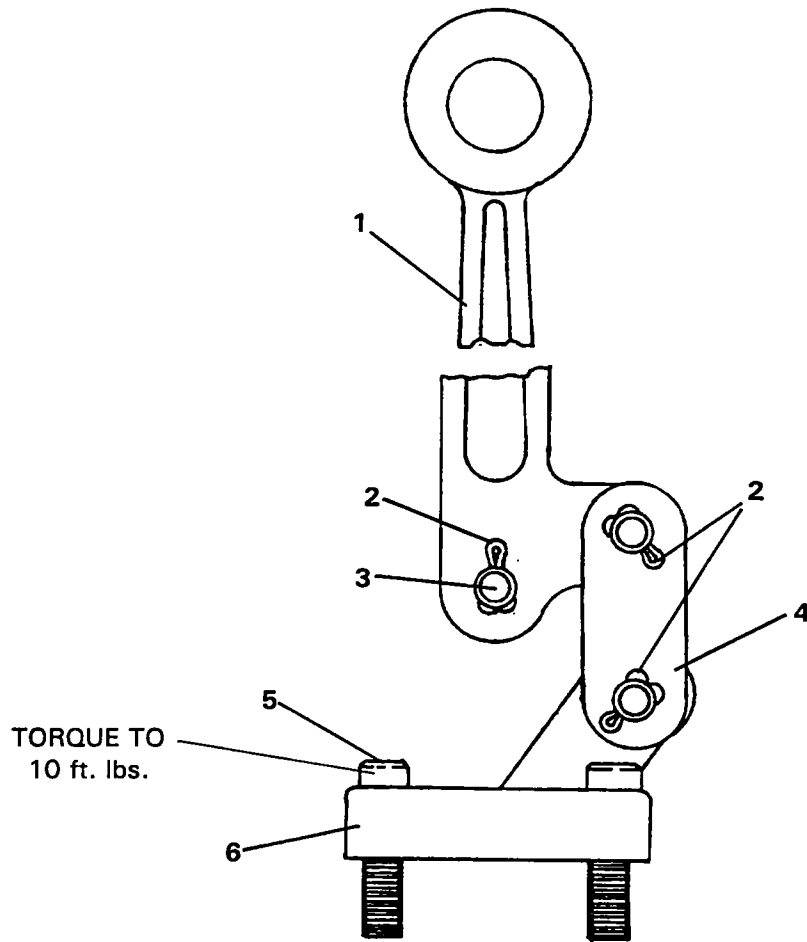
VALVE ASSEMBLY

LEFT MECHANICAL JOYSTICK ASSEMBLY #45655
RIGHT MECHANICAL JOYSTICK ASSEMBLY #45656

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	45657	Mounting Plate
2	2	1943	Screw
3	1	45664	Rod End
4	1	45662	Mechanical Slide
5	1	1945	Screw
6	3	1944	Screw
7	1	45658	Bracket - Left
	1	45659	Bracket - Right
8	1	45661	Rod End Stud
9	1	1271	Screw
10	3	45660	Spacer
11	3	1942	Lock Nut
12	1	45663	Handle Plate Assembly (Includes Items #13 through #17)
13	1	45671	Mechanical Joystick Plate
14	1	1087	Screw
15	2	45664	Female Rod End
16	1	45672	Handle Adapter
17	2	1271	Screw

VALVE ASSEMBLY

Horizontal Handle and Bracket
Assembly #45586



VALVE ASSEMBLY

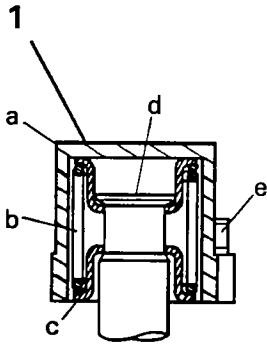
Horizontal Handle and Bracket
Assembly #45586

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	*	Handle
2	3	*	Cotter Pin
3	1	*	Pin
4	1	*	Link
	1	*	Link Plate
5	2	*	Screw
6	1	*	Bracket

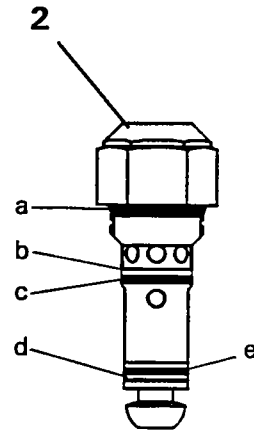
* **NOTE:** All parts marked with an asterisk (*) are included in Horizontal Handle and Bracket Assembly #45586. Parts are not sold separately.

VALVE ASSEMBLY

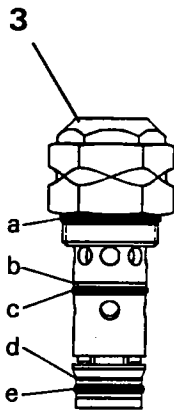
GRESSEN VALVE SERVICE PARTS



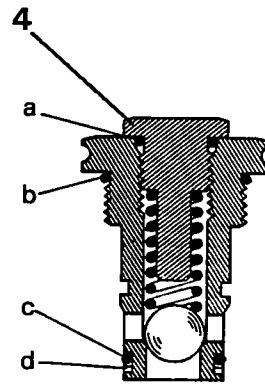
Spool Positioner Assembly



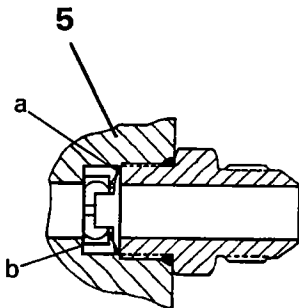
Cylinder Port Relief Assembly



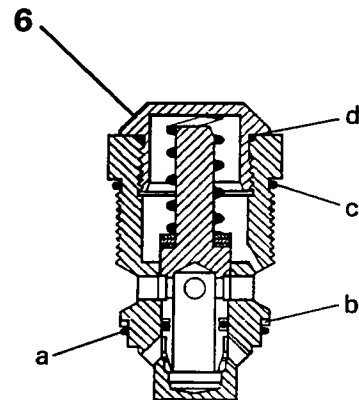
**Cylinder Port Relief/Anti Cav.
Check Assembly**



Lockout Check Assembly



Port Restrictor and Spring Assembly



WH Main Relief Valve Assembly

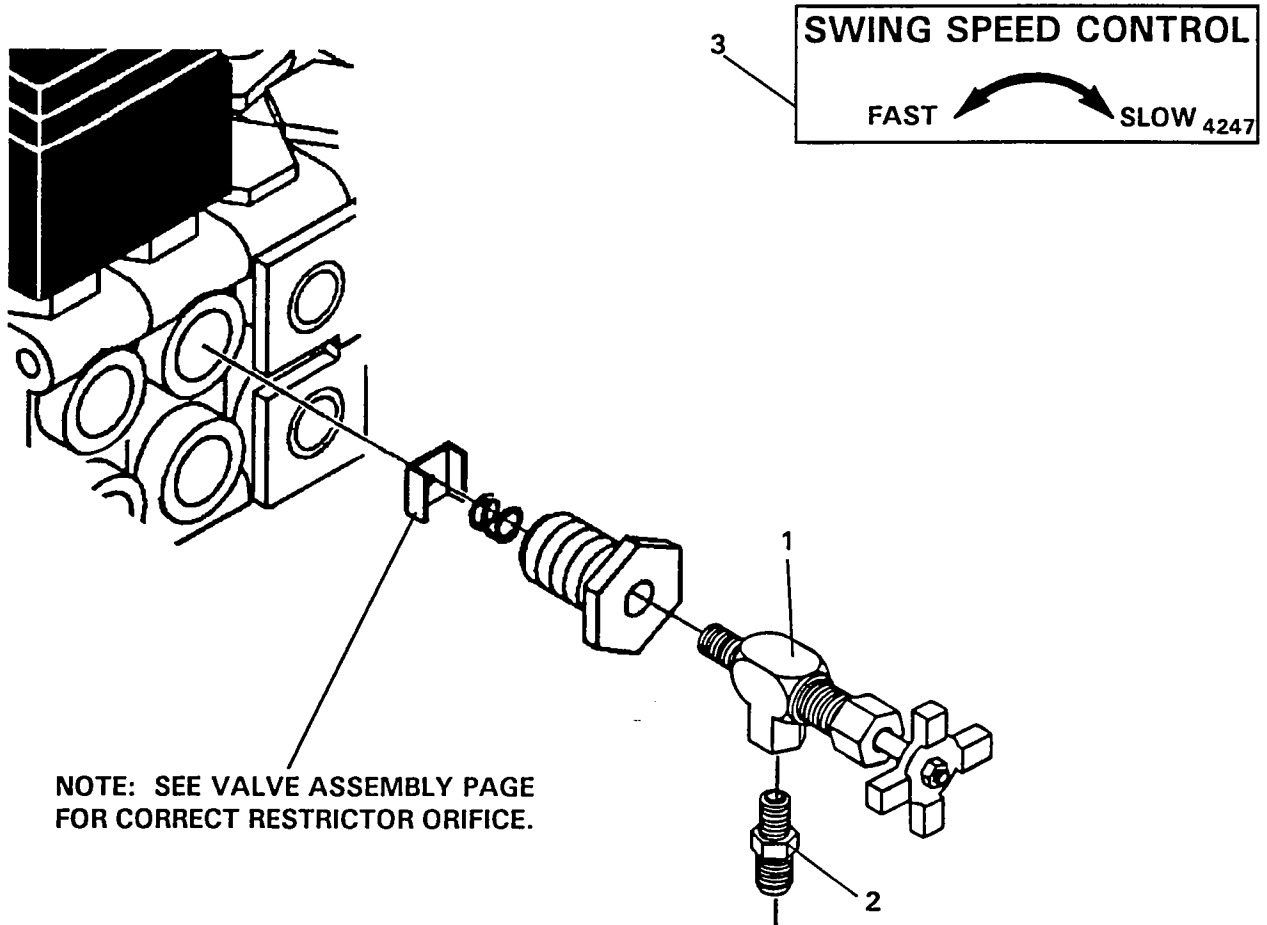
VALVE ASSEMBLY

GRESEN VALVE SERVICE PARTS

<u>NO</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	45282	Spool Positioner Assembly a Bonnet b Spring c Spring Collar d Spool Spud e Screw
2	45667 4822	Cylinder Port Relief Assembly @ 2500 PSI (Due to close tolerances only the seals may be serviced in the field.) Seal Kit a O-Ring Seal b Backup Ring c O-Ring Seal d Backup Ring e O-Ring Seal
3	45139 4822	Relief/Anti-Cav. Check Assembly @ 2250 PSI (Due to close tolerances only the seals may be serviced in the field.) Seal Kit a O-Ring Seal b Backup Ring c O-Ring Seal d Backup Ring e O-Ring Seal
4	4819 4829	Lockout Check Assembly (Due to close tolerances only the seals may be serviced in the field.) Seal Kit a O-Ring Seal b Backup Ring c O-Ring Seal d Backup Ring
5	45633 45643	Port Restrictor Assembly .076 Dia. Orifice Port Restrictor Assembly .109 Dia. Orifice a Spring b Orifice Plate
6	45148 45142	WH Main Relief Valve Assembly @ 2250 PSI (Due to close tolerances only the seals may be serviced in the field.) Seal Kit a O-Ring Seal b Backup Ring c O-Ring Seal d O-Ring Seal

OPTIONAL SWING SPEED CONTROL

ASSEMBLY #83337



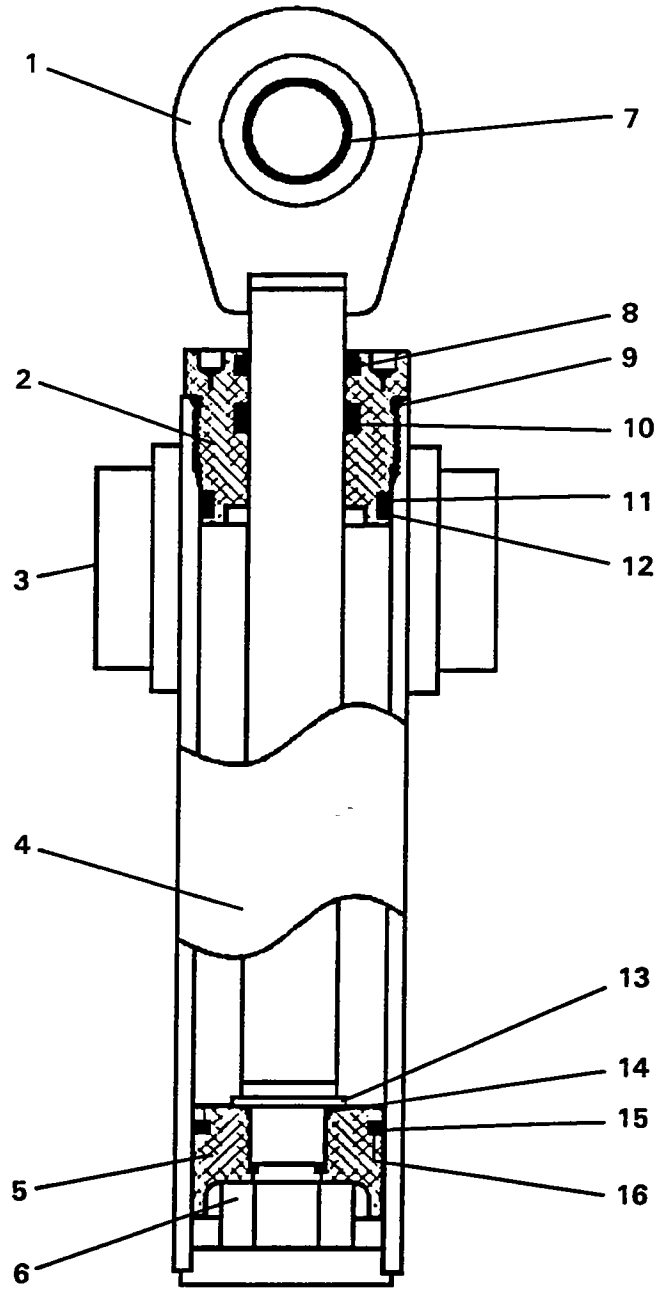
OPTIONAL SWING SPEED CONTROL

ASSEMBLY #83337

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	3185	Needle Valve
2	1	3137	Male Connector
3	1	4247	Swing Speed Control Decal

CYLINDER ASSEMBLY

SWING CYLINDER ASSEMBLY #81827



CYLINDER ASSEMBLY

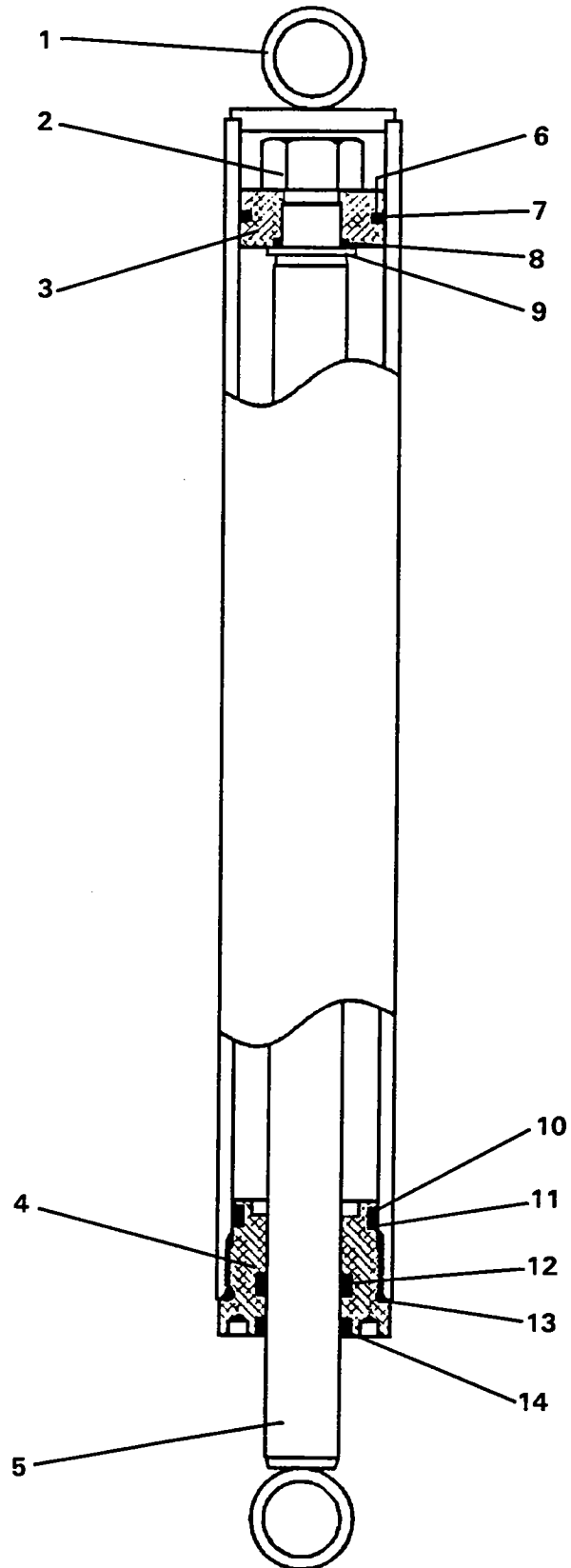
SWING CYLINDER ASSEMBLY #81827

<u>NO</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 #83397



CYLINDER ASSEMBLY

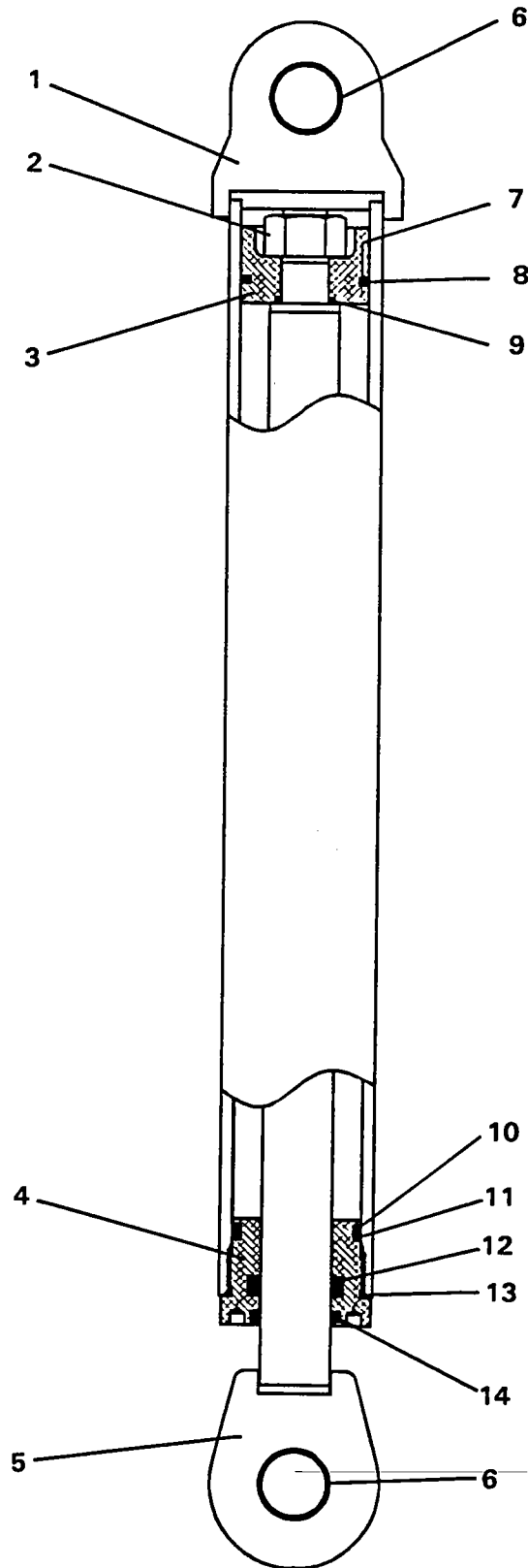
STABILIZER CYLINDER ASSEMBLY #83397

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	83398	Cylinder Tube
2	1	1483	Hex Nut
3	1	50252	Piston
4	1	77458	Cylinder Gland
5	1	83399	Cylinder Rod
6	1	4645*	O'Ring
7	1	4644*	Piston Ring
8	1	4641*	O'Ring
9	1	5421	Washer
10	1	4509*	O'Ring
11	1	4510*	Back-Up Ring
12	1	45219*	Poly Pak Seal
13	1	45250*	O'Ring
14	1	45389*	Rod Wiper

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

CYLINDER ASSEMBLY

BOOM CYLINDER ASSEMBLY #81611



CYLINDER ASSEMBLY

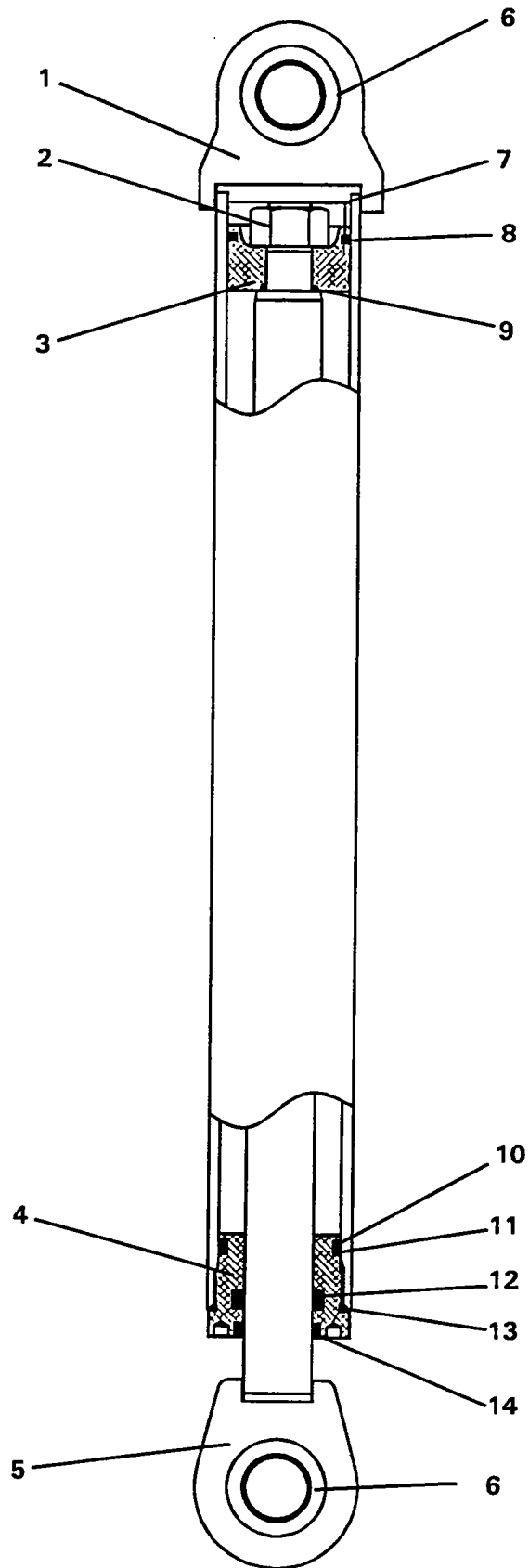
BOOM CYLINDER ASSEMBLY #81611

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	81612	Cylinder Tube
2	1	1483	Hex Nut
3	1	82857	Piston
4	1	82449	Cylinder Gland
5	1	82450	Cylinder Rod
6	2	6615	Self Aligning Bushing
7	1	45250*	O'Ring
8	1	45251*	Piston Ring
9	1	4641*	O'Ring
10	1	45557*	O'Ring
11	1	45249*	Back-Up Ring
12	1	45225*	Poly Pak Seal
13	1	4570*	O'Ring
14	1	45372*	Rod Wiper

NOTE: Seal Kit #45618 includes all parts marked with an asterisk (*).
Parts are not sold separately.

CYLINDER ASSEMBLY

DIPPER CYLINDER ASSEMBLY #81641



CYLINDER ASSEMBLY

DIPPER CYLINDER ASSEMBLY #81641

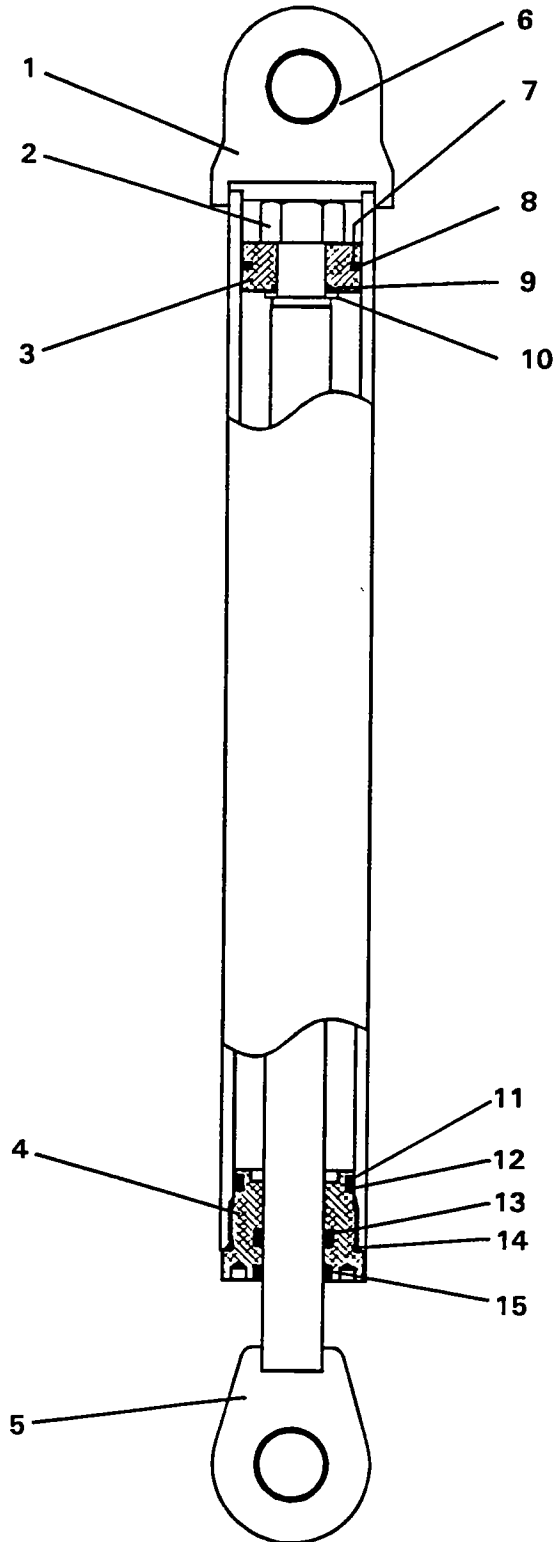
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	81642	Cylinder Tube
2	1	1483	Hex Nut
3	1	83113	Piston
4	1	82449	Cylinder Gland
5	1	81643	Cylinder Rod
6	2	6615	Self Aligning Bushing
7	1	45250*	O'Ring
8	1	45251*	Piston Ring
9	1	4641*	O'Ring
10	1	45557*	O'Ring
11	1	45249*	Back-Up Ring
12	1	45225*	Poly Pak Seal
13	1	4570*	O'Ring
14	1	45372*	Rod Wiper

NOTE: Seal Kit #45618 includes all parts marked with an asterisk (*).
Parts are not sold separately.

6697
12-4-95

CYLINDER ASSEMBLY

BUCKET CYLINDER ASSEMBLY #81634



CYLINDER ASSEMBLY

BUCKET CYLINDER ASSEMBLY #81634

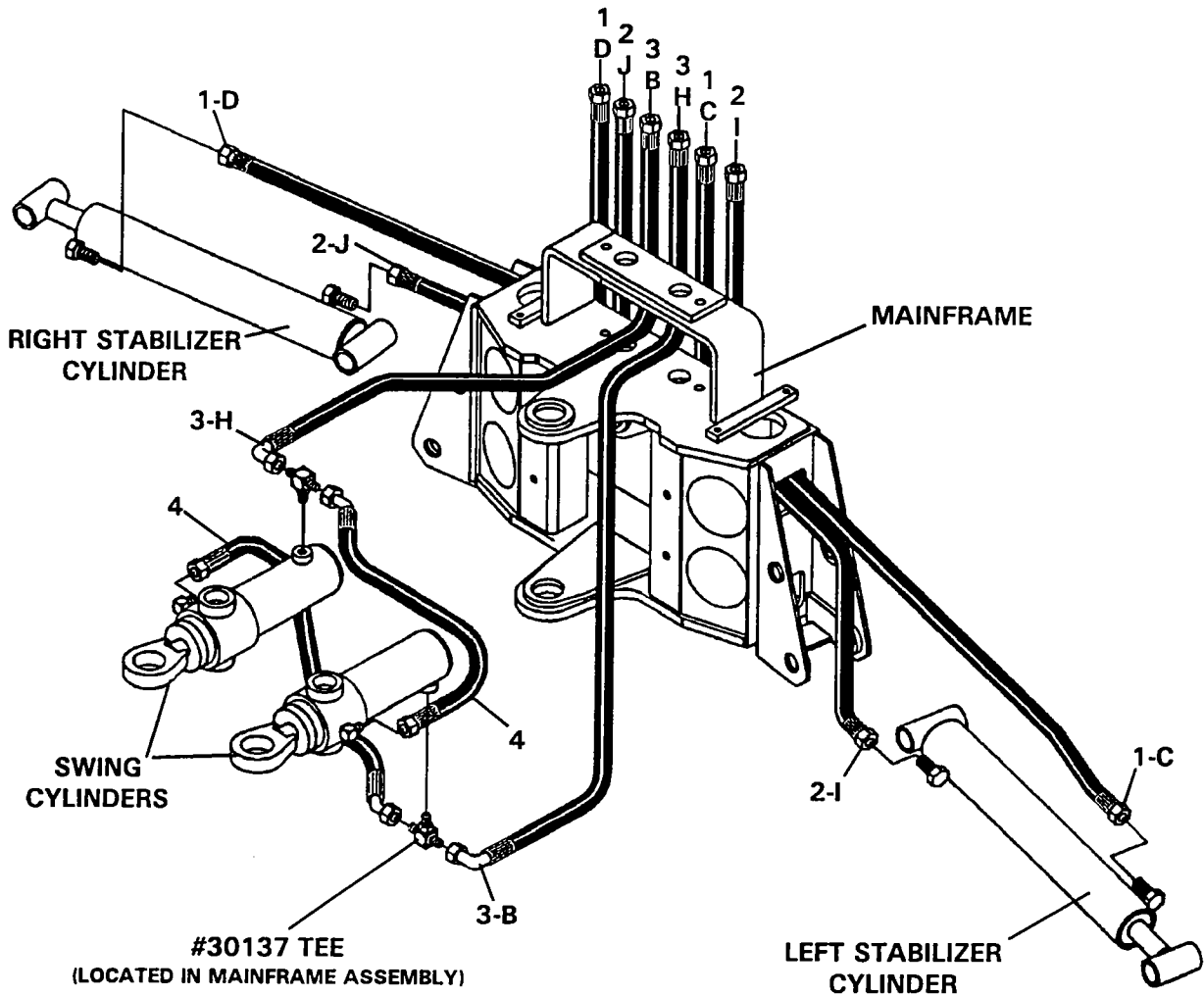
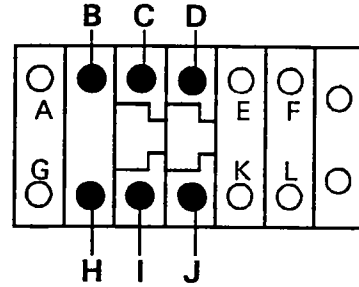
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	81635	Cylinder Tube
2	1	1483	Hex Nut
3	1	50252	Piston
4	1	77458	Cylinder Gland
5	1	81636	Cylinder Rod
6	2	6615	Self Aligning Bushing
7	1	4645*	O'Ring
8	1	4644*	Piston Ring
9	1	4641*	O'Ring
10	1	5421	Washer
11	1	4509*	O'Ring
12	1	4510*	Back-Up Ring
13	1	45219*	Poly Pak Seal
14	1	45250*	O'Ring
15	1	45389*	Rod Wiper

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

MAINFRAME HOSE SET

ASSEMBLY #81815

HYDRAULIC CONTROL VALVE



MAINFRAME HOSE SET

ASSEMBLY #81815

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	37520	Hose Assembly .25" X 42" 6FJX-6FJX
2	2	37521	Hose Assembly .25" X 39" 6FJX-6FJX
3	2	37522	Hose Assembly .25" X 17" 6FJX-6FJX 90° Gooseneck
4	2	37552	Hose Assembly .25" X 15" 6FJX-6FJX 45° Gooseneck

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.

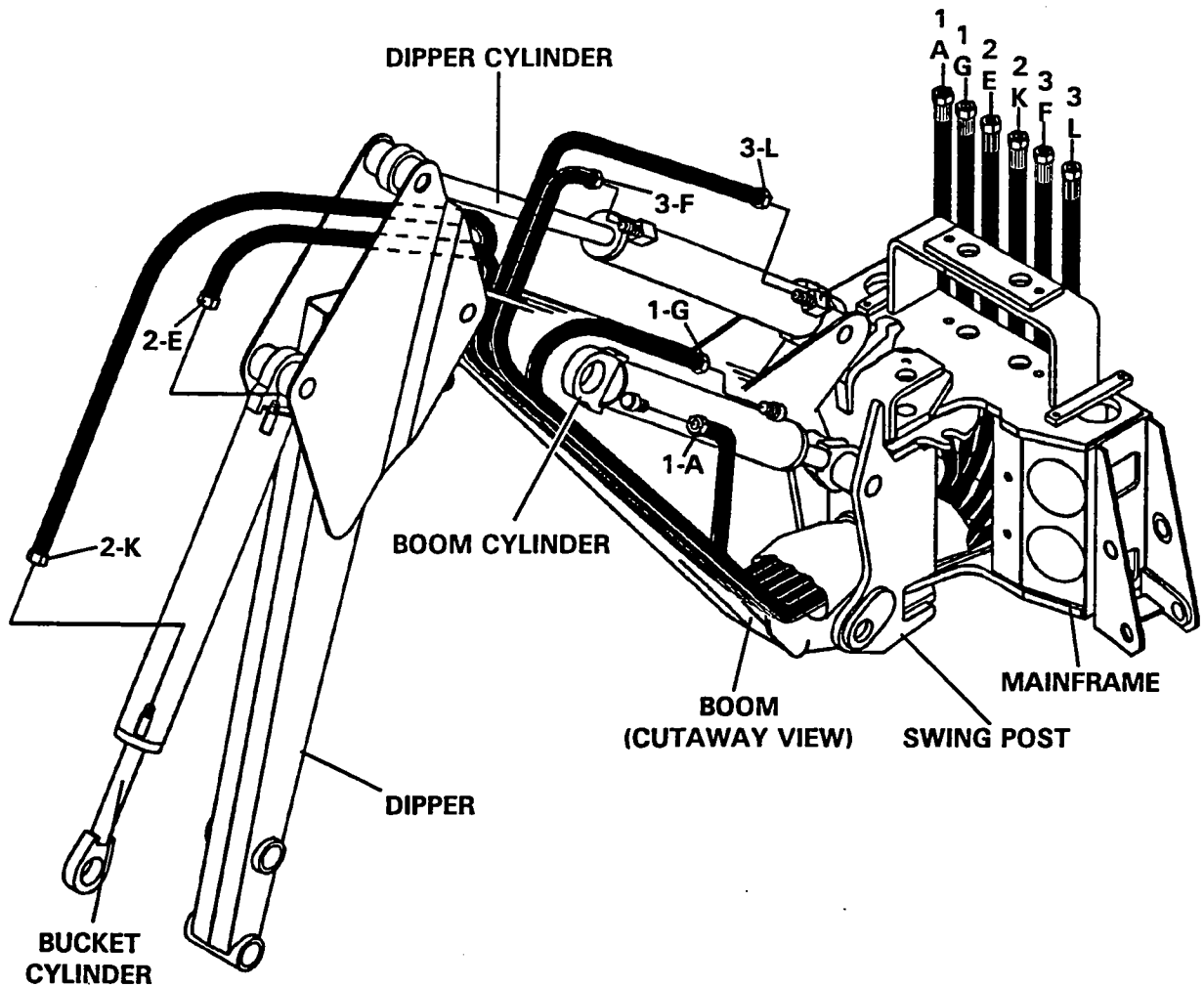
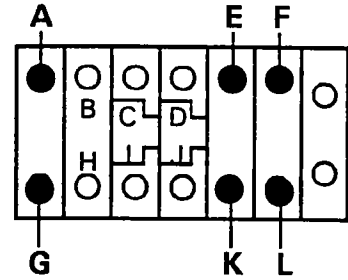
NOTE: Letters on the hose set diagram show the hydraulic hose routing between the backhoe control valve and the various hydraulic cylinders. Simply match the letter on the control valve port to the same letter on the hydraulic hose ends. Example: Hose Assembly labeled "C" runs from the upper Left Stabilizer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

BOOM & DIPPER HOSE SET

ASSEMBLY #81877

HYDRAULIC CONTROL VALVE



BOOM & DIPPER HOSE SET

ASSEMBLY #81877

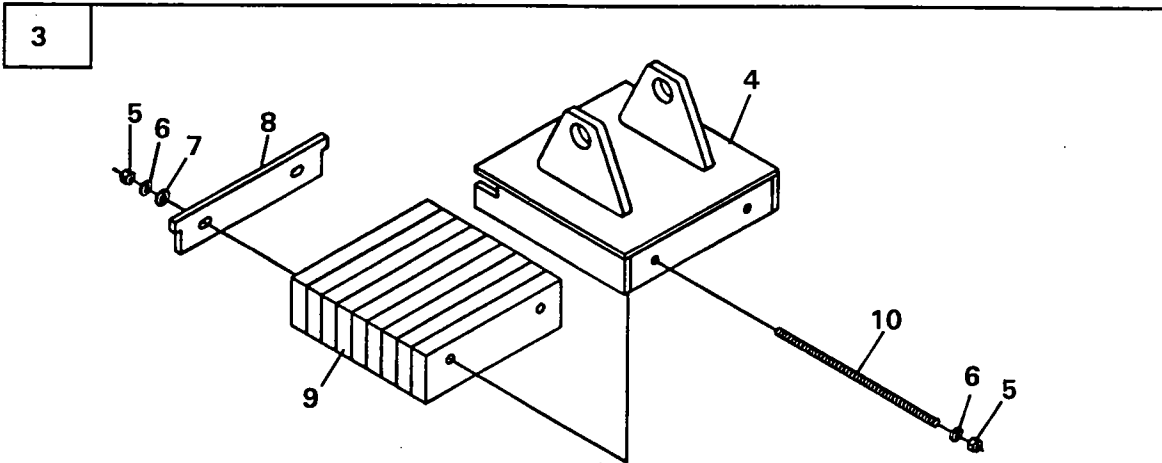
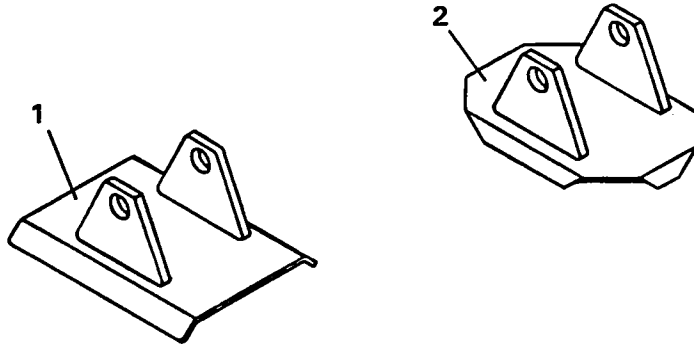
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	37523	Hose Assembly .38" X 80" 6FJX-6FJX
2	2	37525	Hose Assembly .38" X 122" 6FJX-6FJX
3	2	37524	Hose Assembly .38" X 129" 6FJX-6FJX

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 "G" runs from the lower Boom port on the hydraulic control valve - through the mainframe and swing post and to the rod 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.

6709
12-5-95

STABILIZER PADS

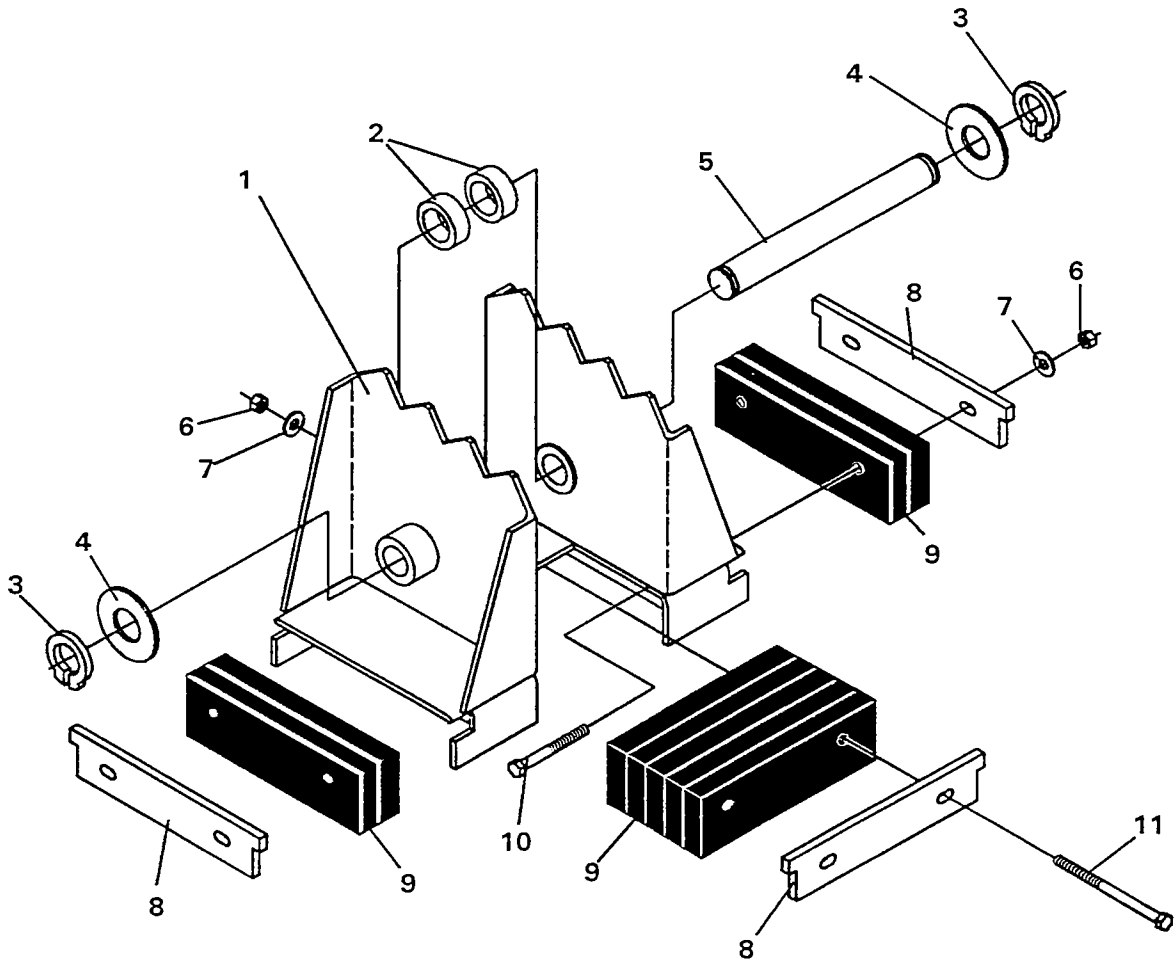


STABILIZER PADS

<u>NO</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" Readl Bolt

STABILIZER PADS

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



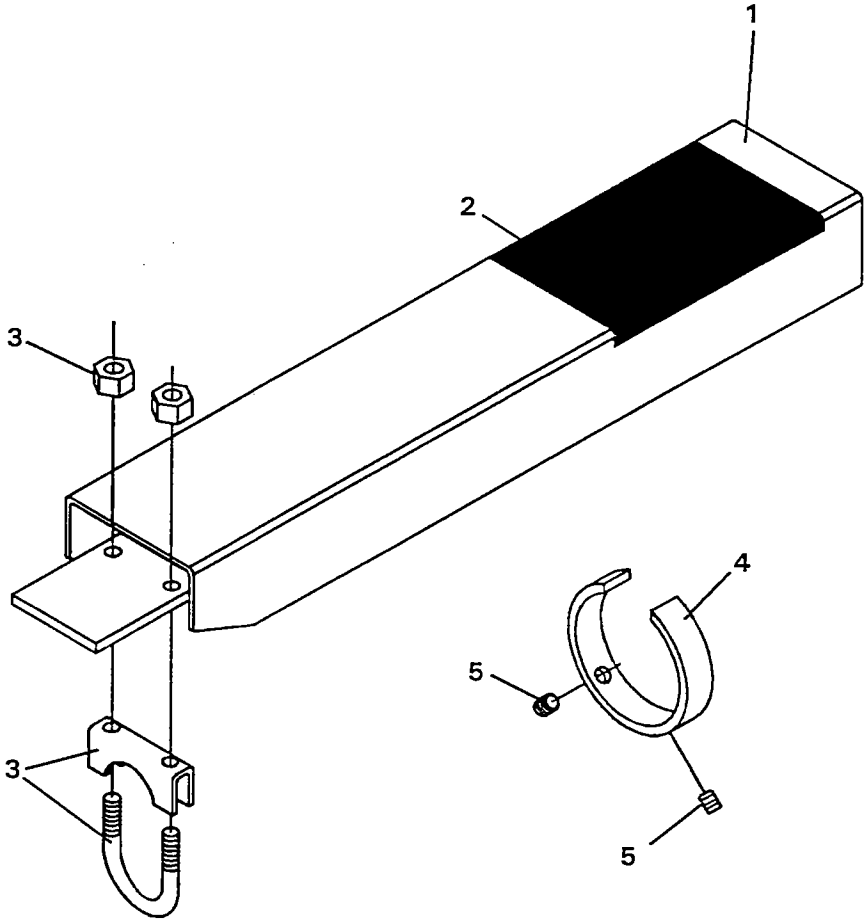
STABILIZER PADS

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

<u>NO</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

STABILIZER CYLINDER COVER ASSEMBLY #83850

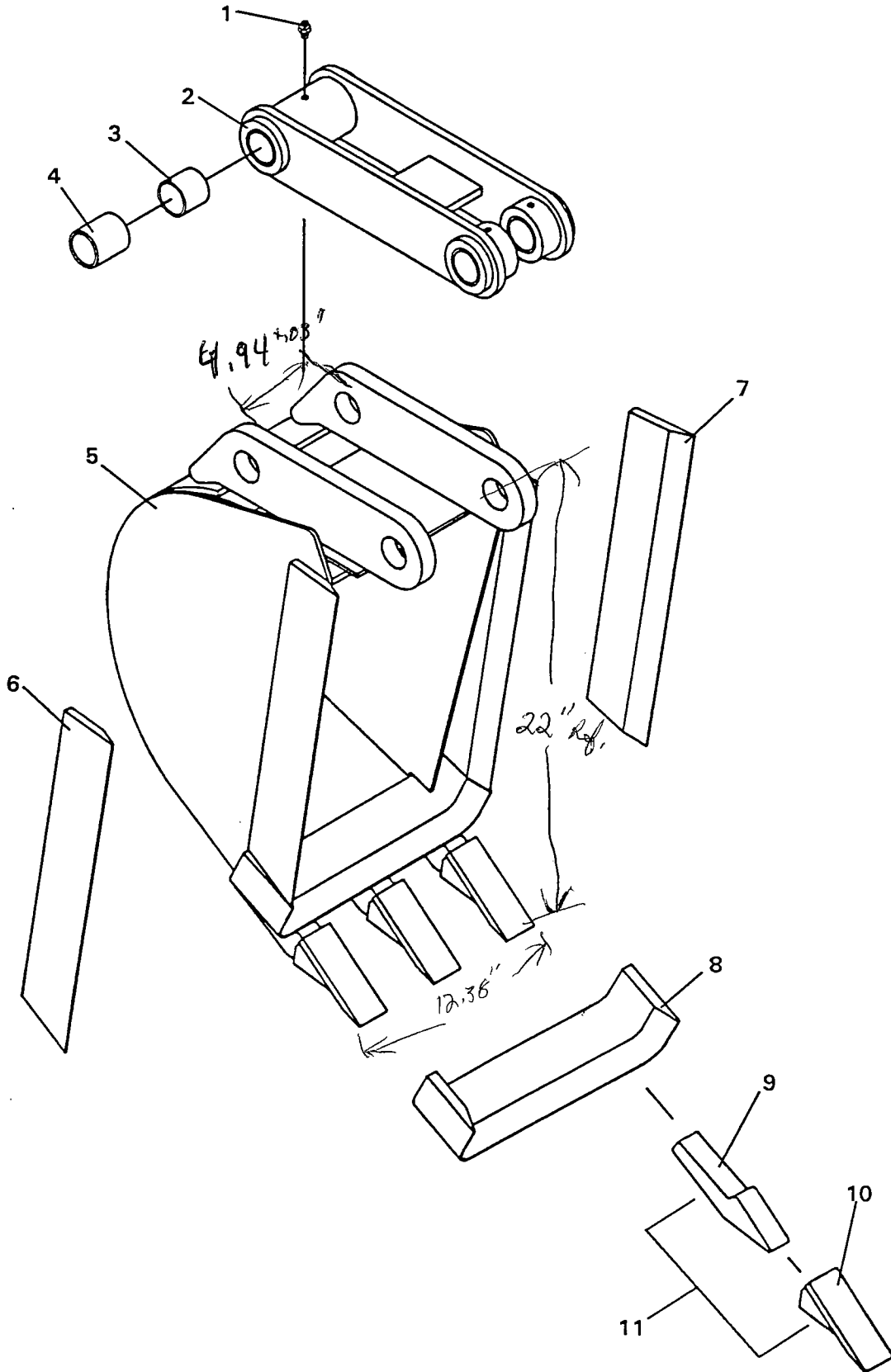


OPTIONAL STABILIZER CYINDER COVER

STABILIZER CYLINDER COVER ASSEMBLY #83850

<u>NO</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	83910	Muffler Clamp Assembly
4	2	83911	Guide Ring
5	4	1575	.38" UNC X .50" Set Screw

BUCKET ASSEMBLIES

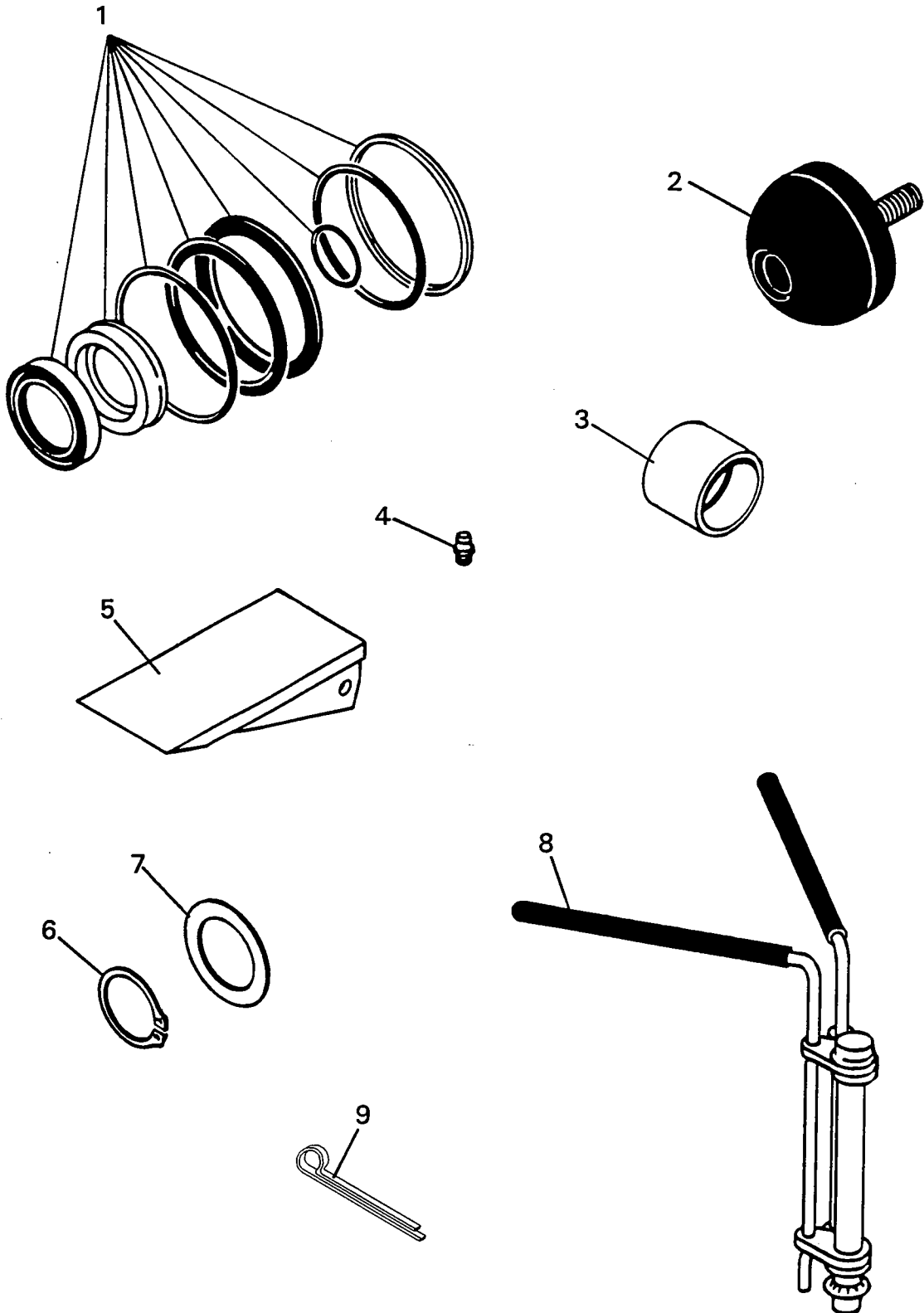


BUCKET ASSEMBLIES

<u>NO</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	6616	Replacement Grease Zerk
2	81824	Replacement Bucket Link (Requires (3) #6616 Grease Zerks, (4) #81610 Bushings, (1) #83368 Spacer)
3	83368	Replacement Spacer
4	81610	Replacement Bushing
5	81710	10" Bucket Weldment
	81712	12" Bucket Weldment —
	81716	16" Bucket Weldment
	81718	18" Bucket Weldment
	81724	24" Bucket Weldment
6	81667	Replacement Right Side Cutter
7	81668	Replacement Left Side Cutter
8	81906	10" Replacement Front Cutter Edge
	81902	12" Replacement Front Cutter Edge
	81898	16" Replacement Front Cutter Edge
	81894	18" Replacement Front Cutter Edge
	81666	24" Replacement Front Cutter Edge
9	6398	Replacement Tooth Shank
10	6397	Replace Tooth Point
11	8274	Replacement Tooth Point & Shank

FIRST LINE REPAIR KIT

ASSEMBLY #83649



FIRST LINE REPAIR KIT

ASSEMBLY #83649

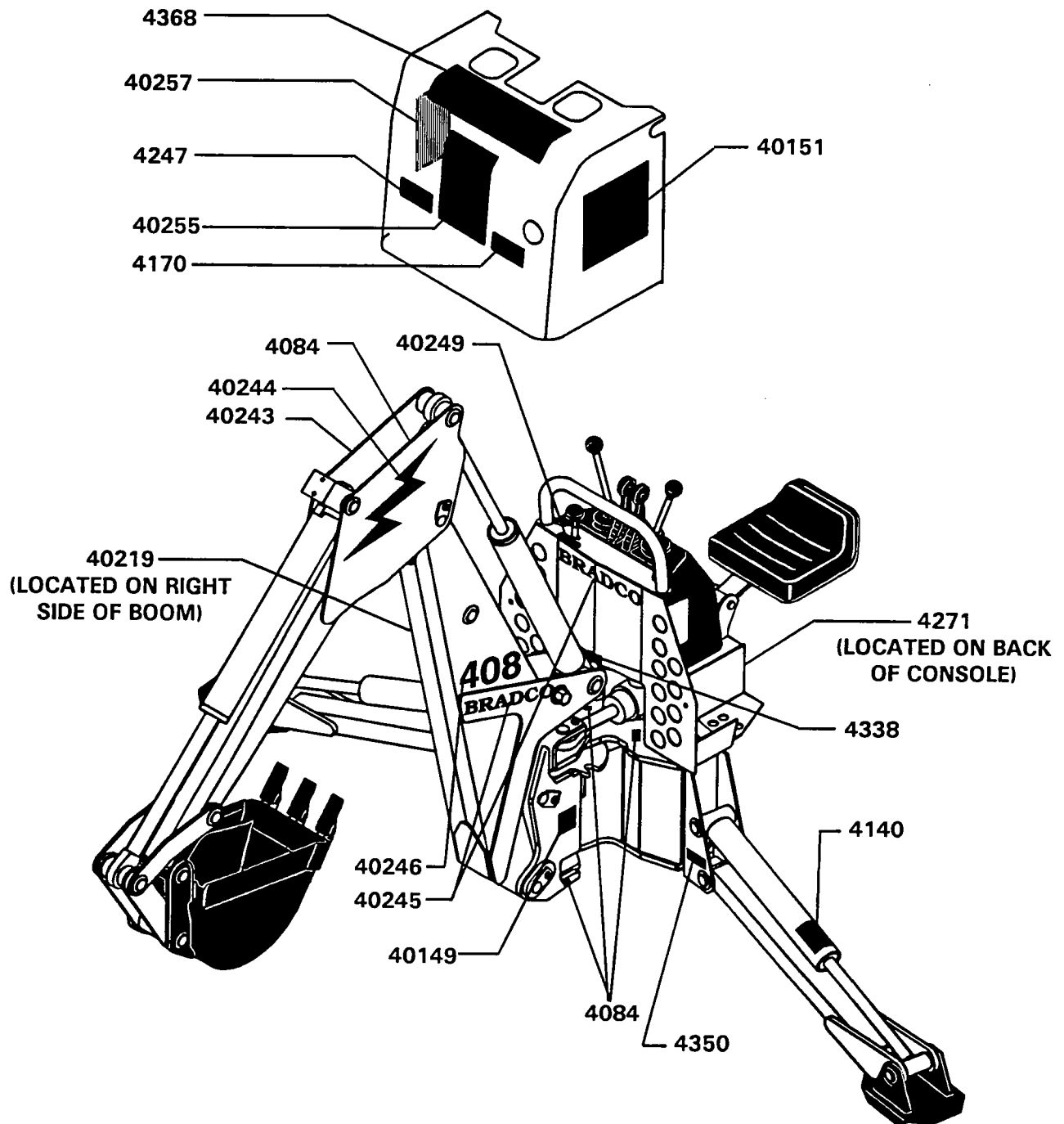
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	45617	Seal Kit (Swing/Stabilizer/Bucket Cylinders)
	2	45618	Seal Kit (Boom/Dipper Cylinders)
2	1	6886	Rubber Bumper
3	4	81610	Bushing
4	4	6616	Grease Zerk
5	4	6397	Bucket Tooth
6	4	1650	Snap Ring 1.38"
7	4	6623	Thrust Washer 1.38" X .031"
8	1	65349	Cylinder Seal Install Tool
9	2	1613	Cotter Pin

DECALS

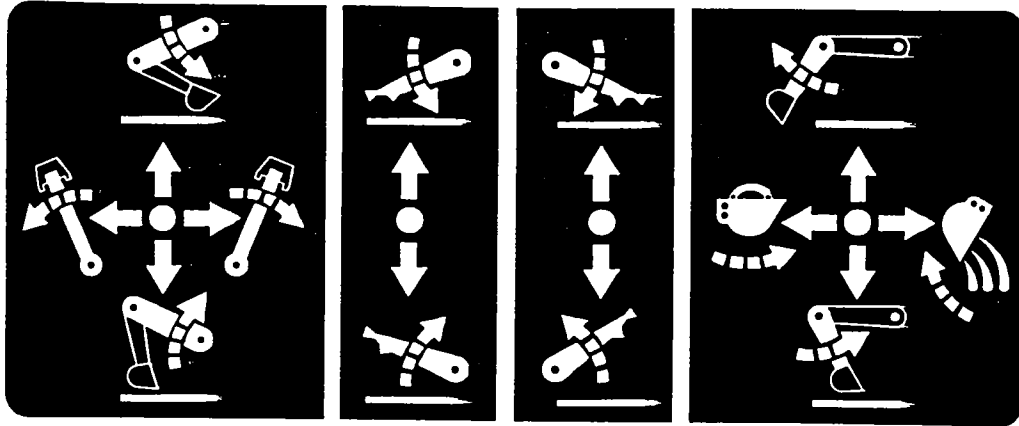
DECAL PLACEMENT

GENERAL INFORMATION

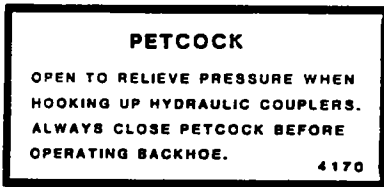
The diagram on this page shows the location of all the decals used on the 408 backhoe. The decals are identified by their part numbers, with reductions of the actual decals located on the following pages. Use this information to order replacements for lost or damaged decals. Be sure to read all decals before operating the backhoe. They contain information you need to know for both safety and backhoe longevity.



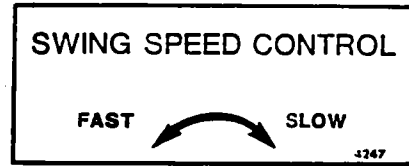
DECALS



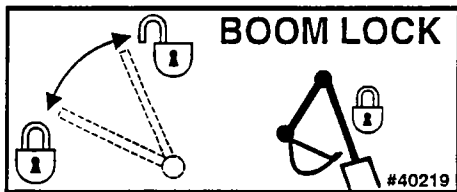
PART #4368
OPERATING CONTROLS DECAL



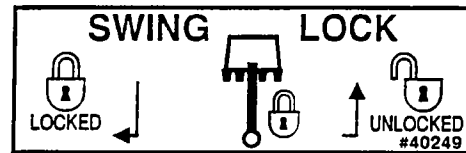
PART #4170
PETCOCK OPERATION DECAL



PART #4247
SWING SPEED CONTROL DECAL



PART #40219
BOOM LOCK DECAL



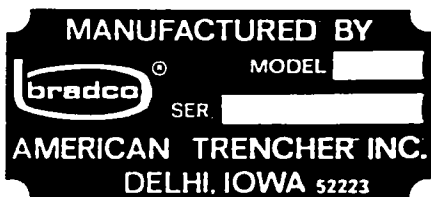
PART #40249
SWING LOCK DECAL

IMPORTANT

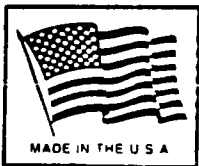
The backhoe bucket is capable of contacting this stabilizer and/or cylinder. Carefull operation will avoid backhoe damage.

4140

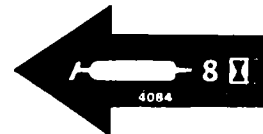
PART #4140
BUCKET CONTACT WARNING DECAL



PART # 4350
ATI SERIAL NUMBER TAG



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



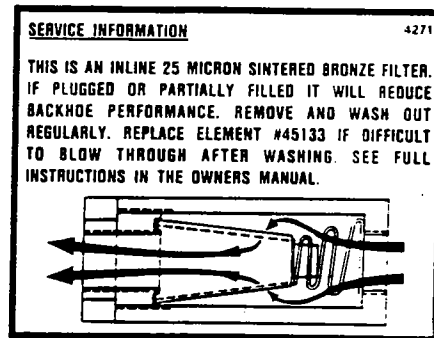
PART #4084
GREASE 8 HOURS

BRADCO

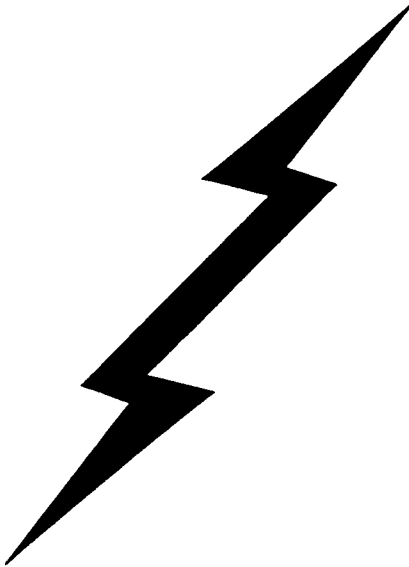
**PART #40245 (3 REQ'D)
BRADCO LOGO - SILVER**

408

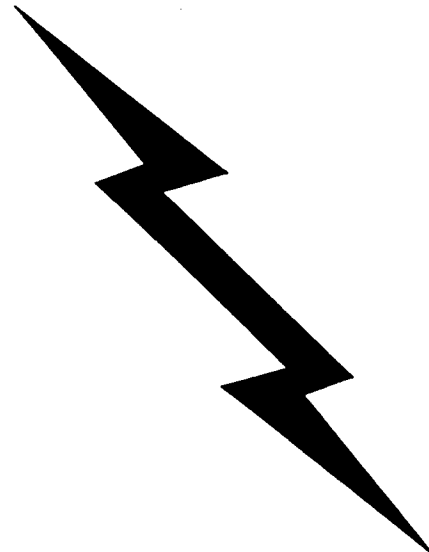
**PART #40246 (2 REQ'D)
408 MODEL NUMBER**



**PART #4271
INLINE FILTER DECAL**



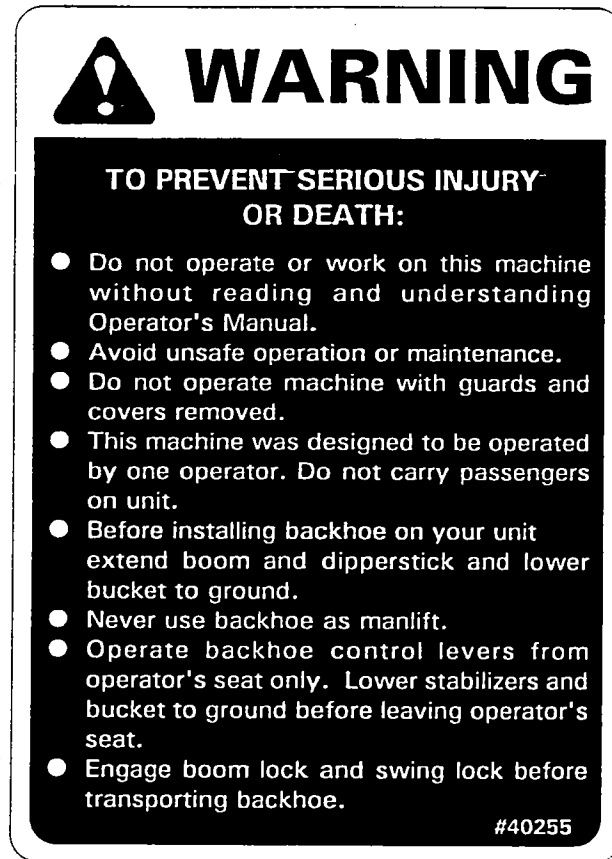
**PART #40244
LIGHTNING BOLT - LEFT**



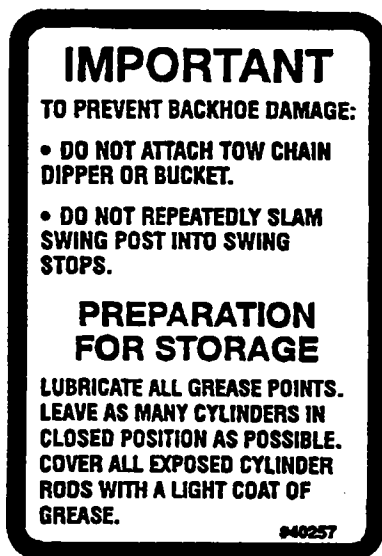
**PART #40243
LIGHTNING BOLT - RIGHT**



PART #40151
HIGH PRESSURE FLUID DECAL



PART #40255
OPERATIONAL WARNING DECAL



PART #40257
IMPORTANT! DECAL



PART #40149
DANGER! PINCH POINTS

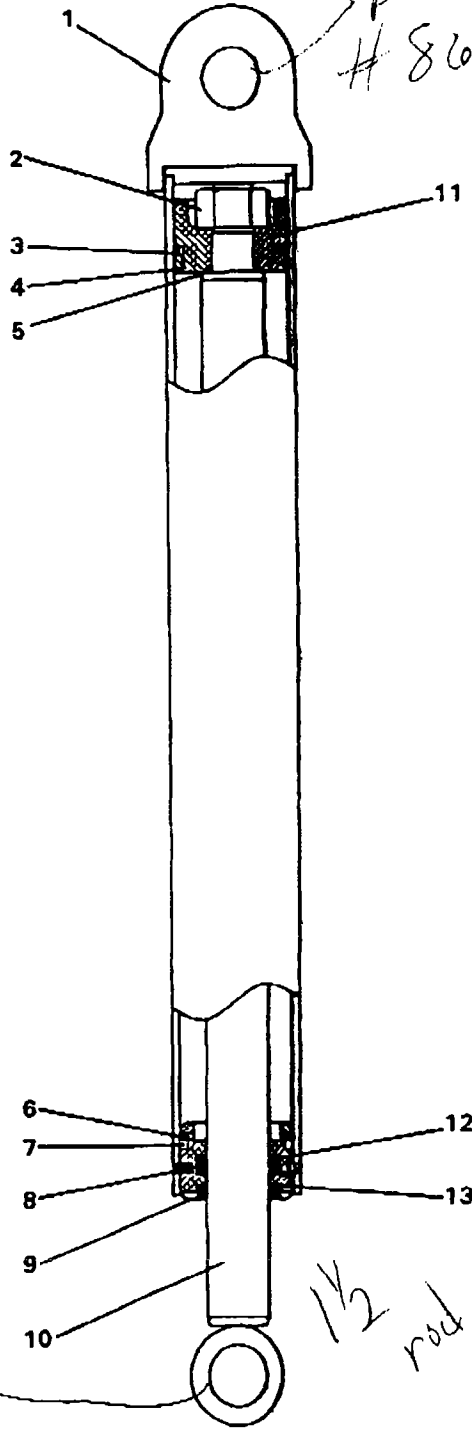
CYLINDER ASSEMBLY

BOOM CYLINDER ASSEMBLY #85663

SERIAL #8408AX973 AND UP

Allen:
Chris

Bushing
86761



85647
takes 2

1/2 rod

CYLINDER ASSEMBLY

BOOM CYLINDER ASSEMBLY #85663

SERIAL #8408AX973 AND UP

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	85664	Cylinder Tube
2	1	1483	Hex Nut
3	1	45250*	O'Ring
4	1	45251*	Piston Ring
5	1	4641*	O'Ring
6	1	45248*	O'Ring
7	1	45249*	Back-Up Washer
8	1	65465*	Gland Retaining Rod
9	1	4914*	Rod Wiper
10	1	85666	Cylinder Rod
11	1	82857	Piston
12	1	45225*	Poly-Pak Seal
13	1	85645	Cylinder Gland

Retainer type

~~85663~~ #45747
~~45250~~

NOTE: Seal Kit #45758 includes all parts marked with an asterisk (*).
Parts are not sold separately.

7470
6-9-98

