



---

# **Illustrated Parts Manual**

## **Models 600A 600AJ**

S/N 0300177361 to Present

**P/N  
3121617**

September 1, 2013

**ANSI**

**CE**



An Oshkosh Corporation Company



# REVISION LOG

## NOTES:

**NOTE:** The 600A & 600AJ Boom Lifts are manufactured by JLG Industries in the following countries: USA and China. Refer to the Serial Number Tag to identify the country of manufacture. The country of manufacture may be determined by the Serial Number. Machines manufactured in the USA will have a serial number prefix of 03 (i.e. 03XXXXXXXX). Machines manufactured in the China will have a serial number prefix of B3 (i.e. B3XXXXXXXX).

## PARTS MANUAL REVISION LOG:

September 1, 2013 - Original Issue Of Manual (Manual edited to 1001160000 Revision B)

# REVISION LOG

# TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
<b>SECTION 1 - FRAME .....1-1</b>		
1-1	AXLE INSTALLATION .....	1-2
1-2	STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITHOUT TOW PACKAGE) .....	1-6
1-3	STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITH TOW PACKAGE) ...	1-10
1-4	STEERING INSTALLATION (7FT/2.1M WIDE MACHINES) .....	1-14
1-5	TIRE & WHEEL DRIVE INSTALLATIONS .....	1-18
1-6	DRIVE HUB ASSEMBLY .....	1-22
1-7	DRIVE MOTOR ASSEMBLY .....	1-24
1-8	DRIVE VALVES & SHIELDS INSTALLATION (FRAME MOUNTED) .....	1-28
1-9	TOW PACKAGE INSTALLATION (OPTIONAL) .....	1-32
<b>SECTION 2 - TURNTABLE.....2-1</b>		
2-1	CONTROL VALVES INSTALLATIONS .....	2-2
2-2	MAIN VALVE BLOCK ASSEMBLY .....	2-6
2-3	ACCESSORY VALVE ASSEMBLIES .....	2-10
2-4	SWING DRIVE, TURNTABLE BEARING & LOCK INSTALLATIONS .....	2-12
2-5	SWING MOTOR/HUB ASSEMBLY .....	2-14
2-6	DEUTZ D2011 ENGINE INSTALLATION .....	2-18
2-7	DEUTZ TD2.9L4 ENGINE INSTALLATION .....	2-26
2-8	GM ENGINE INSTALLATION .....	2-36
2-9	PISTON PUMP ASSEMBLY .....	2-42
2-10	GEAR PUMP ASSEMBLY .....	2-48
2-11	TANK INSTALLATIONS .....	2-50
2-12	ROTARY COUPLING INSTALLATION .....	2-54
2-13	GROUND CONTROL BOX ASSEMBLY .....	2-58
2-14	ELECTRICAL OPTIONS INSTALLATIONS (TURNTABLE MOUNTED) .....	2-62
2-15	ENGINE TRAY JACK INSTALLATIONS (OPTIONAL) .....	2-66
2-16	HOODS INSTALLATIONS .....	2-68
2-17	2500W GENERATOR INSTALLATION - DEUTZ MACHINES (OPTIONAL) .....	2-74
2-18	2500W GENERATOR INSTALLATION - GM MACHINES (OPTIONAL) .....	2-78
2-19	7500W SKYPOWER GENERATOR INSTALLATION - DEUTZ ENGINES .....	2-82
2-20	7500W SKYPOWER GENERATOR INSTALLATION - GM ENGINES .....	2-90
<b>SECTION 3 - BOOM.....3-1</b>		
3-1	BOOMS & CYLINDERS INSTALLATION - 600A .....	3-2
3-2	BOOMS & CYLINDERS INSTALLATION - 600AJ .....	3-6
3-3	TOWER BOOM ASSEMBLY .....	3-12
3-4	MAIN BOOM ASSEMBLY .....	3-16
3-5	ROTATOR ASSEMBLIES .....	3-20
3-6	VALVES & SWITCHES INSTALLATION (BOOM MOUNTED) .....	3-22
<b>SECTION 4 - PLATFORM.....4-1</b>		
4-1	PLATFORM ASSEMBLIES .....	4-2
4-2	PLATFORM COMPONENTS INSTALLATION (FALL ARREST PLATFORM) .....	4-6
4-3	PLATFORM CONSOLE ASSEMBLY .....	4-8
4-4	CONTROLLER ASSEMBLY (LIFT AND SWING) .....	4-12
4-5	CONTROLLER ASSEMBLY (DRIVE AND STEER) .....	4-14
4-6	PLATFORM PADDING INSTALLATION (30in/76cm DEPTH PLATFORMS) (OPTIONAL) .....	4-16

# TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
4-7	SOFT TOUCH SYSTEM INSTALLATION (36in/91.5cm DEPTH PLATFORMS) (OPTIONAL) .....	4-18
<b>SECTION 5 - CYLINDER .....</b>		<b>5-1</b>
5-1	AXLE LOCKOUT CYLINDER ASSEMBLY .....	5-2
5-2	LEVEL (SLAVE) CYLINDER ASSEMBLY - PLATFORM .....	5-4
5-3	LEVEL CYLINDER ASSEMBLY - UPRIGHT .....	5-8
5-4	LIFT CYLINDER ASSEMBLY - JIB .....	5-10
5-5	LIFT CYLINDER ASSEMBLY - MAIN BOOM .....	5-12
5-6	LIFT CYLINDER ASSEMBLY - TOWER BOOM .....	5-14
5-7	MASTER CYLINDER ASSEMBLY .....	5-16
5-8	STEER CYLINDER ASSEMBLY (7FT/2.1M WIDE MACHINES) .....	5-20
5-9	STEER CYLINDER ASSEMBLY (8FT/2.4M WIDE MACHINES) .....	5-22
5-10	TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM .....	5-24
5-11	TELESCOPE CYLINDER ASSEMBLY - TOWER BOOM .....	5-26
<b>SECTION 6 - HYDRAULIC .....</b>		<b>6-1</b>
6-1	DRIVE HYDRAULIC DIAGRAM - 2WD/2WS .....	6-2
6-2	DRIVE HYDRAULIC DIAGRAM - 4WD/2WS .....	6-4
6-3	HYDRAULIC DIAGRAM - OSCILLATING AXLE .....	6-8
6-4	HYDRAULIC DIAGRAM - STANDARD .....	6-10
6-5	HYDRAULIC DIAGRAM LIST .....	6-16
<b>SECTION 7 - ELECTRICAL .....</b>		<b>7-1</b>
7-1	ELECTRICAL DIAGRAM LIST .....	7-2
7-2	HARNES COMPONENTS INSTALLATION .....	7-4
<b>SECTION 8 - DECALS .....</b>		<b>8-1</b>
8-1	DECAL INSTALLATION (ANSI SPEC) .....	8-2
8-2	DECAL INSTALLATION (COUNTRY SPEC) .....	8-6
8-3	DECAL INSTALLATION (AUSTRALIAN & CE SPECS) .....	8-12
<b>SECTION 9 - RECOMMENDED SERVICE PARTS STOCK .....</b>		<b>9-1</b>
<b>SECTION 10 - SPECIAL OPTIONS .....</b>		<b>10-1</b>
<b>SECTION 11 - PARTS NUMBER INDEX .....</b>		<b>11-1</b>

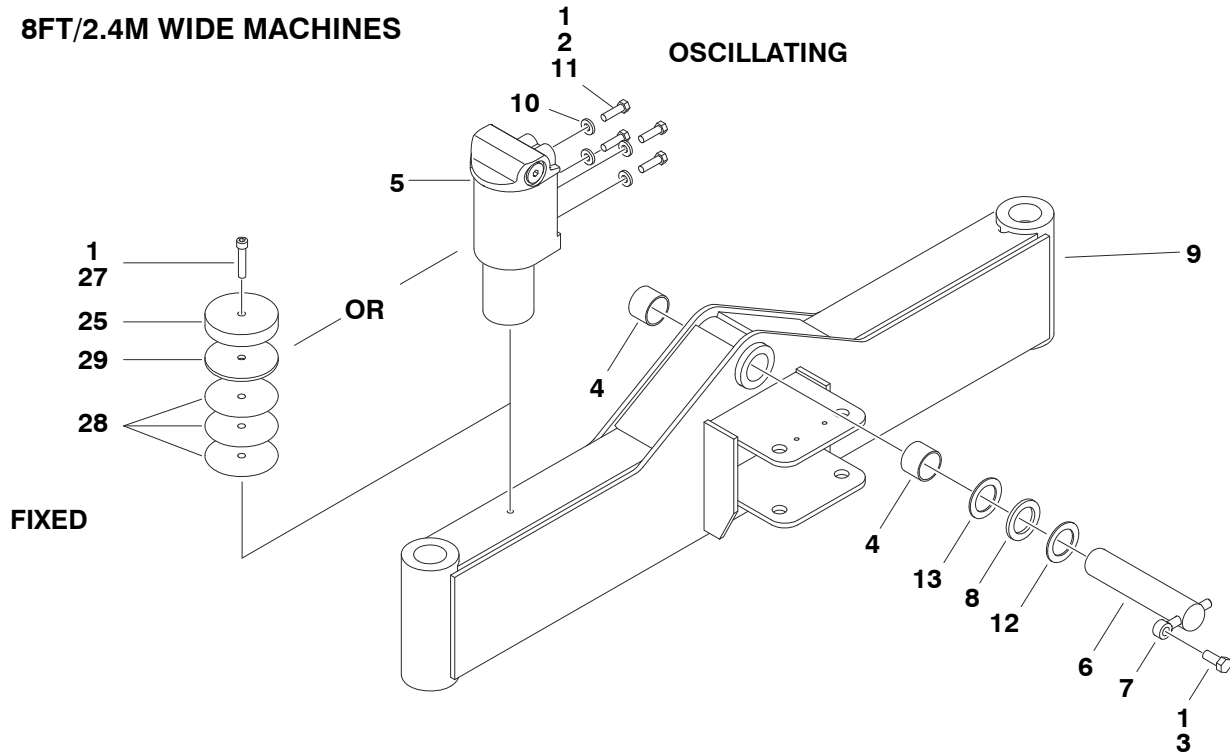
# **SECTION 1**

## **FRAME**

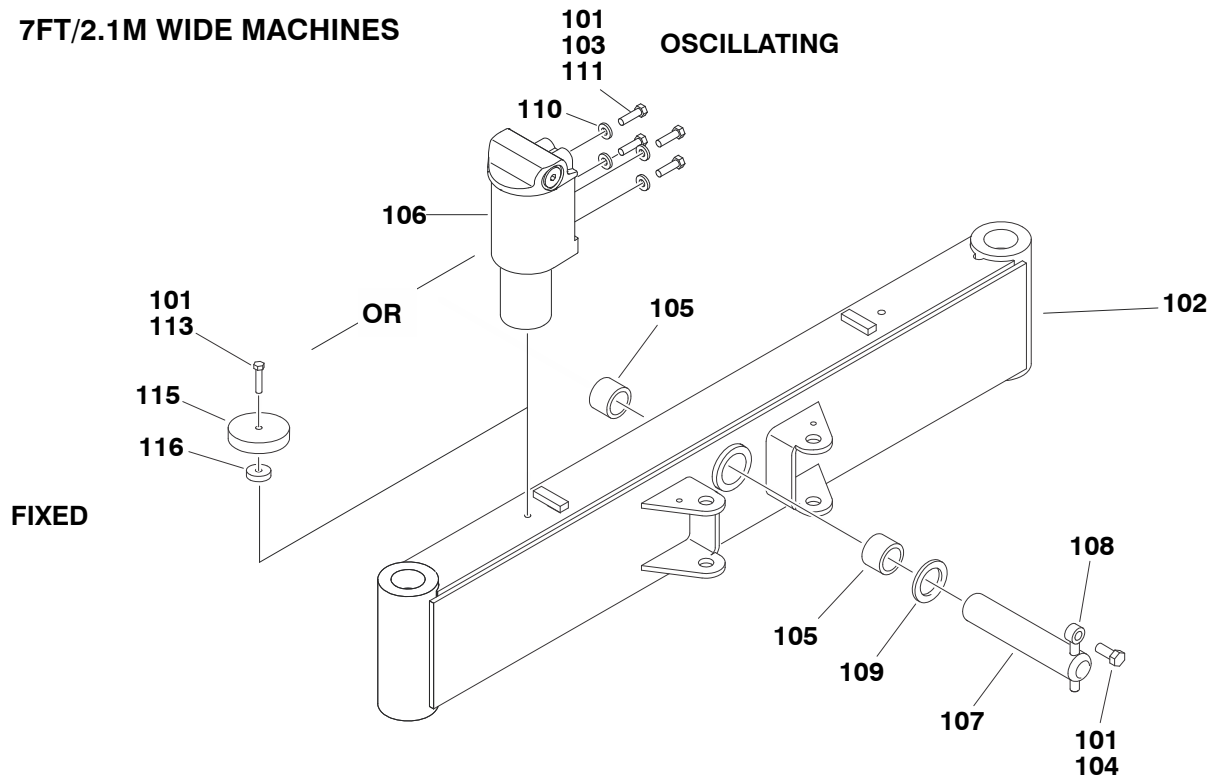
# SECTION 1 FRAME

## FIGURE 1-1. AXLE INSTALLATION

8FT/2.4M WIDE MACHINES



7FT/2.1M WIDE MACHINES





# SECTION 1 FRAME

## FIGURE 1-1. AXLE INSTALLATION

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	<b>AXLE INSTALLATIONS (8FT/2.4M WIDE MACHINES)</b>	
	1001148168	Ref.	<b>Oscillating Axle without Tow Package</b>	C
	1001152448	Ref.	<b>Oscillating Axle without Tow Package (With Turf Tire)</b>	B
	1001148170	Ref.	<b>Oscillating Axle with Tow Package</b>	C
	1001148169	Ref.	<b>Fixed Axle Machines</b>	C
1	0100011	A/R	Compound, Locking	
2	0641814	8	Bolt 1/2in-13NC x 1-3/4in	
3	0642012	1	Bolt 5/8in-11NC x 1-1/2in	
4	0961950	2	Bearing	
5	1684465	2	Axle Lockout Cylinder Assembly (Oscillating Axle Only) (See Section 5 for Breakdown):	
6	3423184	1	Pin	
7	3841258	1	Keeper, Pin	
8	4740158	1	Thrustwasher (1/4in Thick)	
9		1	Axle Weldment Options:	
	1001148171		Machines without Tow Package	
	1001151966		Machines without Tow Package (With Turf Tire)	
	1001148172		Machines with Tow Package	
10	4891800	8	Flatwasher 1/2in Hardened	
11	0100038	A/R	Primer, Locking	
12	4740229	A/R	Thrustwasher (1/8in Thick)	
13	4071101	A/R	Shim	
14 to 24	Not Used			
25	3539877	2	Plate, Stop (Fixed Axle Only)	
26	Not Used			
27	3931840		Capscrew 1/2in-13NC x 2-1/2in	
28	4070944	6	Shim (.06) (Fixed Axle Only)	
29	4070945	2	Shim (.25) (Fixed Axle Only)	
		Ref.	<b>AXLE INSTALLATIONS (7FT/2.1M WIDE MACHINES)</b>	
	0274047	Ref.	<b>Oscillating Axle without Tow Package</b>	B
	0274256	Ref.	<b>Oscillating Axle with Tow Package</b>	B
	0274054	Ref.	<b>Fixed Axle</b>	B
101	0100011	A/R	Compound, Locking	
102		1	Axle Weldment Options:	
	0280171		Machine without Tow Package	
	0280185		Machine with Tow Package	
103	0641814	8	Bolt 1/2in-13NC x 1-3/4in	
104	0642012	1	Bolt 5/8in-11NC x 1-1/2in	
105	0961950	2	Bearing	
106	1684465	2	Axle Lockout Cylinder Assembly (Oscillating Axle Only) (See Section 5 for Breakdown):	
107	3422592	1	Pin	
108	3841258	1	Keeper, Pin	
109	4740158	1	Thrustwasher (1/4in Thick)	
110	4891800	8	Flatwasher 1/2in Hardened	
111	0100038	A/R	Primer, Locking	

# SECTION 1 FRAME

## FIGURE 1-1. AXLE INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
112	Not Used			
113	0641816	2	Bolt 1/2in-13NC x 2in	
114	Not Used			
115	3539877	2	Plate, Stop (Fixed Axle Only)	
116	4740542	2	Spacer (Fixed Axle Only)	

**FIGURE 1-1. AXLE INSTALLATION (CONTINUED)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.



## SECTION 1 FRAME

**FIGURE 1-2. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITHOUT TOW PACKAGE)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	<b>4WD STEERING INSTALLATION</b>	
	1001148162	Ref.	<b>4WD/2WS</b>	C
	1001148163	Ref.	<b>4WD/4WS (Note: Double qty for 4WD/4WS Machines)</b>	B
1	0100011	A/R	Compound, Locking	
2	0641608	6	Bolt 3/8in-16NC x 1in	
3	1001097242	2	Steer Cylinder Assembly (See Section 5 for Breakdown)	
4	0642012	2	Bolt 5/8in-11NC x 1-1/2in	
5	0962356	2	Bushing	
6	0962131	4	Bushing	
7	Not Used			
8	3422326	2	Pin	
9	3422900	2	Kingpin	
10	3422902	2	Pin	
11	3422903	2	Pin	
12	3841143	6	Keeper, Pin	
13	3841258	2	Keeper, Pin	
14	1001155574	1	Tie-Rod	
15	1001099387	1	Spindle	
16	1001099196	1	Spindle	
17	4740111	6	Thrustwasher	
18	4740256	2	Thrustwasher	
19	4740463	2	Thrustwasher	
	1001148161	Ref.	<b>2WD STEERING INSTALLATION</b>	C
101	0100011	A/R	Compound, Locking	
102 to 103	Not Used			
104	0641608	6	Bolt 3/8in-16NC x 1in	
105	Not Used			
106	0642012	2	Bolt 5/8in-11NC x 1-1/2in	
107	Not Used			
108	0962356	2	Bushing	
109	0962131	4	Bushing	
110	Not Used			
111	1001097242	2	Steer Cylinder Assembly (See Section 5 for Breakdown)	
112	4130410	2	Hub Assembly (See Items 201-212 for Breakdown)	
113	Not Used			
114	3422326	2	Pin	
115	3422900	2	Kingpin	
116	3422902	2	Pin	
117	3422903	2	Pin	
118	3841143	6	Keeper, Pin	
119	3841258	2	Keeper, Pin	
120	1001155574	1	Tie-Rod	
121	Not Used			
122	1001099387	1	Spindle	
123	1001099196	1	Spindle	

## SECTION 1 FRAME

**FIGURE 1-2. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITHOUT TOW PACKAGE) (CONTINUED)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
124	4740111	6	Thrustwasher	
125	4740256	2	Thrustwasher	
126	Not Used			
127	4740463	2	Thrustwasher	
128 to 129	Not Used			
130	0682020	12	Bolt 5/8in-11NC x 2-1/2in (Grade 8)	
131	3272001	12	Nut 5/8in-11NC (Grade 8)	
132	4892000	24	Flatwasher 5/8in Hardened	
	4130409	Ref.	<b>HUB ASSEMBLY</b>	C
201	0440170	2	Cone, Bearing	
202	0440171	2	Cup, Bearing	
203	0721003	3	Bolt #10-24NC x 3/8in	
204	1120304	1	Cap, Hub	
205	2780271	1	Hub	
205A	0630490	9	Stud, Wheel	
206	3323403	1	Nut, Slotted 1-1/2in -12NF	
207	3451010	1	Pin, Cotter 5/8in x 2-1/2in	
208	3960343	1	Seal, Grease	
209	4130409	1	Adapter, Spindle	
210	4740283	1	Flatwasher, Hardened	
211	4761000	3	Lockwasher #10	
212	3020017	A/R	Grease, Bearing	

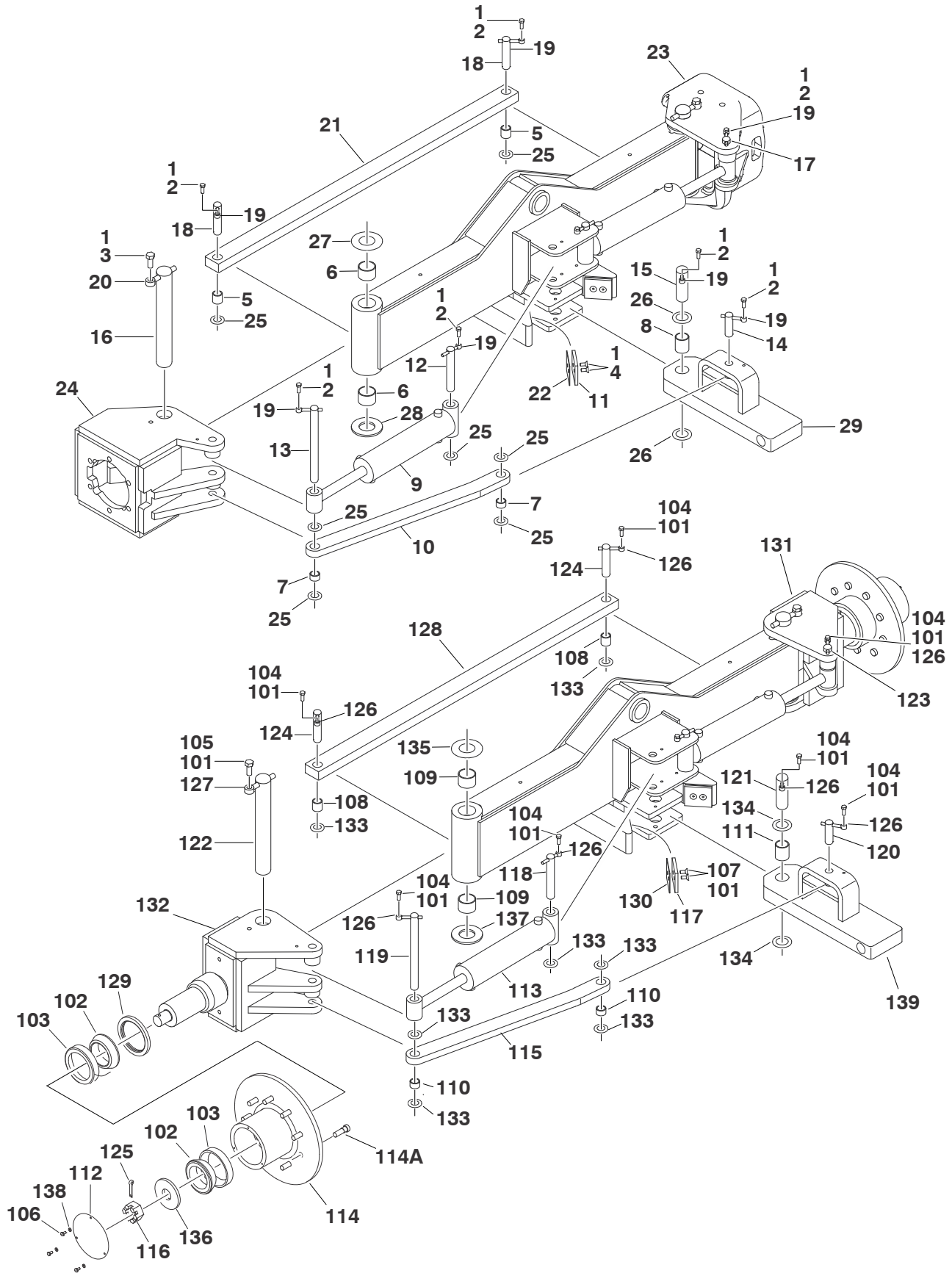
**SECTION 1 FRAME**

**FIGURE 1-2. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITHOUT TOW PACKAGE) (CONTINUED)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

# SECTION 1 FRAME

## FIGURE 1-3. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITH TOW PACKAGE)





## SECTION 1 FRAME

**FIGURE 1-3. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITH TOW PACKAGE)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	<b>4WD STEERING INSTALLATION</b>	
	1001148164	Ref.	<b>4WD/2WS</b>	C
	1001148166	Ref.	<b>4WD/4WS (Note: Double qty for 4WD/4WS Machines)</b>	C
1	0100011	A/R	Compound, Locking	
2	0641608	8	Bolt 3/8in-16NC x 1in	
3	0642012	2	Bolt 5/8in-11NC x 1-1/2in	
4	0741607	4	Screw 3/8in-16NC x 7/8in	
5	0962356	2	Bushing	
6	0962131	4	Bushing	
7	0962292	2	Bushing	
8	0962348	1	Bushing	
9	1001097242	2	Steer Cylinder Assembly (See Section 5 for Breakdown)	
10	1001148178	1	Link	
11	3340966	2	Pad	
12	3422326	2	Pin	
13	3422567	1	Pin	
14	3422813	1	Pin	
15	3422848	1	Pin	
16	3422900	2	Pin	
17	3422902	1	Pin	
18	3422903	2	Pin	
19	3841143	8	Keeper, Pin	
20	3841258	2	Keeper, Pin	
21	1001155574	1	Tie-Rod	
22	4071059	2	Shim	
23	1001099387	1	Spindle	
24	4130399	1	Spindle	
25	4740111	9	Thrustwasher	
26	4740155	2	Thrustwasher	
27	4740256	2	Thrustwasher	
28	4740463	2	Thrustwasher	
29	4846935	1	Pivot	
	1001148165	Ref.	<b>2WD STEERING INSTALLATION</b>	C
101	0100011	A/R	Compound, Locking	
102	0440170	4	Cone, Bearing	
103	0440171	4	Cup, Bearing	
104	0641608	8	Bolt 3/8in-16NC x 1in	
105	0642012	2	Bolt 5/8in-11NC x 1-1/2in	
106	0721003	6	Bolt #10-24NC x 3/8in	
107	0741607	4	Screw 3/8in-16NC x 7/8in	
108	0962356	2	Bushing	
109	0962131	4	Bushing	
110	0962292	2	Bushing	
111	0962348	1	Bushing	
112	1120304	2	Cap, Hub	
113	1001097242	2	Steer Cylinder Assembly (See Section 5 for Breakdown)	

## SECTION 1 FRAME

**FIGURE 1-3. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITH TOW PACKAGE)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
114	2780271	2	Hub	
114A	0630490	18	Stud, Wheel (9 Per Hub)	
115	1001148178	1	Link	
116	3323403	2	Nut, Slotted 1-1/2in -12NF	
117	3340966	2	Pad	
118	3422326	2	Pin	
119	3422567	1	Pin	
120	3422813	1	Pin	
121	3422848	1	Pin	
122	3422900	2	Pin	
123	3422902	1	Pin	
124	3422903	2	Pin	
125	3451010	1	Pin, Cotter 5/8in x 2-1/2in	
126	3841143	8	Keeper, Pin	
127	3841258	2	Keeper, Pin	
128	1001155574	1	Tie-Rod	
129	3960343	2	Seal, Grease	
130	4071059	2	Shim	
131	4130396	1	Spindle	
132	4130400	1	Spindle	
133	4740111	9	Thrustwasher	
134	4740155	2	Thrustwasher	
135	4740256	2	Thrustwasher	
136	4740283	2	Flatwasher, Hardened	
137	4740463	2	Thrustwasher	
138	4761000	6	Lockwasher #10	
139	4846935	1	Pivot	

# SECTION 1 FRAME

**FIGURE 1-3. STEERING INSTALLATION (8FT/2.4M WIDE MACHINES WITH TOW PACKAGE)**

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

# SECTION 1 FRAME

FIGURE 1-4. STEERING INSTALLATION (7FT/2.1M WIDE MACHINES)

