Illustrated Parts Manual

Models

E300AJ

E300AJP

SN 0300211844
TO SN 0300272206

3121721

March 24, 2020 - Rev O

ANSI

AS/NZS

An Oshkosh Corporation Company

Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

SECTION 1 - FRAME 11

FIGURE 1-1. STEER INSTALLATION 12
FIGURE 1-2. HUB AND SPINDLE ASSEMBLY - LH 14
FIGURE 1-3. HUB AND SPINDLE ASSEMBLY - RH 16
FIGURE 1-4. WHEEL DRIVE INSTALLATION (ALL SPECS EXCEPT UL SPEC) 18
FIGURE 1-5. WHEEL DRIVE INSTALLATION (UL SPECS) (SN 0300226252 through 0300272206) 22
FIGURE 1-6. DRIVE HUB ASSEMBLY 26
FIGURE 1-7. DRIVE MOTOR ASSEMBLY 30
FIGURE 1-8. TIRE AND WHEEL INSTALLATION 32
FIGURE 1-9. BATTERY INSTALLATION - 305AH BATTERIES 34
FIGURE 1-10. BATTERY INSTALLATION - 305AH BATTERIES (UL SPECS) (SN 0300226252 through 0300272206) 36
FIGURE 1-11. BATTERY INSTALLATION - 305AH AGM BATTERIES 38
FIGURE 1-12. BATTERY INSTALLATION - 375AH/706HD BATTERIES 40
FIGURE 1-13. INVERTER INSTALLATION - OPTIONAL 42
FIGURE 1-14. FRAME COVERS INSTALLATION 44

SECTION 2 - TURNTABLE 47

FIGURE 2-1. VALVES, TANK AND MOTOR INSTALLATION - E300AJ 48
FIGURE 2-2. VALVES, TANK AND MOTOR INSTALLATION - E300AJP 50
FIGURE 2-3. MAIN VALVE ASSEMBLY 52
FIGURE 2-4. BOOM VALVE ASSEMBLY - E300AJ 54
FIGURE 2-5. BOOM VALVE ASSEMBLY - E300AJP 56
FIGURE 2-6. TURNTABLE BEARING AND SWING DRIVE INSTALLATION - DOHI 58
FIGURE 2-7. TURNTABLE BEARING AND SWING DRIVE INSTALLATION - JING WEI 60
FIGURE 2-8. TURNTABLE BEARING ASSEMBLY - DOHI 62
FIGURE 2-9. TURNTABLE BEARING ASSEMBLY - JING WEI 64
FIGURE 2-10. SWING MOTOR ASSEMBLY 66
FIGURE 2-11. DRIVE ORIENTATION INSTALLATION 68
FIGURE 2-12. ELECTRICAL COMPONENTS INSTALLATION - E300AJ ALL SPECS EXCEPT CE AND UL SPECS 70
FIGURE 2-13. ELECTRICAL COMPONENTS INSTALLATION - E300AJ CE SPEC 72
FIGURE 2-14. ELECTRICAL COMPONENTS INSTALLATION - E300AJ (UL SPECS) (SN 0300226252 through 0300272206) 74
FIGURE 2-15. ELECTRICAL COMPONENTS INSTALLATION - E300AJP ALL SPEC EXCEPT CE AND UL SPECS 76
FIGURE 2-16. ELECTRICAL COMPONENTS INSTALLATION - E300AJP CE SPEC 78
FIGURE 2-17. ELECTRICAL COMPONENTS INSTALLATION - E300AJP (UL SPECS) (SN 0300226252 through 0300272206) 80
FIGURE 2-18. GROUND CONTROL BOX ASSEMBLY - E300AJ ALL SPECS EXCEPT CE SPEC 82
FIGURE 2-19. GROUND CONTROL BOX ASSEMBLY - E300AJ CE SPEC 84
FIGURE 2-20. GROUND CONTROL BOX ASSEMBLY - E300AJP ALL SPECS EXCEPT CE SPEC 86
FIGURE 2-21. GROUND CONTROL BOX ASSEMBLY - E300AJP CE SPEC 88
FIGURE 2-22. BATTERY CHARGER INSTALLATION - WITH PLUG (ALL SPECS EXCEPT CE SPEC) 90
FIGURE 2-23. BATTERY CHARGER INSTALLATION - WITH PLUG (CE SPEC) 92
FIGURE 2-24. BATTERY CHARGER INSTALLATION - WITHOUT PLUG 94
FIGURE 2-25. BATTERY CHARGER ASSEMBLY 96
FIGURE 2-26. ALARM INSTALLATION 98
FIGURE 2-27. STROBE LIGHT INSTALLATION - AMBER 100
FIGURE 2-28. STROBE LIGHT INSTALLATION - BLUE (SN 0300211844 through 0300217405) 102
FIGURE 2-29. STROBE LIGHT INSTALLATION - BLUE (SN 0300217406 through 0300256384) 104
FIGURE 2-30. STROBE LIGHT INSTALLATION - BLUE (SN 0300256384 through 0300272206) 106
FIGURE 2-31. STROBE LIGHT INSTALLATION - RED (SN 0300211844 through 0300217097) 108
FIGURE 2-32. STROBE LIGHT INSTALLATION - RED (SN 0300217098 through 0300256384) 110
FIGURE 2-33. STROBE LIGHT INSTALLATION - RED (SN 0300256384 through 0300272206) 112
FIGURE 2-34. HOODS INSTALLATION 114

SECTION 3 - BOOM 117

FIGURE 3-1. BOOM AND CYLINDERS INSTALLATION - E300AJ 118
FIGURE 3-2. BOOM AND CYLINDERS INSTALLATION - E300AJP 120
FIGURE 3-3. TOWER BOOM ASSEMBLY - E300AJ 122
FIGURE 3-4. TOWER BOOM ASSEMBLY - E300AJP 124
FIGURE 3-5. MAIN BOOM ASSEMBLY - E300AJ 126
FIGURE 3-6. MAIN BOOM ASSEMBLY - E300AJP 128
FIGURE 3-7. JIB ASSEMBLY - E300AJ 130
FIGURE 3-8. JIB ASSEMBLY - E300AJP 132
FIGURE 3-9. ROTATOR ASSEMBLY - PLATFORM 134
FIGURE 3-10. ROTATOR ASSEMBLY - JIB SWING 136

MidWestTech | JLG E300AJ, E300AJP Boom Lift Parts Manual | Publication 3121721 Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

FIGURE 3-11. POWER TRACK INSTALLATION....138
FIGURE 3-12. PLATFORM SUPPORT INSTALLATION - WITHOUT LSS....140
FIGURE 3-13. PLATFORM SUPPORT INSTALLATION - WITH 4 CELL LSS....142
FIGURE 3-14. PLATFORM SUPPORT INSTALLATION - WITH 1 CELL LSS....144

SECTION 4 - PLATFORM....147

FIGURE 4-1. PLATFORM ASSEMBLY - 4FT/1.22M - SIDE GATE ENTRY....148
FIGURE 4-2. PLATFORM ASSEMBLY - 4FT/1.22M - DROP BAR ENTRY....150
FIGURE 4-3. PLATFORM ASSEMBLY - 30IN X 3FT (76CM X 91.5CM)....152
FIGURE 4-4. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - E300AJ WITHOUT SKYGUARD....154
FIGURE 4-5. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION WITH 4 CELL LSS - E300AJ WITH SKYGUARD (SN 0300211844 through 0300256384)....156
FIGURE 4-6. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION WITH 4 CELL LSS - E300AJ WITH SKYGUARD (SN 0300256384 through 0300272206)....158
FIGURE 4-7. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION WITH 1 CELL LSS - E300AJ WITH SKYGUARD....160
FIGURE 4-8. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - E300AJ WITH SKYGUARD (UL SPECS) (SN 0300226252 through 0300256384)....162
FIGURE 4-9. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - E300AJ WITH SKYGUARD (UL SPECS) (SN 0300256384 through 0300272206)....164
FIGURE 4-10. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - E300AJP WITHOUT SKYGUARD....166
FIGURE 4-11. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION WITH 4 CELL LSS - E300AJP WITH SKYGUARD (SN 0300211844 through 0300256384)....168
FIGURE 4-12. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION WITH 4 CELL LSS - E300AJP WITH SKYGUARD (SN 0300256384 through 0300272206)....170
FIGURE 4-13. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION WITH 1 CELL LSS - E300AJP WITH SKYGUARD....172
FIGURE 4-14. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - E300AJP WITH SKYGUARD (UL SPECS) (SN 0300226252 through 0300256384)....174
FIGURE 4-15. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - E300AJP WITH SKYGUARD (UL SPECS) (SN 0300256384 through 0300272206)....176
FIGURE 4-16. PLATFORM CONSOLE ASSEMBLY - E300AJ WITHOUT SKYGUARD....178
FIGURE 4-17. PLATFORM CONSOLE ASSEMBLY WITH 4 CELL LSS - E300AJ WITH SKYGUARD (SN 0300211844 through 0300256384)....182
FIGURE 4-18. PLATFORM CONSOLE ASSEMBLY WITH 4 CELL LSS - E300AJ WITH SKYGUARD (SN 0300256384 through 0300272206)....186
FIGURE 4-19. PLATFORM CONSOLE ASSEMBLY WITH 1 CELL LSS - E300AJ WITH SKYGUARD....190
FIGURE 4-20. PLATFORM CONSOLE ASSEMBLY - E300AJ (UL SPECS) (SN 0300226252 through 0300256384)....194
FIGURE 4-21. PLATFORM CONSOLE ASSEMBLY - E300AJ (UL SPECS) (SN 0300256384 through 0300272206)....198
FIGURE 4-22. PLATFORM CONSOLE ASSEMBLY - E300AJP WITHOUT SKYGUARD....202
FIGURE 4-23. PLATFORM CONSOLE ASSEMBLY WITH 4 CELL LSS - E300AJP WITH SKYGUARD (SN 0300211844 through 0300256384)....206
FIGURE 4-24. PLATFORM CONSOLE ASSEMBLY WITH 4 CELL LSS - E300AJP WITH SKYGUARD (SN 0300256384 through 0300272206)....210
FIGURE 4-25. PLATFORM CONSOLE ASSEMBLY WITH 1 CELL LSS - E300AJP WITH SKYGUARD....214
FIGURE 4-26. PLATFORM CONSOLE ASSEMBLY - E300AJP (UL SPECS) (SN 0300226252 through 0300256384)....218
FIGURE 4-27. PLATFORM CONSOLE ASSEMBLY - E300AJP (UL SPECS) (SN 0300256384 through 0300272206)....222
FIGURE 4-28. CONTROLLER ASSEMBLY - DRIVE AND STEER....226
FIGURE 4-29. CONTROLLER ASSEMBLY - LIFT AND SWING....228
FIGURE 4-30. FOOTSWITCH ASSEMBLY....232
FIGURE 4-31. TRAY ASSEMBLY....234
FIGURE 4-32. SKYGUARD INSTALLATION....236
FIGURE 4-33. CROSSRAIL INSTALLATION....238
FIGURE 4-34. PIPE RACK INSTALLATION (ANSI SPEC)....240
FIGURE 4-35. SKYEYE INSTALLATION....242
FIGURE 4-36. SKYLINE INSTALLATION....244

SECTION 5 - CYLINDER....247

FIGURE 5-1. LEVEL CYLINDER ASSEMBLY - PLATFORM SLAVE (SN 0300211844 through 0300221077)....248
FIGURE 5-2. LEVEL CYLINDER ASSEMBLY - PLATFORM SLAVE (SN 0300221078 through 0300272206)....250
FIGURE 5-3. LIFT CYLINDER ASSEMBLY - JIB....252
FIGURE 5-4. LIFT CYLINDER ASSEMBLY - MAIN BOOM....254
FIGURE 5-5. LIFT CYLINDER ASSEMBLY - TOWER BOOM....256
FIGURE 5-6. MASTER CYLINDER ASSEMBLY....258
FIGURE 5-7. STEER CYLINDER ASSEMBLY....260
FIGURE 5-8. TELESCOPE CYLINDER ASSEMBLY - E300AJ....262

MidWestTech | JLG E300AJ, E300AJP Boom Lift Parts Manual | Publication 3121721 Order the manual at mid-west-tech.com >

FIGURE 5-9. TELESCOPE CYLINDER ASSEMBLY - E300AJP 264

SECTION 6 - HYDRAULIC 267

FIGURE 6-1. HYDRAULIC DIAGRAM - E300AJ 268
FIGURE 6-2. HYDRAULIC DIAGRAM - E300AJP 272
FIGURE 6-3. HYDRAULIC DIAGRAM LIST 276

SECTION 7 - ELECTRICAL 277

FIGURE 7-1. ELECTRICAL DIAGRAM LIST 278
FIGURE 7-2. AC BOX AT PLATFORM INSTALLATION - LOCALLY SUPPLIED COMPONENTS (ANSI EXPORT, AUSTRALIAN AND CE SPECS) 280
FIGURE 7-3. AC BOX AT PLATFORM INSTALLATION - 110V (ANSI, ANSI EXPORT, CSA, JAPANESE AND UL SPECS) 282
FIGURE 7-4. AC BOX AT PLATFORM INSTALLATION - ANSI AND CSA SPECS 284
FIGURE 7-5. AC BOX AT PLATFORM INSTALLATION - 110V IEC YELLOW (CE SPEC) 286
FIGURE 7-6. AC BOX AT PLATFORM INSTALLATION - 220V IEC BLUE (CE SPEC) 288
FIGURE 7-7. AC BOX AT PLATFORM INSTALLATION - 220V AFSINT107 KEYED GROUND (CE SPEC) 290
FIGURE 7-8. AC BOX AT PLATFORM INSTALLATION - 220V CEE7 POST GROUND (CE SPEC) 292
FIGURE 7-9. AC BOX AT PLATFORM INSTALLATION - 220V CEE7 SIDE GROUND (CE SPEC) 294
FIGURE 7-10. BATTERY CABLE KIT - 305AH BATTERIES 296
FIGURE 7-11. BATTERY CABLE KIT - 305AH BATTERIES (UL SPECS) (SN 0300226252 through 0300272206) 298
FIGURE 7-12. BATTERY CABLE KIT - 305AH AGM BATTERIES 300
FIGURE 7-13. BATTERY CABLE KIT - 375AH/706HD BATTERIES 302
FIGURE 7-14. BREAKER BOX KIT - CE SPEC 304
FIGURE 7-15. BOOM CABLES AND CLAMPS INSTALLATION - E300AJ 306
FIGURE 7-16. BOOM CABLES AND CLAMPS INSTALLATION - E300AJP 310
FIGURE 7-17. BOOM HARNESS - MAIN BOOM 314
FIGURE 7-18. BOOM HARNESS - TOWER BOOM 316
FIGURE 7-19. BOOM VALVE AND LIMIT SWITCH HARNESS 318
FIGURE 7-20. CHARGER CORD PLUG INSTALLATION - 110V - IEC 60309 - YELLOW (CE SPEC) 320
FIGURE 7-21. CHARGER CORD PLUG INSTALLATION - 220V - IEC 60309 - BLUE (CE SPEC) 322
FIGURE 7-22. CHARGER CORD PLUG INSTALLATION - 220V - AFSINT107 KEYED GROUND (CE SPEC) 324
FIGURE 7-23. CHARGER CORD PLUG INSTALLATION - 220V - CEE7 POST GROUND (CE SPEC) 326
FIGURE 7-24. CHARGER CORD PLUG INSTALLATION - 220V - CEE7 SIDE GROUND (CE SPEC) 328
FIGURE 7-25. DRIVE CABLE KIT (ALL SPECS EXCEPT UL SPEC) 330
FIGURE 7-26. DRIVE CABLE KIT (UL SPECS) (SN 0300226252 through 0300272206) 332
FIGURE 7-27. GROUND CONTROL HARNESS 334
FIGURE 7-28. INVERTER HARNESS 336
FIGURE 7-29. LSS SYSTEM HARNESS 338
FIGURE 7-30. PLATFORM CONSOLE HARNESS 340
FIGURE 7-31. PLATFORM CONSOLE HARNESS - WITH 1 CELL LSS 342
FIGURE 7-32. GENERATOR TO PLATFORM HARNESS - WITH SKYGUARD 344
FIGURE 7-33. RECEPTACLE BOX KIT - 110V IEC YELLOW (CE SPEC) 346
FIGURE 7-34. RECEPTACLE BOX KIT - 220V IEC BLUE (CE SPEC) 348
FIGURE 7-35. RECEPTACLE BOX KIT - 220V AFSINT107 KEYED GROUND (CE SPEC) 350
FIGURE 7-36. RECEPTACLE BOX KIT - 220V CEE7 POST GROUND (CE SPEC) 352
FIGURE 7-37. RECEPTACLE BOX KIT - 220V CEE7 SIDE GROUND (CE SPEC) 354
FIGURE 7-38. STEER SENSOR HARNESS 356
FIGURE 7-39. STROBE LIGHT HARNESS - AMBER LIGHT 358
FIGURE 7-40. TRACTION MODULE TO DRIVE HARNESS 360
FIGURE 7-41. TRACTION MODULE TO TURNTABLE HARNESS 364
FIGURE 7-42. TURNTABLE HARNESS 366
FIGURE 7-43. VALVE HARNESS 370
FIGURE 7-44. SKYLINE HARNESS 372
FIGURE 7-45. SKYEYE INTERMEDIATE HARNESS 374
FIGURE 7-46. SKYEYE RECEIVER HARNESS 376
FIGURE 7-47. SKYEYE EMITTER HARNESS 378

SECTION 8 - DECALS 381

FIGURE 8-1. DECAL INSTALLATION (ANSI SPEC) 382
FIGURE 8-2. DECAL INSTALLATION (AUSTRALIAN/CE SPECS) 386
FIGURE 8-3. DECAL INSTALLATION (BRAZIL SPEC) 390
FIGURE 8-4. DECAL INSTALLATION (CHINESE SPEC) 394
FIGURE 8-5. DECAL INSTALLATION (CSA SPECS) 398
FIGURE 8-6. DECAL INSTALLATION (JAPANESE SPECS) 402

MidWestTech | JLG E300AJ, E300AJP Boom Lift Parts Manual | Publication 3121721 Order the manual at mid-west-tech.com >

FIGURE 7-1. ELECTRICAL DIAGRAM LIST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: Diagrams not shown are available from the JLG Service Department. Schematics shown in the Service and Maintenance Manual.	
		Ref	ELECTRICAL DIAGRAM LIST	
	1001179394	Ref	Electrical Schematic	

MidWestTech | JLG E300AJ, E300AJP Boom Lift Parts Manual | Publication 3121721 Order the manual at mid-west-tech.com >

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
14	4460465	16	Socket, Female	
15	1001186231	1	Resistor Assembly	
16	4460836	1	Plug, Male - 12 Position	
16	1001157890	4	Socket, Female	
16	4460465	6	Socket, Female	
16	4460466	2	Plug, Terminal	
17	1001116813	1	Receptacle, Female - 8 Position	
17	4460464	5	Pin, Male	
17	1001157891	2	Pin, Male	
17	4460466	1	Plug, Terminal	
18	1001192401	1	Cap, Dust	
19	4460424	1	Plug, Male - 2 Position	
19	4460226	2	Socket, Female	
20	4460933	1	Plug, Male - 12 Position	
20	1001157890	1	Socket, Female	
20	4460465	1	Socket, Female	
20	4460942	3	Socket, Female	
20	4460466	6	Plug, Terminal	
20	1001125677	1	Bussbar- Female - 12 Position	
21	4460891	2	Plug, Male - 2 Position	
21	4460465	4	Socket, Female	
22	4460931	1	Receptacle, Female - 8 Position	
22	4460464	6	Pin, Male	
22	4460466	2	Plug, Terminal	
23	1001116810	1	Plug, Male - 4 Position	
23	4460905	2	Plug, Terminal	
23	4460466	2	Plug, Terminal	
24	2400060	1	Holder, Fuse **(SN 0300226256 through 0300272206)**	
24	8229242	1	Fuse 5Amp **(SN 0300226256 through 0300272206)**	
25	1001117023	1	Fuseholder with Cover and Fuse - 10Amp **(SN 0300211844 through 0300226255)**	
25	1001096134	1	Cover	
25	See Note	1	Fuse 10Amp ATO (Note: Use p/n 1001117023 or Purchase Locally)	
25	1001217844	1	Fuseholder **(SN 0300226256 through 0300272206)**	
25	1001217842	1	Cover	
25	8229235	1	Fuse 20Amp ATO	

MidWestTech | JLG E300AJ, E300AJP Boom Lift Parts Manual | Publication 3121721 Order the manual at mid-west-tech.com >

FIGURE 8-6. DECAL INSTALLATION (JAPANESE SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001176390	Ref	DECAL INSTALLATION (JAPANESE SPECS)	H
1	0641406	4	Bolt 1/4 x 3/4	
3	0860520	1	Box, Manual Storage	
5	1701500	4	Decal - Lift	
6	1701504	1	Decal - Hydraulic Oil	
7	1701509	1	Decal - Manual	
8	1701529	3	Decal - Arrow	
9	1701642	1	Decal - Arrow	
10	1701644	1	Decal - Battery Charger	
11	1001121808	2	Decal - Capacity	
12	1702155	2	Decal - Battery Disconnect	
13	1702300	4	Decal - Tie Down	
14	1001113166	1	Decal - Hand Crushing	
15	See Note	NSS	Decal - Bar Code (Note: Not Available for Purchase)	
19	1703926	1	Decal - Danger/Warning	
20	1703932	1	Decal - Danger/Warning	
21	1703950	4	Decal - Crushing	
22	1703938	3	Decal - Battery Ventilation	
23	1704342	3	Decal - Fire Hazard	
25	1704277	2	Decal - Lanyard Attach Graphic	
26	1704412	1	Decal - Hydraulic Oil	
28	1706126	4	Decal - Tire Load	
31	3251813	1	Decal - USA	
32	3311405	4	Nut 1/4	
33	3820001	2	Rivet	
34	4751400	4	Washer 1/4	
35	1001110196	1	Decal - Manual Descent	
36	1001196811	1	Decal - Legend	
37	1001110389	1	Decal - Legend	
38	1001112461	1	Decal - Lift Diagram	
39	1001212200	1	Decal - Manual Descent	
40	1705426	1	Decal - Drive/Steer Instruction	
41	1703980	1	Decal - Footswitch	
42	1001224053	1	Decal - Yearly Inspection **(SN 0300233727 through 0300272206)**	

MidWestTech | JLG E300AJ, E300AJP Boom Lift Parts Manual | Publication 3121721 Order the manual at mid-west-tech.com >