Illustrated Parts Manual

Models

G6-42A

G9-43A

G10-43A

G6-42A
SN 0160048658 to Present
G9-43A & G10-43A
SN 0160048671 to Present
excluding 0160048773

31200727

Revised

September 28, 2018 - Rev P

An Oshkosh Corporation Company

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

TABLE OF CONTENTS

SECTION 1 - FRAME AND ATTACHING PARTS 11

FIGURE 1-1. FRAME AND ATTACHING PARTS 12
FIGURE 1-2. COVERS G6-42A 14
FIGURE 1-3. COVERS G9-43A AND G10-43A 18
FIGURE 1-4. OUTRIGGER INSTALLATION G10-43A 22
FIGURE 1-5. PINTLE HOOK 24

SECTION 2 - BOOM 27

FIGURE 2-1. BOOM INSTALLATION 28
FIGURE 2-2. FIRST BOOM SECTION G6-42A 30
FIGURE 2-3. FIRST BOOM SECTION G9-43A & G10-43A 32
FIGURE 2-4. SECOND BOOM SECTION G6-42A 34
FIGURE 2-5. SECOND BOOM SECTION G9-43A & G10-43A 38
FIGURE 2-6. THIRD BOOM SECTION G6-42A 40
FIGURE 2-7. THIRD BOOM SECTION G9-43A & G10-43A 42
FIGURE 2-8. PUSH BEAM/EXTEND CHAIN 44
FIGURE 2-9. RETRACT CHAINS 48
FIGURE 2-10. MANUAL QUICK SWITCH 50
FIGURE 2-11. HYDRAULIC QUICK ATTACH 52

SECTION 3 - ATTACHMENTS 55

FIGURE 3-1. TILT CARRIAGE (G6-42A Prior to SN 0160052010; G9-43A Prior to SN 0160051085; G10-43A Prior to SN 0160052011) 56
FIGURE 3-2. TILT CARRIAGE (G6-42A SN 0160052010 to Present; G9-43A SN 0160051085 to Present; G10-43A SN 0160052011 to Present) 58
FIGURE 3-3. SIDE TILT CARRIAGE 60
FIGURE 3-4. 50IN SIDE SHIFT CARRIAGE 62
FIGURE 3-5. 50IN DUAL FORK CARRIAGE ASSEMBLY 64
FIGURE 3-6. 90, SWING CARRIAGE 66
FIGURE 3-7. SHEET MATERIAL HANDLER ASSEMBLY 68
FIGURE 3-8. FORKS 70
FIGURE 3-9. FORK MOUNTED PLATFORM 72
FIGURE 3-10. LIFTING HOOK 74
FIGURE 3-11. FORK PIN LOCK INSTALLATION 76
FIGURE 3-12. BUCKETS 78
FIGURE 3-13. GRAPPLE BUCKET 80
FIGURE 3-14. TRUSS BOOM 82
FIGURE 3-15. 12FT TRUSS BOOM WITH WINCH 84
FIGURE 3-16. ADJUSTABLE TRUSS BOOM 86
FIGURE 3-17. 8FT STANDARD MAST 88
FIGURE 3-18. 8FT SIDE TILT ELECTRIC MAST 92

SECTION 4 - ENGINE AND ATTACHING PARTS 97

FIGURE 4-1. ENGINE INSTALLATION IF EQUIPPED FOR ULS 98
FIGURE 4-2. ENGINE INSTALLATION IF EQUIPPED FOR LS 100
FIGURE 4-3. ENGINE IF EQUIPPED FOR ULS (Prior to SN 0160069037) 102
FIGURE 4-4. ENGINE IF EQUIPPED FOR ULS (SN 0160069037 to Present) 104
FIGURE 4-5. ENGINE IF EQUIPPED FOR LS 106
FIGURE 4-6. FUEL TANK AND LINES IF EQUIPPED FOR ULS 108
FIGURE 4-7. FUEL TANK AND LINES IF EQUIPPED FOR LS 110
FIGURE 4-8. RADIATOR AND COOLING INSTALLATION IF EQUPPED FOR ULS 112
FIGURE 4-9. RADIATOR AND COOLING INSTALLATION IF EQUIPPED FOR LS 116
FIGURE 4-10. AIR CLEANER INSTALLATION IF EQUIPPED FOR ULS (Prior to SN 0160071240, Excluding 0160018840, 0160019245 and 0160019746) 120
FIGURE 4-11. AIR CLEANER INSTALLATION IF EQUIPPED FOR ULS (SN 0160071240 to Present, Including 0160018840, 0160019245 and 0160019746) 122
FIGURE 4-12. AIR CLEANER INSTALLATION IF EQUIPPED FOR LS (Prior to SN 0160071240, Excluding 0160018840, 0160019245 and 0160019746) 124
FIGURE 4-13. AIR CLEANER INSTALLATION IF EQUIPPED FOR LS (SN 0160071240 to Present, Including 0160018840, 0160019245 and 0160019746) 126
FIGURE 4-14. EXHAUST INSTALLATION IF EQUIPPED FOR ULS 128
FIGURE 4-15. EXHAUST INSTALLATION IF EQUIPPED FOR LS 130

MidWestTech | JLG G10-43A, G6-42A, G9-43A Telehandler Parts Manual | Publication 312... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

SECTION 5 - DRIVE TRAIN 133

FIGURE 5-1. DRIVE TRAIN COMPONENTS G6-42A 134
FIGURE 5-2. DRIVE TRAIN COMPONENTS G9-43A & G10-43A 136
FIGURE 5-3. FRONT AXLE 138
FIGURE 5-4. CENTRAL HOUSING AND STEERING G6-42A 140
FIGURE 5-5. CENTRAL HOUSING AND STEERING G9-43A & G10-43A 142
FIGURE 5-6. DIFFERENTIAL G6-42A 144
FIGURE 5-7. DIFFERENTIAL G9-43A & G10-43A 146
FIGURE 5-8. HUB REDUCTION G6-42A 148
FIGURE 5-9. HUB REDUCTION G9-43A & G10-43A 152
FIGURE 5-10. BRAKES G6-42A 156
FIGURE 5-11. BRAKES G9-43A & G10-43A 158
FIGURE 5-12. REAR AXLE 160
FIGURE 5-13. CENTRAL HOUSING AND STEERING G6-42A (Prior to SN 0160065511) 162
FIGURE 5-14. CENTRAL HOUSING AND STEERING G9-43A & G10-43A (Prior to SN 0160064120) 164
FIGURE 5-15. DIFFERENTIAL G6-42A (Prior to SN 0160065511) 166
FIGURE 5-16. DIFFERENTIAL G9-43A & G10-43A (Prior to SN 0160064120) 168
FIGURE 5-17. HUB REDUCTION G6-42A (Prior to SN 0160065511) 170
FIGURE 5-18. HUB REDUCTION G9-43A & G10-43A (Prior to SN 0160064120) 174
FIGURE 5-19. BRAKES G6-42A (Prior to SN 0160065511) 178
FIGURE 5-20. BRAKES G9-43A & G10-43A (Prior to SN 0160064120) 180
FIGURE 5-21. REAE AXLE 182
FIGURE 5-22. CENTRAL HOUSING G6-42A (SN 0160065511 to Present) 184
FIGURE 5-23. CENTRAL HOUSING G9-43A & G10-43A (SN 0160064120 to Present) 186
FIGURE 5-24. DIFFERENTIAL G6-42A (SN 0160065511 to Present) 188
FIGURE 5-25. DIFFERENTIAL G9-43A & G10-43A (SN 0160064120 to Present) 190
FIGURE 5-26. HUB REDUCTION G6-42A (SN 0160065511 to Present) 192
FIGURE 5-27. HUB REDUCTION G9-43A & G10-43A (SN 0160064120 to Present) 194
FIGURE 5-28. BRAKES G6-42A (SN 0160065511 to Present) 196
FIGURE 5-29. BRAKES G9-43A & G10-43A (SN 0160064120 to Present) 198
FIGURE 5-30. STEERING G6-42A (SN 0160065511 to Present) 200
FIGURE 5-31. STEERING G9-43A & G10-43A (SN 0160064120 to Present) 202
FIGURE 5-32. TRUNION G6-42A (SN 0160065511 to Present) 204
FIGURE 5-33. TRUNION G9-43A & G10-43A (SN 0160064120 to Present) 206
FIGURE 5-34. REAR AXLE DIFFERENTIAL ASSEMBLY G6-42A (SN 0160065511 to Present) 208
FIGURE 5-35. REAR AXLE DIFFERENTIAL ASSEMBLY G9-43A & G10-43A (SN 0160064120 to Present) 210
FIGURE 5-36. PLANET GEAR CARRIER KIT G6-42A (SN 0160065511 to Present) 212
FIGURE 5-37. PLANET GEAR CARRIER KIT G9-43A & G10-43A (SN 0160064120 to Present) 214
FIGURE 5-38. RING GEAR SUPPORT KIT G6-42A (SN 0160065511 to Present) 216
FIGURE 5-39. RING GEAR SUPPORT KIT G9-43A & G10-43A (SN 0160064120 to Present) 218
FIGURE 5-40. REDUCTION BUSHING (G6-42A SN 0160065511 to Present) 220
FIGURE 5-41. STEERING CASE KIT LH G9-43A & G10-43A (SN 0160064120 to Present) 222
FIGURE 5-42. STEERING CASE KIT RH G9-43A & G10-43A (SN 0160064120 to Present) 224
FIGURE 5-43. REAR AXLE SUPPORT ASSEMBLY G9-43A & G10-43A (SN 0160064120 to Present) 226
FIGURE 5-44. ZF TRANSMISSION 228
FIGURE 5-45. ZF TRANSMISSION - CONVERTER AND INPUT 230
FIGURE 5-46. ZF TRANSMISSION - GEARBOX HOUSING 232
FIGURE 5-47. ZF TRANSMISSION - FORWARD GEAR GROUP 234
FIGURE 5-48. ZF TRANSMISSION - REVERSE GEAR GROUP 236
FIGURE 5-49. ZF TRANSMISSION - 1ST SHAFT GROUP 238
FIGURE 5-50. ZF TRANSMISSION - 2ND SHAFT GROUP 240
FIGURE 5-51. ZF TRANSMISSION - 3RD SHAFT GROUP 242
FIGURE 5-52. ZF TRANSMISSION - 4TH SHAFT GROUP 244
FIGURE 5-53. ZF TRANSMISSION - POWER TAKE-OFF 246
FIGURE 5-54. ZF TRANSMISSION - CONTROL UNIT AND PRESSURE REGULATOR 248
FIGURE 5-55. ZF TRANSMISSION - GEARSHIFT SYSTEM 250
FIGURE 5-56. ZF TRANSMISSION - OIL PUMP, FILTER AND DIPSTICK 252
FIGURE 5-57. ZF TRANSMISSION - TRANSFER BOX 254
FIGURE 5-58. FENDER INSTALLATION (G6-42A Prior to SN 0160058377; G9-43A Prior to SN 0160058500, Excluding 160058213, 160058216, 160058217, 160058226, 160058230, 160058246, 160058248, 160058249, 1600582577 and 160058260; G10-43A Prior to SN 0160058998, Excluding 0160058678) 256
FIGURE 5-59. FENDER INSTALLATION (G6-42A SN 0160058377 to Present; G9-43A SN 0160058500 to Present, Including 160058213, 160058216, 160058217, 160058226, 160058230, 160058246, 160058248, 160058249, 160058257 and 160058260; G10-43A SN 0160058998 to Present, Including 0160058678) 258
FIGURE 5-60. WHEEL ASSEMBLY G6-42A & G9-43A 260
FIGURE 5-61. WHEEL ASSEMBLY G10-43A 262

MidWestTech | JLG G10-43A, G6-42A, G9-43A Telehandler Parts Manual | Publication 312... Order the manual at mid-west-tech.com >

SECTION 6 - CAB 265

FIGURE 6-1. CAB INSTALLATION 266
FIGURE 6-2. CAB ASSEMBLY 270
FIGURE 6-3. CAB DOOR 274
FIGURE 6-4. CAB INTERIOR 276
FIGURE 6-5. WIPER 278
FIGURE 6-6. SUSPENSION SEAT 280
FIGURE 6-7. SEAT 282
FIGURE 6-8. HEATER INSTALLATION 284
FIGURE 6-9. HEATER INSTALLATION 286
FIGURE 6-10. AIR CONDITIONING INSTALLATION 288

SECTION 7 - CONTROLS 293

FIGURE 7-1. BRAKE 294
FIGURE 7-2. ACCELERATOR 296
FIGURE 7-3. STEERING COLUMN 298
FIGURE 7-4. BOOM JOYSTICK G6-42A 300
FIGURE 7-5. BOOM JOYSTICK G6-42A 302
FIGURE 7-6. BOOM JOYSTICK G9-43A & G10-43A 304
FIGURE 7-7. TILT AND FRAME LEVEL JOYSTICK INSTALLATION G6-42A & G9-43A 306
FIGURE 7-8. TILT AND FRAME LEVEL JOYSTICK ASSEMBLY G6-42A & G9-43A 308
FIGURE 7-9. FRAME LEVEL JOYSTICK INSTALLATION 310
FIGURE 7-10. AUXILIARY HYDRAULIC JOYSTICK INSTALLATION G6-42A 312
FIGURE 7-11. AUXILIARY HYDRAULIC JOYSTICK INSTALLATION G9-43A 314
FIGURE 7-12. ELECTRIC AUXILIARY HYDRAULIC JOYSTICK G9-43A & G10-43A 316
FIGURE 7-13. OUTRIGGER CONTROLLER G10-43A 318

SECTION 8 - HYDRAULIC CIRCUITS 321

FIGURE 8-1. SUPPLY CIRCUIT G6-42A 322
FIGURE 8-2. SUPPLY CIRCUIT G9-43A & G10-43A 326
FIGURE 8-3. DUMP CIRCUIT G6-42A 330
FIGURE 8-4. DUMP CIRCUIT G9-43A & G10-43A 334
FIGURE 8-5. STEER SELECT CIRCUIT 338
FIGURE 8-6. SERVICE BRAKE CIRCUIT G6-42A 340
FIGURE 8-7. SERVICE BRAKE CIRCUIT G9-43A & G10-43A 342
FIGURE 8-8. BOOM JOYSTICK CIRCUIT G6-42A 344
FIGURE 8-9. BOOM JOYSTICK CIRCUIT G9-43A & G10-43A 346
FIGURE 8-10. OUTRIGGER CONTROLLER G10-43A 348
FIGURE 8-11. LIFT CYLINDER CIRCUIT 350
FIGURE 8-12. EXTEND/RETRACT CYLINDER CIRCUIT G6-42A 352
FIGURE 8-13. EXTEND/RETRACT CYLINDER CIRCUIT G9-43A & G10-43A 354
FIGURE 8-14. TILT CYLINDER AND COMPENSATING CYLINDER CIRCUIT G6-42A 356
FIGURE 8-15. TILT CYLINDER AND COMPENSATING CYLINDER CIRCUIT G9-43A & G10-43A 358
FIGURE 8-16. AUXILIARY HYDRAULIC CIRCUIT G6-42A 360
FIGURE 8-17. AUXILIARY HYDRAULIC CIRCUIT G9-43A & G10-43A 362
FIGURE 8-18. FRAME LEVEL CIRCUIT 364
FIGURE 8-19. OUTRIGGER CIRCUIT G10-43A 366

SECTION 9 - HYDRAULIC COMPONENTS 369

FIGURE 9-1. LIFT CYLINDER G6-42A (Prior to SN 0160052707) 370
FIGURE 9-2. LIFT CYLINDER G6-42A (SN 0160052707 to Present) 372
FIGURE 9-3. LIFT CYLINDER G9-43A & G10-43A 374
FIGURE 9-4. LIFT CYLINDER INSTALLATION G9-43A & G10-43A (ARCTIC) 376
FIGURE 9-5. LIFT CYLINDER G9-43A & G10-43A (ARCTIC) 378
FIGURE 9-6. EXTEND/RETRACT CYLINDER G6-42A (Prior to SN 0160057307) 380
FIGURE 9-7. EXTEND/RETRACT CYLINDER G6-42A (SN 0160057307 to Present) 382
FIGURE 9-8. EXTEND/RETRACT CYLINDER G9-43A & G10-43A 384
FIGURE 9-9. EXTEND/RETRACT CYLINDER G9-43A & G10-43A (ARCTIC) 386
FIGURE 9-10. TILT CYLINDER G6-42A (Prior to SN 0160057406) 388
FIGURE 9-11. TILT CYLINDER G6-42A (SN 0160057406 to Present) 390
FIGURE 9-12. TILT CYLINDER G9-43A & G10-43A (Prior to SN 0160060644, Excluding 0160056536, 0160056537, 0160060633 and 0160060635) 392

MidWestTech | JLG G10-43A, G6-42A, G9-43A Telehandler Parts Manual | Publication 312... Order the manual at mid-west-tech.com >

FIGURE 5-2. DRIVE TRAIN COMPONENTS G9-43A & G10-43A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001131776	Ref	DRIVETRAIN INSTALLATION, (G9-43A & G10-43A), (not available to order, see items 1 thru 18 for service)	C
1	0682444	16	HEX HD CAPSCREW, 7/8-9X5-1/2	
2	77383118	16	HARDENED WASHER, 7/8	
6	90206198	3.5 in	PVC VINYL EDGE TRIM, 3/16, (not shown)	
7	90206203	91 in	PVC VINYL EDGE TRIM, 1/2, (not shown)	
8	91403193	40	WHEEL NUT, M22X1.5, (torque to 350-400 lb-ft/474-542 Nm)	
14	1001097463	1	FRONT AXLE ASSY, (includes items 201 thru 209)	E
15	1001097464	1	REAR AXLE ASSY, (includes items 301 thru 305)	E
16	1001106573	1	FRONT DRIVE SHAFT	
17	1001106574	1	REAR DRIVE SHAFT	
18	8880218-OM	4	KIT, STRAP, DANA 1480, (includes items 601 & 602)	
101	8036433	4	UNIVERSAL JOINT KIT	
201		Ref	FRONT AXLE, (See FRONT AXLE for Breakdown)	
202	91515022	1	SWAY PIVOT ASSY	
203	91511105	2	RETAINER PLATE	
204	2170806	2	TEE FITTING, (includes o-ring)	
205	1001097466	2	HOSE ASSY	
206	2144605	4	STRAIGHT FITTING, (includes o-ring)	
207	77101143	4	HEX HD CAPSCREW	
208	90027475	7	WASHER	
209	2110808	2	STRAIGHT FITTING, (includes o-ring)	
301		Ref	REAR AXLE, (See REAR AXLE for Breakdown)	
302	2110808	2	STRAIGHT FITTING, (includes o-ring)	
303	2144605	2	STRAIGHT FITTING, (includes o-ring)	
304	2170806	1	TEE FITTING, (includes o-ring)	
305	1001097466	1	HOSE ASSY	
401		Ref	TRANSMISSION, (See ZF TRANSMISSION for Breakdown)	
501		Ref	WHEEL ASSY, (See WHEEL ASSEMBLY for Breakdown)	
601	8880216-OM	NLA	STRAP, (no longer available, use 8880218-OM for replacement)	
602	8880217-OM	NLA	STRAP BOLT, 0.375-24X0.75, GR9, (no longer available, use 8880218-OM for replacement)	

MidWestTech | JLG G10-43A, G6-42A, G9-43A Telehandler Parts Manual | Publication 312... Order the manual at mid-west-tech.com >

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
210	1001096728	2	BOLT, 1/2-13	
211	1001098344	1	BRICK GUARD BRACKET	
	1001100880	Ref	FRONT BRICK GUARD BRACKET INSTALLATION, (not available to order, see items 301 thru 310 for service)	B
301	4071133	4	KEEPER	
302	4420060	1	DOUBLE SIDED TAPE	
303	4761800	2	LOCKWASHER, 1/2	
304	77143003	4	WHIZ LOCK SCREW, 5/16-18X0.625	
305	88501008	2	HEX NUT, 1/2-13	
306	91403503	2	SPACER	
307	1001096728	2	BOLT, 1/2-13	
308	1001098042	1	BRICK GUARD BRACKET	
310	14404173	AR	SILICONE SEALANT	
	1001135607	Ref	BRICK GUARD WORK LIGHT HARNESS INSTALLATION, (includes item 401)	A
401	1001100895	1	CAB WORK LIGHT HARNESS	
601	8035523	AR	URETHANE, (not shown)	
K1	1001144796	1	CAB ENCLOSURE KIT WITH HEAT, (if equipped for ULS), (includes heater components, door components, rear window, skylight window, harnesses, hoses and other enclosed cab components)	C
K2	1001144797	1	CAB ENCLOSURE KIT WITH HEAT AND A/C, (if equipped for ULS), (includes heater components, door components, rear window, skylight window, harnesses, hoses and other enclosed cab components)	E
K3	1001144798	1	CAB ENCLOSURE KIT WITH HEAT, (if equipped for LS), (includes heater components, door components, rear window, skylight window, harnesses, hoses and other enclosed cab components)	D
K4	1001144799	1	CAB ENCLOSURE KIT WITH HEAT AND A/C, (if equipped for LS), (includes heater components, door components, rear window, skylight window, harnesses, hoses and other enclosed cab components)	F
K5	91413142	1	SKYLIGHT WINDOW KIT, (includes items 101 & 601)	

MidWestTech | JLG G10-43A, G6-42A, G9-43A Telehandler Parts Manual | Publication 312... Order the manual at mid-west-tech.com >

FIGURE 11-2. BOOM DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001139899	Ref	DECAL INSTALLATION, (G6-42A), (ANSI), (not available to order, See items 7 thru 21 on BOOM DECALS and items on CAB AND FRAME DECALS for service)	G
	1001139900	Ref	DECAL INSTALLATION, (G6-42A), (ISO), (not available to order, See items 7 thru 21 on BOOM DECALS and items on CAB AND FRAME DECALS for service)	H
	1001163586	Ref	DECAL INSTALLATION, (G6-42A), (ENGILISH\FRENCH), (not available to order, see items 1 thru 53 on CAB AND FRAME DECALS & all items on BOOM DECALS for services)	B
	1001139867	Ref	DECAL INSTALLATION, (G9-43A), (ANSI), (not available to order, See items 7 thru 21 on BOOM DECALS and items on CAB AND FRAME DECALS for service)	G
	1001139868	Ref	DECAL INSTALLATION, (G9-43A), (ISO), (not available to order, See items 7 thru 21 on BOOM DECALS and items on CAB AND FRAME DECALS for service)	H
	1001163581	Ref	DECAL INSTALLATION, (G9-43A), (ENGILISH\FRENCH), (not available to order, see items 1 thru 53 on CAB AND FRAME DECALS & all items on BOOM DECALS for services)	B
	1001139869	Ref	DECAL INSTALLATION, (G10-43A), (ANSI), (not available to order, See items 7 thru 21 on BOOM DECALS and items on CAB AND FRAME DECALS for service)	G
	1001139870	Ref	DECAL INSTALLATION, (G10-43A), (ISO), (not available to order, See items 7 thru 21 on BOOM DECALS and items on CAB AND FRAME DECALS for service)	I
	1001163582	Ref	DECAL INSTALLATION, (G10-43A), (ENGILISH\FRENCH), (not available to order, see items 1 thru 53 on CAB AND FRAME DECALS & all items on BOOM DECALS for services)	B
7	1706298	1	CARRY PERSONNEL DECAL, (ANSI)	
7	1706282	1	CARRY PERSONNEL DECAL, (ISO)	
7	1001163206	1	CARRY PERSONAL DECAL, (ENGILISH\FRENCH)	
10	1706302	5	PINCH POINT DECAL, (ANSI)	
10	1706292	5	PINCH POINT DECAL, (ISO)	
10	1001163223	5	PINCH POINT DECAL, (ENGILISH\FRENCH)	
14	4105262	1	BOOM ANGLE INDICATOR DECAL	
21	91553072	1	BOOM NUMBERS DECAL	
23		Ref	BOOM ANGLE INDICATOR PLATE AND MOUNTING HARDWARE, (See BOOM SECTION for Breakdown)	
101	1705864	2	JLG DECAL	

MidWestTech | JLG G10-43A, G6-42A, G9-43A Telehandler Parts Manual | Publication 312... Order the manual at mid-west-tech.com >