Illustrated Parts Manual

Models

G5-18A

2505

Prior to SN 0160053000 excluding
0160051045, 0160051047
0160051049, 0160051194 &
0160051359

31200360

Revised
October 23, 2018 - Rev N

An Oshkosh Corporation Company

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

TABLE OF CONTENTS

SECTION 1 - FRAME AND ATTACHING PARTS 9

FIGURE 1-1. FRAME SHROUDING AND ATTACHING PARTS 10
FIGURE 1-2. FRAME COVERS, SHROUDING AND ATTACHING PARTS 16
FIGURE 1-3. ENGINE POD INSULATION - 2505 20
FIGURE 1-4. AXLE AND FENDER INSTALLATION 22
FIGURE 1-5. HITCHES 24
FIGURE 1-6. HITCHES - 2505 26
FIGURE 1-7. LICENSE PLATE HOLDER INSTALLATION (Prior to SN 0160037440) 28
FIGURE 1-8. LICENSE PLATE HOLDER INSTALLATION (SN 0160037440 to Present) 30
FIGURE 1-9. REAR ENGINE COVER 32

SECTION 2 - BOOM 35

FIGURE 2-1. BOOM ASSEMBLY - COMPONENTS 36
FIGURE 2-2. BOOM ASSEMBLY - PADS AND SHIMS 38
FIGURE 2-3. BOOM PIN INSTALLATION 40
FIGURE 2-4. QUICK COUPLER 42
FIGURE 2-5. UNIVERSAL QUICK COUPLER 44

SECTION 3 - ATTACHMENTS 47

FIGURE 3-1. STANDARD CARRIAGE 48
FIGURE 3-2. UNIVERSAL STANDARD CARRIAGE 50
FIGURE 3-3. SIDE TILT CARRIAGE 52
FIGURE 3-4. UNIVERSAL SIDE TILT CARRIAGE - G5-18A 54
FIGURE 3-5. UNIVERSAL SIDE SHIFT CARRIAGE 56
FIGURE 3-6. FORKS 58
FIGURE 3-7. GRAPPLE BUCKET 60
FIGURE 3-8. GRAPPLE BUCKET - 2505 62
FIGURE 3-9. GRAPPLE BUCKET 64
FIGURE 3-10. LIGHT MATERIAL BUCKETS 66
FIGURE 3-11. FORK MOUNTED HOOK 68
FIGURE 3-12. UNIVERSAL HITCH ATTACH 72

SECTION 4 - ENGINE AND ATTACHING PARTS 75

FIGURE 4-1. ENGINE INSTALLATION 76
FIGURE 4-2. ENGINE ASSEMBLY 80
FIGURE 4-3. PERKINS ENGINE (G5-18A, 2505 - LS) 84
FIGURE 4-4. PERKINS ENGINE (ULS) (G5-18A) 86
FIGURE 4-5. PERKINS ENGINE (LS) (2505) 88
FIGURE 4-6. RADIATOR/OIL COOLER INSTALLATION 90
FIGURE 4-7. AIR CLEANER INSTALLATION 92
FIGURE 4-8. EXHAUST INSTALLATION 94

SECTION 5 - DRIVE TRAIN 97

FIGURE 5-1. FRONT AXLE ASSEMBLY 98
FIGURE 5-2. FRONT DIFFERENTIAL AND CENTRAL HOUSING 100
FIGURE 5-3. FRONT HUB REDUCTION 104
FIGURE 5-4. FRONT BRAKES 106
FIGURE 5-5. FRONT STEERING COMPONENTS 108
FIGURE 5-6. REAR AXLE ASSEMBLY 110
FIGURE 5-7. REAR DIFFERENTIAL 112
FIGURE 5-8. REAR HUB REDUCTION AND CENTRAL HOUSING 114
FIGURE 5-9. REAR STEERING COMPONENTS 118
FIGURE 5-10. DRIVESHAFT INSTALLATION 120
FIGURE 5-11. TIRES AND RIMS 122

SECTION 6 - CAB 125

FIGURE 6-1. CAB INSTALLATION 126
FIGURE 6-2. OPEN CAB - G5-18A 132
FIGURE 6-3. ENCLOSED CAB INSTALLATION 134
FIGURE 6-4. REAR HINGED WINDOW INSTALLATION 138

MidWestTech | JLG 2505, G5-18A Telehandler Parts Manual | Publication 31200360 Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

FIGURE 6-5. SUSPENSION SEAT 140
FIGURE 6-6. WIPER INSTALLATION 142
FIGURE 6-7. HEATER AND AC - CAB 144
FIGURE 6-8. HEATER AND AC INSTALLATION - ENGINE POD 148
FIGURE 6-9. OVERHEAD CONSOLE 150

SECTION 7 - CONTROLS 153

FIGURE 7-1. BOOM JOYSTICK 154
FIGURE 7-2. STEERING COLUMN AND ATTACHING PARTS 156
FIGURE 7-3. ACCELERATOR PEDAL ASSEMBLY 158
FIGURE 7-4. BRAKE ASSEMBLY 160

SECTION 8 - HYDRAULIC CIRCUITS 163

FIGURE 8-1. SUPPLY CIRCUIT 164
FIGURE 8-2. DUMP CIRCUIT (G5-18A Prior to SN 0160042093; 2505 Prior to SN 0160042694) 168
FIGURE 8-3. DUMP CIRCUIT (G5-18A SN 0160042093 to Present; 2505 SN 0160042694 to Present) 172
FIGURE 8-4. STEER SELECT 176
FIGURE 8-5. SERVICE/PARK BRAKE 178
FIGURE 8-6. BOOM JOYSTICK - G15-18A (Prior to SN 0160042093) 180
FIGURE 8-7. BOOM JOYSTICK - 2505 (Prior to SN 0160042694) 182
FIGURE 8-8. BOOM JOYSTICK - G15-18A (SN 0160042093 to Present) 184
FIGURE 8-9. BOOM JOYSTICK - 2505 (SN 0160042694 to Present) 186
FIGURE 8-10. LIFT CYLINDER (G5-18A SN 0160032850 through 0160053000, Excluding 0160051045; 2505 Prior to SN 0160042694; Excluding 0160051047, 0160051049, 0160051194 and 0160051359) 188
FIGURE 8-11. LIFT CYLINDER - 2505 (SN 0160042694 to Present) 190
FIGURE 8-12. EXTEND/RETRACT CYLINDER 192
FIGURE 8-13. TILT AND COMPENSATING 194
FIGURE 8-14. AUXILIARY HYDRAULICS 196
FIGURE 8-15. REAR AUXILIARY HYDRAULICS (G5-18A SN 0160035962 through 0160042086; 2505 SN 0160036070 through 0160042693) 198
FIGURE 8-16. REAR AUXILIARY HYDRAULICS (G5-18A SN 0160042093 to Present; 2505 SN 0160042694 to Present) 200
FIGURE 8-17. AUXILIARY HYDRAULICS PRESSURE RELIEF (G5-18A Prior to SN 0160035962; 2505 Prior to SN 0160036070) 202
FIGURE 8-18. AUXILIARY HYDRAULICS PRESSURE RELIEF (G5-18A SN 0160035962 through 0160042086; 2505 SN 0160036070 through 0160042694) 204
FIGURE 8-19. AUXILIARY HYDRAULICS PRESSURE RELIEF (G5-18A SN 0160042093 to Present; 2505 SN 0160042694 to Present) 206

SECTION 9 - HYDRAULIC COMPONENTS 209

FIGURE 9-1. LIFT CYLINDER (G5-18A SN 0160032850 through 0160053000, Excluding 0160051045; 2505 Prior to SN 0160042694; Excluding 0160051047, 0160051049, 0160051194 and 0160051359) 210
FIGURE 9-2. LIFT CYLINDER (2505 SN 0160042694 to Present) 212
FIGURE 9-3. EXTEND/RETRACT CYLINDER 214
FIGURE 9-4. TILT CYLINDER 216
FIGURE 9-5. COMPENSATING CYLINDER 218
FIGURE 9-6. HYDRAULIC QUICK COUPLER CYLINDER 220
FIGURE 9-7. ROTATE/SIDE TILT CARRIAGE CYLINDER AND GRAPPLE BUCKET CYLINDER 222
FIGURE 9-8. UNIVERSAL SIDE SHIFT CYLINDER 224
FIGURE 9-9. MAIN CONTROL VALVE 226
FIGURE 9-10. FRONT DRIVE MOTOR 228
FIGURE 9-11. HYDROSTATIC TRANSMISSION 230
FIGURE 9-12. DIVERTOR VALVE (Prior to SN 0160037453) 232
FIGURE 9-13. DIVERTOR VALVE (SN 0160037453 to Present) 234
FIGURE 9-14. STEERING SELECT VALVE 236
FIGURE 9-15. STEERING SELECT VALVE 238
FIGURE 9-16. BLOCKING VALVE - 2505 (Prior to SN 0160042694) 240
FIGURE 9-17. PILOT SELECT VALVE (G5-18A Prior to SN 0160042093; 2505 Prior to SN 0160042694) 242
FIGURE 9-18. PILOT SELECT VALVE (G5-18A SN 0160042093 to Present; 2505 SN 0160042694 to Present) 244
FIGURE 9-19. BRAKE VALVES 246
FIGURE 9-20. LSI VALVE - 2505 (Prior to SN 0160042694) 248
FIGURE 9-21. AUXILIARY HYDRAULIC PRESSURE RELIEF VALVE (G5-18A SN 0160035962 through 0160042086; 2505 SN 0160036070 through 0160042693) 250

SECTION 10 - ELECTRICAL 253

MidWestTech | JLG 2505, G5-18A Telehandler Parts Manual | Publication 31200360 Order the manual at mid-west-tech.com >

FIGURE 10-1. ELECTRICAL INSTALLATION 254
FIGURE 10-2. ROAD LIGHTS INSTALLATION 258
FIGURE 10-3. WORK LIGHTS INSTALLATION 262
FIGURE 10-4. CAB SWITCHES 266
FIGURE 10-5. CAB FUSE HOLDER 268
FIGURE 10-6. FRAME BASE HARNESS (G5-18A SN 0160032850 through 0160053000, Excluding 0160051045; 2505 Prior to SN 0160042694; Excluding 0160051047, 0160051049, 0160051194 and 0160051359) 270
FIGURE 10-7. FRAME BASE HARNESS (2505 SN 0160042694 to Present) 272
FIGURE 10-8. FRAME OPTIONS HARNESS (G5-18A SN 0160032850 through 0160053000, Excluding 0160051045; 2505 Prior to SN 0160042694; Excluding 0160051047, 0160051049, 0160051194 and 0160051359) 276
FIGURE 10-9. FRAME OPTIONS HARNESS (2505 SN 0160042694 to Present) 278
FIGURE 10-10. CAB HARNESS (G5-18A Prior to SN 0160046189, Excluding 0160045424 and 0160045775; 2505 Prior to SN 0160042694) 282
FIGURE 10-11. CAB HARNESS (G5-18A SN 0160046189 to Present, Including 0160045424 and 0160045775; 2505 SN 0160042694 to Present) 288
FIGURE 10-12. CAB ROOF HARNESS (G5-18A Prior to SN 0160046246; 2505 Prior to SN 0160042694) 292
FIGURE 10-13. CAB ROOF HARNESS (G5-18A SN 0160046246 to Present; 2505 SN 0160042694 to Present) 294
FIGURE 10-14. ROOF WORKLIGHT HARNESS (Prior to SN 0160037441) 296
FIGURE 10-15. ROOF WORKLIGHT HARNESS (SN 0160037441 to Present) 298
FIGURE 10-16. BOOM WORKLIGHTS HARNESS 300
FIGURE 10-17. AC SYSTEM HARNESS 302
FIGURE 10-18. BOOM AUX HARNESS (SN 0160032766 to Present) 304
FIGURE 10-19. LSI TIMER INSTALL - 2505 (Prior to SN 0160042694) 306
FIGURE 10-20. SPEEDOMETER SENSOR INSTALLATION - 2505 (SN 0160042694 to Present) 308
FIGURE 10-21. LSI INSTALLATION - 2505 (Prior to SN 0160042694) 310
FIGURE 10-22. LSI AXLE SENSOR AND BOOM PROXIMITY SENSOR INSTALLATION - 2505 (SN 0160042694 to Present) 312
FIGURE 10-23. FUNCTION CUTOUT JUMP HARNESS 314
FIGURE 10-24. HEATER JUMPER HARNESS 316

SECTION 11 - DECALS 319

FIGURE 11-1. FRAME AND BOOM DECALS 320

SECTION 12 - RECOMMENDED SPARE PARTS 325

FIGURE 12-1. RECOMMENDED SPARE PARTS 326

PART NUMBER INDEX 329

MidWestTech | JLG 2505, G5-18A Telehandler Parts Manual | Publication 31200360 Order the manual at mid-west-tech.com >

FIGURE 1-3. ENGINE POD INSULATION - 2505

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001081147	Ref	ENGINE POD TRAY INSULATION INSTALLATION - 2505, (not available to order, see items 1 thru 3 for service)	E
1	1001081148	1	ENGINE POD TRAY INSULATION	
2	1001081149	1	ENGINE POD TRAY INSULATION	
3	1001081150	1	ENGINE POD TRAY INSULATION	
	1001081075	Ref	DOOR PANEL INSULATION INSTALLATION, (not available to order, see items 101 thru 105 for service) **(Prior to SN 0160040198)**	J
	1001126594	Ref	DOOR PANEL INSULATION INSTALLATION, (not available to order, see items 101 thru 105 for service) **(SN 0160040198 to Present)**	A
101	1001081076	1	DOOR PANEL INSULATION	
102	1001081077	1	DOOR PANEL INSULATION	
103	1001081078	1	DOOR PANEL INSULATION **(Prior to SN 0160040198)**	
103	1001126595	1	DOOR PANEL INSULATION **(SN 0160040198 to Present)**	
104	1001081079	1	DOOR PANEL INSULATION	
105	1001081112	1	DOOR PANEL INSULATION	
	1001081269	Ref	REAR COVER INSULATION INSTALLATION, (not available to order, see items 206 thru 208 for service)	D
206	1001081227	1	ENGINE POD REAR COVER INSULATION	
207	1001081229	1	ENGINE POD REAR COVER INSULATION	
208	1001081230	1	ENGINE POD REAR COVER INSULATION	
	1001081055	Ref	HOOD INSULATION INSTALLATION, (not available to order, see items 301 thru 320 for service)	I
301	1001081056	1	SOUND DAMPENING HOOD INSULATION	
302	1001081057	1	SOUND DAMPENING HOOD INSULATION	
303	1001081058	1	SOUND DAMPENING HOOD INSULATION	
304	1001081059	1	SOUND DAMPENING HOOD INSULATION	
305	1001081060	1	SOUND DAMPENING HOOD INSULATION	
306	1001081061	1	SOUND DAMPENING HOOD INSULATION	
308	1001081063	1	SOUND DAMPENING HOOD INSULATION	
309	1001081064	1	SOUND DAMPENING HOOD INSULATION	
310	1001081065	1	SOUND DAMPENING HOOD INSULATION	
311	1001081066	1	SOUND DAMPENING HOOD INSULATION	
314	1001081144	1	SOUND DAMPENING HOOD INSULATION	
315	1001081228	1	SOUND DAMPENING HOOD INSULATION	
316	1001081300	1	SOUND DAMPENING HOOD INSULATION	
317	1001081356	1	SOUND DAMPENING HOOD INSULATION	
318	1001081328	28	SPINDLE ANCHOR FASTENER	
319	1001081329	28	SELF-LOCKING WASHER, 0.104X1.50	
320	1001081330	28	SELF-LOCKING FASTENER	
	1001081125	Ref	FRONT COVER INSULATION INSTALLATION, (not available to order, see items 401 thru 405 for service)	D
401	1001081126	1	ENGINE POD FRONT COVER INSULATION	
402	1001081127	1	ENGINE POD FRONT COVER INSULATION	
403	70022088	7	SPINDLE ANCHOR FASTENER ASSY, (includes items 404 & 405)	
404	N.S.S.	7	SELF-LOCKING WASHER, 0.104X1.50	
405	N.S.S.	7	SELF-LOCKING CAP	

MidWestTech | JLG 2505, G5-18A Telehandler Parts Manual | Publication 31200360 Order the manual at mid-west-tech.com >

FIGURE 6-9. OVERHEAD CONSOLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001081189	Ref	OVERHEAD CONSOLE INSTALLATION, (G5-18A, open cab), (not available to order, see items 1 thru 6, 110 & 111 for service)	E
	1001081187	Ref	OVERHEAD CONSOLE INSTALLATION, (G5-18A, enclosed cab), (not available to order, see items 1 thru 6 & 101 thru 111 for service)	G
	1001080958	Ref	OVERHEAD CONSOLE INSTALLATION, (enclosed cab), (not available to order, see items 1, 3 thru 6, 101 thru 111 & 201 for service) **(2505 Prior to SN 0160042694)**	H
	1001131064	Ref	OVERHEAD CONSOLE INSTALLATION, (enclosed cab), (not available to order, see items 1, 3 thru 6, 101 thru 110 & 201 for service) **(2505 SN 0160042694 to Present)**	C
1	1001080945	Ref	OVERHEAD CONSOLE INSTALLATION, (not available to order, see items 301 thru 313 for service)	G
2	1001080957	Ref	FRONT FOPS INSTALLATION, (G5-18A), (not available to order, see items 305 & 401 for service)	F
3	1001081161	11	HOOK 1 in WIDE TAPE	
4	1001081163	11	LOOP 1 in WIDE TAPE	
5	1001081164	NLA	IN-BOARD ROPS BAR COVER, (no longer available, use 1001153634 for replacement)	
5	1001153634	1	IN-BOARD ROPS BAR COVER	
6	1001081165	NLA	OUT-BOARD ROPS BAR COVER, (no longer available, use 1001153635 for replacement)	
6	1001153635	1	OUT-BOARD ROPS BAR COVER	
101	0630464	2	BUTTON HD SCREW, #10-24X1/2	
102	1001080952	1	VISOR	
110	1001101333	NLA	A-PILLAR COVER, (no longer available, use 1001153631 for replacement)	
110	1001153631	1	A-PILLAR COVER	
111	1001112058	AR	ADHESIVE STRIP	
201		Ref	CAB ROOF HARNESS, (not shown), (See ELECTRICAL SECTION for Breakdown)	
301	2920209	1	DOME LIGHT LAMP	
301	70020795	1	LIGHT BULB	
302	1001108078	3	TRUSS HD SCREW, 1/4-20X3/8	
303	1001108152	8	SCREW, M4X20	
304	1001108155	2	SOCKET HD CAPSCREW, 10-24X5/8	
305	8303034	10	TRUSS HD SCREW, 1/4-20x3/4	
306	88521304	2	HEX LOCKNUT, 1/4-20	
307	1001080866	1	OVERHEAD CONSOLE COVER	
308	1001080947	8	NUT, M4	
309	1001080951	2	SPEAKER COVER	
310	1001080953	1	HOOK	
311	1001080954	1	VISOR MOUNT BRACKET	
312	1001080955	1	RADIO MOUNT PLATE	
313	1001080960	1	RADIO MOUNT OUTER PLATE	
401	1001101332	NLA	FRONT ROPS BAR COVER, (G5-18A), (no longer available, use 1001153630 for replacement)	
401	1001153630	1	FRONT ROPS BAR COVER, (G5-18A)	
402	1001081162	1	FRONT ROPS BAR COVER **(2505 Prior to SN 0160042694)**	
402	1001135075	1	FRONT ROPS BAR COVER **(2505 SN 0160042694 to Present)**	
	1001080653	Ref	LSI DISPLAY INSTALLATION, (not available to order, see items 402 & 501 thru 503 for service) **(2505 Prior to SN 0160042694)**	I
	1001130237	Ref	LSI DISPLAY INSTALLATION, (not available to order, see items 402, 501 thru 506 for service) **(2505 SN 0160042694 to Present)**	F

MidWestTech | JLG 2505, G5-18A Telehandler Parts Manual | Publication 31200360 Order the manual at mid-west-tech.com >

FIGURE 8-16. REAR AUXILIARY HYDRAULICS (G5-18A SN 0160042093 to Present; 2505 SN 0160042694 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001135759	Ref	REAR AUXILIARY HYDRAULIC INSTALLATION, (G5-18A & 2505 - CE, if equipped), (not available to order, see items 1, 4, 7, 11, 12, 14 thru 17 & 21 thru 23 for service)	A,A
1	0641408	4	HEX HD CAPSCREW, 1/4-20X1, GR5	
4	4031918	2	HEX SOCKET HD CAPSCREW, M8X70	
7	4711400	4	WASHER, 1/4	
11	1001080240	1	TRAILER HITCH BRACKET	
12		Ref	AUXILIARY HYDRAULIC SWITCH, (not shown), (See ELECTRICAL SECTION for Breakdown)	
14	1001135801	2	HOSE ASSY	
15	1001135803	1	HOSE ASSY	
16	1001135805	1	HOSE ASSY	
17	1001135807	Ref	DIVERTOR VALVE INSTALLATION, (not available to order, see items 101 thru 105)	A
21	0100011	AR	LOCTITE 242	
22	1001101235	2	ADAPTER, (includes o-ring)	
23		Ref	HOSE ASSY, (See AUXILIARY HYDRAULICS for Breakdown)	
101	2110810	2	ADAPTER, (includes o-ring)	
102	2131010	1	ADAPTER, 90, (includes o-ring)	
103	2150810	2	ADAPTER, 45, (includes o-ring)	
104	2170210	1	ADAPTER, 90, (includes o-ring)	
105		Ref	DIVERTOR VALVE, (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
	1001101039	1	QUICK DISCONNECT KIT, (FLAT FACED), (if equipped), (includes items 201 thru 204)	A
	1001101040	1	QUICK DISCONNECT KIT, (AG STYLE), (if equipped), (includes items 201 thru 204)	A
201	1001101041	1	MALE COUPLING, (FLAT FACED)	
201	1001001241	1	MALE COUPLING, (AG STYLE)	
202	1001101042	1	FEMALE COUPLING, (FLAT FACED)	
202	1001001240	1	FEMALE COUPLING, (AG STYLE)	
203	8420053	1	DUST CAP	
204	8420055	1	DUST PLUG, (FLAT FACED)	
204	1001001557	1	DUST PLUG, (AG STYLE)	
302		Ref	MAIN CONTROL VALVE, (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
303		Ref	CLAMP SET, (See AUXILIARY HYDRAULICS for Breakdown)	
403		Ref	ADAPTER, (See AUXILIARY HYDRAULICS for Breakdown)	

MidWestTech | JLG 2505, G5-18A Telehandler Parts Manual | Publication 31200360 Order the manual at mid-west-tech.com >