Service Manual

Model
G5-18A

PVC 1911
PVC 2005

31211363

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An Oshkosh Corporation Company

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SECTION CONTENTS

Section	Subject	Page
Section 1		
Safety Practices		**1-1**
1.1	Introduction	1-2
1.2	Disclaimer	1-2
1.3	Operation & Safety Manual	1-2
1.4	Do Not Operate Tags	1-2
1.5	Safety Information	1-2
1.6	Safety Instructions	1-3
1.7	Safety Decals	1-4
Section 2		
General Information and Specifications		**2-1**
2.1	Replacement Parts and Warranty Information	2-3
2.2	Specifications	**2-4**
2.3	Fluids, Lubricants and Capacities	2-6
2.4	Service and Maintenance Schedule	2-9
2.5	Lubrication Schedule	2-12
2.6	Thread Locking Compound	2-13
2.7	Torque Charts	2-14
2.8	Hydraulic Connection Assembly and Torque Specification	2-24
Section 3		
Boom		**1-1**
3.1	Boom System Component Terminology	1-2
3.2	Safety Information	1-3
3.3	Two Section Boom System	1-3
3.4	Boom Removal/Installation	1-3
3.5	Boom Assembly Maintenance	1-6
3.6	Boom Wear Pads	1-12
3.7	Quick Coupler Assembly	1-13
3.8	Forks	1-14
3.9	Boom Prop (If Equipped)	1-15
3.10	Emergency Boom Lowering Procedure	1-16
3.11	Troubleshooting	1-18
Section 4		
Cab		**4-1**
4.1	Operator Cab Component Terminology	4-2
4.2	Operator Cab	4-3
4.3	Cab Components	4-3
4.4	Cab Removal	4-12
4.5	Cab Installation	4-13

MidWestTech | JLG G5-18A Telehandler Service Manual | Publication 31211363 Order the manual at mid-west-tech.com >

Section	Subject	Page
Section 5		
Axles, Drive Shafts, Wheels and Tires		**5-1**
5.1	Axle, Drive Shaft and Wheel Component Terminology	5-2
5.2	General Information	5-3
5.3	Axle Serial Number	5-3
5.4	Axle Specifications And Maintenance Information	5-3
5.5	Axle Replacement	5-4
5.6	Axle Assembly and Drive Shaft Troubleshooting	5-7
5.7	Drive Shafts	5-10
5.8	Wheels and Tires	5-12
5.9	Steering Angle Adjustment	5-13
5.10	Brakes	5-13
5.11	Towing a Disabled Machine	5-14
Section 6		
Transmission		**6-1**
6.1	Transmission Assembly Component Terminology	6-2
6.2	Transmission Serial Number	6-3
6.3	Specifications and Maintenance Information	6-3
6.4	Transmission Replacement	6-3
6.5	Hydrostatic Coupler Replacement	6-5
Section 7		
Engine		**7-1**
7.1	Introduction	7-2
7.2	Engine Serial Number	7-5
7.3	Specifications and Maintenance Information	7-5
7.4	Engine Cooling System	7-5
7.5	Engine Electrical System	7-9
7.6	Fuel System	7-9
7.7	Engine Exhaust System	7-11
7.8	Air Cleaner Assembly	7-12
7.9	Engine Replacement	7-13
7.10	Troubleshooting	7-14
Section 8		
Hydraulic System		**8-1**
8.1	Hydraulic Component Terminology	8-3
8.2	Safety Information	8-4
8.3	Specifications	8-4
8.4	Hoses, Tube Lines, Fittings, Etc.	8-5
8.5	Hydraulic Pressure Diagnosis	8-5
8.6	Hydraulic Circuits	8-6
8.7	Hydraulic Schematic	8-8
8.8	Hydraulic Reservoir	8-10
8.9	Hydraulic System Pump	8-12
8.10	Front Drive Motor	8-13
8.11	Control Valves	8-14
8.12	Hydraulic Cylinders	8-27

MidWestTech | JLG G5-18A Telehandler Service Manual | Publication 31211363 Order the manual at mid-west-tech.com >

Section	Subject	Page
Section 9		
Electrical System		**9-1**
9.1	Electrical Component Terminology	9-3
9.2	Specifications	9-4
9.3	Safety Information	9-4
9.4	Fuses and Relays	9-4
9.5	Electrical System Schematics	9-8
9.6	Dielectric Grease Application	9-18
9.7	Engine Start Circuit	9-20
9.8	Battery	9-23
9.9	Electrical System Components	9-25
9.10	Window Wiper System	9-26
9.11	Cab Heater/AC and Fan	9-28
9.12	Switches, Solenoids and Senders	9-29
9.13	Load Stability Indicator System (LSI) (If Equipped)	9-33
9.14	Machine Data	9-42
9.15	Analyzer Software Accessibility	9-45
9.16	Telematics Gateway	9-49
9.17	Diagnostic Trouble Codes (DTC) on Ground Module	9-54
9.18	Engine Diagnostic Trouble Code	9-58

MidWestTech | JLG G5-18A Telehandler Service Manual | Publication 31211363 Order the manual at mid-west-tech.com >

2.2 SPECIFICATIONS

2.2.1 Travel Speed

Tires	Approximate Speed
12 - 16.50 (305/70D16.5)	15 mph (24 km/h)
14 - 17.50 (355/70D17.5)	17 mph (27 km/h)
10.5 - 18	17 mph (27 km/h)

2.2.2 Hydraulic Cylinder Performance Specifications

Note: *Machine with no load, engine at full throttle, hydraulic oil above 15.6° C (60° F) minimum, engine at operating temperature.*

Function	Approximate Times (sec.)
Boom Extend (Boom Level)	6.7
Boom Retract	3.8
Boom Lift	6.8
Boom Lower	4.6
Quick Attach - UP	2.0
Quick Attach - DOWN	2.5

2.2.3 Electrical System

Note: *Refer to Section 9.4, "Fuses and Relays", for more information.*

Description	Standard
Battery	
Type, Rating	12 BCI, Negative (-) Ground, Maintenance Free
Cold Cranking Amps @ 0° F (-18° C)	950
Cranking Amps @ 0° F (-18° C)	1190
Reserve Capacity Minutes @ 80° F (27° C)	205
Group/Series	Group 31
Alternator	14V, 95 Amps
Starter	12V, 3.2kW

2.2.4 Steering Angle Specification

Model	Angle (in Degrees)
G5-18A	37

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5.6 AXLE ASSEMBLY AND DRIVE SHAFT TROUBLESHOOTING

Problem	Possible Causes	Remedy
1. Excessive axle noise while driving.	1. Oil level too low.	1. Fill oil to correct level. (Refer to Section 2.3, "Fluids, Lubricants and Capacities").
	2. Axle and/or wheel end housings filled with incorrect oil or oil level low.	2. Drain axle and/or wheel end housings and fill to correct level. (Refer to Section 2.3, "Fluids, Lubricants and Capacities").
	3. Incorrect alignment of ring and pinion gears.	3. Correct alignment by adding or removing shims as needed.
	4. Incorrect pinion (input) shaft bearing preload.	4. Correct bearing preload by adding or removing shims as needed.
	5. Worn or damaged bearings.	5. Replace bearings as needed.
	6. Worn or broken gear teeth.	6. Replace gears as needed.
	7. Contamination in the axle.	7. Drain axle and/or wheel end housings and fill to correct level. (Refer to Section 2.3, "Fluids, Lubricants and Capacities").
	8. Axle housing damaged.	8. Replace damaged parts.
2. Intermittent noise when traveling.	1. Universal joint(s) worn or damaged.	1. Repair or replace universal joints as needed.
	2. Differential ring and/or pinion gears damaged.	2. Determine cause and repair as needed.
3. Vibration or intermittent noise when traveling.	1. Drive shaft universal joint(s) assembly incorrectly tightened.	1. Tighten capscrews to correct torque.
	2. Drive shaft universal joint(s) worn or damaged.	2. Repair or replace universal joints as needed.
	3. Drive shaft damaged/unbalanced.	3. Replace drive shaft as needed.

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30. Remove the Do Not Operate Tags from both the ignition key and the steering wheel.

7.5 ENGINE ELECTRICAL SYSTEM

The engine electrical system, including the starter, alternator and primary wiring, is described in Section 9.5, "Electrical System Schematics".

7.6 FUEL SYSTEM

7.6.1 Diesel Fuel

Fuel represents a major portion of machine operating costs and therefore must be used efficiently. ALWAYS use a premium brand of high-quality, clean diesel fuel. Low cost, inferior fuel can lead to poor performance and expensive engine repair.

Refer to Section 2.3, "Fluids, Lubricants and Capacities", for approved fuel specifications.

7.6.2 Fuel Tank

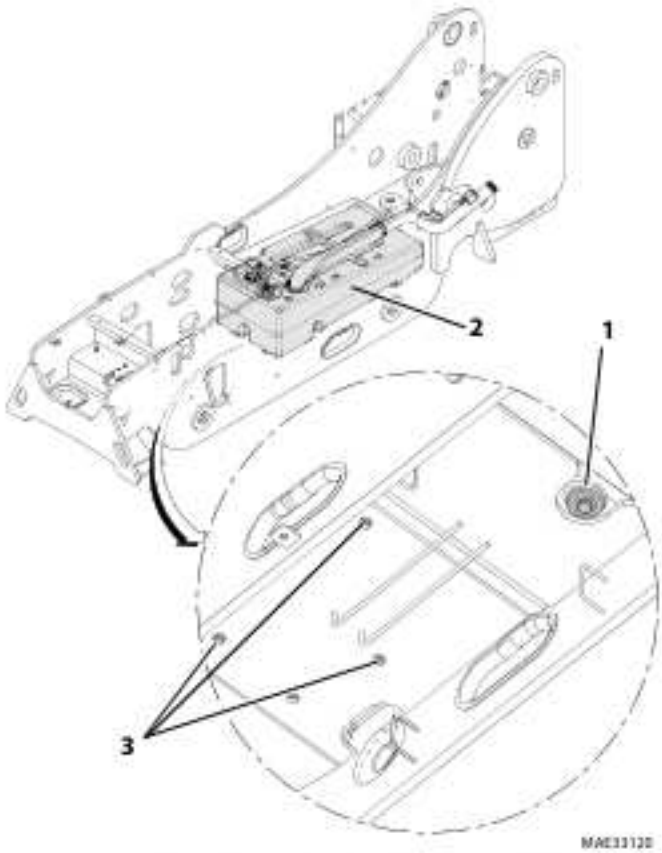
a. Fuel Tank Removal

1. Park machine on a firm, level surface, level machine, fully retract boom, lower boom, place transmission in (N) NEUTRAL, engage parking brake, and shut engine OFF.
2. Place a Do Not Operate Tag on both ignition key switch and steering wheel.
3. Open engine cover. Allow system fluids to cool.
4. Properly disconnect battery. Refer Section 9.8, "Battery", for procedure.

Note: *If replacing the tank, remove all internal and external components from the old tank, and retain for use on the replacement tank.*

Note: *Have a dry chemical (Class B) fire extinguisher near the work area.*

5. Remove the hydraulic oil reservoir. Refer to Section 8.8.4, "Hydraulic Oil Reservoir Removal/ Installation", for procedure.



6. Remove drain plug (**1**) from fuel tank (**2**) and drain fuel into an approved and suitable container. Dispose of fuel properly.
7. Install the fuel tank drain plug (**1**).
8. Remove hardware securing fuel tank (**3**) to frame.
9. Remove fuel tank from frame.

b. Disassembly

Fuel tank is a one-piece unit and cannot be disassembled. Fuel level indicator can be removed and reused on new replacement tank. Dispose of old tank according to local regulations concerning hazardous materials disposal.

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9.6 DIELECTRIC GREASE APPLICATION

Dielectric grease helps to prevent corrosion of electrical contacts and improper conductivity between contacts from moisture intrusion. Non-waterproof connectors benefit from the application of dielectric grease.

9.6.1 Installation

1. The following is general guidance for the installation of dielectric grease in a connector system.
2. Use dielectric grease in a tube for larger connection points or apply with a syringe for small connectors.
3. Apply dielectric grease to plug/male connector housing which typically contains sockets contact/female terminals.
4. Leave a layer of dielectric grease on the mating face of the connector, completely covering each connector terminal hole. Refer the pictures shown below.
5. Assemble the connector system immediately to prevent moisture ingress or dust contamination.

The following connector systems are specifically addressed because of their widespread use at JLG. However, this guidance may be applied to similar devices.

AMP Mate-N-Lok

This connector system is widely used inside enclosures for general-purpose interconnect. Follow the general guidance for installation.



Improper



Proper

AMP Faston

This connector system is typically used on operator switches at JLG. Follow the general guidance for installation.



Improper



Proper

AMP Micro-Fit

This connector system is typically used on control modules at JLG. Follow the general guidance for installation.



Improper



Proper

AMP Mini Fit Jr

This connector system is typically used on control modules at JLG. Follow the general guidance for installation.



Improper



Proper

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