Service Manual

Models

G15-44A

31211077

Original
September 24, 2015

An Oshkosh Corporation Company

MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077

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

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	2-2
2.2	Thread Locking Compound	2-2
2.3	Torque Charts	2-3
2.4	Specifications	2-14
2.5	Fluid and Lubricant Capacities	2-16
2.6	Service and Maintenance Schedules	2-18
2.7	Lubrication Schedules	2-22
Section 3		
Boom		**3-1**
3.1	Boom Component Terminology	3-2
3.2	boom operation	3-3
3.3	Boom Assembly Maintenance	3-3
3.4	Complete Boom Removal/installation	3-4
3.5	Boom Section Removal/installation	3-5
3.6	Boom Section Separation Adjustment	3-13
3.7	Boom Hose Adjustment	3-13
3.8	Boom Hose Removal/installation	3-14
3.9	Boom Extend/retract Chain Removal/installation	3-14
3.10	Quick Coupler Assembly	3-16
3.11	Boom Wear Pads	3-17
3.12	Boom Chain Inspection And Lubrication	3-19
3.13	Forks	3-22
3.14	Emergency Boom Lowering Procedure	3-23
3.15	Troubleshooting	3-25
Section 4		
Cab and Covers		**4-1**
4.1	Operators Cab and Covers Component Terminology	4-2
4.2	Operator Cab	4-3
4.3	Cab Components	4-3
4.4	Cab Removal	4-8
4.5	Cab Installation	4-9

MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077 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	Axle Serial Number	5-3
5.3	Axle Specifications And Maintenance Information	5-3
5.4	Axle Replacement	5-3
5.5	Drive Shafts	5-8
5.6	Wheels and Tires	5-9
5.7	Brakes	5-10
5.8	Towing a Disabled Machine	5-11
Section 6		
Transmission		**6-1**
6.1	Transmission Assembly Component Terminology	6-2
6.2	Transmission Serial Number	6-3
6.3	Transmission Specifications And Maintenance Information	6-3
6.4	Transmission Replacement	6-3
6.5	Transmission Cooler Thermal By-Pass Valve	6-7
6.6	Torque Convertor Diaphragm	6-8
6.7	Troubleshooting	6-9
Section 7		
Engine		**7-1**
7.1	Introduction	7-2
7.2	Engine Cooling System	7-4
7.3	Engine Electrical System	7-7
7.4	Fuel System	7-7
7.5	Engine Exhaust System	7-9
7.6	Air Cleaner Assembly	7-10
7.7	Engine Replacement	7-11
7.8	Troubleshooting	7-13
Section 8		
Hydraulic System		**8-1**
8.1	Hydraulic Component Terminology	8-2
8.2	Safety Information	8-3
8.3	Specifications	8-3
8.4	Hydraulic Circuits	8-3
8.5	Hydraulic Pressure Diagnosis	8-3
8.6	Hydraulic Reservoir	8-9
8.7	Implement Pump	8-10
8.8	Control Valves	8-11
8.9	Hydraulic Cylinders	8-17

MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077

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

Section	Subject	Page
Section 9		
Electrical System		**9-1**
9.1	Electrical Component Terminology	9-2
9.2	Specifications	9-3
9.3	Safety Information	9-3
9.4	Fuses and Relays	9-3
9.5	Electrical System Schematics	9-6
9.6	Engine Start Circuit	9-10
9.7	Window Wiper/Washer Windshield Wiper Motor	9-12
9.8	Cab Heater and Fan	9-14
9.9	Solenoids, Sensors and Senders	9-14
9.10	Display Monitor and Gauges	9-18
9.11	Dash Switches	9-19
9.12	SAE Diagnostic Trouble and Fault Codes	9-21

MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077 Order the manual at mid-west-tech.com >



2.5.2 Capacities

Engine Crankcase Oil	
Capacity with Filter Change	14 quarts (13,3 liters)
Fuel Tank	
Capacity	38 gallons (144 liters)
Cooling System	
System Capacity	20 quarts (18,9 liters)
Hydraulic System	
System Capacity	56 gallons (212 liters)
Reservoir Capacity to Middle of Sight Gauge	33 gallons (125 liters)
Auxiliary Hydraulic Circuit Max Flow	10 gpm (37,9 lpm)
Transmission	
Capacity with Filter Change	22 quarts (20,8 liters)
Transfer Case	
Capacity	1.8 quarts (1,7 liters)
Axles	
Differential Housing Capacity	
Front	15 quarts (14,2 liters)
Friction Modifier (Front Only-If needed)	Maximum 24 ounce (709,8 milliliter)
Rear	15.5 quarts (14,7 liters)
Wheel End Capacity	2 quarts (1,9 liters)
Air Conditioning System (If equipped)	
System Capacity	2.5 lb (1134 grams)

MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077 Order the manual at mid-west-tech.com >

7.8 Troubleshooting

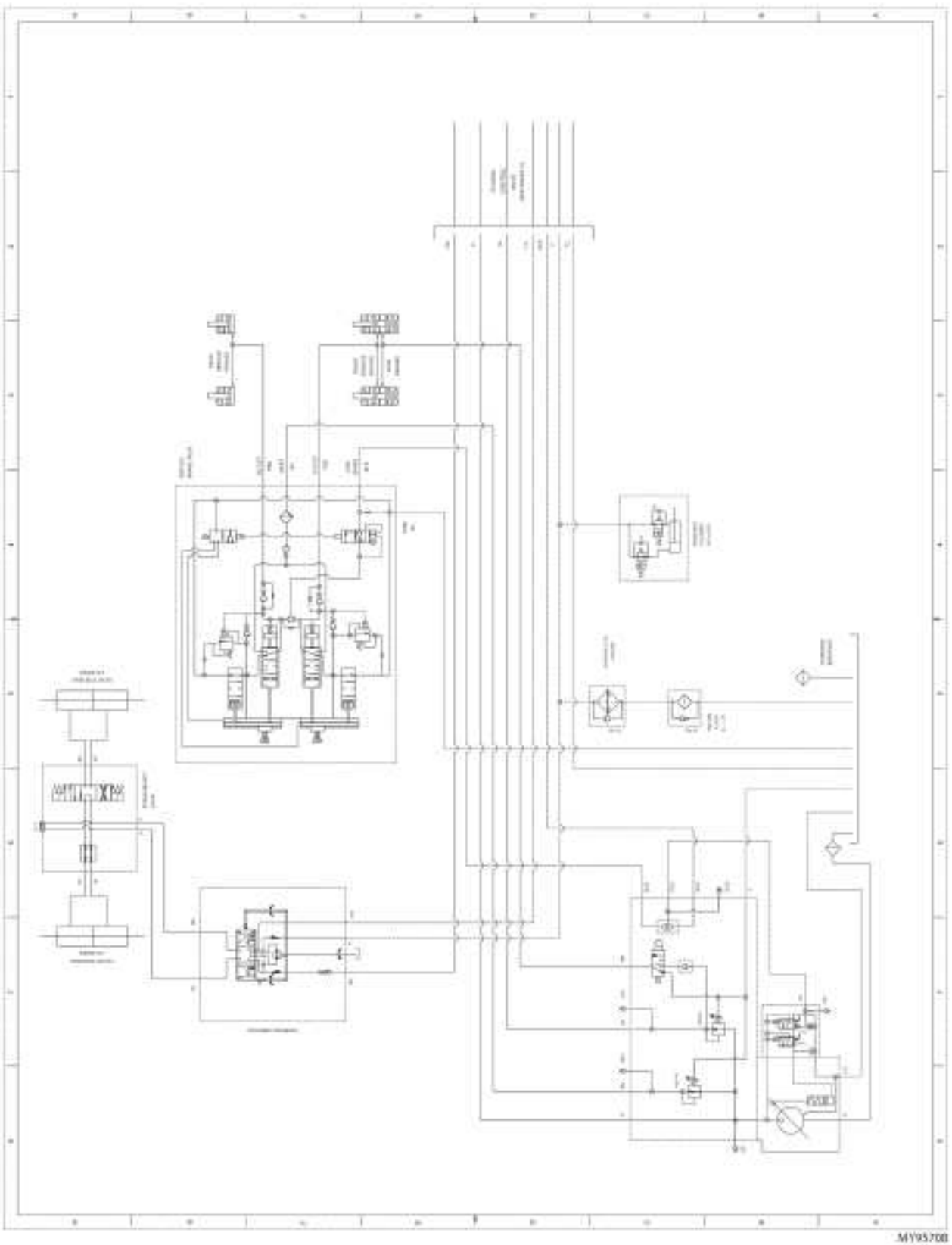
Trouble	Possible Causes (see key, below)
Low Cranking Power	1, 2, 3, 4
Will Not Start	5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 31, 32, 33
Difficult Starting	5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 24, 29, 31, 32, 33, 61, 63
Lack of Power	8, 9, 10, 11, 12, 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 32, 33, 61, 63
Misfiring	8, 9, 10, 12, 13, 14, 16, 18, 19, 20, 25, 26, 28, 29, 30, 32
Excessive Fuel Consumption	11, 13, 14, 16, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 31, 32, 33, 63
Black Exhaust	11, 13, 14, 16, 18, 19, 20, 22, 24, 25, 27, 28, 29, 31, 32, 33, 61, 63
Blue/White Exhaust	4, 16, 18, 19, 20, 25, 27, 31, 33, 34, 35, 45, 56, 62
Low Oil Pressure	4, 36, 37, 38, 39, 40, 42, 43, 44, 58
Knocking	9, 14, 16, 18, 19, 22, 26, 28, 29, 31, 33, 35, 36, 45, 46, 59
Erratic Running	7, 8, 9, 10, 11, 12, 13, 14, 16, 20, 21, 23, 26, 28, 29, 30, 33, 35, 45, 59
Vibration	13, 14, 20, 23, 25, 26, 29, 30, 33, 45, 47, 48, 49
High Oil Pressure	4, 38, 41
Overheating	11, 13, 14, 16, 18, 19, 24, 25, 45, 50, 51, 52, 53, 54, 57
Excessive Crankcase Pressure	25, 31, 33, 34, 45, 55, 60
Poor Compression	11, 19, 25, 28, 29, 31, 32, 33, 34, 46, 59
Starts and Stops	10, 11, 12

Key to Possible Causes

1. Battery charge low
2. Bad electrical connection
3. Faulty starter motor
4. Incorrect grade of lubricating oil
5. Low cranking speed
6. Fuel tank empty
7. Faulty stop control operation
8. Fuel inlet restricted
9. Faulty fuel lift pump
10. Clogged fuel filter
11. Restricted air cleaner
12. Air in fuel system
13. Faulty fuel injection pump
14. Faulty fuel injectors or incorrect type
15. Incorrect use of cold start equipment
16. Faulty cold start equipment
17. Broken fuel injection pump drive
18. Incorrect fuel pump timing
19. Incorrect valve timing
20. Poor compression
21. Blocked fuel tank vent
22. Incorrect grade of fuel
23. Sticking throttle or restricted movement
24. Exhaust pipe restriction
25. Leaking cylinder head gasket
26. Overheating
27. Cold running
28. Incorrect tappet adjustment
29. Sticking valves
30. Incorrect high pressure pipes
31. Worn cylinder bores
32. Pitted valves and seats
33. Broken, worn or sticking piston ring(s)
34. Worn valve stems and guides
35. Restricted air cleaner
36. Worn or damaged bearings
37. Insufficient oil in sump
38. Inaccurate gauge
39. Oil pump worn
40. Pressure relief valve sticking open
41. Pressure relief valve sticking closed
42. Broken relief valve spring
43. Faulty suction pipe
44. Restricted oil filter
45. Piston seizure/pick up
46. Incorrect piston height
47. Damaged fan
48. Faulty engine mounting
49. Incorrectly aligned flywheel housing or incorrectly aligned flywheel
50. Faulty thermostat
51. Restriction in water jacket
52. Loose fan belt
53. Restricted radiator
54. Faulty water pump
55. Restricted breather pipe
56. Damaged valve stem oil deflectors (if fitted)
57. Coolant level too low
58. Blocked sump strainer
59. Broken valve spring
60. Exhauster or vacuum pipe leak
61. Turbo impeller damaged or dirty
62. Turbo lubricating oil seal leak
63. Induction system leaks

MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077 Order the manual at mid-west-tech.com >

8.5.3 Hydraulic Schematic



MidWestTech | JLG G15-44A Telehandler Service Manual | Publication 31211077

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