Service and Maintenance Manual

Model
1532E
1932E
2033E
2046E
2646E
2658E

3120725
March 1, 1998

ANSI

MidWestTech | JLG 1532E, 1932E, 2033E, 2046E, 2646E, 2658E Scissor Lift Service Manual | Publication 3120725
Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

SUBJECT - SECTION, PARAGRAPH		PAGE NO.
INTRODUCTION - MAINTENANCE SAFETY PRECAUTIONS		a
EFFECTIVITY PAGE		b
TABLE OF CONTENTS		i
LIST OF ILLUSTRATIONS		ii
LIST OF TABLES		ii
SECTION 1 — SPECIFICATIONS		
1-1.	Capacities	1-1
1-2.	Component Data	1-1
1-3.	Performance Data	1-1
1-4.	Torque Requirements	1-3
1-5.	Lubrication	1-3
1-6.	Serial Number Locations	1-5
1-7.	Cylinder specifications	1-5
1-8.	Pressure Settings	1-8
1-9.	Limit Switches	1-8
1-10.	Major Component Weights	1-9
1-11.	Critical Stability Weights	1-9
SECTION 2 — PROCEDURES		
2-1.	General	2-1
2-2.	Servicing and Maintenance Guidelines	2-1
2-3.	Lubrication Information	2-2
2-4.	Cylinders - Theory of Operation	2-4
2-5.	Valves - Theory of Operation	2-4
2-6.	Component Functional Description	2-4
2-7.	Wear Pads	2-5
2-8.	Cylinder Checking Procedures	2-5
2-9.	Lift Cylinder Removal and Installation	2-6
2-10.	Lift Cylinder Repair (Machines manufactured before August 1996)	2-6
2-11.	Lift Cylinder Repair (Machines manufactured August 1996 to present)	2-11
2-12.	Brake Cylinder Repair	2-13
2-13.	Steer Cylinder Repair	2-15
2-14.	Tilt Switch Adjustment	2-17
2-15.	Limit Switch Adjustment	2-19
2-16.	Pressure Setting Procedures	2-19
2-17.	Pothole Protection System Limit Switch Adjustment	2-21
2-18.	JLG SMART System™	2-22
2-19.	Drive Motor Repair (Eaton)	2-24
2-20.	Preventive Maintenance and Inspection Schedule	2-27
SECTION 3 — TROUBLESHOOTING		
3-1.	General	3-1
3-2.	Troubleshooting Information	3-1
3-3.	Hydraulic Circuit Checks	3-1
3-4.	JLG SMART System™	3-2

MidWestTech | JLG 1532E, 1932E, 2033E, 2046E, 2646E, 2658E Scissor Lift Service Manu... Order the manual at mid-west-tech.com >

LIST OF ILLUSTRATIONS

FIGURE NO.	FIGURE TITLE	PAGE NO.
1-1	Torque Chart	1-4
1-2	Lubrication Chart - 1532E/1932E/2033E/2046E/2646E/2658E	1-6
1-3	Serial Number Locations - 1532E/1932E/2033E/2046E/2646E/2658E	1-7
2-1	Barrel Support	2-7
2-2	Cylinder Head Retainer Cap Screw Removal	2-7
2-3	Rod Support	2-7
2-4	Tapered Bushing Removal	2-7
2-5	Gar-Max Bearing Installation	2-8
2-6	Rod Seal Installation	2-9
2-7	Poly-Pak Seal Installation	2-9
2-8	Wiper Seal Installation	2-9
2-9	Head Seal Kit Installation	2-9
2-10	Piston Seal Kit Installation	2-10
2-11	Tapered Bushing Installation	2-10
2-12	Rod Assembly Installation	2-10
2-13	Brake Cylinder Assembly	2-14
2-14	Steer Cylinder Assembly	2-16
2-15	Tilt Switch Leveling - Manual Adjustment	2-18
2-16	Tilt Switch Leveling - Voltmeter Adjustment	2-18
2-17	Pressure Setting Adjustments	2-20
2-18	Pothole Protection System Limit Switch Adjustment (Power Lift Down)	2-21
2-19	Pothole Protection System Limit Switch Adjustment (Gravity Lift Down)	2-21
2-20	JLG SMART System™ Controller	2-23
2-21	Drive Motor Assembly (Eaton)	2-24
2-22	Electrical Schematic - Power Lift Down Machines	2-30
2-23	Electrical Schematic - Gravity Lift Down Machines	2-32
2-24	Hydraulic Diagram - Standard - Power Lift Down Machines	2-34
2-25	Hydraulic Diagram - Standard - Gravity Lift Down Machines	2-35
3-1	JLG SMART System™ Controller	3-2

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1-1	Torque Requirements	1-3
1-2	Hydraulic Oil	1-3
1-3	Lubrication Specifications	1-5
1-4	Cylinder Specifications	1-5
1-5	Major Component Weights	1-9
1-6	Critical Stability Weights	1-9
2-1	Cylinder Component Specifications	2-11
2-2	Holding Valve Torque Specifications	2-11
2-3	JLG SMART System™ Flash Fault Codes	2-22
2-4	Preventive Maintenance and Inspection Schedule	2-29
3-1	JLG SMART System™ Flash Fault Codes	3-2
3-2	JLG SMART System™ Troubleshooting	3-3
3-3	Hydraulic System Troubleshooting	3-5

MidWestTech | JLG 1532E, 1932E, 2033E, 2046E, 2646E, 2658E Scissor Lift Service Manu... Order the manual at mid-west-tech.com >