**Table 1-9. Lubrication Chart**

| | Components | Number/Type Lube Points | Capacity | Lube | Interval | | Hours | | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3 Months 150 hrs | 6 Months 300 hrs | 1 Year 600 hrs | 2 Years 1200 hrs | |
| Lubrication | | | | | | | | | |
| 1 | Swing Bearing - Internal Ball Bearing | 2 Grease Fitting | A/R | MPG | X | | | | |
| 2a | Swing Bearing - Teeth | Spray On | A/R | OGL | X | | | | More frequent lubrication intervals may be required. |
| 2b | End Bearings - Worm Gear* | 2 | A/R | MPG | | | | X | Remove grease fittings and install plugs after greasing. |
| 3 | Wheel Bearings (2WD Only) | Repack | A/R | MPG | | | | X | |
| 4 | Wheel Drive Hub | Level/Fill Plug | 0.5 liters (1/2 full) | EPGL | | | | X | Change after first 150 hours then every 1200 hours of operation. |
| 5 | Hydraulic Return Filter | N/A | N/A | N/A | | X | | | Change after first 50 hours and every 300 hours thereafter or as indicated by condition indicator. |
| 6 | Hydraulic Charge Filter | N/A | N/A | N/A | | X | | | Change after first 50 hours and every 300 hours thereafter or as indicated by condition indicator. |
| 7 | Hydraulic Oil | Fill Cap | 116 liters Tank<br>124 liters System | HO | | | | X | Check level daily.<br>Change every 1200 hours. |
| 8 | Suction Strainers (In Tank) | 2 | N/A | N/A | | | | X | Remove and clean at time of hydraulic oil change. |
| Engines | | | | | | | | | |
| 9 | Oil Change w/Filter - Ford | Fill Cap/Spin-on Element | 4.5 Quarts (4.25 L) | EO | X | | | | Check level daily; change every 150 hours. Adjust final oil level by mark on dipstick. |
| 10 | Oil Change w/Filter - Deutz | Fill Cap/Spin-on Element | 6 liters crankcase<br>**4.5 liters cooler | EO | | | X | | Check level daily; change every 600 hours. Adjust final oil level by mark on dipstick. |
| 11 | Oil Change - Crankcase Only, Caterpillar | Fill Cap/Spin-on Element | 3.8 Quarts (3.6 L) | EO | X | | | | Check level daily; change every 150 hours. Adjust final oil level by mark on dipstick. |
| 12 | Fuel Filter - Ford | Replaceable Element | N/A | N/A | | | X | | |
| 13 | Fuel Filter - Deutz | Replaceable Element | N/A | N/A | | | X | | |
| 14 | Fuel Filter - Caterpillar | Replaceable Element | N/A | N/A | | | | | |
| 15 | Air Filter - Ford | Replaceable Element | N/A | N/A | | X | | | Or as indicated by condition indicator |
| 16 | Air Filter - Deutz | Replaceable Element | N/A | N/A | | X | | | Or as indicated by condition indicator |
| 17 | Air Filter - Caterpillar | Replaceable Element | N/A | N/A | | X | | | Or as indicated by condition indicator |

**Table 1-9. Lubrication Chart**

| | Components | Number/Type Lube Points | Capacity | Lube | Interval | | Hours | | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 3 Months 150 hrs | 6 Months 300 hrs | 1 Year 600 hrs | 2 Years 1200 hrs | |

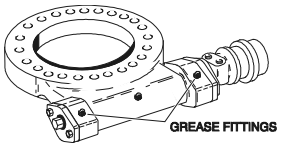
**NOTES:**

Lubrication intervals are based on machine operation under normal conditions. For machines used in multi shift operations and/or exposed to hostile environments or conditions, lubrication frequencies must be increased accordingly.

* If necessary install grease fittings into worm gear housing and grease bearings.

**⚠ CAUTION**

**DO NOT OVERGREASE BEARINGS. OVERGREASING BEARINGS WILL RESULT IN BLOWING OUTER SEAL IN HOUSING.**




**KEY TO LUBRICANTS

| | |
|---|---|
| EO | Engine Oil |
| EPGL | Extreme Pressure Gear Lube |
| HO | Hydraulic Fluid (Mobil DTE-11M) |
| MPG | Multi-Purpose Grease |
| OGL | Open Gear Lubricant - Mobiltac 375 or equivalent |

**When changing oil in the Deutz oil cooled engine, drain both the crankcase and the cooler. When refilling it is acceptable to overfill crankcase (10.5 L), capacity of both crankcase and cooler combined). Start engine, allow the engine to run until the thermostat opens (approximately 105 degrees C) cooler will fill up within minutes; shut down and wait for approximately two minutes. Check oil level, fill oil to max marking on dipstick.

## 1.8 MAJOR COMPONENT WEIGHTS

**Table 1-10. Component Weights**

| Component | Pounds | Kilograms |
|---|---|---|
| Frame | 2325 | 1055 |
| Turntable | 1500 | 680 |
| Boom Link | 180 | 82 |
| Boom Timing Link | 30 | 14 |
| Upper Upright | 217 | 98 |
| Lower Upright | 115 | 52 |
| Lower Boom | 497 | 225 |
| Mid Boom | 385 | 175 |
| Upper Boom | 1065 | 484 |
| 4 Wheel Drive Axle | 200 | 91 |
| 2 Wheel Drive Axle | 235 | 107 |

## 1.9 PRESSURE SETTINGS - PSI (BAR)

Bang-Bang Main Relief - 3300 (227.5)

Steer - 2500 (172)

Platform Level Up - 2800 (193)

Platform Level Down - 1800 (124)

Articulating Jib - 1800 (124)

Proportional Main Relief - 3200 (220)

Lift Down - 1200 (83)

Swing - 1700 (117)

**Table 2-3. Inspection and Preventive Maintenance Schedule**

| AREA | INTERVAL | | | | | |
|---|---|---|---|---|---|---|
| | Pre-Start[1] Inspection | Weekly Preventive Maintenance | Monthly Preventive Maintenance | Pre-Delivery[2] or Frequent[3] Inspection | Annual[4] (Yearly) Inspection | Every 2 Years |
| **Boom Assembly** | 9 | | | | | |
| Boom Weldments | | | | 1,2,4 | 1,2,4 | |
| Hose/Cable Carrier Installations | | | | 1,2,9,12 | 1,2,9,12 | |
| Pivot Pins and Pin Retainers | | | | 1,2 | 1,2 | |
| Sheaves, Sheave Pins | | | | 1,2 | 1,2 | |
| Bearings | | | | 1,2 | 1,2 | |
| Wear Pads | | | | 1,2 | 1,2 | |
| Covers or Shields | | | | 1,2 | 1,2 | |
| Extend/Retract Chain or Cable Systems | | | | 1,2,3 | 1,2,3 | |
| **Platform Assembly** | 9 | | | | | |
| Platform | 1,2 | | | | 1,2 | |
| Railing | 1,2 | | | 1 | 1,2 | |
| Gate | | | 5 | 1 | 1,5 | |
| Floor | 1,2 | | | 1 | 1,2 | |
| Rotator | | 9,5 | | | | |
| Lanyard Anchorage Point | 2 | | | 1,2,10 | 1,2,10 | |
| **Turntable Assembly** | 9 | | | | | |
| Swing Bearing or Worm Gear | | | | 1,2,14 | 1,2,3,13,14 | |
| Oil Coupling | | 9 | | | | |
| Swing Drive System | | | | | | |
| Turntable Lock | | | | 1,2,5 | 1,2,5 | |
| Hood, Hood Props, Hood Latches | | | | 5 | 1,2,5 | |
| **Chassis Assembly** | 9 | | | | | |
| Tires | 1 | 16,17 | | 16,17,18 | 16,17,18 | |
| Wheel Nuts/Bolts | 1 | 15 | | 15 | 15 | |
| Wheel Bearings | | | | | | 14,24 |
| Oscillating Axle/Lockout Cylinder Systems | | | | | 5,8 | |
| Outrigger or Extendable Axle Systems | | | | 5,8 | 5,8 | |
| Steer Components | | | | | | |
| Drive Motors | | | | | | |
| Torque Hubs | | | | 11 | 11 | |
| **Functions/Controls** | 9 | | | | | |
| Platform Controls | 5 | 5 | | 6 | 6 | |

**Table 2-3. Inspection and Preventive Maintenance Schedule**

| AREA | INTERVAL | | | | | |
|---|---|---|---|---|---|---|
| | Pre-Start[1] Inspection | Weekly Preventive Maintenance | Monthly Preventive Maintenance | Pre-Delivery[2] or Frequent[3] Inspection | Annual[4] (Yearly) Inspection | Every 2 Years |
| Ground Controls | 5 | 5 | | 6 | 6 | |
| Function Control Locks, Guards, or Detents | 1,5 | 1,5 | | 5 | 5 | |
| Footswitch | 1,5 | | | 5 | 5 | |
| Emergency Stop Switches (Ground & Platform) | 5 | | | 5 | 5 | |
| Function Limit or Cutout Switch Systems | | | | 5 | 5 | |
| Capacity Indicator | | | | | 5 | |
| Drive Brakes | | | | 5 | | |
| Swing Brakes | | | | 5 | | |
| Boom Synchronization/Sequencing Systems | | | | | 5 | |
| Manual Descent or Auxiliary Power | | | | 5 | 5 | |
| **Power System** | 9 | | | | | |
| Engine Idle, Throttle, and RPM | | | | 3 | 3 | |
| Engine Fluids (Oil, Coolant, Fuel) | 11 | 9,11 | | 11 | 11 | |
| Air/Fuel Filter | | 1,7 | | 7 | 7 | |
| Exhaust System | | | 1,9 | 9 | 9 | |
| Batteries | 5 | 1,9 | | | 19 | |
| Battery Fluid | | 11 | | 11 | 11 | |
| Battery Charger | | 5 | | | 5 | |
| Fuel Reservoir, Cap, and Breather | 11,9 | | 2 | 1,5 | 1,5 | |
| **Hydraulic/Electric System** | 9 | | | | | |
| Hydraulic Pumps | | 1,9 | | 1,2,9 | | |
| Hydraulic Cylinders | | 1,9,7 | 2 | 1,2,9 | 1,2,9 | |
| Cylinder Attachment Pins and Pin Retainers | | 1,9 | | 1,2 | 1,2 | |
| Hydraulic Hoses, Lines, and Fittings | | 1,9 | 12 | 1,2,9,12 | 1,2,9,12 | |
| Hydraulic Reservoir, Cap, and Breather | 11 | 1,9 | 2 | 1,5 | 1,5 | 24 |
| Hydraulic Filter | | 1,9 | | 7 | 7 | |
| Hydraulic Fluid | 11 | | | 7,11 | 7,11 | |
| Electrical Connections | | 1 | | 20 | 20 | |
| Instruments, Gauges, Switches, Lights, Horn | | 1 | | | 5,23 | |
| **General** | | | | | | |
| Operators and Safety Manuals in Storage Box | 21 | | | 21 | 21 | |
| ANSI and EMI Manuals/Handbooks Installed | | | | | 21 | |
| Capacity Decals Installed, Secure, Legible | 21 | | | 21 | 21 | |
| All Decals/Placards Installed, Secure, Legible | 21 | | | 21 | 21 | |

**Table 2-3. Inspection and Preventive Maintenance Schedule**

| AREA | INTERVAL | | | | | |
|---|---|---|---|---|---|---|
| | Pre-Start[1] Inspection | Weekly Preventive Maintenance | Monthly Preventive Maintenance | Pre-Delivery[2] or Frequent[3] Inspection | Annual[4] (Yearly) Inspection | Every 2 Years |
| Walk-Around Inspection Performed | 21 | | | | | |
| Annual Machine Inspection Due | | | | 21 | | |
| No Unauthorized Modifications or Additions | | | | 21 | 21 | |
| All Relevant Safety Publications Incorporated | | | | 21 | 21 | |
| General Structural Condition and Welds | | | | 2,4 | 2,4 | |
| All Fasteners, Pins, Shields, and Covers | | | | 1,2 | 1,2 | |
| Grease and Lubricate to Specifications | | | | 22 | 22 | |
| Function Test of All Systems | 21 | | | 21 | 21, 22 | |
| Paint and Appearance | | | | 7 | 7 | |
| Stamp Inspection Date on Frame | | | | | 22 | |
| Notify JLG of Machine Ownership | | | | | 22 | |

Footnotes:

[1] Prior to use each day; or at each Operator change

[2] Prior to each sale, lease, or delivery

[3] In service for 3 months or 150 Hours; or Out of service for 3 months or more; or Purchased used

[4] Annually, no later than 13 months from the date of the prior inspection

Performance Codes:

1 - Check for proper and secure installation
2 - Visual inspection for damage, cracks, distortion or excessive wear
3 - Check for proper adjustment
4 - Check for cracked or broken welds
5 - Operates Properly
6 - Returns to neutral or "off" position when released
7 - Clean and free of debris
8 - Interlocks function properly
9 - Check for signs of leakage
10 - Decals installed and legible
11 - Check for proper fluid level
12 - Check for chafing and proper routing
13 - Check for proper tolerances
14 - Properly lubricated
15 - Torqued to proper specification
16 - No gouges, excessive wear, or cords showing
17 - Properly inflated and seated around rim
18 - Proper and authorized components
19 - Fully charged
20 - No loose connections, corrosion, or abrasions
21 - Verify
22 - Perform
23 - Sealed Properly
24 - Drain, Clean, Refill