Service & Maintenance Manual

Model
320-30

3121319

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1.8 MAJOR COMPONENT WEIGHTS

Table 1-7. Component Weights

Platform	2100 kg (4630 lbs)
Chassis with Foam Filled Tires	15,100 kg (33,290 lbs)
Arm Assembly	18,000 kg (39,683 lbs)
Lift Cylinder	2900 kg (6393 lbs)

1.9 CRITICAL STABILITY WEIGHTS

⚠ WARNING

DO NOT REPLACE ITEMS CRITICAL TO STABILITY, SUCH AS BATTERIES OR SOLID TIRES, WITH ITEMS OF DIFFERENT-WEIGHT OR SPECIFICATION. DO NOT MODIFY UNIT IN ANY WAY TO AFFECT STABILITY.

Table 1-8. Critical Stability Weights

Component	Unit of Measure	
	kg	lbs
Wheel and Tire Assembly (each)	900	1984
Wheel/Tire and Drive Assembly (each)	1048	2310
Batteries - Standard (each)	24.6	54.2

1.10 PRESSURE SETTING

Cold temperatures have a significant impact on pressure readings. JLG Industries Inc. recommends setting the pressures with the operating temperature between 15°-20°C (59° - 68°F). JLG Industries Inc. also recommends the use of a calibrated gauge. The pressures may be set with a tolerence of ± 3 bar (43.5 psi).

Table 1-9. Pressure Settings

Main Relief	Steer Relief	Lift Relief
200 bar (2901 psi)	175 bar (2538 psi)	230 bar (3336 psi)

1.11 LUBRICATION

Hydraulic Oil

Table 1-10. Hydraulic Oil

HYDRAULIC SYSTEM OPERATING TEMPERATURE RANGE	SAE VISCOSITY GRADE
-18° to -5° C (0° to +23° F)	10W
-18° to +100° C (0° to +210° F)	10W-20, 10W-30
+10° to +100° C (+50° to +210° F)	20W-20

NOTE: *Hydraulic oils must have anti-wear qualities at least to API Service Classification GL-3, and sufficient chemical stability for mobile hydraulic system service. JLG Industries recommends Mobilfluid 424 hydraulic oil, which has an SAE viscosity index of 152.*

NOTE: *When temperatures remain below -7°C (20°F), JLG Industries recommends the use of Mobil DTE13M.*

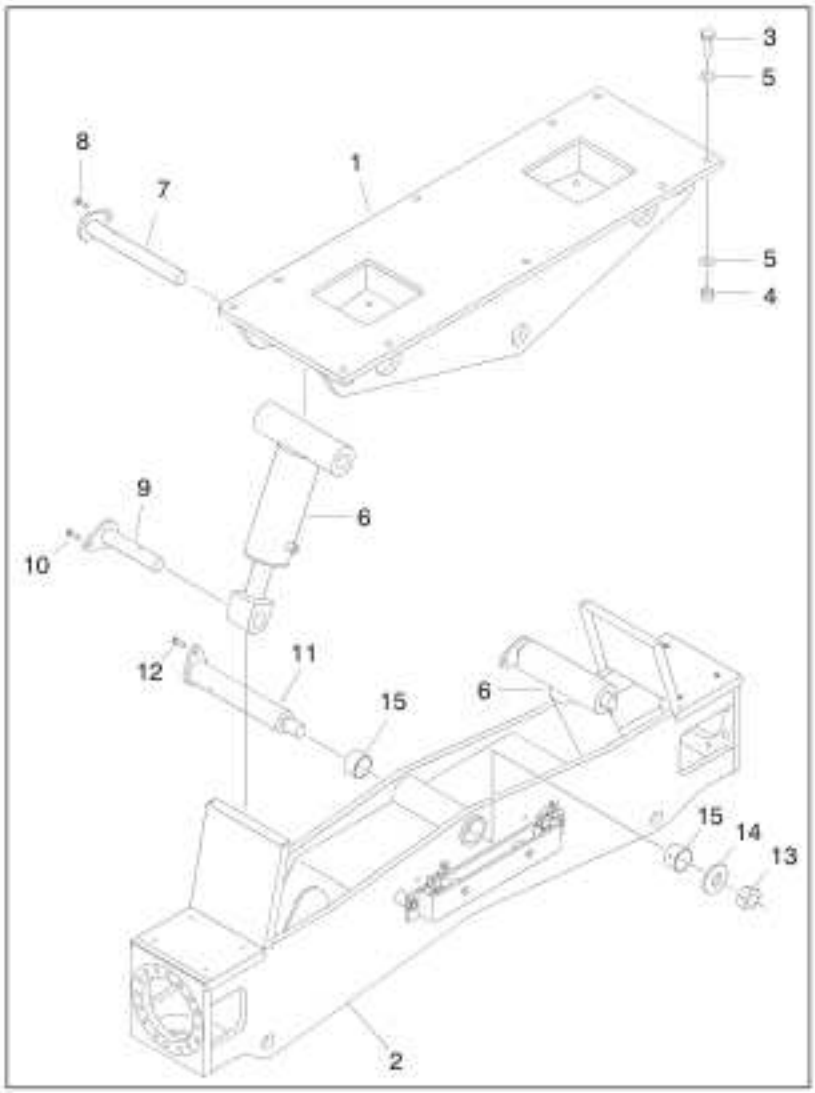
NOTE: *Aside from JLG recommendations, it is not advisable to mix oils of different brands or types, as they may not contain the same required additives or be of comparable viscosities. If use of hydraulic oil other than Mobilfluid 424 is desired, contact JLG Industries for proper recommendations.*

Table 1-11. Mobil DTE 11M Specs

ISO Viscosity Grade	#15
Gravity API	31.9
Pour Point, Max	-40°F (-40°C)
Flash Point, Min.	330°F (166°C)
Viscosity	
at 40° C	15 cSt
at 100° C	4.1 cSt
at 100° F	80 SUS
at 210° F	43 SUS
cp at -30° F	3,200
Viscosity Index	140

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3.4 REAR AXLE



1. Axle Pivot
2. Axle
3. Bolt, M20 x 80mm
4. Nut, M20
5. Flatwasher, M21
6. Axle Lockout Cylinder
7. Pin
8. Bolt, M12 x 30mm
9. Pin
10. Bolt, M12 x 30mm
11. Pivot Pin
12. Bolt, M16 x 30mm
13. Pivot Pin Nut
14. Pivot Pin Washer
15. Bushing

Figure 3-5. Oscillating Axle

Removal:

NOTE: *Disconnect battery. Disconnect all wires and hoses when removing cylinders and/or limit switches.*

1. Secure the Axle (2). The axle assembly can be removed from the chassis by removing the ten Bolts (3), Nuts (4), and twenty Flatwashers (5).
2. The Axle Lockout Cylinders (6) can be removed by removing the Bolts (8, 10) and Pins (7, 10).
3. The Axle can be separated from the Axle Pivot by removing the Pivot Pin (11). Remove the Bolt (12), Pivot Pin Nut (13), Pivot Pin Washer (14). Pull Pin out.

Installation:

1. Follow Removal Procedures in reverse order when installing the axle assembly.

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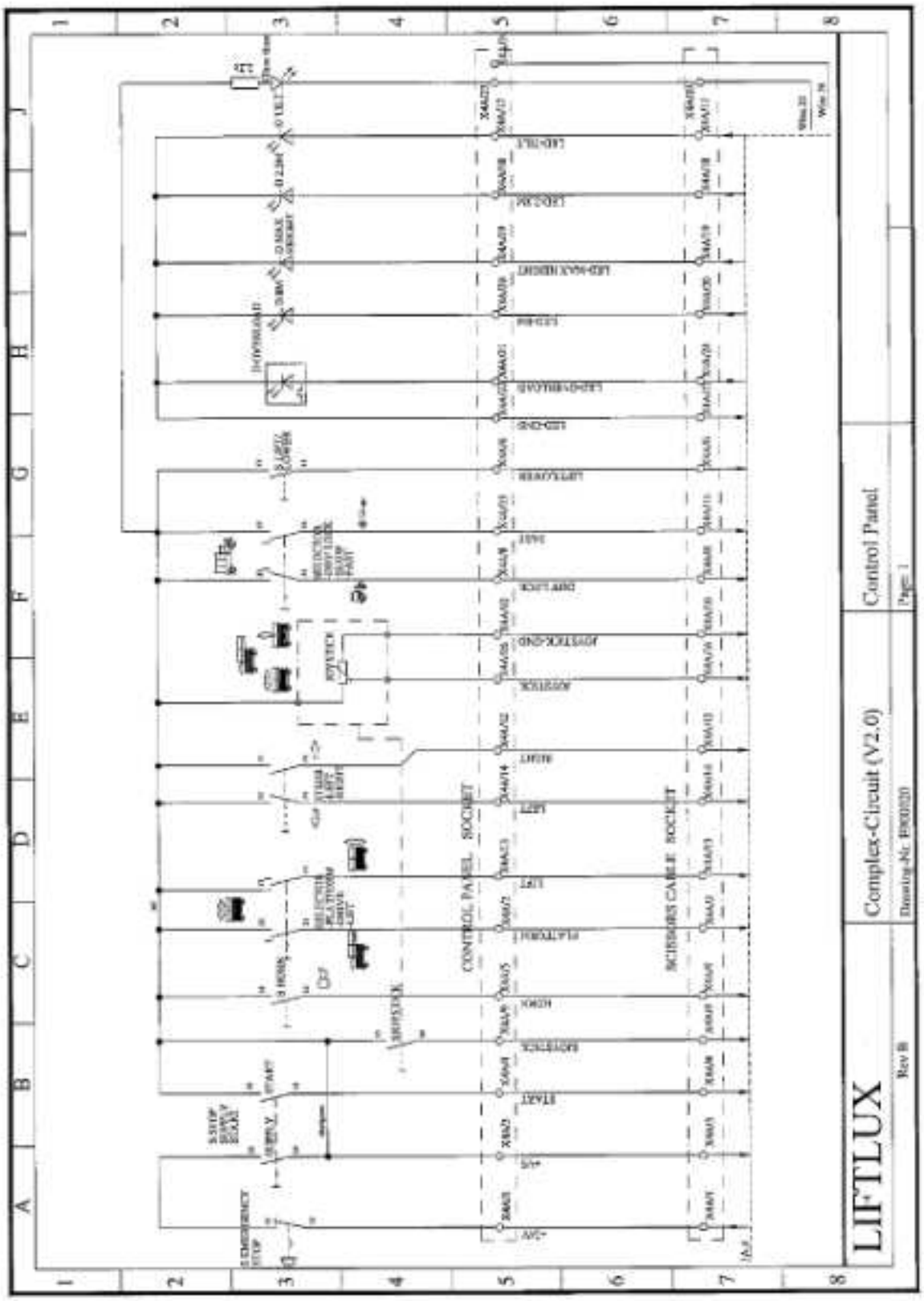


Figure 6-18. Electrical Schematic - Sheet 1 of 14

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