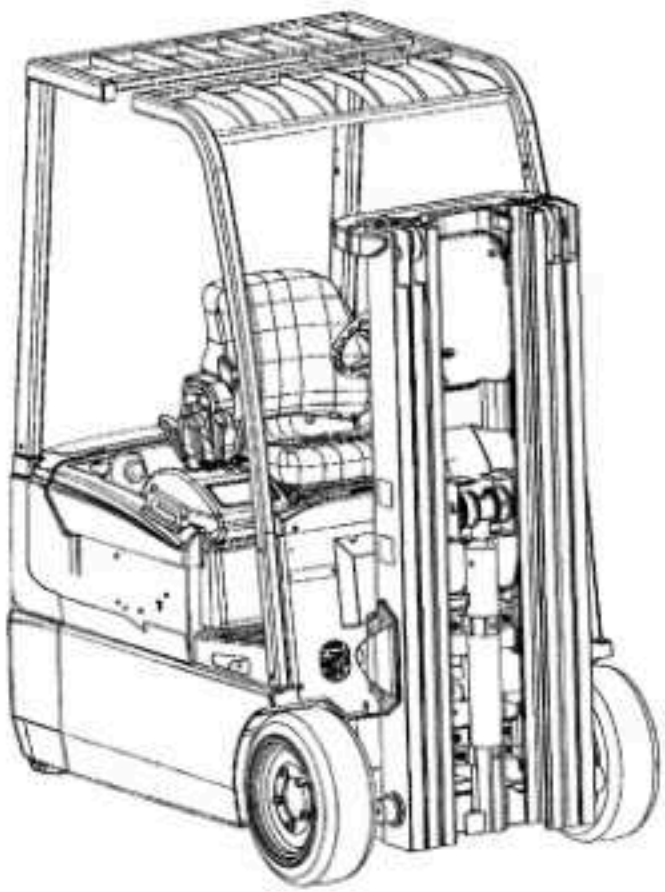
SERVICE MANUAL

J160 (J30-35-40ZT)



FORM 1554640 Rev. 03/14

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This section is for the following models:

All Electric Lift Trucks

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Troubleshooting

PROBLEM	POSSIBLE CAUSE	PROCEDURE OR ACTION
Slow or no movement of cylinders.	Air is in the hydraulic system.	Remove air from hydraulic system.
	The hydraulic pump is worn or damaged.	Repair or replace hydraulic pump.
	Restriction in the hydraulic lines.	Repair hydraulic lines.
	Cylinder seals are damaged.	Repair cylinders.
	Load is greater than capacity.	Reduce load.
	Linkage is disconnected or damaged.	Repair and adjust linkage for control levers.
	Pressure relief valve(s) is not adjusted correctly or is damaged.	Repair or adjust relief valve(s).
	Large leaks between spool and bore.	Replace valve section.
	Switch plates are not installed or adjusted correctly.	Check position of switch plates.
Pump motor fails to turn on.	Failed control valve switch.	Replace switch.
	Open circuit.	Check wiring connections. Check wiring continuity.
	Switch plates are not installed or adjusted correctly.	Check position of switch plates.
Oil leaks at the end of a spool.	Seal for spool is damaged.	Replace seal.
	Spool is damaged.	Replace valve section.
	Valve body is damaged.	Replace valve section.
Hydraulic pressure is above specifications.	Pressure relief valve(s) is not adjusted correctly or is damaged.	Repair or adjust relief valve(s).
	Restriction in return line.	Clean or replace return line or filter.

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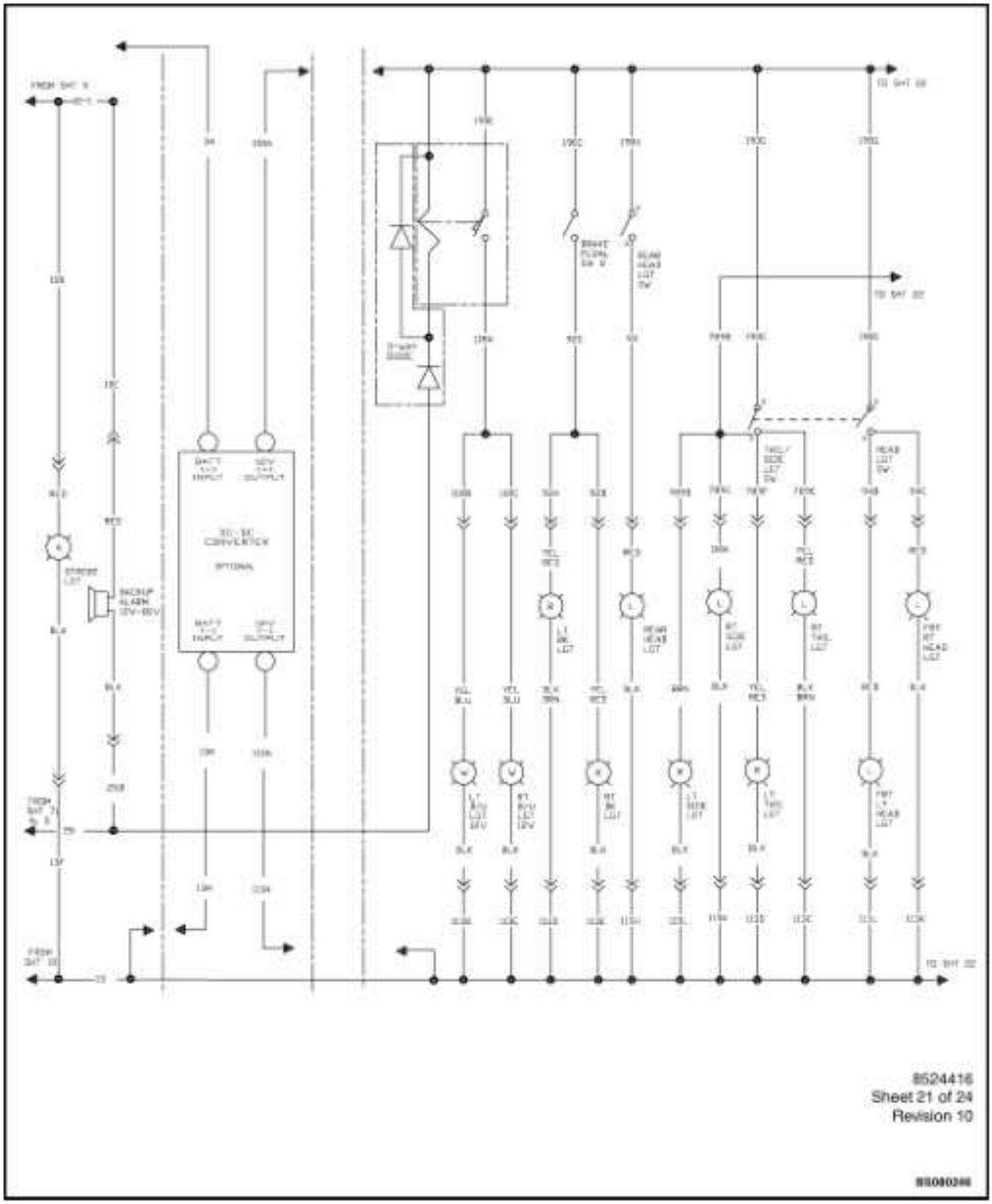


Figure 21. Wiring Schematic - Options - Lights

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* Metric Formulas (All Dimensions are in Millimeters)
Class III Mast Type (3.0 - 3.5 Ton Capacity)
Dimension E = (0.985 × Y) + (0.985 × Z) − 350** **The Calculation for Dimension E for Class III Mast is the Same as Class II Mast. See Class II Mast - Metric Formula.**
Dimension G Calculations are Similar to Dimension E Dimension G for Lift Heights of 3518 mm to 5918 mm: (1.965 × Y) + (0.985 × Z) − 65 Dimension G for Lift Heights of 6068 mm to 8318 mm: (1.965 × Y) + (0.985 × Z) − 65
**** For Lift Heights of 3518 mm to 5918 mm. For Lift Heights of 6068 mm to 8318 mm, Use 842**

* Inch Formulas (All Dimensions are in Inches)
Class III Mast Type (6000 - 7000 lb. Capacity)
Dimension E = (0.985 × Y) + (0.985 × Z) − 8.781** **The Calculation for Dimension E for Class III Mast is the Same as Class II Mast. See Class II Mast - Inch Formula.**
Dimension G Calculations are similar to Dimension E Dimension G for Lift Heights of 138.5 to 233.0: (1.965 × Y) + (0.985 × Z) − 2.562 Dimension G for Lift Heights of 238.9 to 327.5: (1.965 × Y) + (0.985 × Z) − 2.562
**** For Lift Heights of 138.8 to 233.0. For Lift Heights of 238.9 to 327.5, use 33.156.**
*All measurements are made with mast vertical and fully lowered.

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