SERVICE MANUAL

J40-60Z (A416)



FORM 1534731 Rev. 01/04

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J40-60Z (A416)
SERVICE MANUAL CONTENTS

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Legend for Figure 28

* Metric Formulas (All Dimensions are in Millimeters)
Class II Mast Type
Dimension E = (0.492 × Y) + (0.985 × Z) + 303
Example: Dimension E = (0.492 × Y) + (0.985 × Z) + 303 **Step 1.** Dimension E = (0.492 × 2482) + (0.985 × 2095) + 303 **Step 2.** Dimension E = 1221.1 + 2063.6 + 303 **Step 3.** Dimension E = 3284.7 + 303 **Step 4.** Dimension E = 3587.7
Dimension G Calculations are Similar to Dimension E Dimension G (3 Function) for Lift Heights of 2482 mm to 2982 mm: (1.982 × Y) + (0.985 × Z) − 801 Dimension G (3 Function) for Lift Heights of 3082 mm to 5482 mm: (1.991 × Y) + (0.985 × Z) − 917 Dimension G (4 Function) for Lift Heights of 2482 mm to 2982 mm: (1.982 × Y) + (0.985 × Z) − 868 Dimension G (4 Function) for Lift Heights of 3082 mm to 5482 mm: (1.991 × Y) + (0.985 × Z) − 1046

* Inch Formulas (All Dimensions are in Inches)
Class II Mast Type
Dimension E = (0.492 × Y) + (0.985 × Z) + 11.938
Example: Dimension E = (0.492 × Y) + (0.985 × Z) + 11.938 **Step 1.** Dimension E = (0.492 × 97.7) + (0.985 × 82.5) + 11.938 **Step 2.** Dimension E = 48.1 + 81.3 + 11.938 **Step 3.** Dimension E = 129.4 + 11.938 **Step 4.** Dimension E = 141.34
Dimension G Calculations are Similar to Dimension E Dimension G (3 Function) for Lift Heights of 97.7 to 117.4 (1.982 × Y) + (0.985 × Z) − 31.531 Dimension G (3 Function) for Lift Heights of 121.3 to 215.8 (1.991 × Y) + (0.985 × Z) − 36.125 Dimension G (4 Function) for Lift Heights of 97.7 to 117.4 (1.982 × Y) + (0.985 × Z) − 34.156 Dimension G (4 Function) for Lift Heights of 121.3 to 218.8 (1.991 × Y) + (0.985 × Z) − 41.156
*All measurements are made with mast vertical and fully lowered.

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Status Code	Description	Memory Recall	Circuit
91	Pump motor temperature is too high.	Yes	Pump

Symptom

Truck acceleration and travel speed reduced. Pump motor may stop completely.

Possible Causes and Test Procedures

- Excessive operation or stalling of pump motor.
- Operation may continue at slower duty cycle.
  Allow pump motor to cool off to regain full performance.
- Comparing the motor temperature through the display panel with a known motor temperature, such as room temperature, can check the motor temperature sensor.
- A shorted or open temperature sensor will generate a status code 43.

Status Code	Description	Memory Recall	Circuit
93	Power steering motor brushes are worn.	Yes	

Symptom

Status code warning only.

Possible Causes and Test Procedures

- Pump motor brushes are worn too short.
- Motor brush wear sensor wires to motor controller may have a short to battery positive.

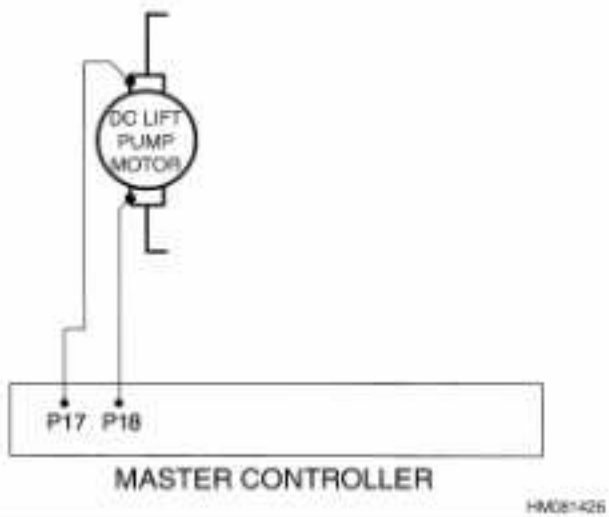
Status Code	Description	Memory Recall	Circuit
95	DC lift pump motor brushes are worn.	Yes	Pump

Symptom

Status code warning only.

Possible Causes and Test Procedures

- Pump motor brushes are worn too short.
- Motor brush wear sensor wires to motor controller may have a short to battery positive.



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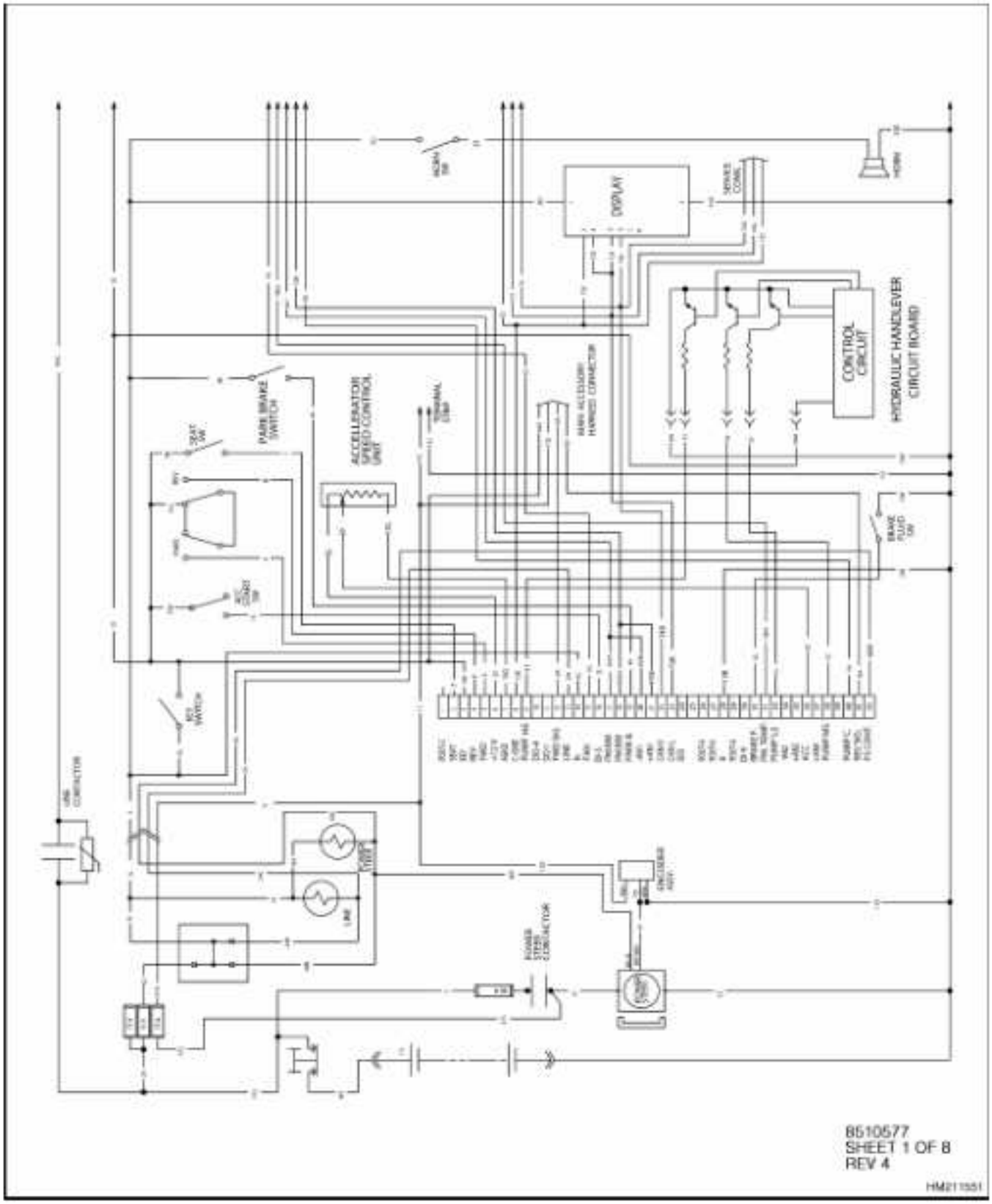


Figure 1. Wiring Schematic Diagram for J2.00-3.20XM (J40-60Z) (A416) (Sheet 1 of 8)

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