SERVICE MANUAL

F114 (E25Z, E30Z, E35Z, E40ZS)



FORM 1625070 Rev. 03/14

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This section is for the following models:

All Electric Lift Trucks

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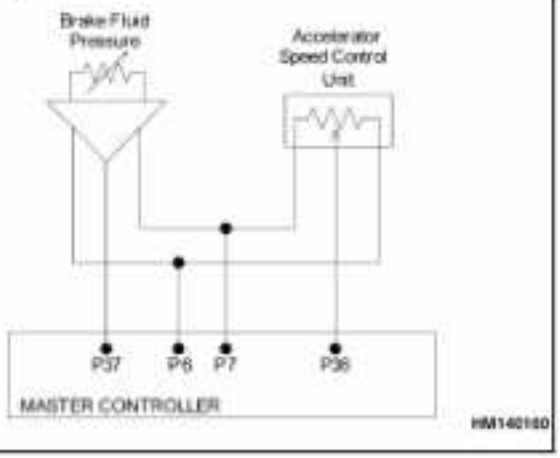
Status Code	Description	Memory Recall	Circuit
13	Brake Pressure is out of range	No	Traction

Symptom

Top speed reduced to half

Possible Causes and Test Procedures

- Failed sensor
  Check wiring for damage. Replace sensor.



Status Code	Description	Memory Recall	Circuit
15	Battery voltage is too low or truck is adjusted to the wrong battery voltage.	No	Traction

Symptom

Lift truck does not move.

Possible Causes and Test Procedures

- Discharged battery.
  Check battery for correct open circuit voltage. Correct voltages are listed on right. Charge battery if required.
- Battery is damaged.
  Check each battery cell for correct voltage (greater than 1.85 volts each cell). Replace or repair battery.
- Incorrect master controller adjustment.
  Check the battery volts setting in the master controller for the correct battery volts.
- Check the battery volts on the main power cables at the motor controllers.

NOMINAL BATTERY VOLTAGE	MINIMUM LIMIT VOLTS AT 1.85 VDC PER CELL
36	33.3
48	44.4
72	66.6
80	74.0

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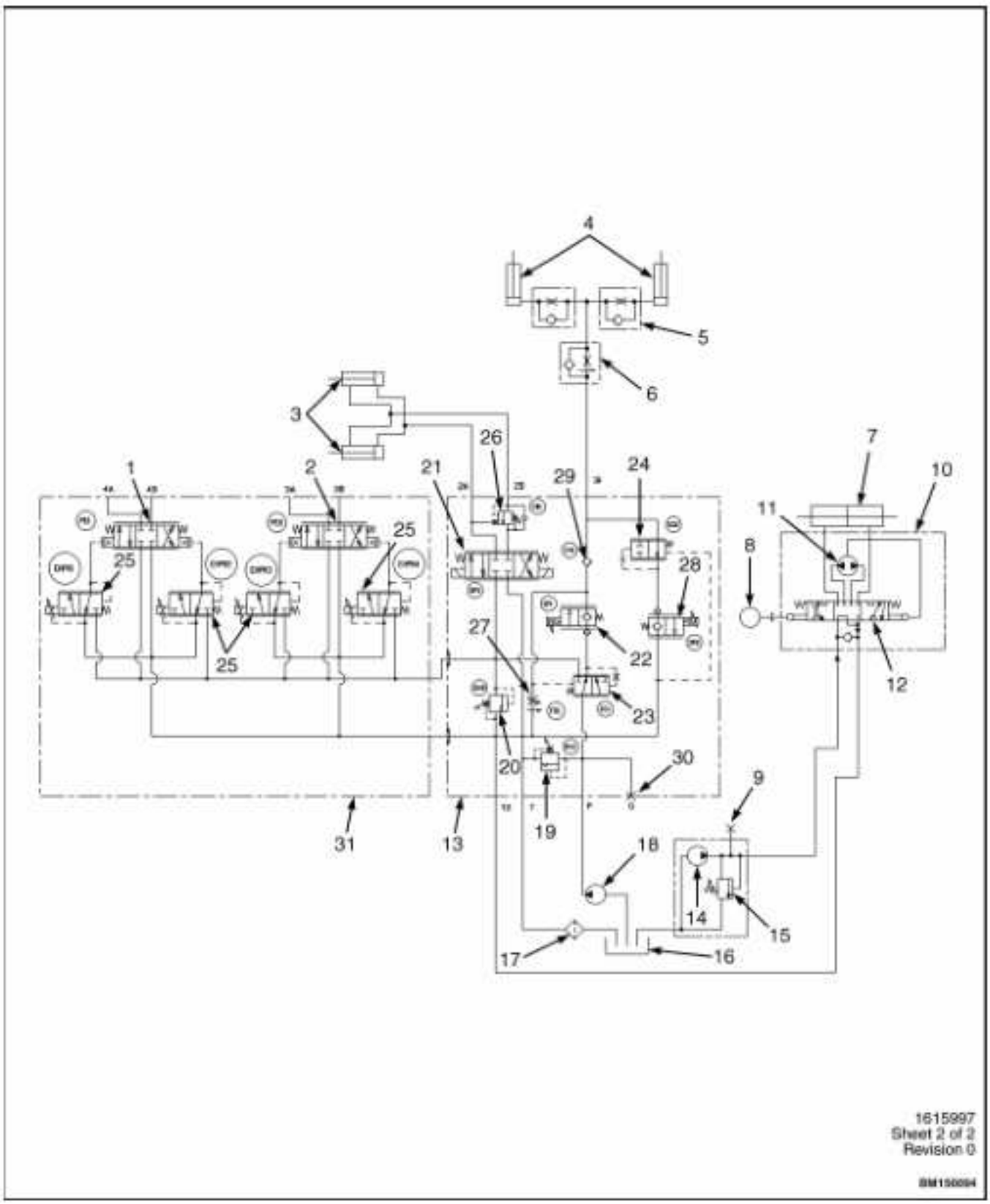


Figure 16. Electro-Hydraulic Control Valve Schematic (High Flow) for Lift Truck Models E2.00-3.20XM (E45-65Z) (G108) and E1.50-2.00XM, E2.00XMS (E25-35Z, E40ZS) (F114)

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1. Adjust the stroke of the tilt cylinders WITHOUT tilt limit spacers as follows:

   a. Adjust the rod ends to

      (1) 15 mm (0.6 in.) for lift truck model

      - S4.0, 4.5, 5.5FT, S5.5FTS, (S80, 100, 120FT; S80, 100FTBCS; S120FTS; S120FTPRS) (G004, H004), See Figure 7.

      (2) 20 mm (0.8 in.) for lift truck models

      - H4.0FT5/FT6; H4.5FTS5, H4.5FT6; H5.0-5.5FT (H80, 90, 100, 110, 120FT) (N005, P005, R005, S005) See Figure 7.

      (3) 32 mm (1.25 in.) for lift truck model

      - J1.60-2.00XMT (J30-40ZT) (J160) See Figure 7.

   b. Slowly tilt the mast backward until one cylinder rod stops. On the opposite cylinder, loosen the capscrews on the rod end. Measure the distance from the end of the cylinder to the back end of the rod end. Use a wrench and turn the cylinder rod IN until the dimension starts to decrease, then stop. Repeat this procedure until both cylinder rods stop at the same position within:

      (1) 1 mm (0.04 in.) for lift truck models

      - S30FT, S35FT, S40FTS (E010)
      - H1.6FT, H1.8FT, H2.0FTS (H30FT, H35FT, H40FTS) (F001)
      - S2.0-3.5FT (S40-S70FT, S55FTS) (F187)
      - H2.0-3.5FT (H40-70FT) (L177)
      - E1.50-2.00XM (E25-35Z, E40ZS) (E114,F114)
      - E2.00-3.20XM (E45-65Z) (G108)
      - J2.00-3.20XM (J40-65Z) (B416)
      - J1.60-2.00XMT (J30-40ZT) (J160)
      - H4.0FT5/FT6; H4.5FTS5, H4.5FT6; H5.0-5.5FT (H80, 90, 100, 110, 120FT) (N005, P005, R005, S005)
      - E3.50-5.50XL, E4.50XLS (E70-120Z, E100ZS) (E098)
      - S50CT (A267)
      - H2.0-2.5CT (H50CT) (A274)

      (2) 0.5 mm (0.02 in.) for lift truck model

      - S4.0, 4.5, 5.5FT, S5.5FTS, (S80, 100, 120FT; S80, 100FTBCS; S120FTS; S120FTPRS) (G004, H004)

      (3) After the adjustments are complete, tighten the nuts on the rod ends to 90 N•m (66 lbf ft).

   c. Tilt the mast fully backward and measure the tilt angle. See the Nameplate for tilt angles. If necessary, adjust both rod ends equally for the correct angle.

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