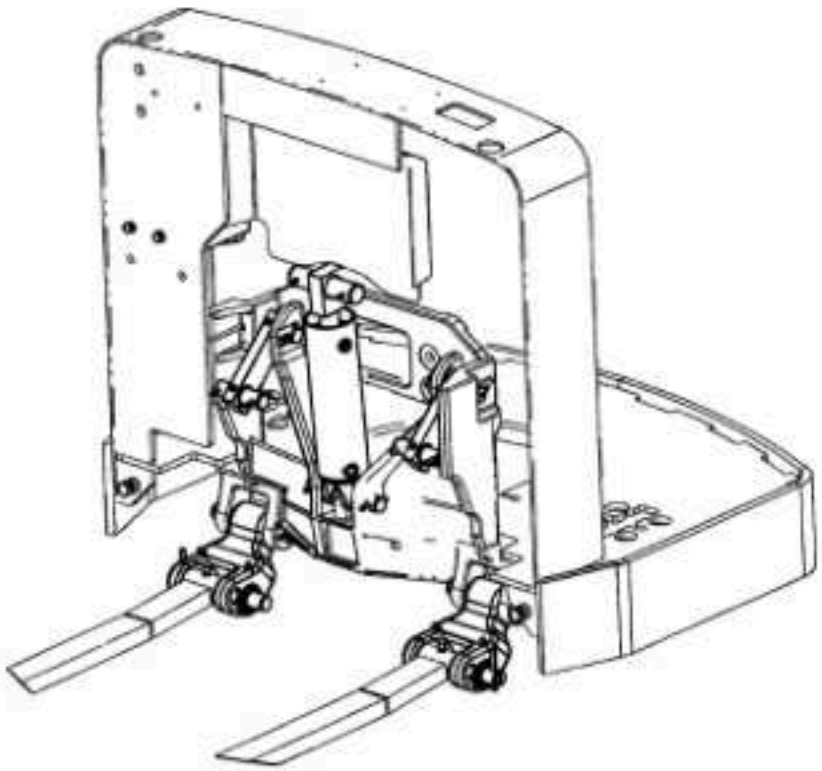
SERVICE MANUAL

W60Z (A231), B60Z (A230)



FORM 1480465 Rev. 02/04

MidWestTech | Hyster W60Z (A231), B60Z (A230) Walkie Pallet Truck Service Manual | Pu... Order the manual at mid-west-tech.com >

W60Z (A231), B60Z (A230)
SERVICE MANUAL CONTENTS

Section	SRM Number	Rev Date
FRAME	0100 SRM 0960	05/01
DC MOTOR MAINTENANCE	0620 SRM 0294	08/03
MASTER DRIVE UNIT	0630 SRM 0961	08/03
STEERING MECHANISM	1600 SRM 0962	08/03
BRAKES	1800 SRM 0963	08/03
WALKIE HYDRAULIC SYSTEM	1900 SRM 0964	08/03
CURTIS TRANSISTOR MOTOR CONTROLLER	2200 SRM 0928	11/03
ELECTRICAL SYSTEM	2200 SRM 0929	02/04
INDUSTRIAL BATTERY	2240 SRM 0001	11/03
BATTERY INDICATORS	2260 SRM 0138	06/02
LIFTING MECHANISM	4000 SRM 0965	08/03
INCH (SAE) AND METRIC FASTENERS	8000 SRM 0231	03/03
CAPACITIES AND SPECIFICATIONS	8000 SRM 0918	05/01
PERIODIC MAINTENANCE	8000 SRM 0919	05/01
DIAGRAMS	8000 SRM 0920	02/03

PART NO. 1480465
Rev. 02/04

MidWestTech | Hyster W60Z (A231), B60Z (A230) Walkie Pallet Truck Service Manual | Pu... Order the manual at mid-west-tech.com >

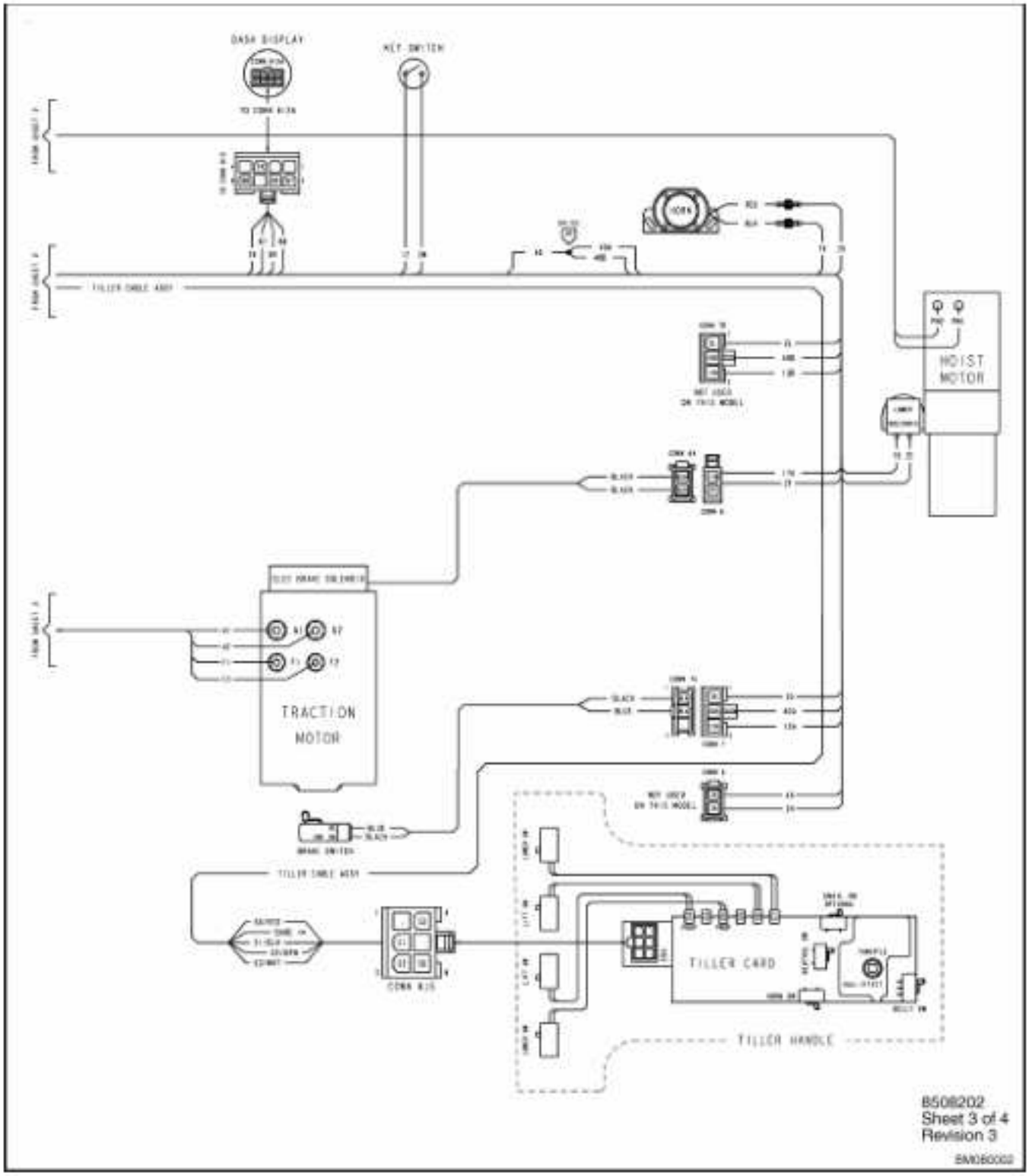


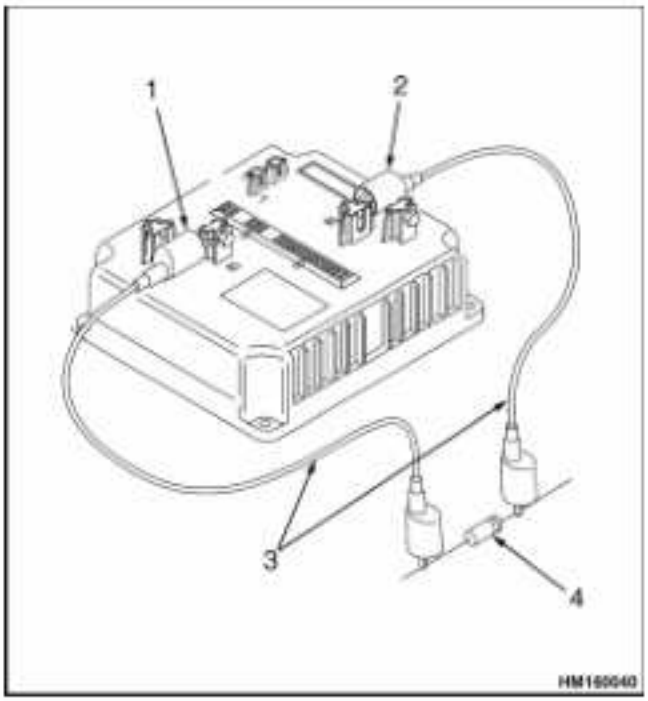
Figure 1. Schematic Diagram - 24 Volt (Sheet 3 of 4)

MidWestTech | Hyster W60Z (A231), B60Z (A230) Walkie Pallet Truck Service Manual | Pu... Order the manual at mid-west-tech.com >

WARNING

The capacitor in the traction motor controller can hold an electrical charge after the battery is disconnected. To prevent electrical shock and injury, discharge the capacitor before inspecting or repairing any component. Wear safety glasses. Make certain the battery has been disconnected. Discharge the capacitors using the recommended procedures and never by any other method.

4. Discharge the capacitors in the traction motor controller by connecting a 200 ohm, 2 watt resistor across the controller"s B+ and B– terminals using two insulated jumper wires. See Figure 5.



1. POSITIVE CONNECTION
2. NEGATIVE CONNECTION
3. JUMPER WIRES
4. 200-OHM, 2-WATT RESISTOR

Figure 5. Discharging the Capacitors

5. Connect programmer handset to traction motor controller. The cord of the handset plugs into the J-3 connector on the front of the controller.

NOTE: Each time the programmer handset is connected to the controller, it acquires all of the controller function value settings and stores them in its temporary memory. This allows the user to return to the original settings at any time. The SPECIAL PROGRAM menu selection RESET ALL SETTINGS is used to revert to the original settings. Any unwanted change made to any of the function values can be "undone" in this manner, as long as the programmer has not been unplugged or the key switch turned off (power disconnected).

6. Reconnect battery.

7. Turn key switch to **ON** position.

8. Press PROGRAM button on programmer handset. The green LED in the corner of the PROGRAM button lights to indicate the handset has been placed in the PROGRAM mode.

9. Press SCROLL DISPLAY buttons, as required, until the desired function is shown on the top line of the display.

10. Press MORE INFO button to display additional information, if desired, on the selected function. The green LED in the corner of the MORE INFO button lights to indicate that the MORE INFO option has been selected.

WARNING

NEVER adjust function settings outside the range recommended for the specific truck model.

11. Press CHANGE VALUE buttons to change the function value higher or lower, as required. A green LED on each CHANGE VALUE button lights to indicate that the function value can be changed in the corresponding direction. If the green LED on one of the CHANGE VALUE buttons is not illuminated, the value has reached the limit for the corresponding direction.

WARNING

Program changes affect lift truck performance and operation. If function settings are changed, make sure all operators of the lift truck know that the truck has been changed and may operate differently.

12. Press MORE INFO button to return to PROGRAM menu if the MORE INFO screen had been selected.

13. Repeat Step 9 through Step 12, as required, until all of the functions are set to the desired values.

MidWestTech | Hyster W60Z (A231), B60Z (A230) Walkie Pallet Truck Service Manual | Pu... Order the manual at mid-west-tech.com >

Troubleshooting

LIFT ASSEMBLIES

PROBLEM	POSSIBLE CAUSE	PROCEDURE OR ACTION
Forks fail to elevate.	Oil in the hydraulic reservoir is low.	Fill reservoir to correct level. Check for leaks.
	Faulty hydraulic equipment.	See Lift Pump and Motor Assembly, and Lift Cylinders below.
	Broken pull rods.	Disassemble and replace damaged parts.
	Deformed lifting components.	Disassemble and replace damaged parts.
Slow lifting speed and insufficient handling capacity.	Oil in the hydraulic reservoir is low.	Fill reservoir to correct level. Check for leaks.
	Faulty hydraulic equipment.	See Lift Pump and Motor Assembly, and Lift Cylinders below.
	Deformed lifting components.	Disassemble and replace damaged parts.
Forks fail to lower.	Deformed forks.	Disassemble, repair, or replace.
	Deformed lifting components.	Disassemble, repair, or replace.
	Bent lift cylinder piston rod.	See Lift Pump and Motor Assembly, and Lift Cylinders below.

MidWestTech | Hyster W60Z (A231), B60Z (A230) Walkie Pallet Truck Service Manual | Pu... Order the manual at mid-west-tech.com >