TOYOTA
INDUSTRIAL EQUIPMENT

Service Manual

7HBW30, 7HBE30, 7HBE40, 7HBC30, 7HBC40, and 7TB50

Serial Numbers 30,001 and up

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Vehicle Specifications

Category	7HBW30	7HBE30/40	7HBC30/40	7TB50
Max. Load Capacity	6,000 lb (2,724 kg)	6,000 lb (2,724kg)*	6,000 lb (2,724kg)**	N/A
Normal Rated Drawbar Pull	N/A			200 lb (91 kg)
Max. Drawbar Pull***	N/A			700 lb (318 kg)
Upright Height	58 in. (147.3cm)		50.75 in. (128.9cm)	
Overall Length	up to 92.15 in. (234.1 cm)	up to 145.85 in. (370.5cm)†	up to 157.6 in. (400.3cm)	53.11 in. (134.9 cm)
Overall Width	32.5 in. (82.6cm)	36 in. (91.4cm)	32.5 in. (82.6cm)	
Max. Lift Height	9.25 in. (23.5cm)			N/A
Coast Travel Speed	N/A	3.5 mph (5.6kph) Max.		
Regular Speed	3.9 mph (6.3kph)	6.0 mph (9.6kph) Max.		
Rabbit Speed	N/A	8.8 mph (14.2kph) Max.		
Stopping Distance	6 ft. (1.83m)			
Battery Compartment Width	9.19 in. (23.3cm)	13.44 in. (34.1cm)		
Battery Voltage	24V			
Min. Battery Weight	490 lb (222kg)	490 lb (222kg)		965 lb (438kg)
Max. Battery Weight	1056 lb (479kg)	1500 lb (681 kg)		
Truck Weight Without Battery	1058 lb†† (480 kg)	1234 lb†† (560 kg)	1320 lb†† (599 kg)	1190 lb (540 kg)

* Model 7HBE40 has 8000 lb (3632 kg) capacity.
** Model 7HBC40 has 8000 lb (3632 kg) capacity.
*** when equipped with rubber drive tire
† with 8000 lb (3632 kg) trucks, overall length is up to 186.85 in. (474.6 cm)
†† Weight with 48 in. forks.

⚠ WARNING

The total weight of the load must include the pallet, the container or the device holding the load, and the operator (on rider models).

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Possible Cause	Action
Truck overloaded or operated in extreme conditions	Operate and load truck within specifications.
Bad motor controller	Check mounting of motor controller. It must be mounted securely and in contact with the tmck frame (that acts as a heatsink). If controller is mounted correctly, replace controller.
Faulty wiring or connector	Jack and block truck. With key switch ON and battery connected, while attempting travel, measure voltage between A2, motor controller B+, B-,and: FU1-1, FU1-2, M1-1, M1-2 and MD-. If not 24V, repair or replace wiring.

Table 5-27.No Travel. Motor Controller Fault Code 2,2 - Static Return To Off (SRO)

Possible Cause	Action
Handle not positioned correctly	Move the handle to operating position before the throttle is rotated or jog switches are pressed (if equipped).
Bad motor controller	With key switch ON and battery connected, check for B+ voltage at PMC-10 and PMC-11. If not detected, replace motor controller. If all other possible causes check out, replace motor controller.
Directional switches SW3 or SW4 shorted	Repair or replace.
Bad wiring between motor controller and handle assembly	[Motor controller is receiving direction command (B+ at PMC-10 and PMC-11) before handle is lowered.]With key switch OFF and battery disconnected, check for continuity and wiring shorts between PMC-10 and PMC-11 and the control handle. Repair or replace.
Bad jog switches	With key switch OFF and battery disconnected, measure resistance of jog switches. Repair or replace.

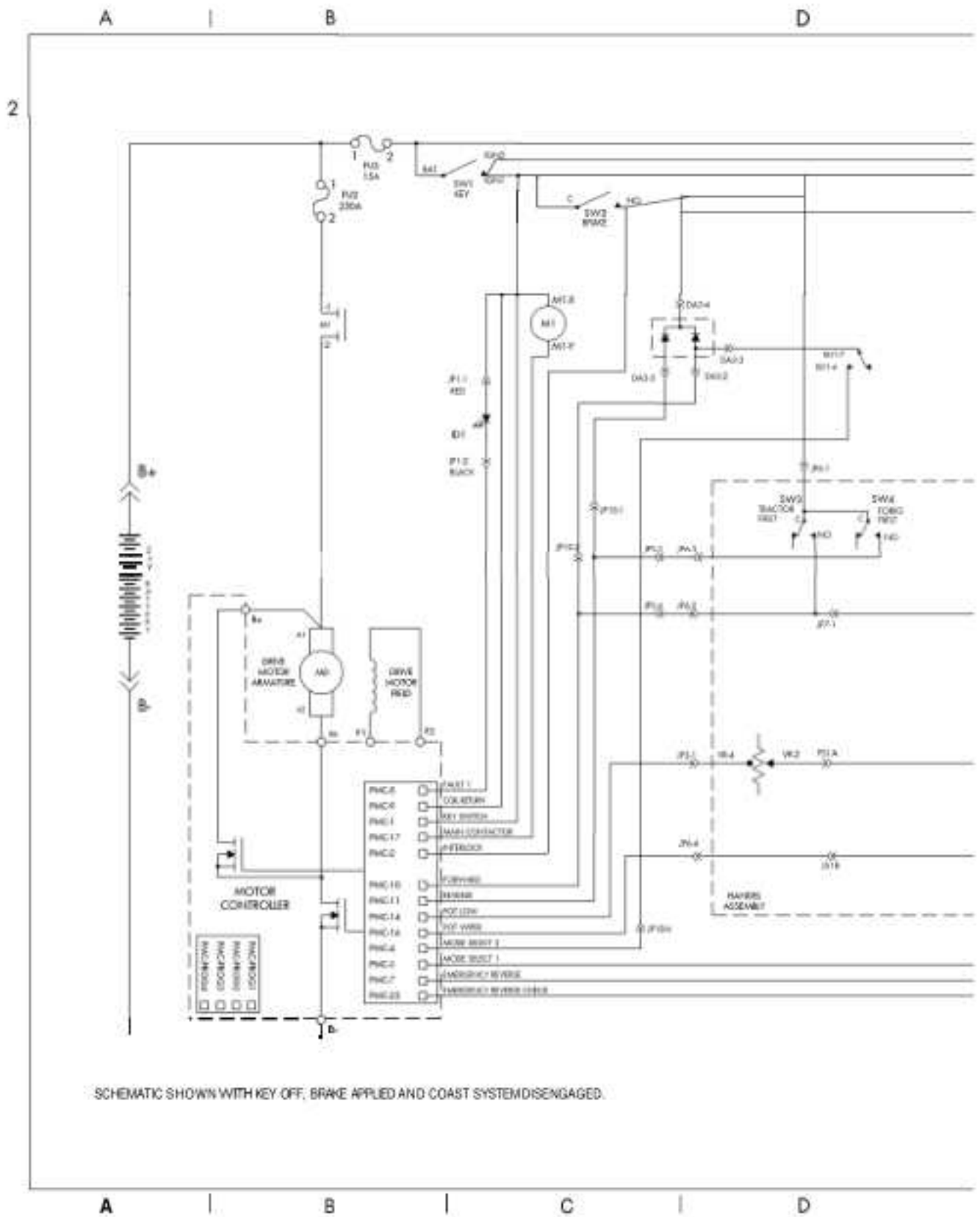
Table 5-28.No Travel. Motor Controller Fault Code 2,3 - High Pedal Disable

Possible Cause	Action
Handle positioned correctly?	Move the handle to operating position before the throttle is rotated or jog switches are pressed (if equipped).
Bad throttle potentiometer	Test and adjust throttle potentiometer. See "Throttle Potentiometer" on page 6-37.
Bad motor controller	If all other possible causes check out, replace motor controller.

Table 5-29.Plugging Does Not Operate Correctly. Truck Travels OK in Forward and Reverse

Possible Cause	Action
Bad motor brushes or motor	With key switch OFF and battery disconnected, check drive motor brushes and motor. See "Motor Brushes" on page 6-42. Repair or replace.
Bad motor controller	If all other possible causes check out, replace motor controller.

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SCHEMATIC SHOWN WITH KEY OFF, BRAKE APPLIED AND COAST SYSTEM DISENGAGED.

A | B | C | D

Figure A-8. 7TB50 Electrical Schematic - With Coast (Sheet 1 of 2)

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