CLS-M2 Forklift Scale Troubleshooting guide

PN 151718

Symptom	Possible Cause	Action	
Scale displaying negative weight	Forks are resting (even slightly) on the floor.	Lift forks up off floor.	
Scale reading high against test weight.	Material, like wood debris, between the scale and the forklift carriage.	Remove debris.	
	Material, like wood debris, between the front and back scale plates.	Remove debris.	
	Centering pin touching the forklift carriage, causing it to teeter back and forth.	Adjust scale carriage, centering pin should not touch on sides and bottom.	
	Bottom cleats not adjusted properly or loose.	Adjust to proper gap using jam nuts, 0.02"	
	If all these steps do not resolve your issue, check the following,		
	J-box error	Open j-box and look for obvious damage	
	Load cell errors	Test mV/v levels, at 1.5 mV per 1,000 lb, test at 350 ohms	
	Calibration is required	Calibrate the scale using Revolution [™]	
Scale reading low against test weight.	Zero key has been pressed with a negative weight reading, while forks are on the floor.	Lift forks off ground, press the Zero key	
	Material, like wood debris, between the scale and the forklift carriage.	Remove debris	
	Material, like wood debris, between the front and back scale plates.	Remove debris	
	Centering pin touching the forklift carriage, causing it to teeter back and forth.	Adjust scale carriage, centering pin should not touch on sides and bottom.	
	Bottom cleats not adjusted properly or loose.	Adjust to proper gap using jam nuts, 0.02"	
	If all these steps do not resolve your issue, check the following		
	J-box error	Open j-box and look for obvious damage.	
	Load cell errors	Test mV/v levels, at 1.5 mV per 1,000 lb, test at 350 ohms	
	Calibration is required	Calibrate the scale using Revolution.	



Symptom	Possible Cause	Action	
Scale not returning to zero (0)	Forks are touching the ground.	Lift forks off ground, press the Zero key.	
	Material, like wood debris, between the scale and the forklift carriage.	Remove debris	
	Material, like wood debris, between the front and back scale plates.	Remove debris	
	Centering pin touching the forklift carriage, causing it to teeter back and forth.	Adjust scale carriage, centering pin should not touch on sides and bottom.	
	Bottom cleats not adjusted properly or loose.	Adjust to proper gap using jam nuts, 0.02"	
	Scale is in motion, it won't zero if the forklift is moving: • Forks moving up and down • Forklift is being driven	Bring forklift to a complete stop and ensure forks are still.	
	If all these steps do not resolve your issue, check the following,		
	J-box error	Open j-box and look for obvious damage.	
	Load cell errors	Test mV/v levels, at 1.5 mV per 1,000 lb, test at 350 ohms.	
Will not display small weight values	Digital filter sensitivity is too high.	Using Revolution: scales menu/scales #1/filtering change the digital filitering sensitivity to light and change digital filter threshold to 10°.	
Unstable weight	Power connections faulty, low battery	Check battery power cable. Check for low battery voltage.	
Scale reading incorrect weight value	Tare is enabled	At stable zero weight, press the TARE key to return to normal weighing mode.	
Intermittent weight readings, weight reading high and low.	Material, like wood debris, between the scale and the forklift carriage.	Remove debris	
	Material, like wood debris, between the front and back scale plates.	Remove debris	
	Centering pin touching the forklift carriage, causing it to teeter back and forth.	Adjust scale carriage, centering pin should not touch on sides and bottom.	
	Bottom cleats not adjusted properly.	Adjust to proper gap using jam nuts, 0.02"	
	Check alignment of load cells.	Adjust load cells.	
	Low forklift battery	Charge forklift battery, disconnect power prior to charging.	
	Check coiled cable for loose connections & wear.	Fasten coiled cable connections. Replace coiled cable, if damaged.	
	If all these steps do not resolve your issue, check the following,		
	Load cell connections on j-box	Securely fasten connections.	
	J-box error	Open j-box and look for obvious damage.	
	Load cell errors	Test mV/v levels, at 1.5 mV per 1,000 lb, test ohms using Revolution/Live Weight Data/Cell 1 & 2 MV	
	Calibration is required.	Calibrate the scale using Revolution.	

Symptom	Possible Cause	Action	
Weight on forks, no displayed weight.	Material, like wood debris, between the scale and the forklift carriage.	Remove debris	
	Material, like wood debris, between the front and back scale plates.	Remove debris	
	Centering pin touching the forklift carriage, causing it to teeter back and forth.	Adjust scale carriage, centering pin should not touch on sides and bottom.	
	Bottom cleats not adjusted properly.	Adjust to proper gap using jam nuts, 0.02"	
	Low forklift battery.	Charge forklift battery.	
	Coiled cable error	Check coiled cable connections wand wear and tear.	
	If all these steps do not resolve your issue, check the following,		
	J-box sealing switch is in calibration mode.	Move switch to weighing mode.	
	Load cell connections on j-box loose.	Securely fasten connections.	
	J-box error	Open j-box and look for obvious damage.	
	Load cell errors	Test mV/v levels, at 1.5 mV per 1,000 lb, test ohms.	
	Calibration is required.	Calibrate the scale using Revolution.	
COMPOW Box LEDs	Power Supply PCB		
	Green LED "PWR LED1"		
	On	COMPOW box turned on, power from battery cable is good.	
	On, blinking	Check power cable for short. Check for low battery voltage.	
	Off	Turn COMPOW box power switch ON. Check fuses on battery connection and power supply PCB.	
		Low forklift battery	
		Replace power supply PCB	
	USB/Blue	tooth PCB	
	Green LED "HB LED4"		
	On	J-box is transmitting valid data. Coiled cable and j-box are working.	
	On, solid	Change j-box	
	Off	Check coiled cable and tighten connections.	
		Check power switch.	
		Check PWR LED1	
		Check load cell connections.	
		Check j-box.	
	Red/Green LED "RS-232 LED5"		
	On, blinking	Responding to commands from VIRTUi2. VIRTUi2 interface configuration.	
	Off	Not responding to commands from VIRTUi2 software. Restart VIRTUi2 configurator.	

Symptom	Possible Cause	Action
VIRTUi2 displays INVALID.	Calibration switch in open position J-box error check wiring connections Check load cell wires Check excitation on j-box at 4.1.	Move calibrationswitch to closed position. Press reset in VIRTUi2. Correct wiring. Change j-box.
VIRTUi2 weight display is blank.	No power.	Turn on COMPOW Check
Scale carriage is not fitting securely on forklift during installation.	May have to use electric grinder to grind down the centering pin on the forklift scale or center slot on forklift.	Discuss with local terminal manager to determine if scale dealer is to perform this chargeable service.
	May have to grind or torch down the area where the top cleats of the forklift scale are mounted.	
	May have to grind or torch side of forklift carriage due to previously installed side shift protection method.	
Loose screws on j-box		Apply Loctite [®] 242 or 243 for greasy enviroments, to screws and tighten.

Loctite is a registered trademark of Henkel Corporation, U.S.A.



230 W. Coleman St. • Rice Lake, WI 54868 • USA U.S. 800-472-6703 • Canada/Mexico 800-321-6703 International 715-234-9171

> www.ricelake.com m.ricelake.com

© Rice Lake Weighing Systems