MOVING SHOT FIELD CARD

Updated 2026-11-03

MotoCrane RADICAL error codes

BEFORE ANY CODE

Check every cable and the COM and Power LEDs on every module.
Touch the icon for STATUS. The System Log holds the last 10 events.

Code	Name	First move
002	Lift Motor Temp Warning	Keep working with care and watch the temperature readout. Recheck payload and counterweight balance.
003	Lift Motor Temp Error	Stop major lift moves and let it cool below the error threshold. Recheck payload and counterweight balance.
004	Lift Motor Temp Sensor Failure	Contact MotoCrane Support and book service. Go easy on heavy lift moves in hot weather until it is fixed.
007	Lift Motor Driver Temp Warning	Keep working with care and watch the temperature readout. Recheck payload and counterweight balance.
008	Lift Motor Driver Temp Error	Stop major lift moves and let it cool below the error threshold. Recheck payload and counterweight balance.
009	Lift Motor Driver Temp Sensor Failure	Contact MotoCrane Support and book service. Go easy on heavy lift moves in hot weather until it is fixed.
012	Lift Over-Current Warning	Keep working with care and watch current and temperatures. Recheck payload and counterweight balance.
013	Lift Over-Current Error	Stop using the axis while the error is active. Recheck payload and counterweight balance.
014	Lift Current Sensor Failure	Contact MotoCrane Support. Avoid hard lift moves under heavy load until serviced.
017	Lift Motor Current Warning	Clear anything blocking the boom. Ease off the intensity of moves or terrain if it keeps showing.
018	Lift Motor Stall	Disarm, power cycle, and test the axis again. Clear anything blocking the boom.
020	Lift IMU Warning	Do not push the rig any harder than the conditions that triggered this.
021	Lift IMU Error	Back off to an acceptable level of terrain, speed, or move intensity.
022	Lift IMU Sensor Failure	Contact MotoCrane Support.
029	Lift Motor Command Timeout	Power cycle the system. Check every cable connection.
031	Boom Imbalance - Front Heavy	Rebalance payload and counterweight following the Operation Manual.
032	Lift Limits Disabled From Error	Power cycle. Recalibrate the lift angle.
033	Boom Imbalance - Back Heavy	Rebalance payload and counterweight following the Operation Manual.
035	Central Heartbeat Timeout	Power cycle the system. Check every cable connection. Try a known good cable.
042	Swing Motor Temp Warning	Keep working with care and watch the temperature readout. Clear anything that blocks the boom from swinging.
043	Swing Motor Temp Error	Stop major swing moves and let it cool below the error threshold. Clear anything that blocks the boom from swinging.
044	Swing Motor Temp Sensor Failure	Contact MotoCrane Support and book service. Go easy on heavy swing moves in hot weather until it is fixed.
047	Swing Motor Driver Temp Warning	Keep working with care and watch the temperature readout. Clear anything that blocks the boom from swinging.
048	Swing Motor Driver Temp Error	Stop major swing moves and let it cool below the error threshold. Clear anything that blocks the boom from swinging.
049	Swing Motor Driver Temp Sensor Failure	Contact MotoCrane Support and book service. Go easy on heavy swing moves in hot weather until it is fixed.
052	Swing Over-Current Warning	Keep working with care and watch current and temperatures. Clear anything blocking the boom.
053	Swing Over-Current Error	Stop using the axis while the error is active. Clear anything blocking the boom.
054	Swing Current Sensor Failure	Contact MotoCrane Support. Avoid hard swing moves under heavy load until serviced.
057	Swing Motor Current Warning	Clear anything blocking the boom. Ease off the intensity of moves if it keeps showing.
058	Swing Motor Stall	Disarm, power cycle, and test the axis again. Clear anything blocking the boom.
060	Swing IMU Warning	Do not push the rig any harder than the conditions that triggered this.
061	Swing IMU Error	Back off to an acceptable level of terrain, speed, or move intensity.
062	Swing IMU Sensor Failure	Contact MotoCrane Support.
069	Swing Motor Command Timeout	Power cycle the system. Check every cable connection.
072	Swing Limits Disabled From Error	Power cycle. Recalibrate the swing orientation.
075	Swing Driver Heartbeat Timeout	Power cycle the system. Check every cable connection. Try a known good cable.
081	Swing Encoder Data Suspect	Power cycle the system.
082	Swing Encoder Data Invalid	Power cycle to reset the board. Use caution and contact MotoCrane Support.
089	Swing Encoder Heartbeat Timeout	Power cycle the system. Check every cable connection. Try a known good cable.
101	Lift Encoder Data Suspect	Power cycle the system.
102	Lift Encoder Data Invalid	Run the Lift Encoder Calibration and power cycle. Contact MotoCrane Support if it persists.
109	Lift Encoder Heartbeat Timeout	Power cycle the system. Check every cable connection. Try a known good cable.
122	System Over-Voltage Warning	Check the power source voltage. The PSU wants 48VDC (45 to 60VDC max).
123	System Over-Voltage Error	Disarm and disconnect the power source. Confirm the correct power source is connected.
125	System Under-Voltage Warning	Check the power source voltage. The PSU wants 48VDC (45 to 60VDC max).
126	System Under-Voltage Error	Move the arm to a safe position and disarm.
128	System Over-Current Warning	Keep working with care and watch current and temperatures. Recheck payload and counterweight balance.
129	System Over-Current Error	Stop using the axis while the error is active. Recheck payload and counterweight balance.
130	System Current Sensor Failure	Contact MotoCrane Support.
133	Lift Joystick Failure	Power cycle with joysticks centered. Recalibrate the joystick.
135	Lift Joystick Initialization Failure	Power cycle with both joysticks centered and hands off.
138	Swing Joystick Failure	Power cycle with joysticks centered. Recalibrate the joystick.
140	Swing Joystick Initialization Error	Power cycle with both joysticks centered and hands off.
233	Lift Control Mode Disabled From Error	Check STATUS and LOG to find the cause. Power cycle and try to re-enable the mode.
236	Swing Control Mode Disabled From Error	Check STATUS and LOG to find the cause. Power cycle and try to re-enable the mode.
239	Lift Limit Switch Error	Move the lift axis away from the mechanical limit. Power cycle before operating again.

Independent summary by Moving Shot. Not an official MotoCrane document and not affiliated with MotoCrane, LLC. Source: RADICAL Troubleshooting Guide v4.0 at motocrane.com/knowledge-base. Always follow the current MotoCrane manual. MotoCrane Support: support@motocrane.com, +1 (612) 361-2325. Full guide: movingshot.com/knowledge/motocrane