



Operator Assist Technology Package

FOR ELECTRIC ROPE SHOVELS

SPEND MORE TIME DIGGING

What if you could improve reliability and increase uptime by eliminating the costs associated with unplanned downtime? Caterpillar has developed the Operator Assist Technology Package for the 7495 Rope and HydraCrowd™ and 7495HF Rope and HydraCrowd shovels that simplifies operation. The enhancements provide operator assist and machine self-protection without sacrificing productivity. The software is comprised of multiple features that will reduce or eliminate the occurrence of poor digging practices that negatively impact machine availability while maintaining the designed performance of the machine. With this upgrade customers can expect more consistent production, a more predictable maintenance schedule, improved cost per ton and extended component life. This package is available as an optional upgrade for new and existing machines.



LET'S DO THE WORK.™



Cat® Electric Rope Shovel - Operator Assist Technology Package

APPLICABLE MACHINES

Machine	Serial Number
7495*	ER601143 – up
7495HF*	ER801136 – up

MACHINE SELF PROTECTION

Intended to increase uptime by minimizing machine self-collisions that cause fatigue and impact issues that lead to machine damage. The control system detects and avoids collisions between the dipper, crawler, boom bumper, and cable management systems. The algorithm integrates with the operator commands to provide the least intrusive avoidance path. If a collision is unavoidable, the system will arrest the machine motion to prevent or mitigate the collision.

ENHANCED MOTION CONTROL GEN 1

Improves the reliability of the machine by protecting it from operational practices that cause damage. It also enhances shovel performance, productivity, and overall physical availability by intelligently controlling how motions are allowed to operate under certain conditions. Features include Anti-Swing in Bank, Hoist Stall Prevention, Hoist Rope Slack Prevention and Boom Jack Minimization. Rope Crowd model features include Rope Crowd Impact Prevention and Rope Crowd OverSpeed Prevention.

ENHANCED MOTION CONTROL GEN 2

EMC 2 includes all features and improvements in Gen 1 plus protection to the rotating undercarriage parts from damage due to counter-rotation effects. An alarm is sounded when the turning angle exceeds 20 degrees. The feature is designed to prevent unplanned downtime from damage on the drive tumblers, load rollers, crawler side frames, crawler links, crawler link eyes, link pins, and front idlers.

SYSTEM BENEFITS

- Reduces the occurrence of hoist stalls, boom jacking, crowd impacts, crowd over-speeds, and swinging in the bank
- Reduces unplanned downtime by reducing machine self-collisions
- Improves total cost of ownership by reducing maintenance costs and unplanned downtime
- Extends component life on the running ropes, boom and accessories, and gears/pinions
- Improves productivity by enabling operators to efficiently load materials and avoid poor digging practices
- Creates consistent machine performance across operators
- Increases safety
- Provides equal or better cycle times

*Integrated Technology Bundle is required for this upgrade

To learn more about this update and others contact your local Cat® dealer today.

CAT DEALER COMMITMENT AND CAPABILITIES MAKE THE DIFFERENCE

Cat dealers provide the level of support you need, on a global scale. Dealer expert technicians have the knowledge, experience, training and tooling necessary to handle your repair and maintenance needs, when and where you need them.

