

# CAT® R1700 UNDERGROUND LOADER

## CONTINUOUS IMPROVEMENT

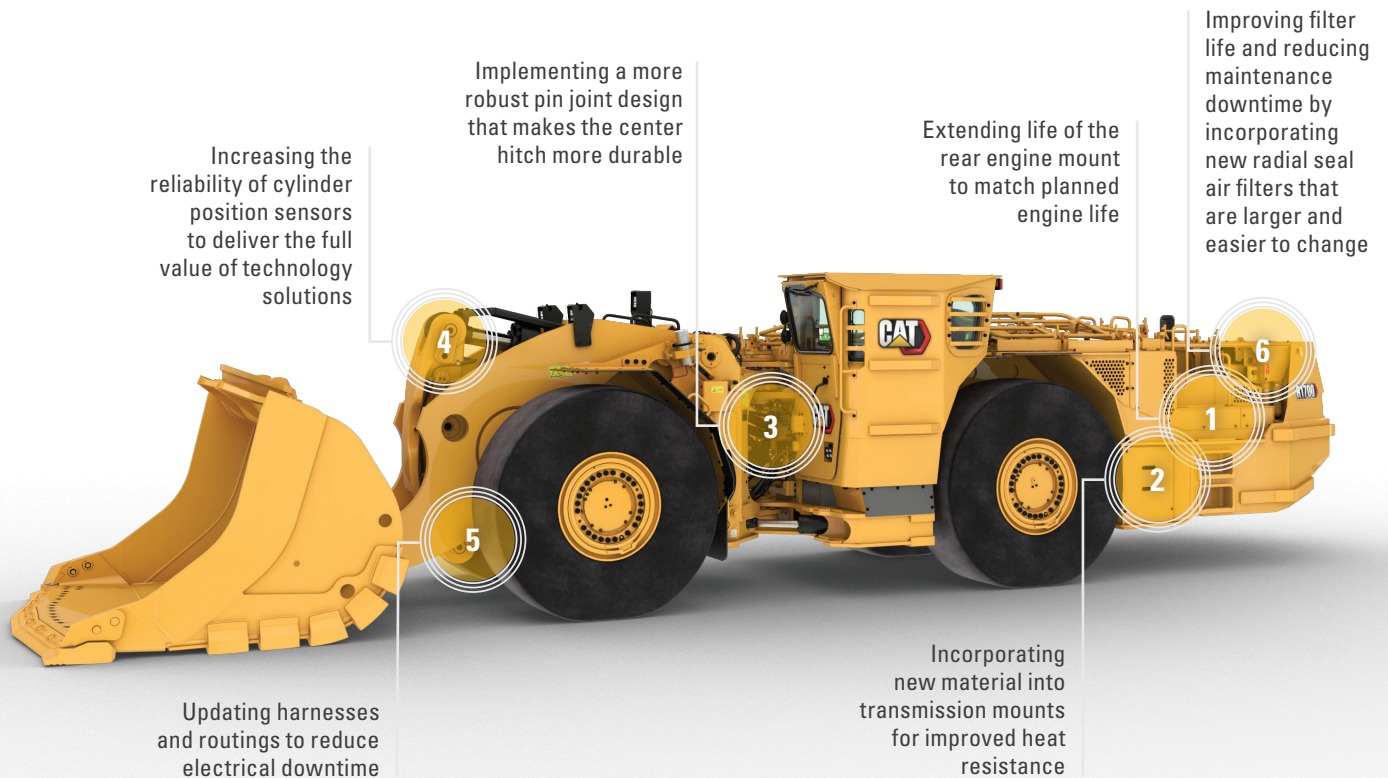
### ADDRESSING DOWNTIME DRIVERS

Our commitment to Cat® underground equipment doesn't end when the machines begin work. We immediately start looking for improvement opportunities to make that machine work more efficiently, safely and productively. From addressing performance issues, to training operators and technicians, to finding ways to increase uptime — our support lasts for the life of the machine, and beyond.

When it comes to the Cat R1700 Underground Loader, we've recently addressed several downtime drivers and have incorporated improvements that are available to both new machines from the Caterpillar factory and current R1700s in the field through Cat dealers.

Together with Cat dealers, we've improved reliability and durability through the defined Caterpillar Continuous Product Improvement process.

The most significant upgrades are around six areas:





## RECENT UPDATES

1

### REAR ENGINE MOUNT

In an effort to streamline maintenance and reduce downtime, rear engine mounts on the R1700 are now about 50% larger in diameter, which targets to extend life to 12,000-14,000 hours to align with the full Planned Component Replacement (PCR) schedule for the machine's Cat C13 engine.

4

### CYLINDER POSITION SENSORS

To ensure R1700 customers are able to get the full value of their investment in onboard and optional technology solutions, the machine's cylinder position sensors have been updated to provide better retention inside the cylinder. These sensors ensure the machines' advanced dynamics and controls are enabled, contributing to higher machine functionality.

2

### TRANSMISSION MOUNTS

Transmission mounts are now made from a new material with higher heat resistance, targeting to reduce unplanned downtime and eliminating the potential for contingent damage that could cause a need for immediate repair.

5

### HARNESSES ROUTINGS

Multiple Continuous Improvement projects have been implemented over the past several years to reduce electrical downtime associated with harnesses and routings. Improved routing and better-protected harnesses reduce the need for unplanned troubleshooting and repair.

3

### CENTER HITCH JOINT

The center hitch on the R1700 has been updated to a more robust pin/joint to improve durability and extend its life to align with the full PCR schedule for the C13 engine. The hitch arrangement is common with the new R2900 XE. The new design features an updated locking pin, coupled with straight and tapered sleeves.

6

### AIR FILTERS

Air filters have been upgraded to a radial seal arrangement with a larger filter capacity, such as those installed in the R2900G. The new design improves filter life, particularly in mines that are wet or humid, and also increases service life, reducing downtime and costs in most mining applications.