



## TROWELS USED FOR POLISHING APPLICATIONS

This document outlines service and maintenance considerations for all trowels used in grinding applications.

MQ Whiteman trowels are engineered for floating and finishing freshly placed concrete. However, many contractors are now equipping these machines with aftermarket components to perform grinding operations. During grinding, diamond tooling and water are used to remove material from the concrete surface, generating an abrasive cement slurry that accumulates on critical machine assemblies.

Slurry buildup restricts the free movement of hydraulic drive systems, rotating and load-bearing components—including the lower pulley, upper clutch assembly, drive line, trowel arms, thrust plate bearings, and associated bushings. This contamination accelerates mechanical wear, shortens component service intervals, degrades machine performance, and ultimately increases the risk of unplanned downtime.

To maintain performance, reliability, and expected service life of trowels used in grinding applications, equipment owners should implement preventive measures to limit slurry exposure and mitigate premature component deterioration

- Consider adding covers or shielding to deflect slurry from moving parts. Ref. page 2 Pic. A.
- Do not use any type of form oil as this could contaminate components.

**Note: Regular cleaning and preventative maintenance is necessary to maintain performance. Damage resulting from improper maintenance or misapplication is not covered by the Multiquip Limited Warranty.**

### End-of-Operation Recommended Preventive Maintenance

*(Removal of guards or covers may be required to allow full inspection and cleaning.)*

- Pressure-wash the machine at the end of each shift, focusing on high-contamination areas including the lower spider drive, gearbox, and CVT drive system. Ensure debris and slurry are removed from all exposed mechanical assemblies.
- Clean all heat-exchange components, including:
  - ✓ Engine radiators
  - ✓ Hydraulic oil coolers
  - ✓ Any auxiliary heat exchangers
- Slurry and debris accumulation in these areas restricts airflow and causes thermal inefficiency, which can lead to overheating and reduced system performance. Use low-pressure water or compressed air to avoid fin damage.
- Warm up the unit after washing and operate it at low speed while stationary to evaporate residual moisture and purge water from rotating components.
- Grease all required lubrication points after cleaning. Lubricating the thrust plate bushing, trowel arms, and cross-shaft bearings will purge any remaining water or abrasive contaminants from these interfaces.
- Apply spray lubricant to all moving rod-end bearings (heim joints) within the steering system, as well as stabilizer-ring pivot points and gearbox pivot joints. Avoid applying lubricant to the drive belt, CVT clutch, or pulley surfaces.

## TROWELS USED FOR POLISHING APPLICATIONS



**A**

*Plastic added to the outside of the guard rings to keep slurry from splashing onto works and nearby walls or columns. All the splash is being contained back into the trowel components.*



*Slurry build-up on frame and steering cylinder.*



*Slurry build-up on hydraulic components may reduce cooling and increase chance of contamination during servicing.*



*Heavy slurry build-up on arms and pitch bolt area also add weight to the unit. When rotating, this makes for an out of balanced rotation resulting in damaging vibrations.*

## TROWELS USED FOR POLISHING APPLICATIONS



*Heavy slurry build-up on arms and pitch bolt area also add weight to the unit. When rotating this makes for an out of balanced rotation resulting in damaging vibrations.*

*Both photos show slurry splash onto the upper clutch area. Once allowed to harden, the clutch movable components will be limited and not operate correctly.*



*Heavy slurry built up on the spider and thrust plate area. Bearing and bushing failure will occur as well as potential for the gearbox output shaft seal to be damaged.*

## TROWELS USED FOR POLISHING APPLICATIONS



**Shown is the charcoal canister that is part of the gasoline evaporative emission system. The lower air intake port in both photos are restricted or fully plugged with slurry. If the unit was switched from LPG fuel to gasoline, engine operation will be affected.**



**A customer-installed emissions after-treatment device is shown in the image. The HHXDF5 trowel is already equipped by Kubota with an EPA-approved, OEM-integrated catalyst housed within the factory muffler assembly.**

**All engine manufacturers prohibit the installation of any aftermarket catalyst, scrubber, or auxiliary emissions-control device. Adding non-approved after-treatment components can alter exhaust temperatures, increase backpressure, disrupt engine calibration, and ultimately void the engine manufacturer's warranty.**

**To maintain compliance, performance, and warranty protection, only OEM-approved exhaust and emissions components should be used on trowels in any application.**



**Clogged engine radiator & Hyd. coolers.**