

Operation & Maintenance Manual

Standard Operational Procedures

1. Municipal Sweeping & Dust Suppression Fleet

Water Tank & Filter Pre-Check

Prior to operation, ensure the water tank is filled to capacity and verify that the self-cleaning filtration grids are entirely free of debris to guarantee uninterrupted nozzle flow.

Dual-Engine & Auxiliary PTO Engagement

Start the auxiliary engine (or engage the specialized PTO) to initialize the high-pressure water pump and fan vacuum system. Allow the system to idle for 2 minutes to stabilize operational pressure boundaries.

Multi-Axis Brush & Suction Shroud Deployment

Lower the multi-axis floating brush mechanisms and the negative-pressure vacuum suction nozzles. Adjust the brush angle via the cab control panel to achieve optimal curb-following tracking and eliminate mechanical cleaning blind spots.

Post-Operation Debris Tank Cleanout

After completing the sweeping cycle, use the hydraulic tilting system to dump all collected street fragments and micro-particles. Flush the interior tank thoroughly to prevent wet debris from hardening.

2. Liquid Tanker & High-Vacuum Sewage Fleet

Valve Realignment & Seal Verification

Inspect the chemical-resistant internal coatings and verify that all liquid-tight mechanical seals on the rear dump gates are perfectly aligned before loading fluid payloads.

Suction Pump Pressure Monitoring

Connect the heavy-duty suction hoses to the sewage network. Fully engage the high-output vacuum pump and constantly monitor the pressure gauge to ensure continuous, non-clogging pulling of high-viscosity sludge.

Regulated Water Cannons & Sprinkling Operation

For roadway dust suppression, activate the calibrated water pump and adjust the low-pressure side spraying or long-range water cannons via the electronic control toggles inside the cab.

Commercial Vehicle Logistics Platforms

Strategic Payload Weight Distribution

Ensure that bulk logistics loads are distributed uniformly across the high-tensile steel chassis frames. Avoid off-center weight placement to protect the reinforced multi-leaf suspension from extreme uneven stress.

Optimized Powertrain Cruise Synchronization

During cross-regional long-haul transport, utilize the high-torque calibrated drivetrains within their optimal RPM power bands to maximize fuel economy and take full advantage of the aerodynamic cabin design.

Responsive Start-Stop Navigation in Urban Sectors

For last-mile city distribution, leverage the agile turning radiuses and responsive steering calibrations built into the light truck platforms to safely maneuver through tight alleyways and busy loading docks.

Fleet Preventive Maintenance Schedule

Daily Before-Operation Checklist

All Fleets : Check engine oil levels, coolant status, and verify tyre pressures for regional road compliance.

Sweeper & Tanker Groups: Inspect for any fluid dripping under the tank mechanical seals; check auxiliary power take-off (PTO) linkages.

Periodic Operational Maintenance Intervals

Every 5,000 km or 250 Working Hours

For Sweepers & Washers : Clean the internal water filtration grids to prevent nozzle clogging; check the wear patterns of the multi-axis floating brushes and adjust negative-pressure suction skirt sealing.

For Water Trucks & Vacuum Suction Fleets : Grease all external water/vacuum pump bearing housings; inspect suction valve mechanical levers.

For Commercial Chassis Series : Lubricate the reinforced multi-leaf anti-torsion suspension systems and inspect chassis frame bolts for tightness.

Every 20,000 km or 1,000 Working Hours :

For Sweepers & Tankers: Conduct a complete ultrasound or visual inspection of the debris box and vacuum tank's chemical-resistant internal coatings to intercept premature corrosion. Service high-pressure pumps.

For Commercial Platforms: Execute full electronics diagnostics on the high-torque calibrated powertrain systems. Drain and replace transmission and axle gear fluids for the brand-specific chassis networks.