

MacLean Municipal Vehicle



Setting the Standard for
Articulated Municipal Vehicles



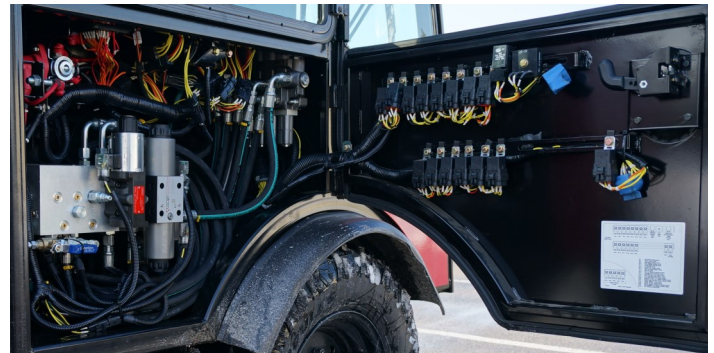
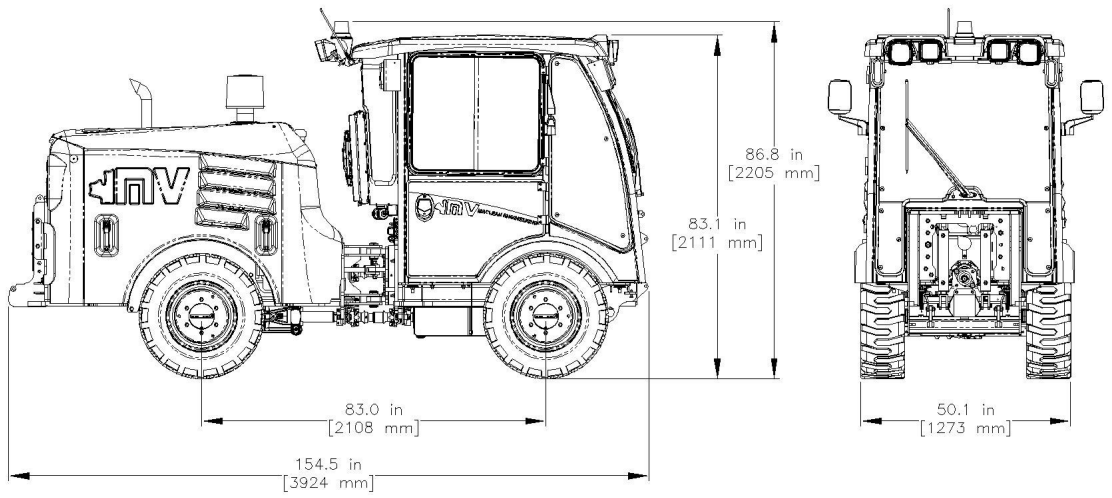
MacLean MV Specifications

Dimensions and Weight			
Overall length (including rear bumper)		154.5"	3924 mm
Height to top of cab roof		83.1"	2111 mm
Width at fenders		50.1"	1273 mm
Wheel base		83"	2108 mm
Unit weight (full of fluids, no operator)		6,500 lbs	2,948 kg
Fluid Capacities			
Fuel	Ultra-low sulphur diesel	26.4 gal.	100 L
Engine coolant	Caterpillar Extended Life Coolant (CAT EC-1) or ASTM D6210 compliant	3.4 gal.	13 L
Engine oil	Mobil 1 ESP 0W40 oil or equivalent (must meet API CJ4 requirements)	1.7 gal. (MV4.1) 2.1 gal. (MV5)	6.5 L 8 L
Hydraulic oil	ISO 11158 hydraulic oil; multi-grade recommended	18.5 gal.	70 L
Axle differential	SAE 80W90 GL-5 oil or equivalent (must contain limited slip additive)	1 gal. per axle	4 L per axle
Axle hub (2 per axle)	SAE 80W90 GL-5 oil or equivalent (must contain limited slip additive)	17 oz. per hub	0.5 L per hub
Rear axle gearbox	SAE 80W90 GL-5 oil or equivalent (must contain limited slip additive)	51 oz. per axle	1.5 L per axle
Pump drive gearbox	Mineral based ISO VG 220 gear oil	42 oz.	1.25 L
4 to 1 gearbox	Mineral based ISO VG 220 gear oil	42 oz.	1.25 L
PTO clutch	SAE 15W40 motor oil	17 oz.	0.5 L
Brake fluid	Dexron III ATF	68 oz.	2 L

	Standard	Optional
Engine		
Caterpillar C3.6 Tier 4 Final emission compliant (MV5 model) 74 HP @ 2400 RPM 313 lb-ft @ 1200 RPM	x	
Caterpillar C3.6 Tier 4 Final emission compliant (M5 model) 120 HP @ 2400 RPM 369 lb-ft @ 1500 RPM		x
Caterpillar C3.4B Tier 4 Interim emission compliant (MV4.1 model) 115 HP @ 2400 RPM 310 lb-ft @ 1600 RPM		Available in Canada only
Caterpillar engine protection system	x	
Cold starting aid with 400 watt block heater	x	
Reversing engine fan		x
Drive System		
Fully hydrostatic with 3-speed drive system Low speed range 0-12 km/h (0-7.5 mph) Intermediate speed range 0-18 km/h (0-11.2 mph) High speed range 0-32 km/h (0-19.9 mph)	x	
"Shift on the fly" between speed ranges	x	
Directional control via foot operated hydraulic treadle pedal	x	
Axles		
Dana 111 heavy-duty outboard planetary style axles complete with limited slip differentials front and rear	x	
Differential locking axles; front only or front and rear		x
12,000 lb (5,443 kg) capacity per axle	x	
Braking Systems		
Hydrostatic dynamic braking	x	
Hydraulically actuated internal wet style disc brakes acting on all four (4) wheels	x	
Spring applied hydraulically released (SAHR) parking brake acting on all four (4) wheels	x	
Steering		
Two (2) steering cylinders controlled through an open-centre steering valve powered by priority flow	x	
Articulated steering 40 degrees each way	x	
Inside turning radius of 90" (2286 mm)	x	
Tilt and telescopic steering column with self-cancelling signal lights	x	
Electrical		
1125 CCA battery; 120 amp (MV4.1 model) / 150 amp (MV5 model) alternator protected by main breaker switch	x	
Automotive style relays and solenoids; mini blade fuses contained within watertight enclosure	x	

	Standard	Optional
Hydraulic System		
24 GPM (91 LPM) hydraulic gear pump	x	
Additional 18 GPM (68 LPM) hydraulic gear pump, tandem mounted for total theoretical rating of 42 GPM (159 LPM)		x
Mechanical 4-spool valve controls attachment function(s)	x	
Standard high flow hydraulic circuit is reversible and proportional	x	
High hydraulic oil temperature and low hydraulic oil level warning system	x	
Thermostatically controlled bypass from oil cooler for cold weather start-up	x	
Auto run for sander (start/stop for standard high flow hydraulic circuit)		x
Power Take-Off (PTO)		
540 RPM front mount PTO	x	
Wet multi-disc hydraulically actuated clutch	x	
4:1 planetary style reduction gearbox	x	
Lighting		
Two (2) 55 watt (each) halogen headlights with 60 watt high beam feature Two (2) 70 watt (each) halogen front work lights One (1) 70 watt halogen rear light One (1) 27 watt interior light	x	
LED taillights and signal lights		x
Pedestal mounted beacon light with amber and blue lens covers	x	
LED strobe lights (4 total) mounted to cab roof guard		x
Rear Hoods and Cab Roof		
Made of vacuum moulded thermoplastic polyolefin (TPO) composite material, solid red in colour	x	
Side engine panels removeable without use of tools	x	
Wheels and Tires		
10.0 x 16.5, 8 ply loader lug style on steel 16.5" x 8.25" rim	x	
245/75/R16, 2 ply winter radial tires		x
31 x 15.5 x 15, 10 ply turf style summer tires		x
Cab Features		
Mounted on six (6) isolation mounts to reduce vibrations and enhance operator comfort	x	
ROPS certified to 12,000 lbs	x	
DOT approved tempered safety glass is tinted	x	
Two (2) exterior side mirrors on outside of cab and one (1) rearview mirror inside cab	x	
5" multifunctional colour touchscreen display	x	
Backup camera		x
AM/FM/Bluetooth radio with two (2) speakers	x	
Retractable sun visor	x	
GPS speedometer		x
Cruise control		x
Pantograph intermittent windshield wiper	x	
Fully adjustable air ride seat with 3-point heavy-duty retractable seatbelt	x	
Removeable sound barrier floor mats	x	
Directional defrost fan and high output heating/defrost system	x	
Air conditioning		x
Cab roof and headlight guard		x
Illuminated licence plate mount		x
Safety Features		
Automatic PTO and high flow hydraulic shutdown if operator leaves the seat for more than 5 seconds	x	
PTO, high flow hydraulics, and differential locking axle functions automatically disengage when high range travel speed is selected	x	
Reflective slow-moving vehicle sign mounted on rear of tractor	x	
Reflective vinyl decals on cab	x	
Backup alarm rated at 107 dBA	x	
Warning/Caution/Danger safety decals	x	
First aid kit		x
Fire extinguisher		x

Notice: MacLean Engineering reserves the right to change specifications without notice.



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