

# MacLean Municipal Vehicle



**Setting the Standard for  
Articulated Municipal Vehicles**



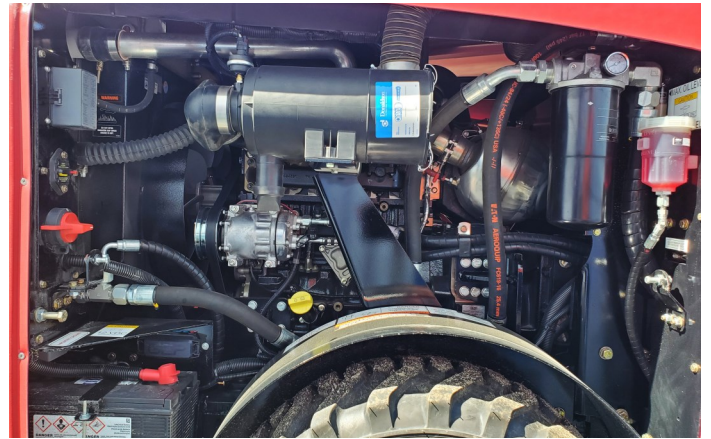
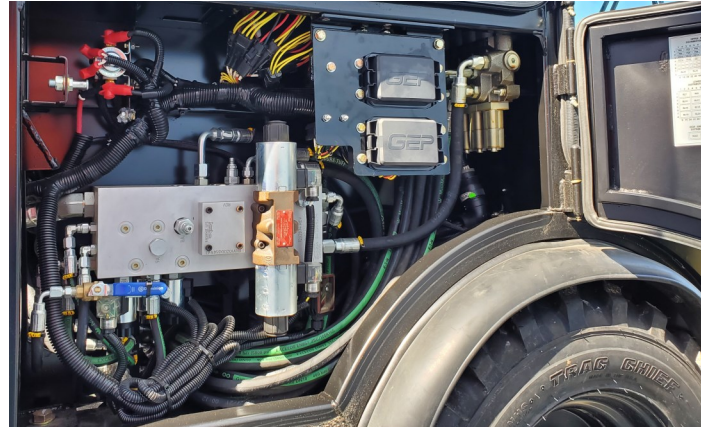
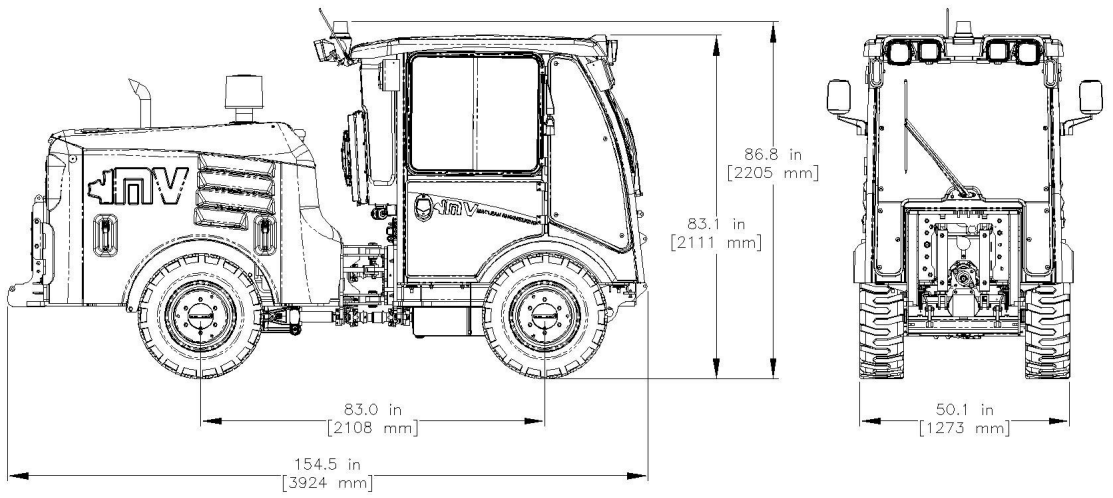
# MacLean MV5 Specifications

| 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        |
| Wheelbase                                 |   | 83"             | 2108 mm        |
| Unit weight (full of fluids, no operator) |   | 6,990 lbs       | 3,170 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)   | 2.1 gal.        | 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<br>74 HP @ 2300 RPM<br>313 lb-ft @ 1200 RPM  | x        |          |
| Caterpillar C3.6 Tier 4 Final emission compliant<br>120 HP @ 2300 RPM<br>369 lb-ft @ 1500 RPM   |          | x        |
| Caterpillar engine protection system  | x        |          |
| Cold starting aid controlled by the engine ECM  | x        |          |
| Reversing engine fan  |          | x        |
| Drive System  |          |          |
| Fully hydrostatic with 3-speed drive system<br>Low speed range           0-12 km/h (0-7.5 mph)<br>Intermediate speed range   0-18 km/h (0-11.2 mph)<br>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        |          |
| Power Take-Off (PTO)  |          |          |
| 540 RPM front mount PTO   | x        |          |
| Wet multi-disc hydraulically actuated clutch  | x        |          |
| 4:1 planetary style reduction gearbox   | x        |          |

|  | Standard | Optional |
|--|----------|----------|
| <b>Hydraulic System</b>  |          |          |
| 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        |
| <b>Electrical</b>  |          |          |
| 1125 CCA battery; 150 amp alternator protected by main breaker switch  | x        |          |
| Automotive style relays and solenoids; mini blade fuses contained within watertight enclosure  | x        |          |
| <b>Lighting</b>  |          |          |
| Two (2) 55 watt (each) halogen headlights with 60 watt high beam feature<br>Two (2) 70 watt (each) halogen front work lights<br>One (1) 70 watt halogen rear light<br>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        |
| <b>Rear Hoods and Cab Roof</b>   |          |          |
| Made of vacuum moulded thermoplastic polyolefin (TPO) composite material, solid red in colour  | x        |          |
| Side engine panels removeable without use of tools   | x        |          |
| <b>Wheels and Tires</b>  |          |          |
| 10.0 x 16.5, 8 ply loader lug style on steel 16.5" x 8.25" rim   | x        |          |
| 245/75/R16, 10 ply winter radial tires   |          | x        |
| 31 x 15.5 x 15, 10 ply turf style summer tires   |          | x        |
| <b>Cab Features</b>  |          |          |
| 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        |
| <b>Safety Features</b>   |          |          |
| 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        |          |
| Park brake is automatically activated each time the engine is started  | 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        |





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