



All-Terrain Litter Vacuum

LR50 (diesel)

Product Overview

www.madvac.com



Sourcewell
Formerly NJPA



canoe
procurement group of canada



Feb 2023

Table of Contents

Applications / Customers / Attributes.....	3-5
Specs, Characteristics & Performance.....	6-23
Vacuum System.....	24-31
Litter Collection System.....	32-36
Safety, Comfort & Convenience.....	37-44
Contact Us.....	45

LR50 (diesel) options

Enclosed cab with heated or non-heated windshield.....	14
Heated seat	13
Rear-view camera	29
Vacuum head	30
Wander hose	31
Litter collector bags	33
Bagless debris system	34
Water mist system	36
Fire extinguisher	37
Floor-mounted cab heater	38
Fan for operator comfort	42
Tire flatproofing	42

Technical specs are subject to change without prior notice



Application

From concrete to grass, the LR50 can tackle all types of urban terrain with ease.

- Parks and grass areas
- Sidewalks
- Bike and pedestrian lanes
- Parking lots
- Curb side
- Alleys
- Pathways
- Alongside buildings



Customers

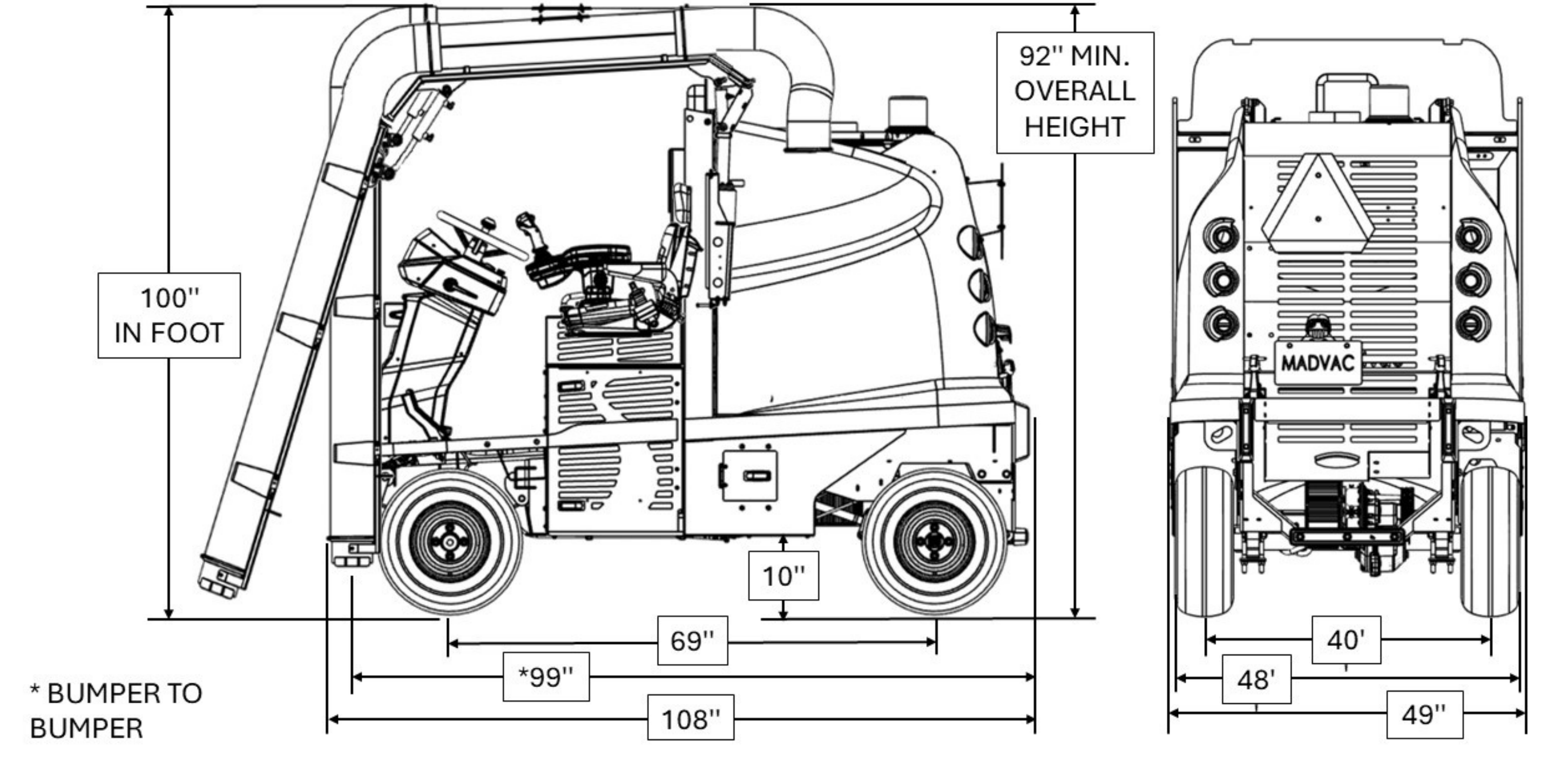
- Cities & municipalities
- Outdoor cleaning contractors
- Airports & seaports
- Transit authorities
- Healthcare services
- Distribution centers
- Shopping malls
- Educational & sports facilities
- Manufacturing facilities
- Amusement parks
- Casinos
- Military
- Correctional facilities



Attributes

- LR50 replaces **6 to 8** manual litter pickers (equal quantity of litter removed within same time period)
- Can collect litter that is dry, humid, or wet
- All-terrain vehicle
- Easy to operate, no CDL required
- Street legal lighting package

Dimensions



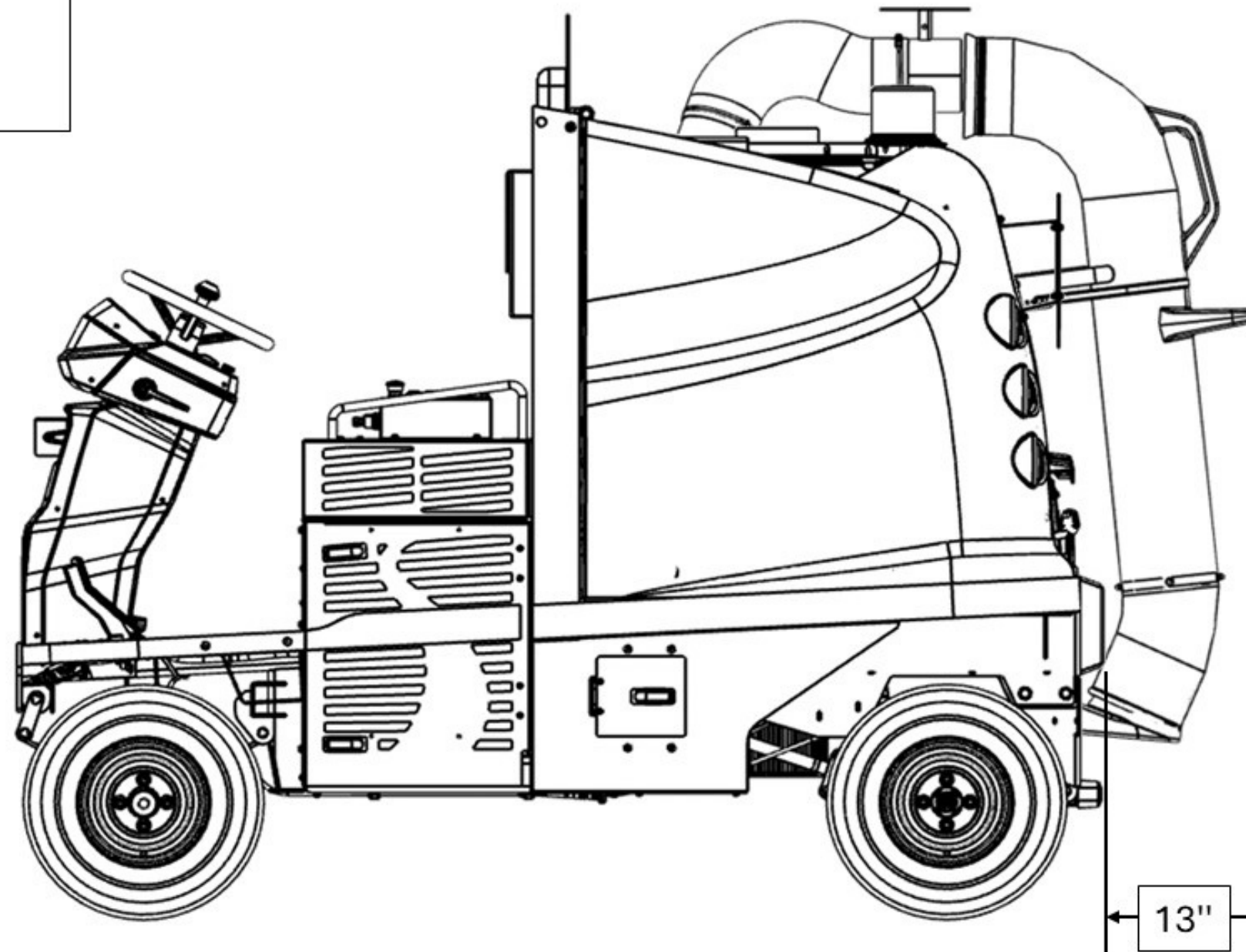
Inches to mm

10	254
40	1016
48	1219
49	1245
69	1753
92	2337
99	2515
100	2540
108	2743

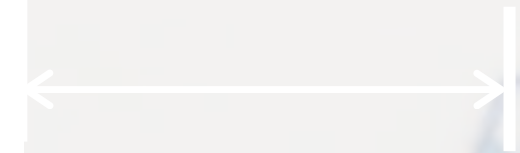
Dimensions

7

WANDER
HOSE

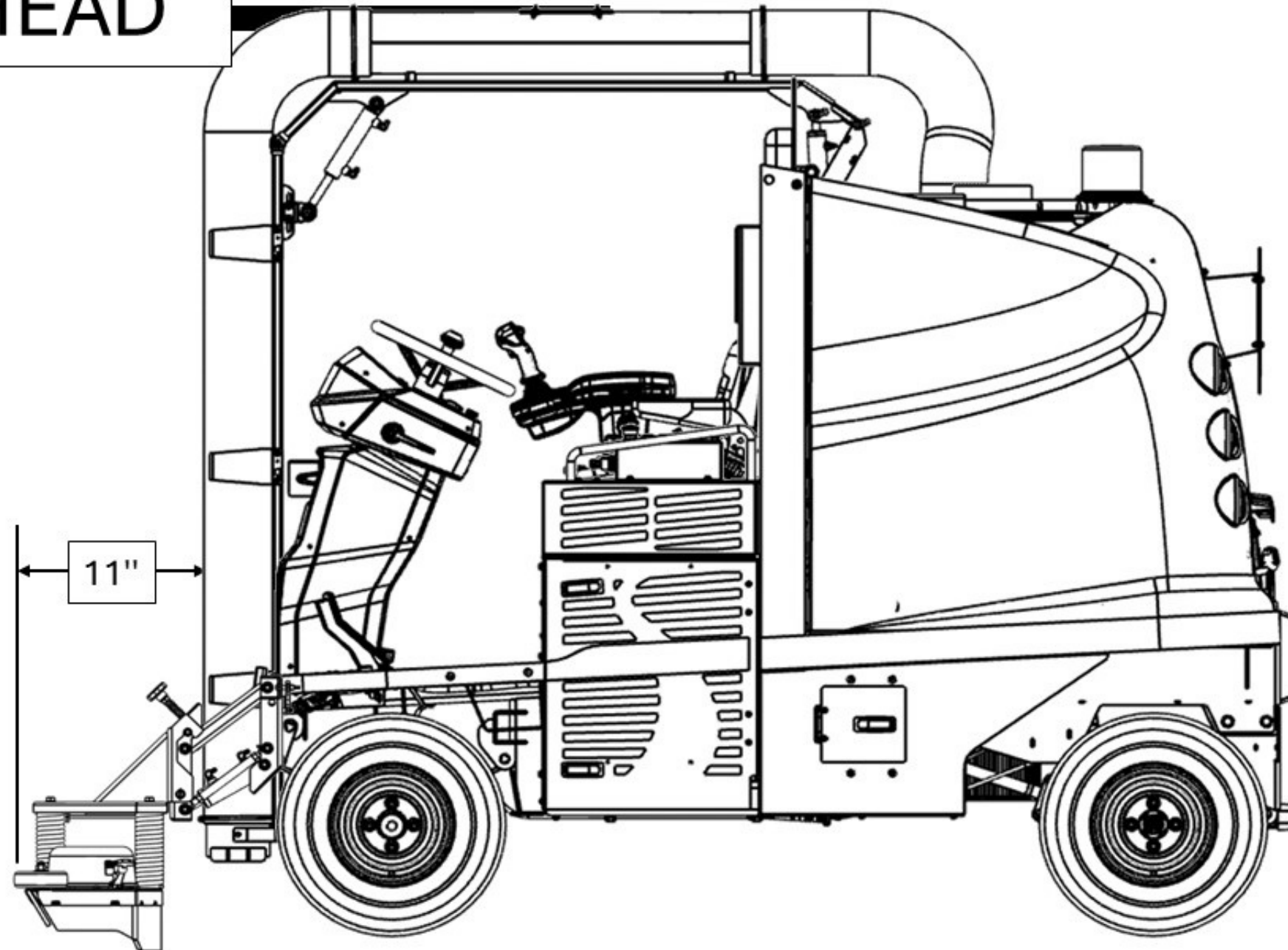


Inches to mm
13 330

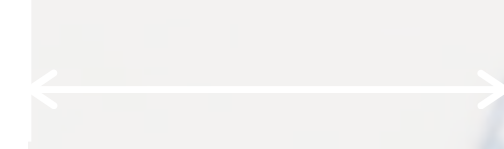


Dimensions

VAC HEAD



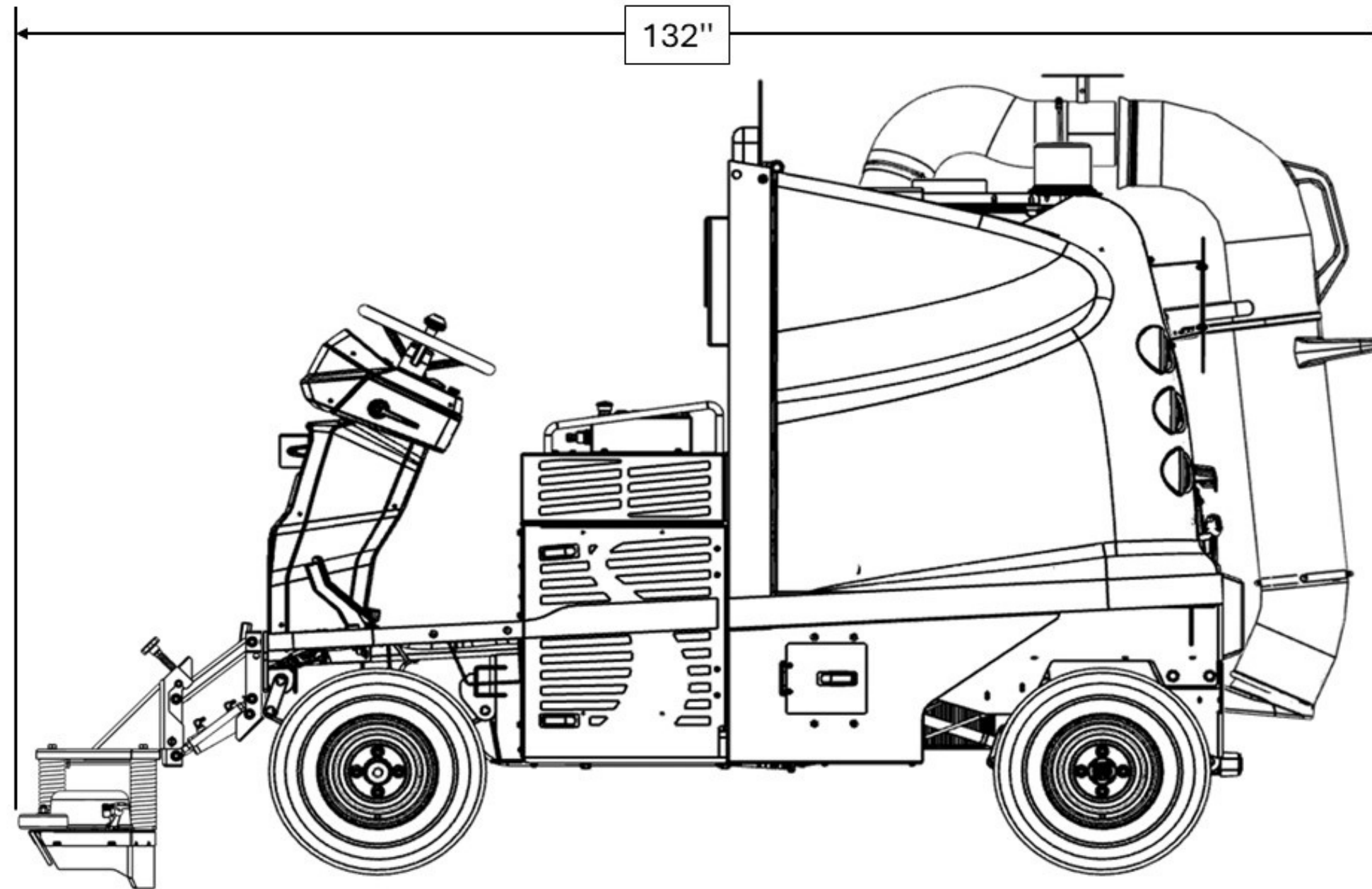
Inches to mm
11 279



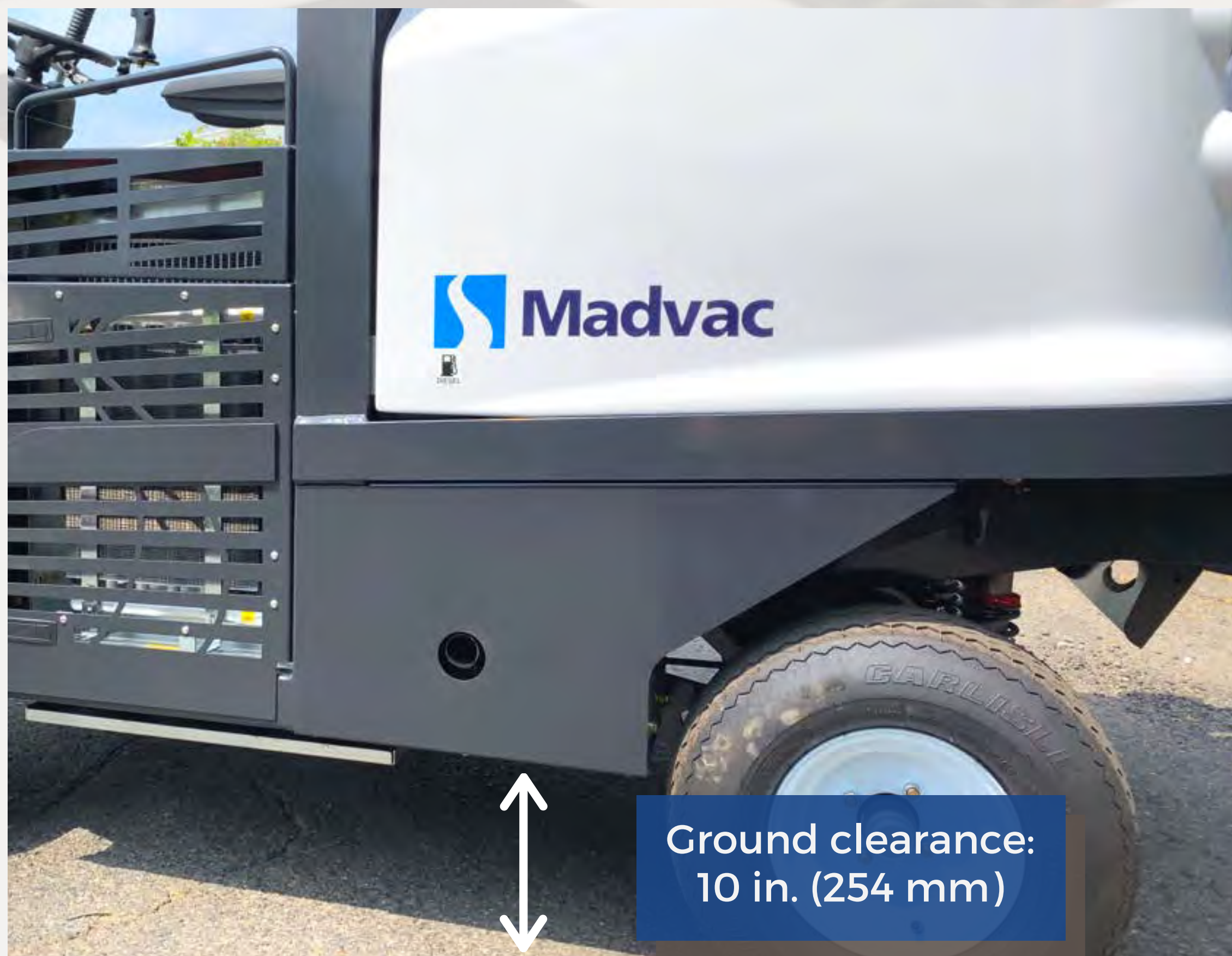
Dimensions

9

WANDER
HOSE
+
VAC
HEAD



Inches to mm
132 3353



Ground Clearance & Curb Climbing

Curb climbing:
7 in. (178 mm) tall

Ground clearance:
10 in. (254 mm)

Weight

- Net/dry weight: 2910 lbs (1320 kg)
- Gross vehicle weight rating: 3500 lbs (1587 kg)
- Axle rating:
front 1980 lbs (898 kg)
rear 1980 lbs (898 kg)





Frame & Body

Heavy gauge steel
body on a welded
1/4 in. (6.35 mm)
structural steel
frame

Electrostatic
powder-coated
paint

Cabin



- Armrest, headrest, and optional heated seat for operator comfort
- Grab-handle and cup holder
- One safety lap belt
- Automotive-type steering wheel with steering ball for ease of handling

Seating: 40.5 in. (1029 mm) above ground

Cabin size: 48 cu. ft. (1.36 cu. m.)

Cabin



Enclosed cab with heated or non-heated windshield and vinyl doors



Engine

- Model: Kubota Diesel D1105-E4B (EPA Tier 4 Final)
- Power: 24.8 hp (18.5 kw) @ 3200 rpm
- Displacement: 68.53 cu.in. (1123 cc)
- Air cleaner: 2-stage Donaldson with restriction indicator



General Machine Performance

- Max. forward speed: 11 mph (18 km/h)
- Max. reverse speed: 5 mph (8 km/h)
- Min. aisle turn: 180 in. (4572 mm)
- Internal turning radius: 60 in. (1524 mm)
- External turning radius: 90 in. (2286 mm)
- Cleaning speed:
up to 84,480 sq. ft. per hour
- Gradeability: 11.3 deg. (20%)
(with full & empty litter container)

Instrumentation & Controls

- Turn signal/horn/beacon/work light switch and lever
 - Fuel gauge
 - Operator presence indicator
 - Parking brake indicator
 - Left/right signal indicator
 - Engine oil pressure indicator
 - Engine temperature light
 - Hourmeter
 - Glow plug indicator
 - Hazard light switch
 - Low voltage indicator light
- (...continued on following page)



Instrumentation & Controls

- Key ignition for starting and stopping the engine
- Key ignition glow plug on prior to starting the engine
- Neutral start switch installed on traction control pedal prevents engine from starting if pedal is pressed
- Brake pedal on opposite side of steering column
- Throttle: progressive lever (idle up to maximum operating speed)
- Steering: adjustable tilt steering column



Drive

- Drive: front wheel drive
- Drive system: heavy-duty hydrostatic
- Turf size (all 4 wheels)
 - Regular: 20.5x8x 10 in. / 520x203x254 mm (205/65-10)
 - Turf MV17094: 20x8x10 in. / 508x203x254 mm (205/60-10)
- Tire load capacity: 1323 lbs / 600 kg per tire
- Brakes: front hydrostatic brake; rear mechanical disc parking brake
- Suspension: leaf spring front & rear





dB Rating

Front decibel

- Cabin: 96 dB
- 5 feet away: 88 dB
- 10 feet away: 85 dB
- 20 feet away: 83 dB

Lighting

Complete road lighting and signaling package

- Strobe beacon
- LED headlight
- LED turn signals
- LED brake lights
- LED flashers
- LED backup lights (with backup alarm)
- License plate holder with light
- SMV emblem



Fuel Tank

Capacity: 10.2 gal. (39 L)

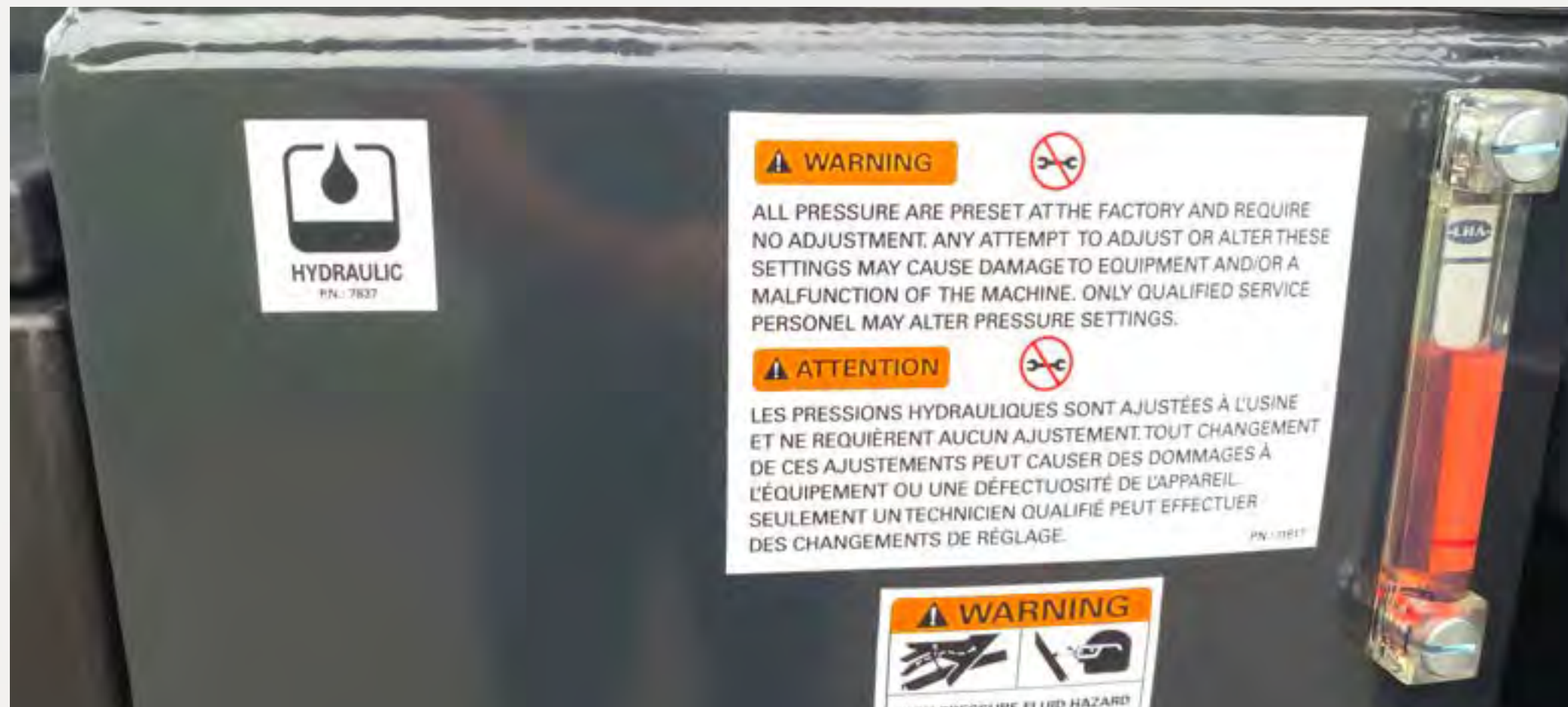
Can easily do an 8-hour shift



Capacity: 12.5 gal. (47 L)

Hydraulic Oil Tank

*Easily accessible with see-through
oil level indicator*



For both the traction and
the vacuum systems

Vacuum Fan & Suction System

- Straight-through suction system compacts litter 2:1 ratio
- No litter comes in contact with the fan
- Vacuum rating 1800 CFM



Vacuum fan position: bottom mounted



Vacuum fan diameter: 14 in. (356 mm)

Vacuum Hose

- Diameter: 7 in. (178 mm)
- Right-side support for hose storage in transport mode
- 170-degree arm movement with 72 in. (1829 mm.) reach
- Bottom of suction hose maximum lift above ground surface: 52 in. (1321 mm)



Vacuum Hose Support Arm

For operator safety and easy displacement of the boom | removable plate to access top hose



Vacuum Arm Control

Ergonomic 6-position robotic joystick allows effortless displacement of the boom
3 controls on joystick for up / down, and vacuum fan ON, vacuum fan OFF





Mirrors

2 convex mirrors mounted
on each side of cab for
excellent rear visibility





Rear View Camera

Optional - in cab 7 in. (178 mm)
rear-view camera system
with TFT color monitor





2 operating positions : one on each side of vacuum head

Vacuum Head

Optional

Effortless vacuuming, simply drive over litter



Wander Hose

Optional

*For confined,
hard-to-reach
areas*

Length: 15 ft. (4.57 m)
Diameter: 6 in. (152 mm)



Container


One bag

One container

Easy, Fast, Efficient

- 16-gauge powder-coated steel container
- Air cylinder power-assist tilt
- Litter capacity
 - Volume: 75 gal. (284 L)
 - Weight: 150 lbs (68 kg)





Bag size: 42 x 51 in.
(1066 x 1295 mm)

Litter Bags

*One container, one bag -
easy bag changing process
that takes only 45 sec!*

Bagless Debris System: Kevlar Bin



Optional Kevlar bin can be filled, then emptied into off-the-shelf bag or dumpster

Dust Control

Exhaust bag captures dust particles that can escape from the minute holes of the special Madvac collector bags or Kevlar bin

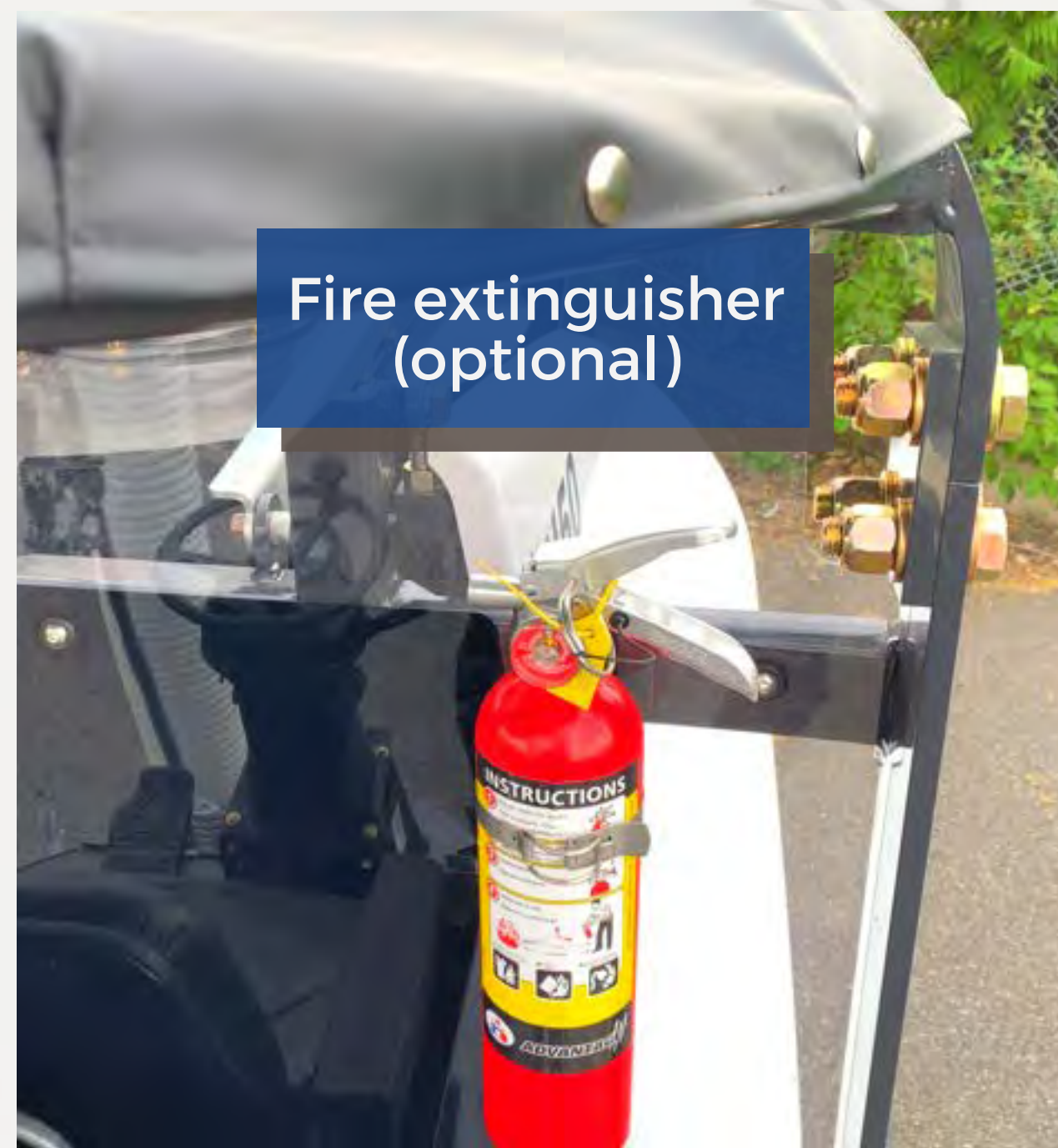


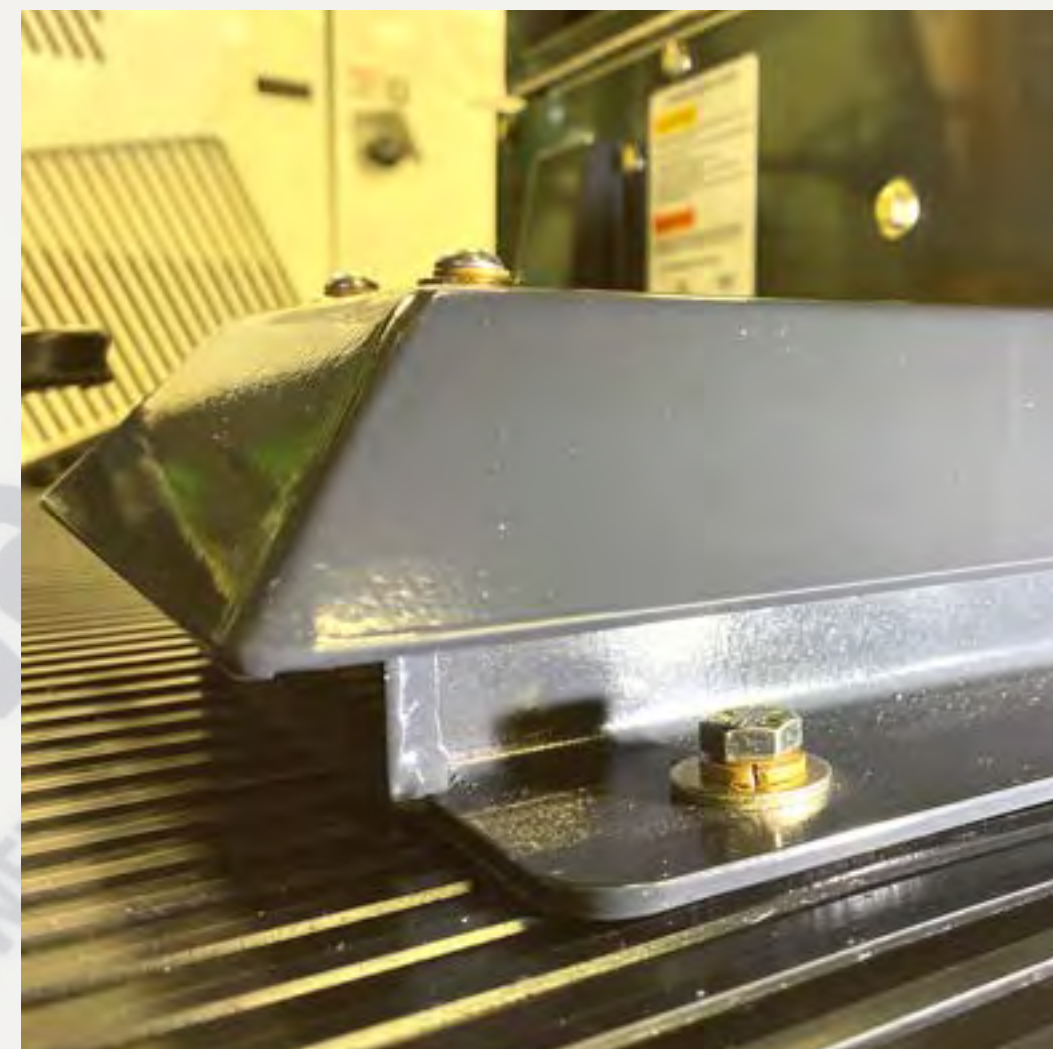
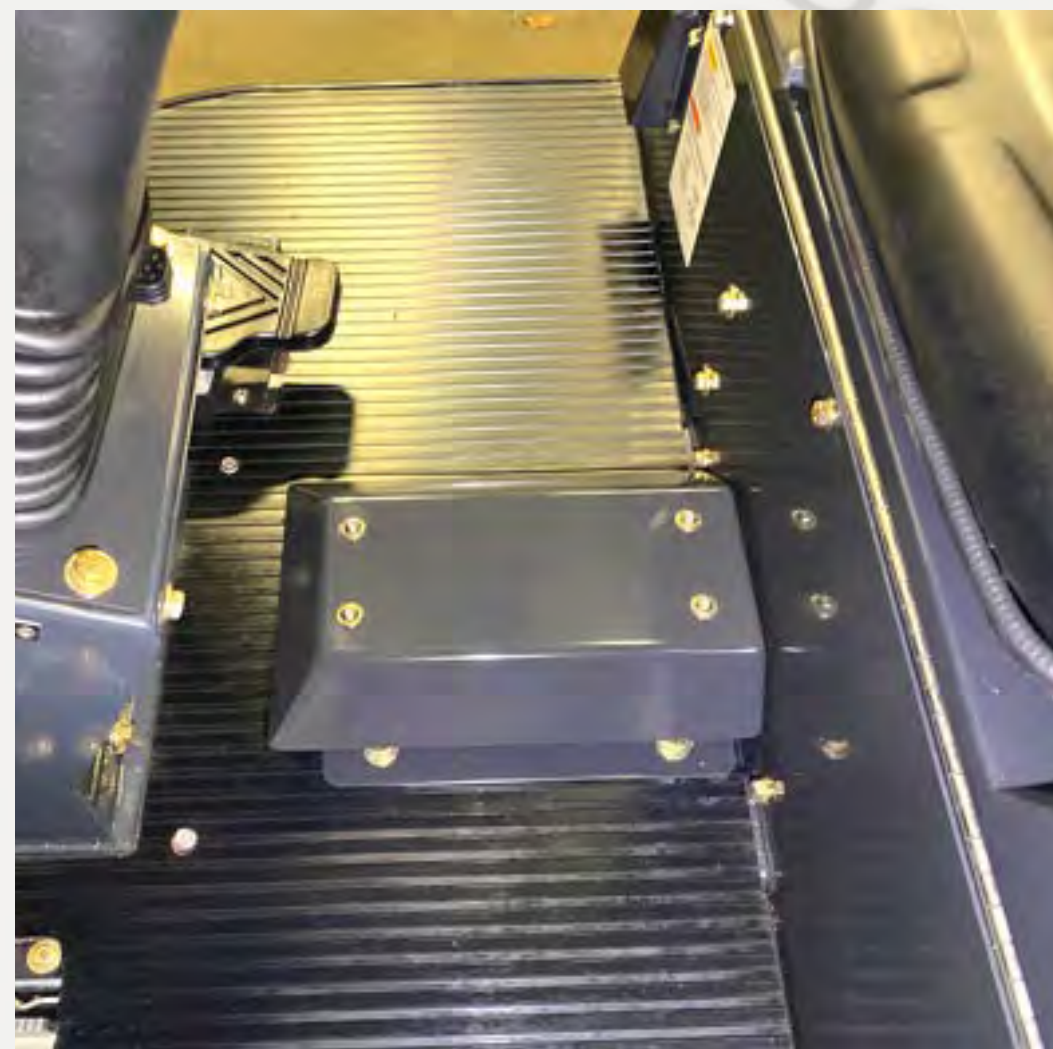


Dust Control

Optional intermittent water mist system with 10.17 gal. (38.5 L) water tank: controls dust and reduces risk of cigarette butt fire inside the container

Safety





Foot Heater

Optional 2-speed floor-mounted heater keeps operator's feet warm during cold weather

Console Accessory Box

Console accessory box with
USB / 12V aux outlet and switch
for optional floor heater and
optional water mist system





Foot Step

Helps operator
climb on board
easily and safe



Foot Activated Horn

Allows the operator to use the horn while keeping one hand on the steering wheel and the other controlling the vacuum arm

Convenience



Broom and rake holder



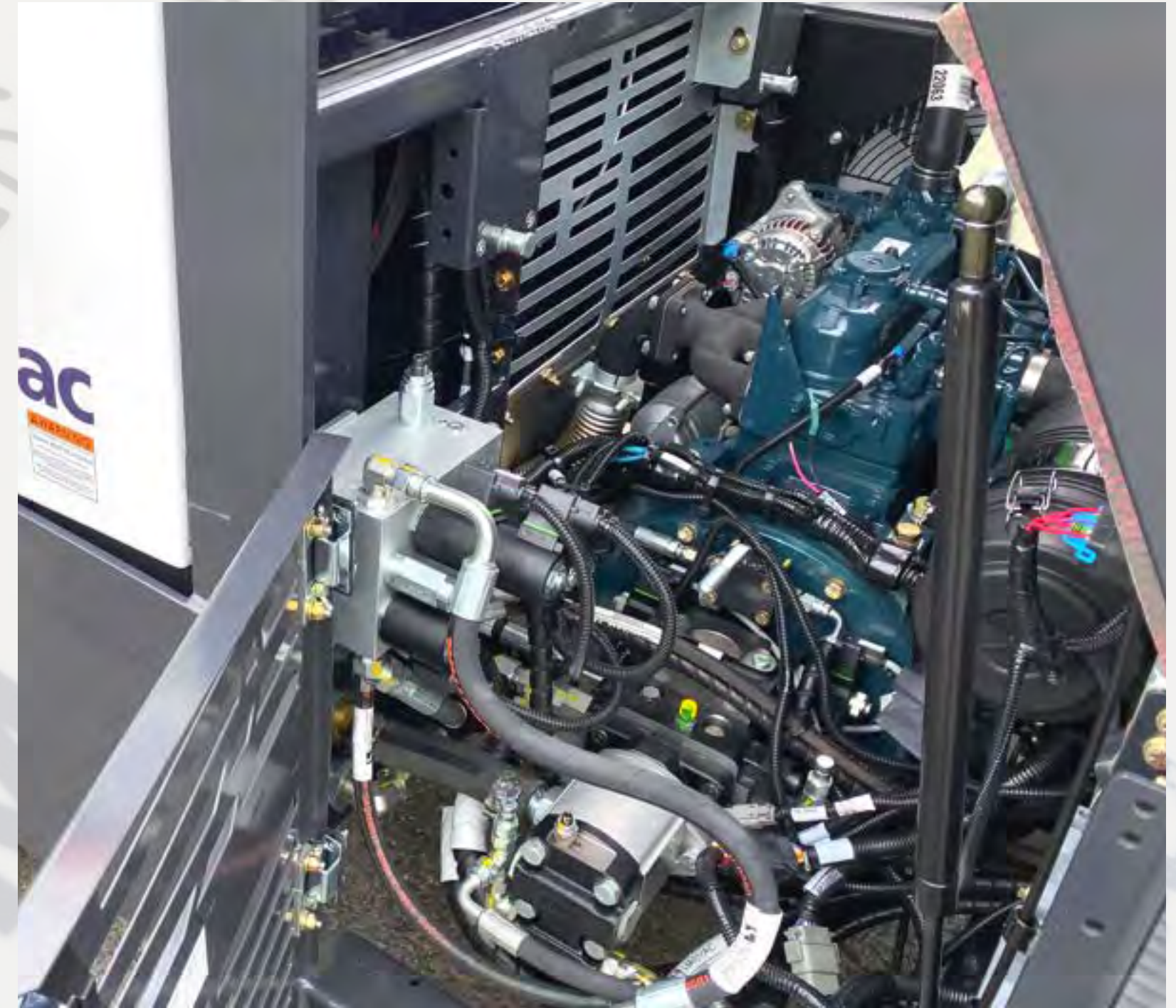
Fan for operator comfort (optional)



Tire flat proofing - liquid sealant (optional)



Tilt seat for engine compartment

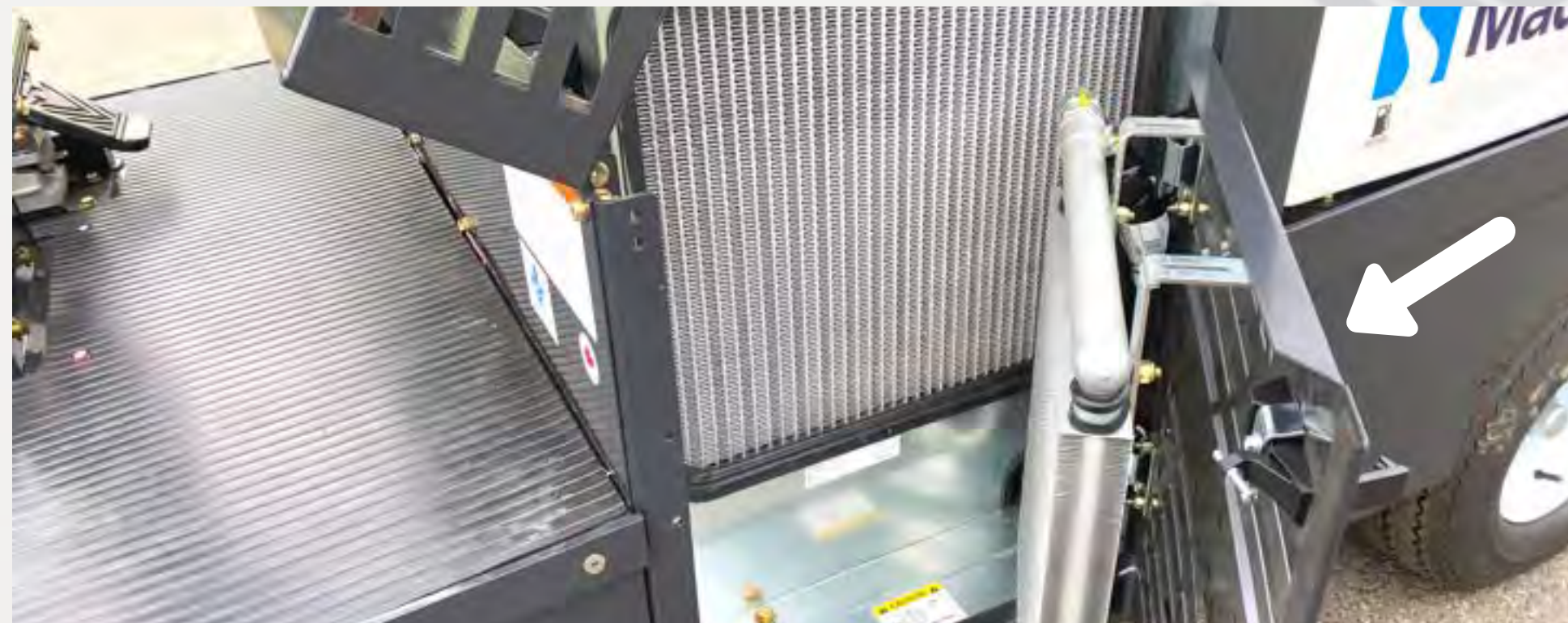


Easy access to all critical components of the machine



Easy access to all
critical components
of the machine

Hinged side door
for oil cooler
and radiator





Contact

To schedule a demo, request a quote, or for more information on the MADVAC LR50 diesel all-terrain litter vacuum:



855-651-0444 (USA/Canada)
1-450-651-0444 (International)



info@exprolink.com



www.madvac.com

 **Excelway**®

 **Madvac**®

2 Brands, ONE Great Company

 **exprolink**

Sourcewell 
Formerly NJPA

 **canoe**
procurement group of canada

awarded contract vendor **#093021-EXP**