



W35

WATER TANK



Designed to fit a Caterpillar 740C, 745C and 745

Elphinstone Surface Mining Solutions
elphinstone.com

ELPHINSTONE

SURFACE MINING SOLUTIONS



DESIGNED TO FIT CATERPILLAR 740C, 745C AND 745.

The W35 water tank module

The Elphinstone W35 water tank module is designed to fit a Caterpillar 740C, 745C and 745 bare chassis in place of factory applications. The module incorporates a robust under body structure that plays a crucial role in ensuring the tank shell is properly supported.

All Elphinstone design and manufacturing processes consider the actual working conditions of the mining applications the water truck will be operating in. Engineering analysis of the specific carrier chassis' axle loadings throughout a range of grades ensure weight distribution is kept within the safe working limit specifications.

Selection of the highest quality manufacturing materials and components ensure Elphinstone modules provide safety to the operator and longevity to both the module and the truck.

Specialised, unique, and durable

The W35 water tank module incorporates many unique features that are included in the standard specification on all water tanks designed and manufactured by Elphinstone.

The tank structure has been engineered with specialised design features, including internal baffles to reduce water surge and improve machine stability.

Top fill points are fitted with hinged trash screens to prevent debris from entering the tank.

All Elphinstone water tanks feature braided wiring harnesses manufactured by Elphinstone and fitted with quality Deutsch connectors. Features include:

- » Custom fit for a Caterpillar 740C, 745C and 745 truck.
- » 35,000 litre water capacity.
- » Top fill points with hinged trash screens.
- » Ground level fill point with quick connect fittings for fast filling.
- » Sacrificial anodes are installed in tank for corrosion protection, and accessible from the outside of the tank at ground level.
- » The tank can be installed without a need to modify the original chassis.
- » Upper covers for easy inspection and cleaning.

The water cannon

Mounted forward on its own platform, the water cannon can be raised and lowered hydraulically using the joystick control located on the control system inside the cab. The cannon is capable of delivering 1,200 litres per minute at a spray distance of 35 to 55 metres.

Features include:

- » Spray coverage follows a 90° arc rotation with 70° elevation.
- » Water cannon operation is hydraulically controlled and actuated.
- » With the cannon lowered the machine is below transport height restriction requirements and can be transported freely throughout most states of Australia without the need for an approved transport escort.



BUILT TO PERFORM IN THE HARSHTEST MINING CONDITIONS.

Overwatering can be hazardous

Elphinstone is a name synonymous with quality workmanship, operator intended safety features and reliability. The W35 water tank modules are built to perform in the harshest mining conditions and designed for premium operability and safety.

Overwatering of haul roads by water trucks is a major contributor to uncontrolled movements by vehicles utilising these roads. This road hazard causes incidents of skidding/sliding and vehicle roll-over as well as increased road maintenance costs.

Rear watering system

The W35 watering system features 5 fully adjustable and individually controlled spray head valves. Three are mounted horizontally on the rear spray bar and two vertically for side (batter) spraying. Features include:

- » Rear spray head valves are double acting, hydraulically controlled units.
- » The spray head delivers a flat, dense and variable spray pattern.
- » The spray fan pattern, volume, width and direction can all be customised.
- » 15 metre spring rewind hose reel.

Operator control systems

The operator control system is easily accessible inside the cabin located to the right of the operator. The control system features individual switch controls for each spray head and the water cannon, allowing for more fine grain control when maneuvering in confined spaces.

The tank hydraulics are integrated with Caterpillar base machine systems and the operator controlled high flow pump features an auto low level pump cut-out.

Features include:

- » Joystick control for water cannon rotation and elevation.
- » Individual switch controls for each rear spray head and the water cannon.
- » Tank water level indicator system with in-cab and external displays.
- » High flow pump with auto low level pump cut-out.
- » Tank hydraulics integrated with Caterpillar systems.
- » Tank fitted with LED lighting and warning beacon.



FEATURE OVERVIEW

3x REAR SPRAY HEAD VALVES

Fully adjustable, mounted horizontally on rear spray bar.

ELPHINSTONE BRAIDED ELECTRICAL HARNESSES

Designed and manufactured by Elphinstone

RH SIDE BATTER SPRAY

Fully adjustable, mounted vertically for side (batter) spray.

LED LIGHTING

Lighting arrangements fitted as standard

TANK INSPECTION COVERS

For easy inspection and cleaning.

WARNING BEACON

LH SIDE BATTER SPRAY

Fully adjustable, mounted vertically for side (batter) spray.

15 M HOSE REEL WITH SPRING REWIND



TANK HYDRAULICS INTEGRATED WITH CATERPILLAR BASE MACHINE SYSTEMS.

ENGINEERED TANK STRUCTURE

Tank structure engineered with specialised design features, including internal baffles to reduce water surge, and improve machine stability.

35,000 L WATER CAPACITY

(9,250 Gallons). Sacrificial anodes are installed in tank for corrosion protection accessible at ground level on the outside of the tank.

TOP FILL POINTS

Tank top fill point fitted with trash screen to filter debris.

WATER CANNON

Capable of supplying 1,200 litres per minute with a spray distance of 35 to 55 metres.

JOYSTICK CONTROL OPERATION

Controls water cannon rotation and elevation via control panel inside cab.

CUSTOM DESIGNED TO SUIT CATERPILLAR 740C, 745C AND 745 ARTICULATED TRUCKS

Fit for purpose.

90° ARC ROTATION 70° ELEVATION RANGE

WATER CANNON PLATFORM

Can be lowered for ease of transport to meet height restrictions.

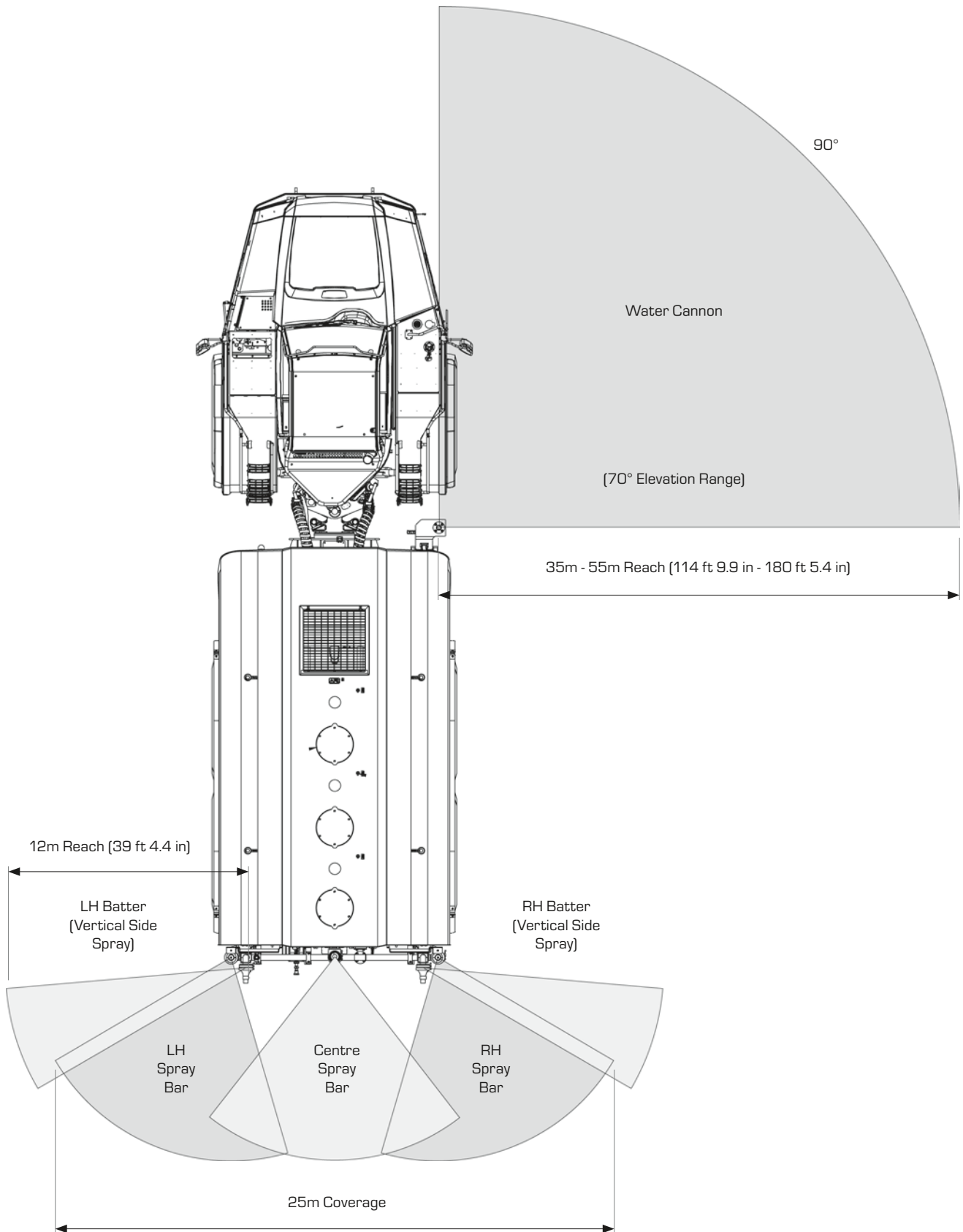
OPERATOR CONTROLS

Operator control panel mounted in the cabin.



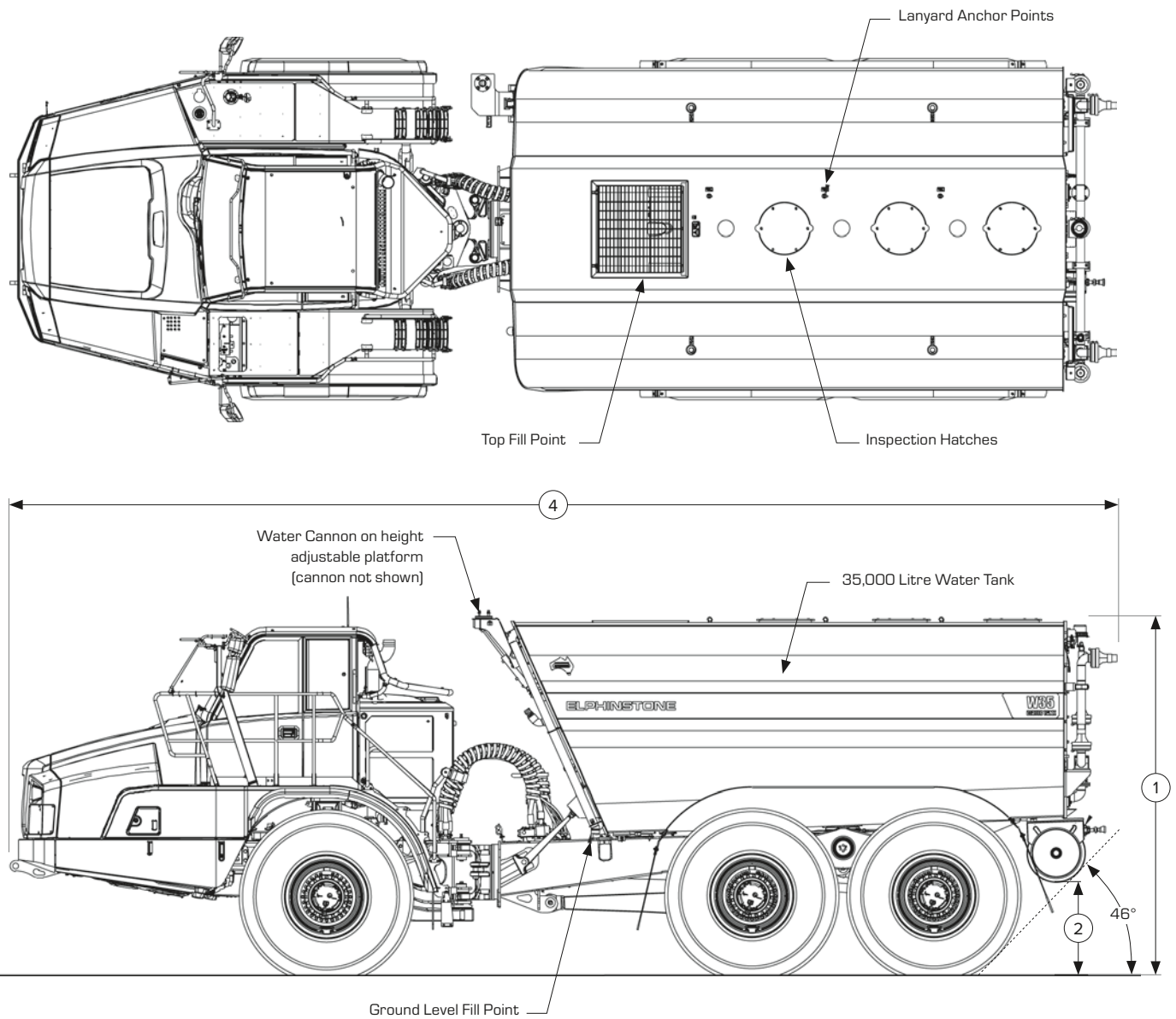


SPRAY PATTERNS



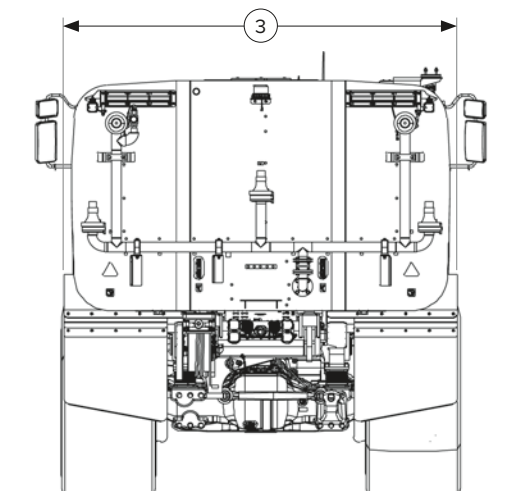


MACHINE DIMENSIONS



Dimensions

1	Height - Top of Water Tank	3865 mm	12 ft 8 in
2	Height - Ground Clearance (Hose Reel)	1000 mm	3 ft 3.4 in
3	Width - Water Tank	3500 mm	11 ft 5.7 in
4	Length - Front Bumper to Rear Batter Spray	11940 mm	39 ft 2.1 in



OVER 45 YEARS IN THE MINING INDUSTRY.

Elphinstone Pty Ltd is an established Caterpillar OEM Solutions customer with over 45 years' experience in the mining industry.

Elphinstone specialises in the design, manufacture and support of quality equipment for the global underground and surface mining industries.

The Elphinstone range of products combines practical design, the latest technology and quality manufacturing to ensure reliable performance.

The current product range includes specialised underground support vehicles, mine extraction devices, extended distance off-highway haulage trucks and water tanks customised to suit Caterpillar articulated trucks.

All Elphinstone products, technical assistance, support, and access to spare parts are available through the global Cat® dealer network with additional support from the Elphinstone regional sales and support team.

W35 WATER TANK

For more complete information on Elphinstone products, dealer services, and industry solutions, visit www.elphinstone.com or contact your local Cat® dealer.

Material and specifications are subject to change without notice. Featured machines in photos may include additional equipment.

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