

# A-series

Tracked Carrier

TC7A | TC11A

Tier 4 Final Certified



**BELL**

# Bell Tracked Carriers



A premium solution for soft underfoot conditions

Bell Equipment has been designing, manufacturing, and distributing heavy equipment for the mining, construction, forestry, agriculture, and waste handling industries around the globe for over six decades.

Our passion for innovation, and proven ability to give customers fit-for-purpose solutions, has given rise to the Bell Tracked Carrier as a premium solution for soft underfoot conditions.

Harnessing our experience as a global Articulated Dump Truck specialist and Original Equipment Manufacturer, the Bell Tracked Carrier stays true to our philosophy of developing 'strong reliable machines'.

## Proven engineering, quality manufacturing

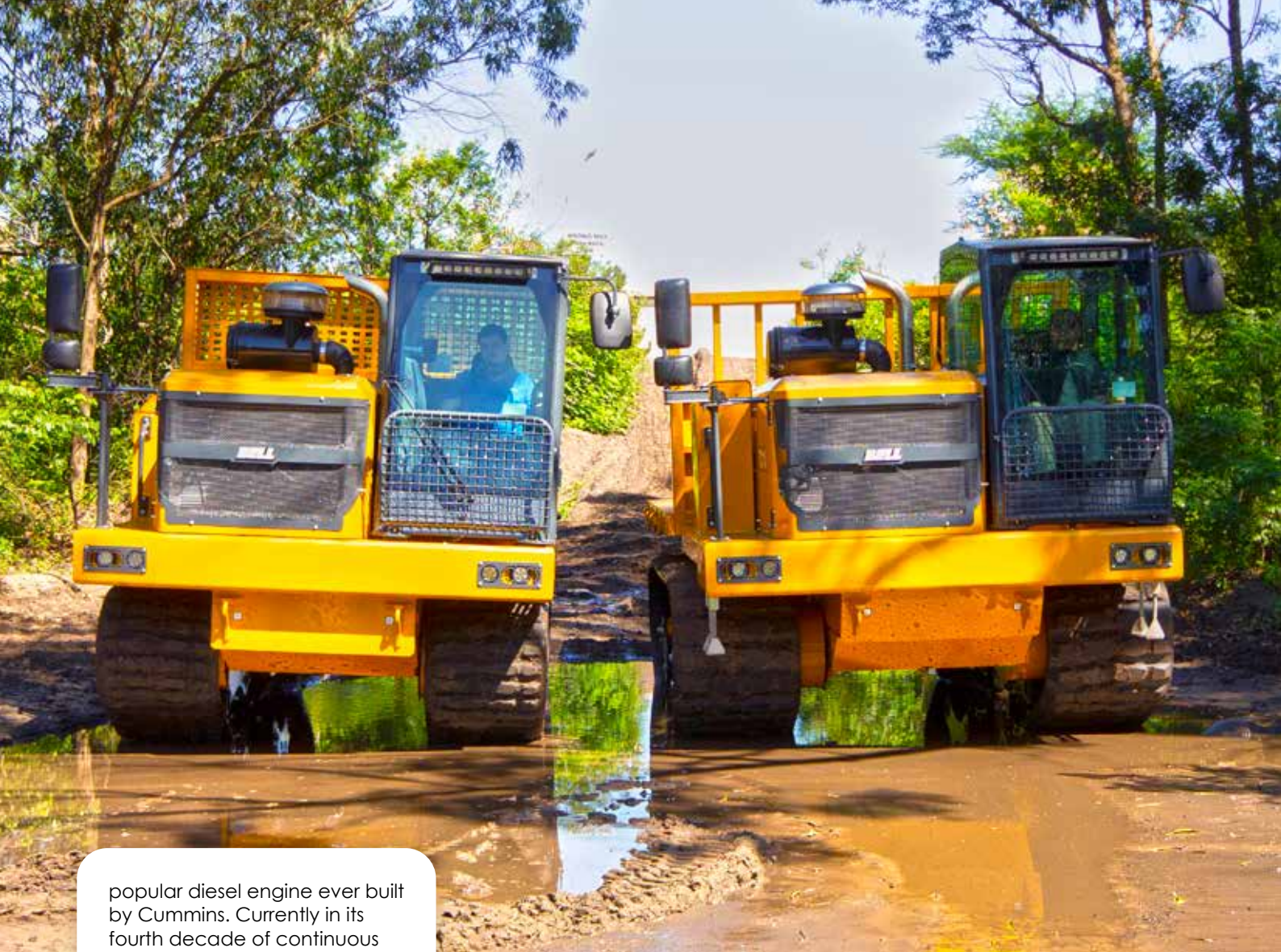
Well suited to the short haul and to provide solutions to the construction, oil and gas, forestry, drilling and mining industries, both the 7-ton TC7A and the 11-ton TC11A Tracked Carriers are made from higher grade steel, and fitted with premium components and Bell Equipment's proprietary software.



- Bell manufactured components – Design and manufacture philosophies that have been adopted from our decades of ADT successes have been instilled into the Tracked Carrier. The steel structures, including the cab, structures and track suspension system, are run through independently developed and globally recognized processes such as Finite Element Analysis (FEA) testing to ensure maximum durability.

- High quality components used throughout – Bell Equipment continues to choose from the best drivetrain technology available and has matched Cummins engines with Rexroth hydraulics in this application. This reliable combination ensures that fuel consumption and performance are optimized.

- Cummins engine – Both models are powered by the globally renowned, Stage 5 emissions compliant B6,7 Cummins engine. This 6,7-liter engine enjoys global market acceptance as the most



popular diesel engine ever built by Cummins. Currently in its fourth decade of continuous improvement, it has set an industry standard for reliability and durability. Packaging has been made extremely compact with the diesel particulate filter (DPF), Selective Catalytic Reduction (SCR) and urea dosing placed in one unit.

- Fleetm@tic® - Monitor and manage your machines and your operators efficiently with our cutting-edge fleet management software. Accurate, up-to-date operational, production and diagnostic data helps you to work smarter and protect your investment.



## On the right track

To provide a light footprint and optimal ground contact, our engineers designed a unique balanced six-roller undercarriage with compound walking beams. In this way vehicle mass is applied through only two points on the chassis at either side enabling the walking beams to most optimally distribute the load through all the rollers onto the tracks.



In addition, the walking beam geometry is biased, reducing the rear roller lift and track tension whilst traversing obstacles. The balanced system tracks the surface of the terrain better, providing chassis stability by not lifting the vehicle as high. This results in reduced ground pressure, lower track point-loading for longer track life, and improved operator comfort.

## Next level operator comfort

A comfortable operator is a productive operator, so we place great value on designing purpose-built cabs with a dedicated focus on ergonomics, comfort, and safety.

Geared towards safety, our Tracked Carrier cab is ROPS and FOPS certified and offers best-in-class visibility. A wide suspended step, with an unaligned foot hole above it, and conveniently placed handrails provide safe ease of access into the operator station.



In terms of ergonomics, a single joystick control extends from the left-hand side armrest from which electric over hydraulic control of all forward, left, right and backward machine movements are controlled. Additional functions, such as raising and lowering the dump bed, cruise control and sounding the horn, are assigned to buttons on the joystick. For safety, all joystick functions require that the pilot switch be pressed for the functions to work.

An automotive mouse, or B-drive, is used to control the 5-inch colour display unit (CDU), which provides superior diagnostics. The CDU is customizable in terms of the operator's preferred views using the Quickselect function. To further enhance operator comfort, the Tracked Carriers are fitted with a Pilot suspension seat.

## Made with ease of maintenance in mind



Making maintenance faster and easier translates into more machine uptime.

By design, the engine and radiator are strategically elevated to keep them far from mud and well protected from debris by belly plates.

The large ground level service hatch houses filters, as well as fuel and diesel exhaust fluid (DEF) filling points, for convenience and improved service and re-fuelling times.

Remote oil drainage is possible for the engine and hydraulic tank using the remote drain hose supplied with the machine. This allows for a quick, convenient oil drain and an engine drain through the service hatch without having to remove the entire belly plate. Additional removable panels are deliberately situated to provide ample access to all areas of the machine for ease of maintenance.

The undercarriage also features greaseless, rubber conical bearings in the bogie pivots for extended life and reduced cost over the life of the machine. The greaseless undercarriage utilizes oil-filled rollers and idlers, which translates into less maintenance on the machine.



## Customizable

Factory options include the choice of either a dump bed or a flat bed. The TC7A has a utility tipping load body with the ability to fold down or remove the tailgate and sides for a flat deck. The TC11A factory options include a dump bed or a flat bed. The flat bed can either be in a tipping configuration or fixed to provide a permanent utility vehicle.

The base units lend themselves to several customized solutions with the flat bed option allowing for various configurations through third party suppliers.

## ENGINE

**Manufacturer**  
Cummins

**Model**  
B6.7

### Configuration

Inline 6, turbocharged and intercooled

### Gross Power

225 hp (168 kW) @ 2200 rpm

### Net Power

215 hp (160 kW) @ 2200 rpm

### Displacement

409 cu.in (6.7 liter)

### Fuel Tank Capacity

42 US gal (190 liters)

### Diesel Exhaust Fluid Capacity

10 US gal (37.8 liters)

### Air Cleaner

Radial seal air cleaner with clear bowl pre-cleaner. Filter blockage is detected by a pressure transducer

### Certification

The B6.7 meets Tier 4 final emissions regulations

## HYDRAULIC SYSTEM

### Hydrostatic Drive System

Electro-hydraulic pump control with variable displacement hydraulic motors. Closed loop system

### Wheel Drive System

Double reduction planetary track drive

## Service Brake

Hydrostatic brake

## Park Brake

Fail to safe Spring Applied Hydraulic Released (SAHR) brake

## System Pressure

6 092 psi (420 bar)

## Filtration

13 micron spin-on filters

## Hydraulic Tank Capacity

28 US gal (107 liters)

## TRACK

### Track Type

Rubber tracks with steel inserts

### Tensioning System

Manually adjusted grease cylinder plus mechanical spring

## SUSPENSION

### Roller Quantity

6 per side

### Walking Beam Arrangement

Two terrain-response compound walking beams per side which, maximize the ground contact area, minimize ground pressure, reduce roller to track pressure and decrease the potential for de-tracking

## DUMPING SYSTEM

### Configuration

Two double-acting, single stage, dump cylinders

### Flow Rate

15 US gal (56 liters) per minute

## Raise Time

13 seconds

## Lower Time

13 seconds

## Tipping Angle

60 degrees

## Safety

Bin pole which locks bin in the up position

## LOAD BODIES

### Standard

Utility tipping load body with tailgate. Sides and rear can be folded down or removed to make a flat deck.

### Standard Body Capacity

(SAE 2:1)  
4.6 yd<sup>3</sup> (3.5 m<sup>3</sup>)

## ELECTRICAL SYSTEM

### Voltage

24 V

### Battery Type

Two AGM (Absorption Glass Mat) type

### Battery Capacity

2 X 75 Ah

### Alternator Rating

70 Amp

### Headlights

LED Hella Valuefit is fitted standard

### Extra Lighting Option

Optional LED bar light mounted to top of cab

### Reverse Camera

Standard

## CAB

### Configuration

Dedicated cab developed by Bell for the Tracked Carrier application

### Steering

Single handed joystick controller

### Air Conditioning

HVAC system is standard fitment

### Mirrors

Heated (optional) and remotely operated

### Safety

ROPS/FOPS certified according to the following standards: ISO3471, ISO13459, ISO3449

## VEHICLE PERFORMANCE

### Speed

7.5 mph (12 km/h)

### Gradient (laden)

49% (26 degrees)

## VEHICLE MASS (STANDARD CONFIGURATION)

### Unladen

24 140 lb (10 950 kg)

### Laden

39 573 lb (17 950 kg)

### Payload

15 432 lb (7 000 kg)

## UNLADEN GROUND PRESSURE

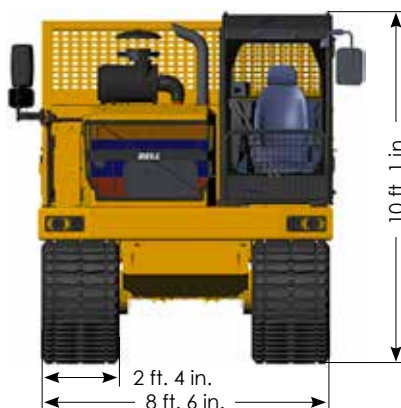
### 6" Sinkage method

2.39 psi (0.17 kg/cm<sup>2</sup>)

### Hard Ground method

4.09 psi (0.29 kg/cm<sup>2</sup>)

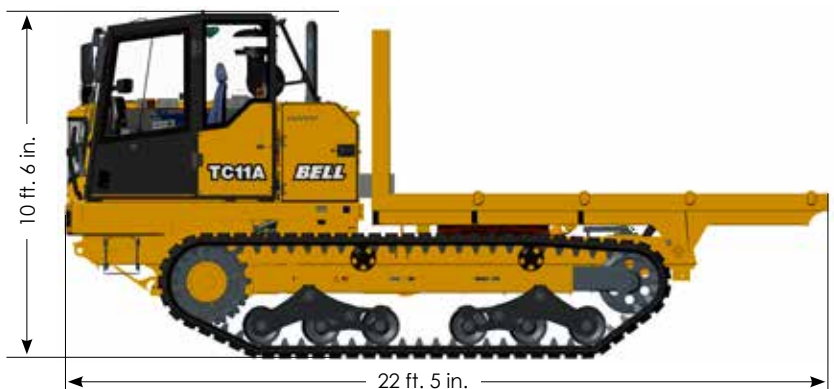
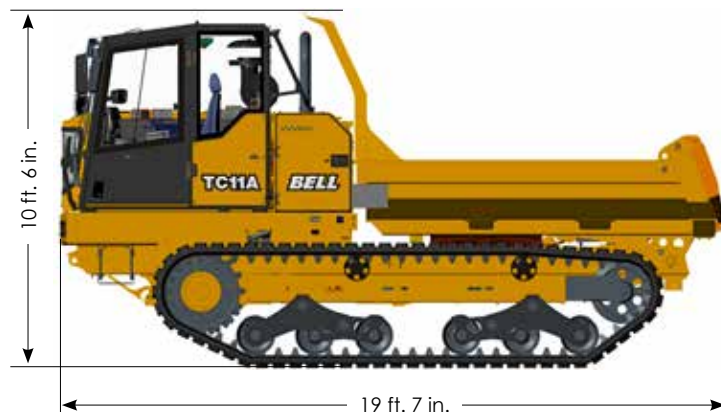
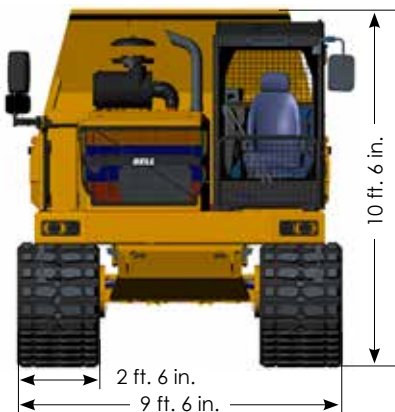
## Dimensions



# TC11A Tracked Carrier

<p><b>ENGINE</b>  <b>Manufacturer</b>          Cummins</p> <p><b>Model</b>          B6.7</p> <p><b>Configuration</b>          Inline 6, turbocharged and intercooled</p> <p><b>Gross Power</b>          249 hp (186 kW) @ 2000 rpm</p> <p><b>Net Power</b>          237 hp (177 kW) @ 2000 rpm</p> <p><b>Displacement</b>          409 cu.in (6.7 liter)</p> <p><b>Fuel Tank Capacity</b>          42 US gal (190 liters)</p> <p><b>Diesel Exhaust Fluid Capacity</b>          10 US gal (37,8 liters)</p> <p><b>Air Cleaner</b>          Radial seal air cleaner with clear bowl pre-cleaner. Filter blockage is detected by a pressure transducer</p> <p><b>Certification</b>          The B6.7 meets Tier 4 final emissions regulations</p>	<p><b>Park Brake</b>          Fail to safe Spring Applied Hydraulic Released (SAHR) brake</p> <p><b>System Pressure</b>          6 092 psi (420 bar)</p> <p><b>Filtration</b>          13 micron spin-on filters</p> <p><b>Hydraulic Tank Capacity</b>          140 US gal (152 liters)</p>	<p><b>Tipping Angle</b>          60 degrees for normal load bed          40 degrees for flat deck</p> <p><b>Safety</b>          Bin pole which locks bin in the up position</p>	<p><b>CAB</b>  <b>Configuration</b>          Dedicated cab developed by Bell for the Tracked Carrier application</p> <p><b>Steering</b>          Single handed joystick controller</p> <p><b>Air Conditioning</b>          HVAC system is standard fitment</p> <p><b>Mirrors</b>          Heated (optional) and remotely operated</p> <p><b>Safety</b>          ROPS/FOPS certified according to the following standards: ISO3471, ISO13459, ISO3449</p>
<p><b>HYDRAULIC SYSTEM</b>  <b>Hydrostatic Drive System</b>          Electro-hydraulic pump control with variable displacement hydraulic motors. Closed loop system</p> <p><b>Wheel Drive System</b>          Double reduction planetary track drive</p> <p><b>Service Brake</b>          Hydrostatic brake</p>	<p><b>TRACK</b>  <b>Track Type</b>          Rubber tracks with steel inserts</p> <p><b>Tensioning System</b>          Manually adjusted grease cylinder plus mechanical spring</p>	<p><b>LOAD BODIES</b>  <b>Standard</b>          Load body with tailgate</p> <p><b>Standard Body Capacity (SAE 2:1)</b>          6.9 yd<sup>3</sup> (5.25 m<sup>3</sup>)</p> <p><b>Option</b>          Tipping flat deck (which can be bolted down)</p>	<p><b>VEHICLE PERFORMANCE</b>  <b>Speed</b>          8.7 mph (14 km/h)</p> <p><b>Gradient (laden)</b>          55% (29 degrees)</p>
<p><b>DUMPING SYSTEM</b>  <b>Configuration</b>          Two double-acting, single stage, dump cylinders</p> <p><b>Flow Rate</b>          24 US gal (92 liters) per minute</p> <p><b>Raise Time</b>          12 seconds</p> <p><b>Lower Time</b>          12 seconds</p>	<p><b>WALKING BEAM ARRANGEMENT</b>          Two terrain-response compound walking beams per side which, maximize the ground contact area, minimize ground pressure, reduce roller to track pressure and decrease the potential for de-tracking</p>	<p><b>ELECTRICAL SYSTEM</b>  <b>Voltage</b>          24 V</p> <p><b>Battery Type</b>          Two AGM (Absorption Glass Mat) type</p> <p><b>Battery Capacity</b>          2 X 75 Ah</p> <p><b>Alternator Rating</b>          70 Amp</p> <p><b>Headlights</b>          LED Hella Valuefit is fitted standard</p> <p><b>Reverse Camera</b>          Standard</p> <p><b>Extra Lighting Option</b>          Optional LED bar light mounted to top of cab</p>	<p><b>VEHICLE MASS (STANDARD CONFIGURATION)</b>  <b>Unladen</b>          30 777 lb (13 960 kg)</p> <p><b>Laden</b>          55 027 lb (24 960 kg)</p> <p><b>Payload</b>          24 251 lb (11 000 kg)</p>
			<p><b>UNLADEN GROUND PRESSURE</b>  <b>6" Sinkage method</b>          2.72 psi (0.19 kg/cm<sup>2</sup>)</p> <p><b>Hard Ground method</b>          4.72 psi (0.33 kg/cm<sup>2</sup>)</p>

## Dimensions





All dimensions are shown in feet and inches unless otherwise stated between brackets. Under our policy of continuous improvement we reserve the right to change technical data and design without prior notice. Photographs featured in this brochure may include optional equipment.

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