

Telehandlers



| | TH62 | TH63 | TH82 | TH83 | TH103 |
|-----------------------|---------|---------|---------|-----------|-----------|
| Rated capacity | 3000 kg | 3000 kg | 4000 kg | 4000 kg | 5000 kg |
| Maximum lift height | 7.6 m | 12.5 m | 7.6 m | 12.5 m | 13.5 m |
| Maximum forward reach | 4.1 m | 8.1 m | 4.1 m | 8.1 m | 8.7 m |
| Operating weight | 6680 kg | 8900 kg | 7640 kg | 10 130 kg | 12 500 kg |

Caterpillar® Telehandlers

Outstanding reliability and versatility for maximum performance.

Rugged construction

- Designed and built for long life in tough applications
- Heavy-duty boom for demanding applications
- Cat exclusive, high-pressure XT-3 hose
- O-ring face seal fittings
- Enclosed oil-disc brakes seal out contamination for increased service life
- Operator station provides falling object and rollover protection (FOPS/ROPS)

Proven power train

- Powerful Caterpillar 3054 T turbocharged diesel engine
- 4-speed full Power-Shift transmission for responsive performance
- Full-time all-wheel drive (AWD)
- Planetary drive axles
- Front axle differential lock
- High ground clearance to keep machine moving in poor underfoot conditions
- All mechanical drive

Excellent visibility

- Low boom position provides operator with excellent all-around visibility, particularly to the right and rear of the machine
 - Close fitting fenders and profiled engine cover further enhance visibility
- pg. 4**

Cat® Telehandlers are reliable, durable and backed with unparalleled product support so you can depend on them to help keep your jobs on schedule.



Efficient operator station

- Power brakes and power steering increase operator efficiency
- Tilt steering column for operator comfort
- Fully adjustable suspension seat with retractable seat belt
- Isolation-mounts reduce vibration and noise
- Low effort single joystick – hydraulic control

pg. 6

Maneuverability

- Three steering modes
- Tight turning radius
- Compact dimensions allow Cat Telehandlers to operate effectively in crowded work areas
- Single, double-acting steering cylinders protected above the axles
- Oscillating rear axle with differential lock on front axle. Allows travel across rough job sites

Versatility

- Hydraulic Quick Coupler allows work tools to be changed quickly and easily
- Standard auxiliary hydraulics allows the use of hydraulically-activated work tools
- Ample boom head rotation for superior loader-like performance
- A range of work tools

pg. 8



Excellent Visibility

Increased visibility means greater operator confidence and productivity.



Low Boom Design

The machine's low profile design allows for loads to be carried with the boom in a low position. Carrying loads in this position improves visibility to the front and right side of the machine.

Low boom design provides unobstructed visibility when in the load carry position. For maximum visibility, load must be carried as low as possible.

Flexible, close-fitting fenders resist damage, while protecting the operator and machine components from jobsite debris. Fenders move with the wheels, allowing the operator to easily determine wheel direction.

The carefully profiled engine hood enhances visibility and allows for easy access to the engine compartment.

Panoramic View

The ergonomically designed operator station provides excellent all-around visibility.

The adjustable suspension seat accommodates a wide range of operators, allowing optimal adjustment in the settings.



Advanced Hydraulic System

Precise, responsive boom control increases productivity.

Outstanding load control

The Cat Telehandler's load sensing hydraulic system provides smooth power on demand, allowing the operator to efficiently place loads.

Axial-piston hydraulic pump

The hydraulic pump automatically adjusts to meet the constantly changing requirements for optimum performance and fuel efficiency. The pump has been sized for maximum productivity.

Compensated control valve

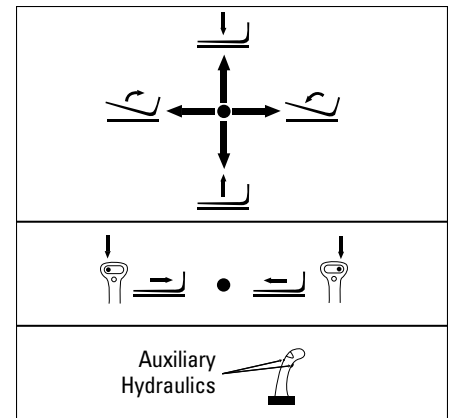
The pressure and flow compensated control valve provides load independent flow distribution for exceptional control, modulation and multi-function capability.



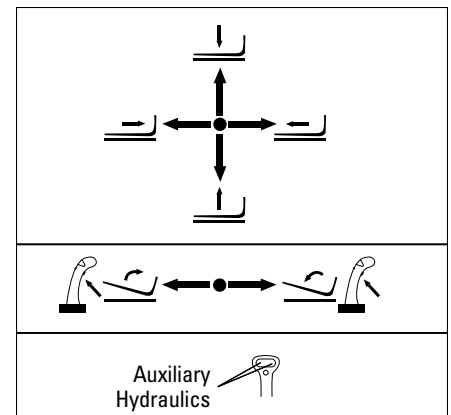
Single, multi-function joystick

All boom and auxiliary functions are controlled with a single, smooth operating ergonomic joystick.

The pilot-operated joystick allows remote location of the main hydraulic control valve and other hydraulic components. This reduces operator fatigue, exposure to noise, vibration and excess heat.



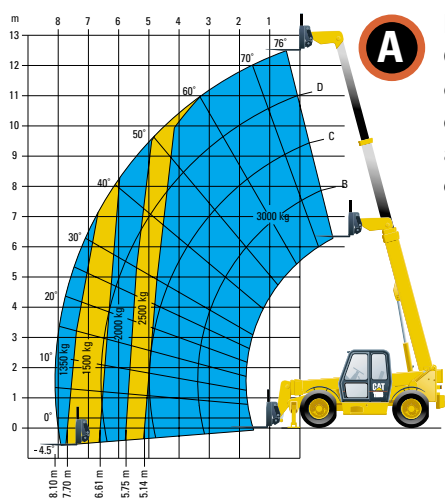
Controls, Bucket Configuration



Controls, Fork Configuration

Operator Station

Designed for comfort and ease of operation



A

Load Charts

Conveniently located in front of the operator. Load charts define the operating range and weight in which a load can be lifted and placed.



B

Powershift Transmission

Standard on all machines. The twist grip control allows operators to easily select machine direction and transmission speed.



Operation and Maintenance Manual

This manual, along with other machine information is located behind the seat in a weather resistant storage case.



Suspension Seat

Ergonomically designed for comfort in hardworking environments. The fully adjustable suspension seat is also designed to accommodate various operator requirements. (Optional cloth seat shown).



Frame Leveling

The three position, frame leveling switch is used to level the machine when on uneven surfaces.

The machine allows a maximum tilt of 10° to either side.



Instrument Cluster

Gauges are designed to help operators monitor machine operating conditions. The gauge cluster includes an Hour meter, Transmission and Coolant temperature gauges, and Fuel Level indicator.



Joystick Control

All boom functions, including auxiliary hydraulic supply, are controlled with a smooth operating ergonomic joystick.

Versatility

Providing solutions through a variety of work tools.



Versatility

Cat Telehandlers are designed to perform in a wide range of applications. Features such as a hydraulic quick coupler, low boom profile and ample work tool rotation make it an extremely versatile machine. The hydraulic quick coupler allows operators to effortlessly couple the right work for the job. The ample work tool rotation enables the machine to shine in bucket applications.

Hydraulic Quick Coupler

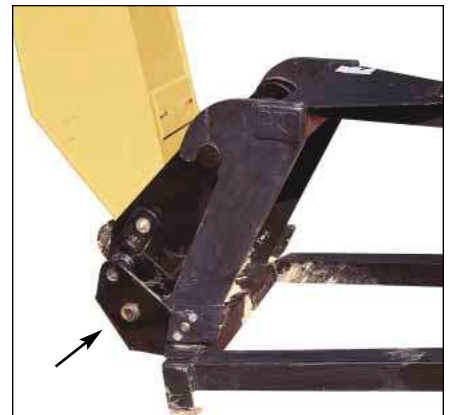
All Caterpillar Telehandlers use a hydraulic quick coupler for fastening work tools to the front of the boom. This easy to use attachment point allows use of a wide range of work tools, taking advantage of the standard auxiliary hydraulic supply and the ample boom head rotation. Work tools hook over the top of the coupler and are secured by two hydraulically engaged pins at the bottom.



Line up quick coupler with tool



Tilt coupler back



Engage pins

Work Tools

Choose from a wide variety of tools designed specifically for Telehandlers.

Work Tools

A wide range of work tools are available to meet most job site applications. Lift and place operations are easily accomplished with a wide variety of carriages and forks. An assortment of buckets and hydraulically assisted work tools are also available.

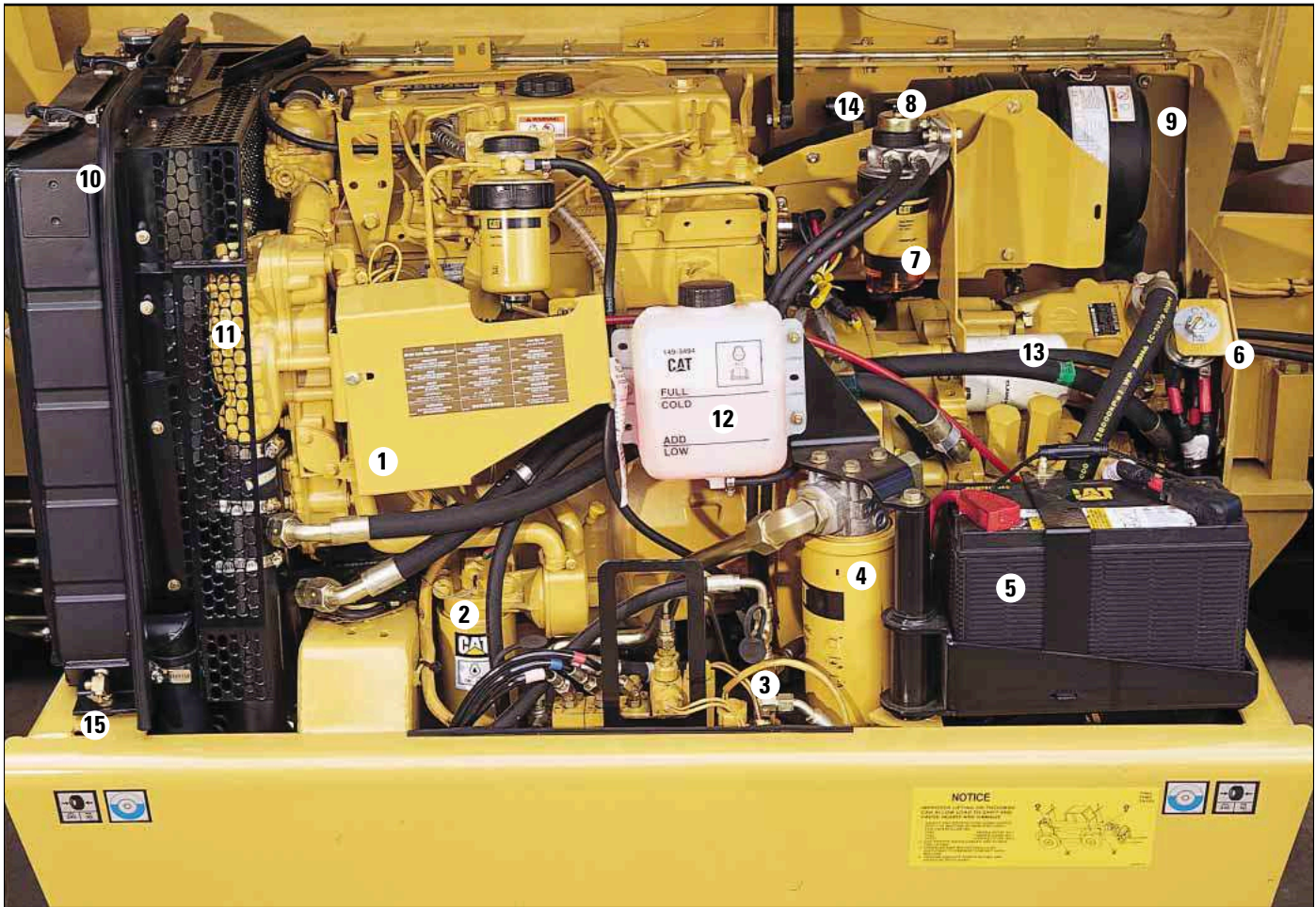
Caterpillar Telehandler Work Tools expand the versatility of the machine. Built for performance and durability, these work tools deliver high productivity, long life and excellent value:

- General Purpose Bucket (1.0 m³)
- Grapple Bucket (0.85 m³)
- Light Material Bucket (2.0, 2.5 and 3.0 m³)
- Material Handling Bucket (1.5 m³)
- Multi Purpose Bucket (1.0 m³)
- Fixed Carriages
- Rotate Carriages
- Block Forks
- Pallet Forks
- Lifting Hook
- Self Tipping Hopper
- Truss Boom
- Bale Handler
- Manure Forks
- Manure Forks and Grab
- Manure Forks, Grab and push-off device
- Access Platform



Serviceability

Improved access and less maintenance requirements add up to unparalleled ease of service.



Serviceability

Cost of operation starts with ease of service. All Cat Telehandler service points are readily accessible and major components are easy to reach at ground level due to overall machine design.

- | | |
|--|---|
| 1 Protected fuel pump guard | 10 Radiator chaff guard eliminates debris |
| 2 Engine oil filter | 11 Radiator fan guard |
| 3 Hydraulic test ports | 12 Cooling system expansion tank |
| 4 5 micron hydraulic filter | 13 Transmission filter |
| 5 500 CCA battery (dual battery option) | 14 Air filter restriction indicator |
| 6 Optional battery disconnect switch | 15 Radiator drain plug |
| 7 Water/Fuel Separator | |
| 8 Fuel primer | |
| 9 Air filter | |

Complete Customer Support

Cat dealer services help you operate longer with lower costs.



Customer support

Your Cat dealer offers a wide range of services that can be set up under a customer-support agreement when you purchase equipment. Your dealer can help choose a plan that can cover everything from machine and Work Tool selection to replacement to help you get the best return on your investment.

Selection

Make detailed comparisons of the machines you are considering before you buy. A Cat dealer can give precise answers to questions like – which machine is best suited for my needs? What is the cost of preventive maintenance? What is the true cost of lost production?

Purchase

Look beyond initial purchase price. Consider the financing options available through Cat Financial, as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

Operation

Improving operating techniques can boost profits. Caterpillar dealers have training materials and other ideas to help you increase productivity.

Maintenance

More and more equipment users are planning for effective maintenance before purchasing equipment. Choose from your dealer's wide range of maintenance services at the time you receive your machine. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling and Technical Analysis help you avoid unscheduled repairs.

Replacement

Repair, rebuild or replace? Caterpillar dealers help evaluate the cost involved.

Product support

Most parts are in stock at Caterpillar dealers. Cat dealers utilize a worldwide computer network to find in-stock parts, minimizing machine downtime.

Engine

Caterpillar four-stroke cycle, four cylinder 3054 T turbocharged diesel engine.

| Ratings at 2200 rpm | kW | hp |
|---------------------|----|-----|
| Gross power | 79 | 106 |
| Net power | | |
| EEC 80/1269 | 75 | 101 |
| ISO 9248 | 75 | 101 |

| Ratings at 1600 rpm | |
|---------------------|--------|
| Peak Torque | 375 Nm |

| Dimensions | |
|--------------|---------|
| Bore | 100 mm |
| Stroke | 127 mm |
| Displacement | 4 liter |

Power rating conditions

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator

Emissions

The Caterpillar 3054 T meets current European emission regulations.

Features

- Direct-injection, rotary fuel pump with individual, adjustment-free injection valves
- Cast-iron block with internally stiffened deep skirt design
- Replaceable valve guides and seats

- Large-diameter, hardened chrome-molybdenum steel crankshaft
- Three-ring, controlled-expansion pistons lubricated from oil jets
- Helical steel front gear train
- Fuel priming pump and fuel/water separator are standard
- Gear-driven water pump
- 12-volt negative ground, 950 CCA maintenance-free battery and 55-amp alternator
- Enclosed, positive-engagement starter
- Thermal starting aid
- Dual-element, two-stage air cleaner
- Filter restriction indicator
- Vertical exhaust

Hydraulic System

| | TH62, TH63, TH82, TH83 | TH103 |
|-------------------------------|------------------------|------------------|
| Max system pressure | 250 bar | 250 bar |
| Max pump flow | 105 l/min | 142 l/min |
| Max pressure | 250 bar | 250 bar |
| Pump standby pressure | 31.3 bar | 20.7 bar |
| Steering relief pressure | 175 bar | 175 bar |
| Brake servo pressure | 25-28 bar | 25-28 bar |
| Auxiliary hydraulic supply at | 124 bar/71 l/min | 124 bar/71 l/min |

Features

- Pilot-operated joystick boom control
- Load-sensing, variable-displacement axial-piston pump
- Pressure and flow-compensated valves
- Caterpillar XT-3 hoses
- O-ring face seal fittings
- Chrome plated cylinder rods
- Full-flow, 5-micron, spin-on filter
- Single auxiliary hydraulic supply

Instrumentation

Clear, simple to operate and comprehensive instrumentation.

Features

- Gauges for engine coolant temperature, transmission oil temperature and fuel level
- Warning lights for alternator charging and low engine oil pressure
- Indicator lights for steering mode
- Engine hour meter

Safety Standards Met

- Overhead guard certified to provide falling object protection per ISO 3449:1992 Performance Criteria for FOPS on Earthmoving Machines
- Cab certified to provide rollover protection per ISO 3471-1:1986 Performance Criteria for Rollover Structures for Construction, Earthmoving and Mining Machines

Operator Station

Features

- Excellent all-around visibility
- Isolation-mounted to frame for reduced vibration and increased ride comfort
- Full suspension seat with armrest
- Tilt steering column
- Low step with anti-slip edge and two hand grab bars for easy three point entry
- Conveniently located, low-effort controls
- Rear-view mirror
- Retractable seat belt

Axles

Outboard planetary drive axles.

| | TH62, TH63, TH82, TH83 | TH103 |
|-------------------------|------------------------|-------|
| Crown and pinion ratio | 4.4 | 3.6 |
| Hub reduction ratio | 5.3 | 6.2 |
| Overall reduction ratio | 23.1 | 22.6 |

Features

- Oscillating rear axle
- Front axle differential lock
- Compact, four-pinion differentials
- Single, double-acting steer cylinder mounted above each axle for protection
- Full-time, all-wheel drive

Brakes

Enclosed, oil-disc brakes in both axles.

Features

- Power-assisted, foot-operated service brakes
- Switchable transmission disconnect for foot brake operation
- Hand operated modulating park brake operates on front axle brake discs
- Transmission interlock on parking brake

Service Refill Capacities

| | Liter |
|-------------------------------|-------|
| TH62, TH63, TH82, TH83 | |
| Fuel tank (90% fill) | 120 |
| Hydraulic tank | 150 |
| TH103 | |
| Fuel tank (90% fill) | 144 |
| Hydraulic tank | 180 |

Transmission

Full Power Shift transmission with four forward speeds.

| | TH62 km/h | TH63 km/h | TH82 km/h | TH83 km/h | TH103 km/h |
|---------|--------------|--------------|--------------|--------------|---------------|
| Forward | | | | | |
| 1 | 6 | 6 | 6 | 6 | 4 |
| 2 | 11 | 11 | 11 | 11 | 9 |
| 3 | 22 | 22 | 22 | 22 | 19 |
| 4 | 32 | 32 | 32 | 32 | 29 |
| Reverse | | | | | |
| 1 | 6 | 6 | 6 | 6 | 4 |
| 2 | 11 | 11 | 11 | 11 | 9 |
| 3 | 22 | 22 | 22 | 22 | 19 |

Features

- Compact countershaft-type design
- Torque converter 280 mm with 2.2:1 stall ratio
- Single column-mounted, twist-grip control for selection of speed and direction
- Modulated control for smooth gear shifts
- High-output, reverse alarm standard
- Neutral start

Boom Performance

All times are approximate

| | TH62 | TH63 | TH82 | TH83 | TH103 |
|-------------------------------|------|------|------|------|-------|
| Boom up (sec.) | 7 | 13 | 10 | 13 | 16 |
| Boom down (sec.) | 5 | 10 | 7 | 10 | 13 |
| Tele out (sec.) | 9 | 15 | 8 | 15 | 12 |
| Tele in (sec.) | 7 | 12 | 9 | 12 | 12 |
| Combined – up and out (sec.) | 16 | 28 | 19 | 28 | 29 |
| Combined – down and in (sec.) | 8 | 16 | 11 | 16 | 15 |
| Coupler fore/aft tilt | 138° | 140° | 140° | 140° | 140° |

Features

- Non-metallic, adjustable, long-life boom wear pads
- Lock valves on all load-holding cylinders
- Selected fore/aft coupler tilt maintained automatically

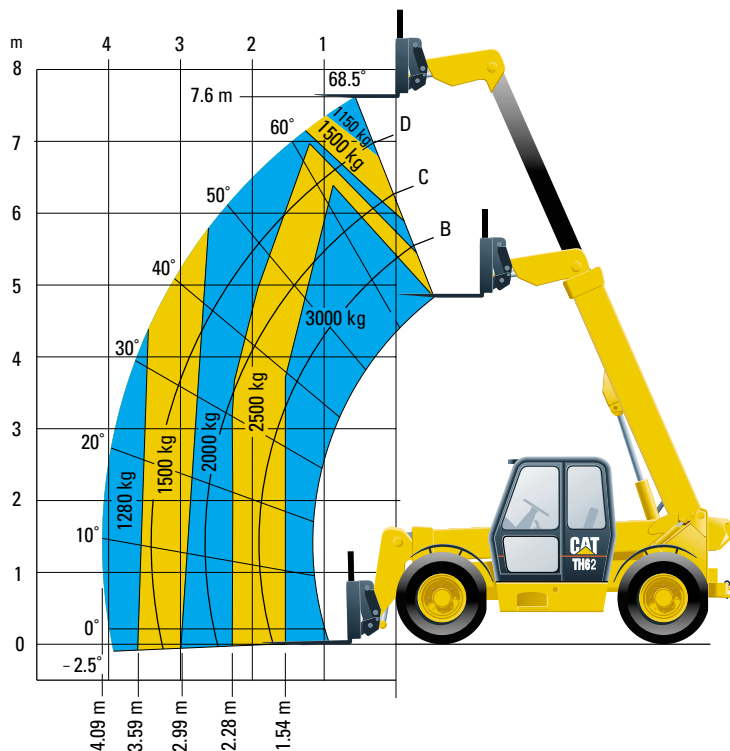
Wheels and Tires

Four equal-size wheels and tires.

| | TH62 | TH63 | TH82 |
|-----------------------|----------------|-------------------------------|-------------------------------|
| Standard | *15.5/80-10 PR | 15.5-25 12PR 15.5 R25 XTLA | 15.5-25 12PR 15.5 R25 XTLA |
| Option | *17.5 LR24 | 15.5 R25 XHA | 15.5 R25 XHA |
| | 13.00-24 12PR | *15.5/80-24 12PR | 13.00-24 12PR |
| | 15.5-25 12PR | | *15.5/80-24 12PR |
| | 15.5 R25 XTLA | | *17.5 LR24 |
| | 15.5 R25 XHA | | *19.5 R24 |
| | | TH83 | TH103 |
| Standard | | 14.0-24 12PR | 14.00-24 16PR |
| Optional Construction | | 15.5 R25 XHA | 17.5 R25 |

* Agricultural Tread Pattern

TH62 Load Chart

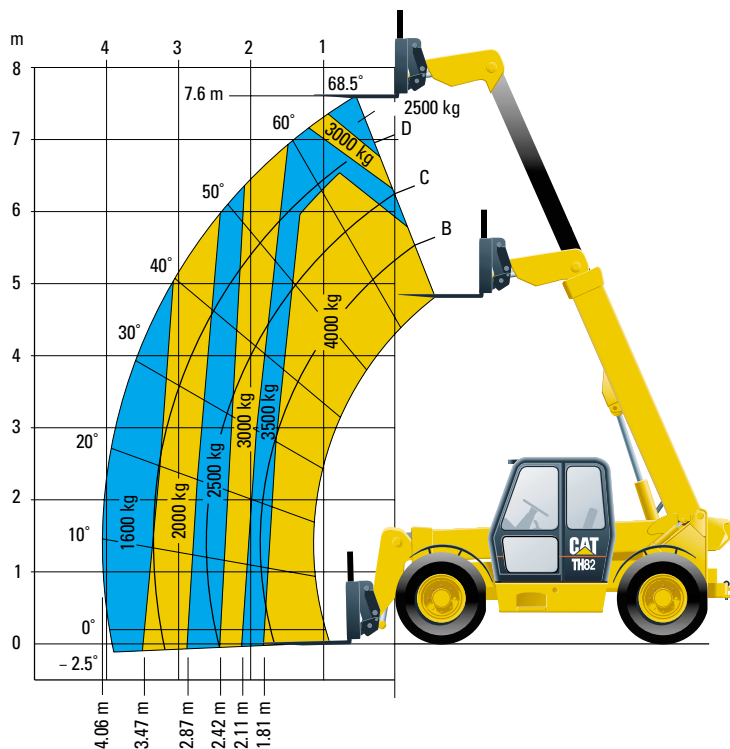


Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 3000 kg |
| Maximum Lift Height | 7.6 m |
| Capacity at Maximum Lift Height | 1150 kg |
| Maximum Forward Reach | 4.1 m |
| Capacity at Maximum Reach | 1280 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools.

TH82 Load Chart

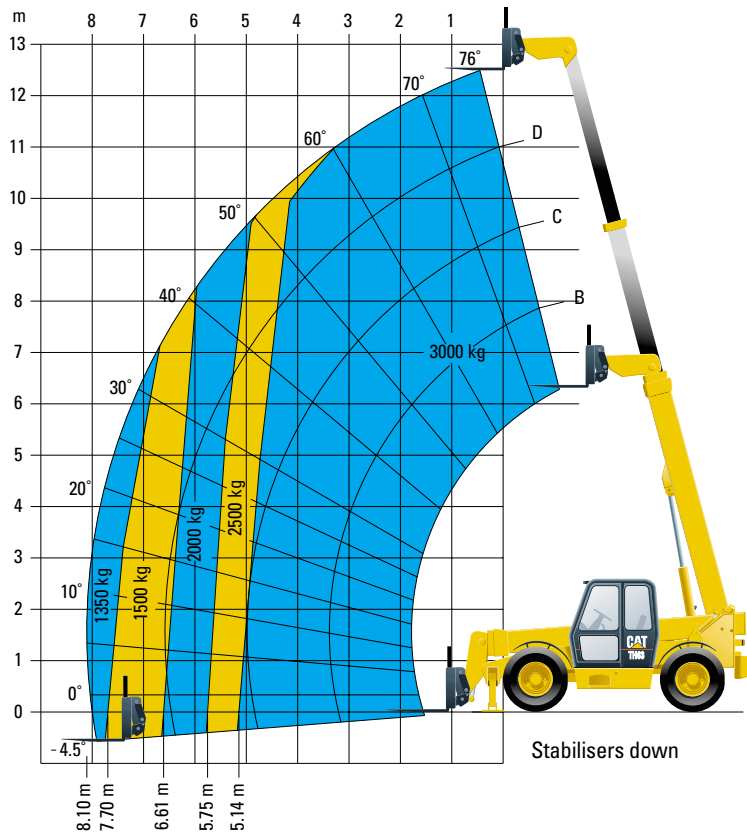


Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 4000 kg |
| Maximum Lift Height | 7.6 m |
| Capacity at Maximum Lift Height | 2500 kg |
| Maximum Forward Reach | 4.1 m |
| Capacity at Maximum Reach | 1600 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools.

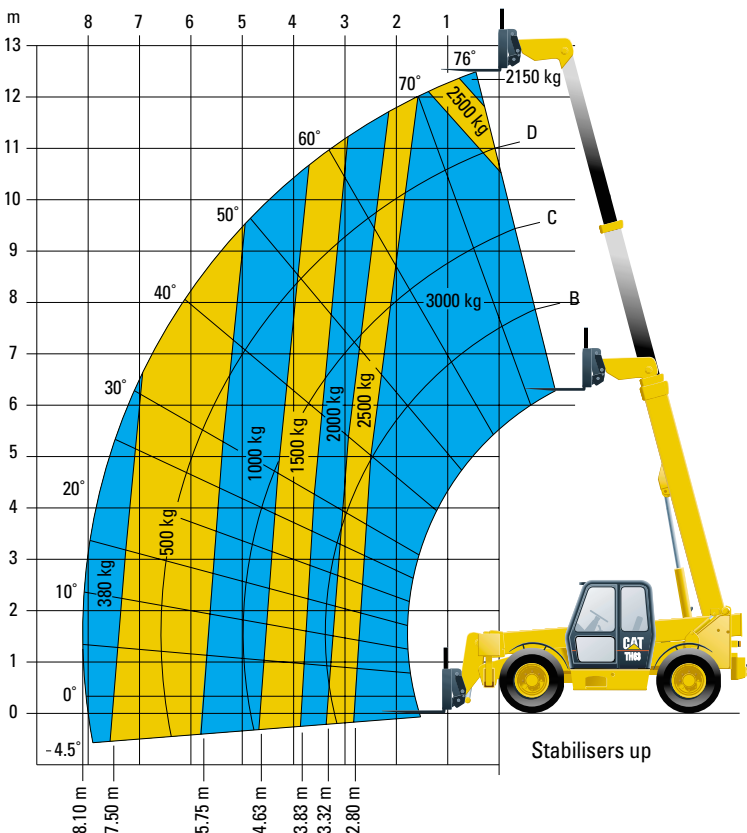
TH63 Load Charts



Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 3000 kg |
| Maximum Lift Height | 12.5 m |
| Capacity at Maximum Lift Height | 3000 kg |
| Maximum Forward Reach | 8.1 m |
| Capacity at Maximum Reach | 1350 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools. Stabilisers are optional on the TH63.

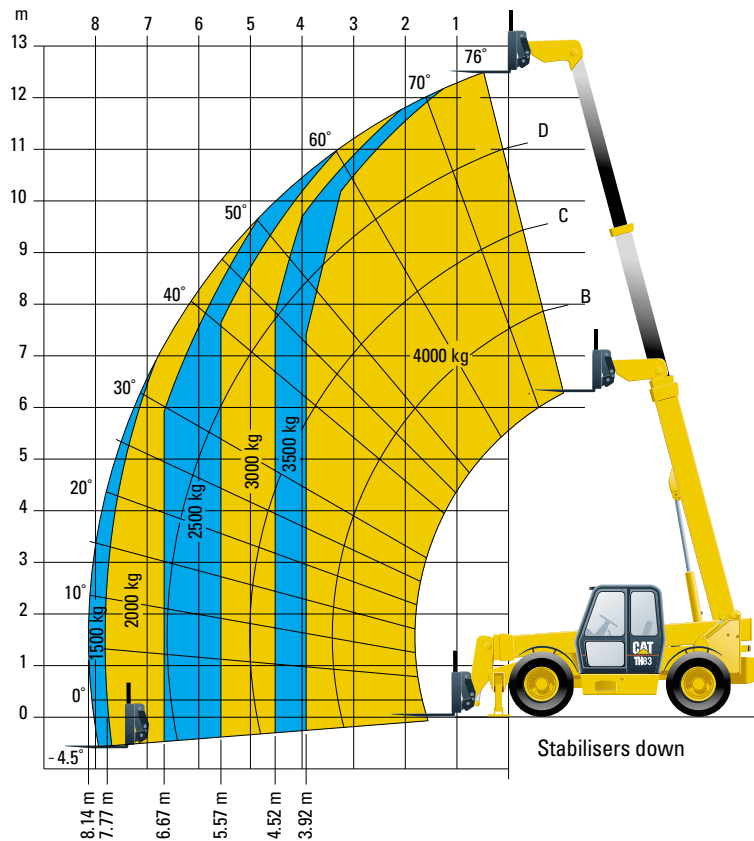


Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 3000 kg |
| Maximum Lift Height | 12.5 m |
| Capacity at Maximum Lift Height | 2150 kg |
| Maximum Forward Reach | 8.1 m |
| Capacity at Maximum Reach | 380 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools. Stabilisers are optional on the TH63.

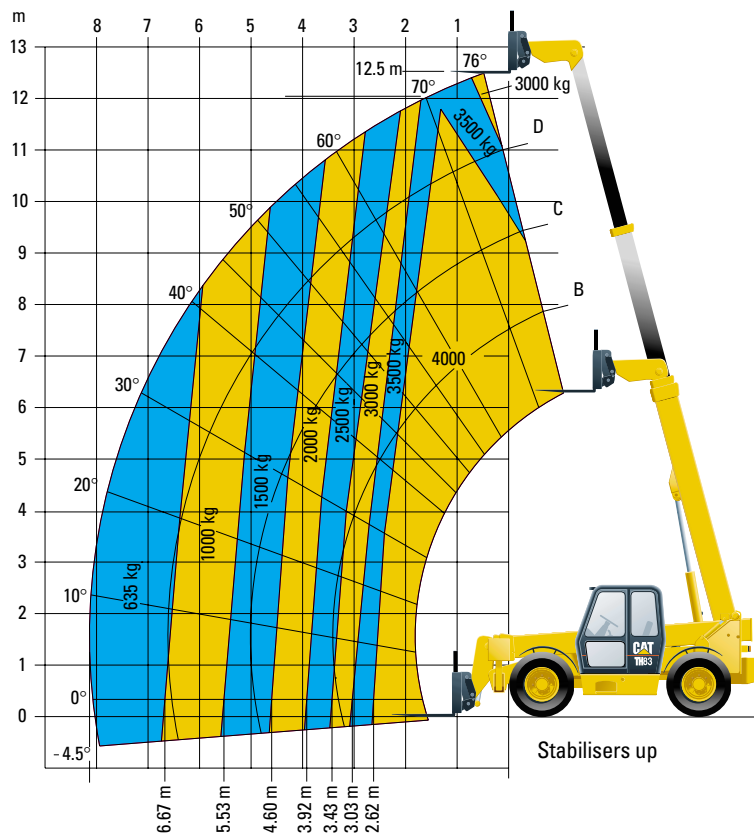
TH83 Load Charts



Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 4000 kg |
| Maximum Lift Height | 12.5 m |
| Capacity at Maximum Lift Height | 4000 kg |
| Maximum Forward Reach | 8.1 m |
| Capacity at Maximum Reach | 1500 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools. Stabilisers are optional on the TH83.

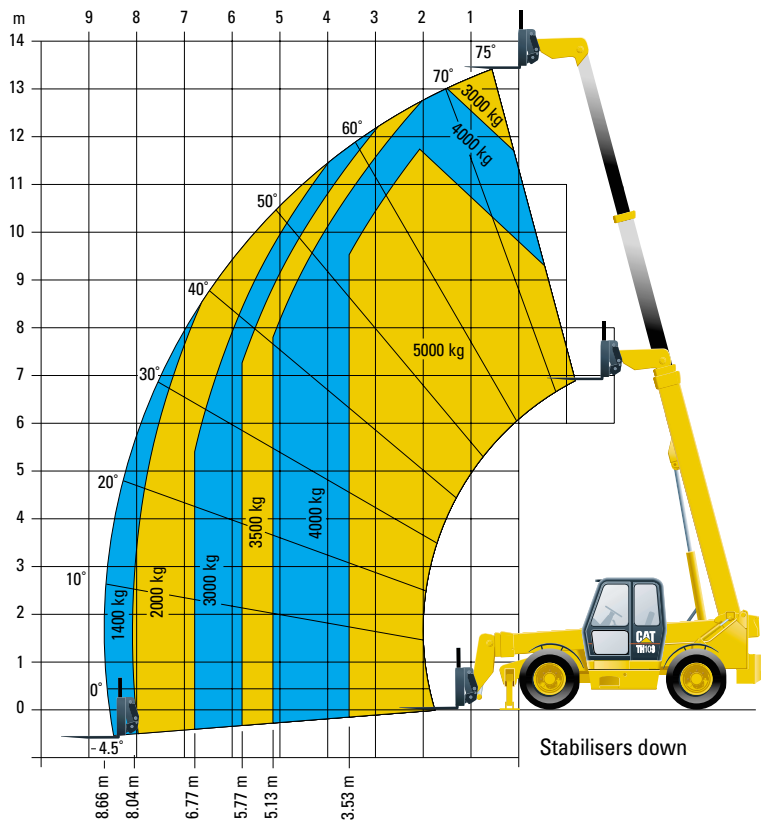


Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 4000 kg |
| Maximum Lift Height | 12.5 m |
| Capacity at Maximum Lift Height | 2160 kg |
| Maximum Forward Reach | 8.1 m |
| Capacity at Maximum Reach | 700 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools. Stabilisers are optional on the TH83.

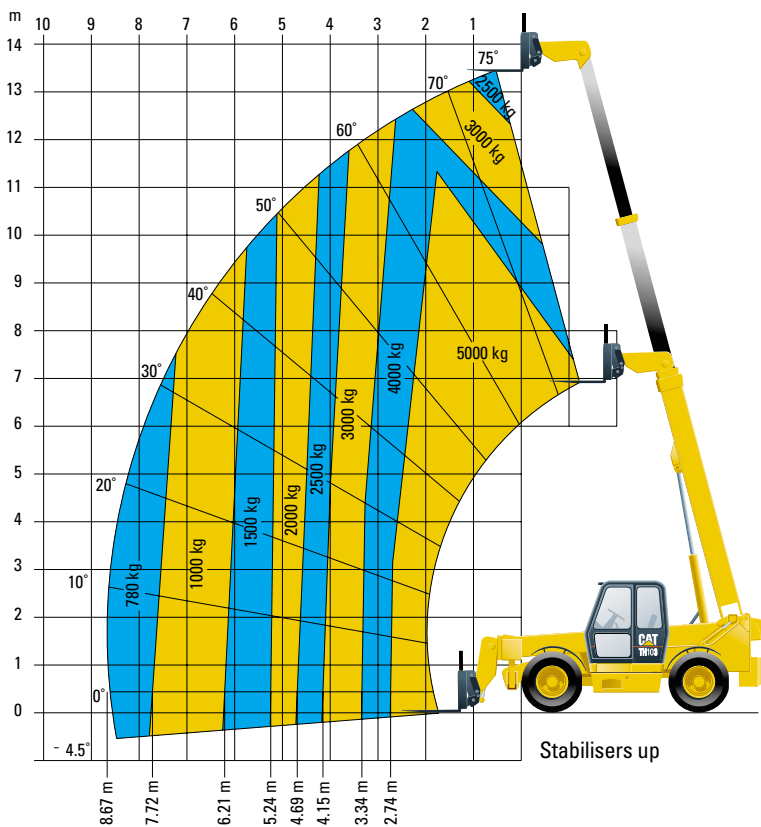
TH103 Load Charts



Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 5000 kg |
| Maximum Lift Height | 13.5 m |
| Capacity at Maximum Lift Height | 3000 kg |
| Maximum Forward Reach | 8.7 m |
| Capacity at Maximum Reach | 1400 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools. Stabilisers are optional on the TH103.

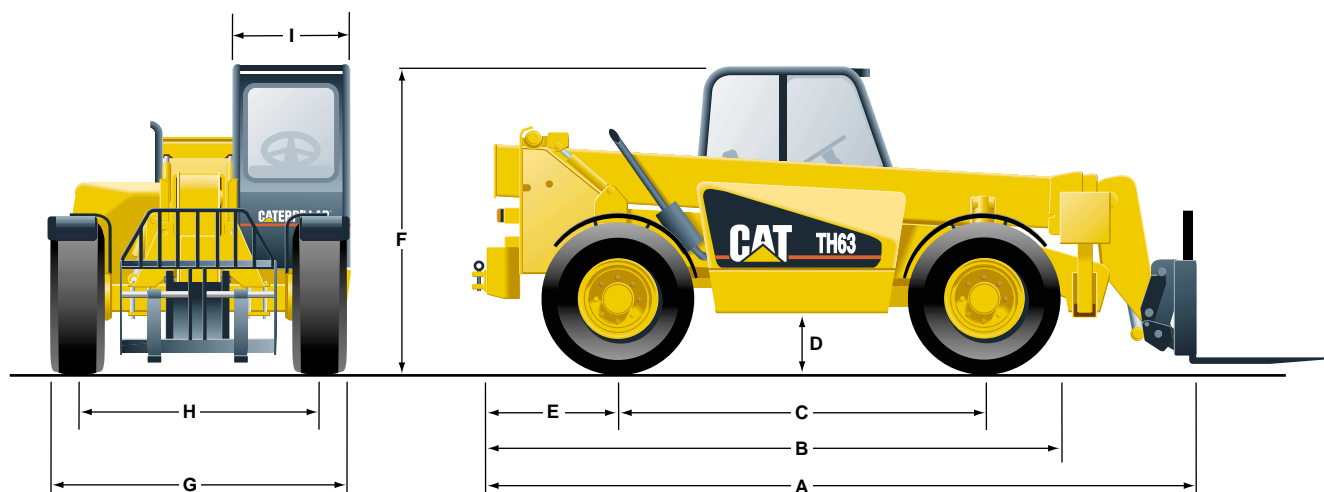


Performance

| | |
|---------------------------------|---------|
| Rated Load Capacity | 5000 kg |
| Maximum Lift Height | 13.5 m |
| Capacity at Maximum Lift Height | 2500 kg |
| Maximum Forward Reach | 8.7 m |
| Capacity at Maximum Reach | 780 kg |

Specifications shown are for machines equipped with a 1.22 m fixed carriage. Performance will vary with different work tools. Stabilisers are optional on the TH103.

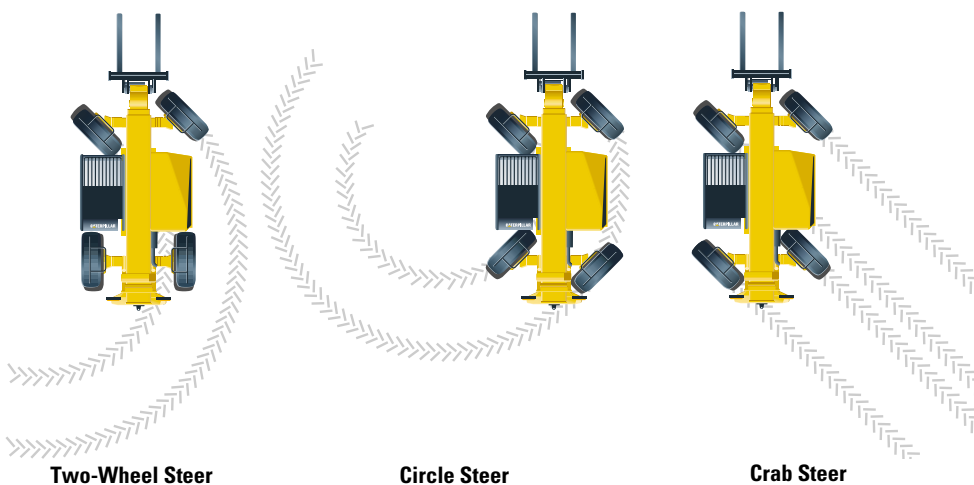
Dimensions



| | TH62 | TH63 | TH82 | TH83 | TH103 |
|--------------------------------|---------|---------|---------|-----------|-----------|
| A Length to Carriage | 4900 mm | 5835 mm | 4915 mm | 5835 mm | 6447 mm |
| B Length to Front Wheel | 4315 mm | 4685 mm | 4375 mm | 4660 mm | 5153 mm |
| C Wheel base | 2900 mm | 2975 mm | 2975 mm | 2975 mm | 3175 mm |
| D Ground Clearance | 445 mm | 435 mm | 435 mm | 495 mm | 495 mm |
| E Rear Overhang | 775 mm | 1085 mm | 770 mm | 1060 mm | 1310 mm |
| F Height | 2437 mm | 2425 mm | 2425 mm | 2490 mm | 2675 mm |
| G Width | 2230 mm | 2440 mm | 2440 mm | 2440 mm | 2440 mm |
| H Track | 1847 mm | 2040 mm | 2040 mm | 2095 mm | 2074 mm |
| I Cab Width | 900 mm | 955 mm | 955 mm | 955 mm | 955 mm |
| Weight Empty | 6680 kg | 8900 kg | 7640 kg | 10 130 kg | 12 500 kg |

Steering

| | TH62 | TH63 | TH82 | TH83 | TH103 |
|--|-------|-------|-------|-------|-------|
| Minimum Turning Circle Radius over tires | 3.7 m | 3.8 m | 3.8 m | 3.8 m | 3.9 m |



Features

- Three steering modes
 - Circle steer
 - Two-wheel steer
 - Crab steer
- Tight outside turning radius
- Dash-mounted switch for selecting steering modes
- Lighted steering mode indicator on dash

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

| | | |
|---|--|--|
| Air cleaner, dry-type (dual element with restriction indicator) | Filters for engine oil, transmission oil, hydraulic oil and fuel | Mirror, rear-view, RH side |
| Alarm (back-up), audible | Floor mat | Paint, high-gloss polyurethane |
| All-wheel drive, full-time | Horn | Pump, axial-piston, load-sensing |
| Alternator, 55-amp, 12-volt | Hydraulic Quick Coupler | Seat, suspension, vinyl cover with armrest and retractable seat belt |
| Antifreeze | Instrumentation: | Steering, power assisted, three steer modes |
| Auxiliary hydraulic supply at boom head | Alternator warning light | Switches, dash illuminated |
| Battery, maintenance-free, 12-volt, 950 CCA | Engine coolant temperature gauge | Thermostart starting aid |
| Brakes, power-assisted, oil-immersed discs, both axles | Low pressure indicator light | Tires (see pg. 13) |
| Canopy, FOPS/ROPS | Fuel level gauge | Torque converter |
| Counterweight (rear) | High beam indicator light | Transmission disconnect |
| Differential lock (front axle) | Hour meter | Transmission, full Power Shift, four forward, three reverse |
| Engine, Caterpillar 3054 T | Low oil pressure warning light | Transmission oil cooler |
| Engine cover, hinged, lockable | Steering mode indicator light | Transport tie-down points |
| Fenders, four | Transmission oil temperature gauge | Water separator (fuel system) |
| | Joystick control lever, pilot-operated | |
| | Key start/stop, with auxiliary position and anti-restart | |

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

| | | |
|---|--|--|
| Cab (FOPS/ROPS), fully enclosed, with two-speed windshield wiper/washer, heater/defroster with two-speed fan, laminated windshield and roof glass | Radio, stereo with cassette | A wide range of optional work tools are available. (see pg. 9) |
| Sliding rear window | Road lighting package | |
| Tinted glass | Roof wiper/washer | |
| Floodlights, two on boom | Rotating amber beacon with magnetic mounting | |
| Grill, front of cab | Seat, suspension, cloth cover with armrest and retractable seat belt | |
| Mirror, left hand (additional) | Tires (see page 13) | |
| | Hydraulic tow hitch on TH62 | |
| | Vandalism protection package | |

Caterpillar Telehandlers

HEHB2612 (11/2000) ro

Materials and specifications are subject to change without notice.
Featured machines in photos may include additional equipment.
See your Caterpillar dealer for available options.

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