TH460B
Telehandler

Engine
- Model: Cat® 3054E
- Gross Power: 74.5 kW (99.9 hp)

Weights
- Operating Weight: 11 330 kg (24,978 lb)

Operating Specifications
- Rated Load Capacity: 4100 kg (9,000 lb)
- Maximum Lift Height: 13 500 mm (44.3 ft)
Operator Station
✔ Operators will feel relaxed and comfortable in the spacious, ergonomically designed cab. Considerable attention has been paid to control layout, making this cab an industry leader. pg. 4

Ease of Operation
✔ Ease of operation was paramount in the design of the new TH460B. The single joystick with its intuitive, modulated, hydraulic functions and the new Cat electronic machine information display are designed to maximize operator efficiency. pg. 5

Performance
✔ In its size class, the TH460B combines productivity, maneuverability and responsiveness to deliver smooth and stable performance on the job site. pg. 6

Serviceability and Customer Support
✔ The lowest operating costs in the industry — setting new standards in serviceability. Caterpillar Dealer Services enable you to operate longer with lower costs, helped by significantly extended service intervals. pg. 10

The TH460B is a highly versatile machine, designed to deliver maximum performance with traditional Cat reliability, durability and productivity in the toughest working conditions.
Power Train
✔ The TH460B is designed to perform in the toughest conditions. With its Cat 3054E engine, that is U.S. EPA Tier 2 compliant, and purpose designed Cat transmission and axles, you can depend on the TH460B to keep your job on schedule. pg. 7

Versatility
✔ The TH460B is a very versatile machine. With its optional hydraulic quick coupler and extensive range of work tools, you can simply and efficiently get the job done. pg. 8

Cost of Ownership
✔ Extended service intervals and the reduction in service parts give Cat the lowest operating costs in the industry. pg. 9

 ✔ New Feature
Operator Station

The operator station provides comfort and protection with excellent job site visibility and convenient, logical controls.

Intuitive Control Layout. All day operator comfort and efficiency is ensured through our simple, logical control layout.

Easy Access. Cab entry and exit is easy due to the well placed handholds and step.

Operator Protection. The machine provides full operator security with ROPS/FOPS protection.

Seat. A variety of seats are available, tailored to meet the requirements of the operator and applications.


Excellent Visibility. The B-Series cab has a superb viewing area due to the use of advanced virtual design techniques.

Joystick. The joystick is capable of three simultaneous boom functions making machine operation easy. All functions are fully modulated.
Ease of Operation

Ease of operation was paramount in the design of the new TH460B. The single joystick with its intuitive, modulated, hydraulic functions and the new Cat electronic machine information display are designed to maximize operator efficiency.

Joystick Control. The joystick allows three simultaneous boom functions and incorporates a unique slider switch. Two joystick control patterns are available to meet application requirements. The joystick also operates the auxiliary hydraulic function and allows the option of a second auxiliary service for the use of work tools that require more than one hydraulic service.

Hydraulic System. The Cat Electro Hydraulic system allows all three boom functions to be operated simultaneously and proportionally. This enables precise placing of loads in challenging applications. Auxiliary hydraulic functions are available on the joystick to allow operators to utilize more complex work tools. A continuous flow auxiliary hydraulic supply is available for operating tools such as pickup brooms that require continuous flow for long periods of time.

Integrated System. The Caterpillar integrated management system allows the engine, transmission and hydraulic systems to operate with maximum efficiency, control and productivity.

Flow Sharing. Three simultaneous hydraulic functions are achieved using a full flow sharing hydraulic valve. A load sensing variable displacement pump allows full hydraulic power even at low revs.
Lift Height. The TH460B can effectively and quickly place bricks, roofing materials and trusses to a maximum height of 44 ft (13.5 m).

Reach. Job site obstacles present challenges demanding a machine to place loads at greater distances — the TH460B delivers.

Maneuverability. The TH460B offers excellent maneuverability due to its tight turning circle and its three different steering modes.

The TH460B has a 48 degree axle turning circle and no rear tail swing, allowing it to work productively and safely in confined areas.

Steering Modes. The TH460B offers three steering modes (two wheel, crab and circle steer) to allow an operator to easily position the machine. Steering modes are selected by a single three position rocker switch. Selected machine configurations eliminate the need for the operator to manually align the wheels when switching between steering modes. Steering sensors automatically actuate the change when the wheels are centered.

Performance
The TH460B delivers high performance to meet your specific job site needs.
**Power Train**

*Caterpillar engines, axles and transmissions give you the quality power train that you expect.*

**High Torque Rise Engine.** The Cat 3054E Electronic engine is U.S. EPA Tier 2 and EU Stage II compliant. While continuing to deliver maximum performance it features improved timing, reduced smoke and exceptional service improvements. For improved sound characteristics, a venturi tailpipe has been packaged inside the engine enclosure.

The cooling system has been designed to work in the most challenging conditions.

Electronic engines deliver:
- Improved low idle performance
- Improved fuel consumption
- Improved cold start
- Increased diagnostic and security capability

**Transmission.** The TH460B has a purpose designed Caterpillar four speed forward, three speed reverse powersyncro transmission with powershift controls.

**Axles.** The TH460B is fitted with Caterpillar planetary reduction axles with four wheel braking.

For improved machine performance in difficult conditions, a differential lock is available (front axle).
Versatility

Redefine the traditional role of a telehandler with the Cat TH460B.

Quick Coupler. An IT interface is standard on the B-Series. It is available in both a manual and a hydraulic version. For optimum versatility, machines can be equipped with the hydraulic quick coupler, allowing the operator to quickly and easily change work tools without leaving the cab.

Hydraulic Services. Machines can be equipped with Auxiliary Hydraulic services, allowing the use of hydraulically operated work tools. Two options are available:

- One auxiliary hydraulic service at the boom head
- Continuous hydraulic flow

These auxiliary hydraulic services are available as an option on the B-Series through the Merchandising Arrangement (MA) structure.

Work Tools. A wide range of work tools are available to meet most job site applications.

Caterpillar Telehandler Work Tools extend 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 m³/1.3 yd³)
- Material Handling Bucket (1.5 m³/1.95 yd³)
- Multi Purpose Bucket (1.0 m³/1.3 yd³)
- Grapple Bucket (0.85 m³/1.1 yd³)
- Fixed Carriage
- Rotate Carriage
- Sideshift Carriage
- Pallet Forks
- Block Forks
- Lift Hook
- Truss Boom
- Self-tipping Hopper
- Material Handling Arm

Tow Hitches. A manual rear tow hitch is available as an option for off-highway towing.
Cost of Ownership
The TH460B is specifically designed to lower your owning and operating costs.

Ease of Access. Cost of ownership 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.

Daily Maintenance. Routine daily maintenance is now reduced to checking fluid levels and a walkaround inspection.

Service Intervals. Engine oil, filter changes and routine lubrication are now only required every 500 hours.

Reduced Componentry. The combined hydraulic/transmission oil filter requires changing at 1,000 hours. With the reduction in the number of filters and extended service intervals, owning and operating costs are the lowest in the industry.

Machine Security System. Secure your investment with the Caterpillar Machine Security System (MSS), a programmable key system that provides optimum machine security for both fleet users and single owners.

- MSS disables machine by interacting with the machine’s Electronic Control Modules (ECM)
- Keys fit all existing Cat machines (including machines without MSS)
- Each machine can store up to 50 key identifications
- Each key can be configured to operate a certain range of machines or enable operation for a certain period of time
Serviceability and Customer Support

Caterpillar Dealer Services enable you to operate longer with lower costs, helped by significantly extended service intervals.

Access. All Cat Telehandler service points, including the combined transmission/hydraulic oil filter, are readily accessible and major components are easy to reach at ground level due to the overall machine design.

A cab mounted service point allows access to the fuel fill, hydraulic oil fill, washer bottle, fuse box and cab air filter for daily checks.

Selection. Make detailed comparisons before you buy. What are the job requirements? What production is needed? What is the true cost of lost production? Your Cat Dealer can give you precise answers to these questions.

Purchase. Look at the value that the TH460B Telehandler will offer you. Consider all the flexible financing options your Cat Dealer offers as well as day to day operating costs.

Operation. Improving operating techniques can boost your profits. Your Cat Dealer has training literature and other ideas to help increase your productivity.

Maintenance. Repair options 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? Your Cat Dealer can help you evaluate the cost involved so you can make the right choice.

Product Support. You will find high availability of parts at our dealer parts counter. Cat Dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime.

Additionally, Caterpillar offers a line of genuine remanufactured components which can help lower repair costs.

Easy Financing. Your Cat Dealer can provide a financing package to meet your needs.
### Engine

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Cat 3054E</td>
</tr>
<tr>
<td>Gross Power (kW/HP)</td>
<td>74.5/99.9</td>
</tr>
<tr>
<td>Net Power (kW/HP)</td>
<td>70.8/94.9</td>
</tr>
<tr>
<td>Maximum Torque (N·m/lb ft)</td>
<td>410/303</td>
</tr>
<tr>
<td>Bore (mm)</td>
<td>105</td>
</tr>
<tr>
<td>Stroke (mm)</td>
<td>127</td>
</tr>
<tr>
<td>Displacement (L in³)</td>
<td>4.4/268</td>
</tr>
<tr>
<td>Number Cylinders</td>
<td>4</td>
</tr>
<tr>
<td>Aspiration</td>
<td>Turbocharged</td>
</tr>
<tr>
<td>Engine Manufacturer</td>
<td>Caterpillar</td>
</tr>
</tbody>
</table>

- Engine is U.S. EPA Tier 2 and EU Stage II compliant.
- Maximum net power shown is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Maximum torque shown is at 1400 rpm.

### Weights

<table>
<thead>
<tr>
<th>Weight Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Weight</td>
<td>11 330 kg 24,978 lb</td>
</tr>
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</table>

### Operating Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Load Capacity (kg/lb)</td>
<td>4100/9000</td>
</tr>
<tr>
<td>Maximum Lift Height (mm)</td>
<td>13 500</td>
</tr>
<tr>
<td>Load at Max Height — No Stabilizers (kg/lb)</td>
<td>4086/9000</td>
</tr>
<tr>
<td>Load at Max Height — Stabilizers Down (kg/lb)</td>
<td>4086/9000</td>
</tr>
<tr>
<td>Maximum Forward Reach (mm)</td>
<td>9200</td>
</tr>
<tr>
<td>Load at Max Reach — No Stabilizers (kg/lb)</td>
<td>817/1800</td>
</tr>
<tr>
<td>Load at Max Reach — Stabilizers Down (kg/lb)</td>
<td>1816/4000</td>
</tr>
<tr>
<td>Load at Max Reach — Stabilizers Up (kg/lb)</td>
<td>771/1700</td>
</tr>
<tr>
<td>Top Travel Speed (kph/mph)</td>
<td>32/20</td>
</tr>
<tr>
<td>Steering Modes</td>
<td>2-Wheel, Crab, Circle</td>
</tr>
</tbody>
</table>

### Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (mm)</td>
<td>2530</td>
</tr>
<tr>
<td>Width (mm)</td>
<td>2515</td>
</tr>
<tr>
<td>Wheelbase (mm)</td>
<td>3250</td>
</tr>
<tr>
<td>Length to Fork Face (mm)</td>
<td>5980</td>
</tr>
<tr>
<td>Ground Clearance (mm)</td>
<td>505</td>
</tr>
<tr>
<td>Turning Radius over Tires (mm)</td>
<td>3800</td>
</tr>
<tr>
<td>Turning Radius over Forks (mm)</td>
<td>5450</td>
</tr>
<tr>
<td>Track (mm)</td>
<td>2150</td>
</tr>
<tr>
<td>Cab Width (mm)</td>
<td>900</td>
</tr>
</tbody>
</table>

### Hydraulic System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum System Pressure (bar/psi)</td>
<td>250/3,625</td>
</tr>
<tr>
<td>Maximum Pump Flow (L/min/gal/min)</td>
<td>151/40</td>
</tr>
<tr>
<td>Auxiliary Hydraulic Supply (L/min/gal/min)</td>
<td>90/24</td>
</tr>
<tr>
<td>Pump Type</td>
<td>Variable Displacement Axial Piston Pump</td>
</tr>
</tbody>
</table>

### Service Refill Capacities

<table>
<thead>
<tr>
<th>Tank Type</th>
<th>Capacity (L/gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank</td>
<td>99/23</td>
</tr>
<tr>
<td>Hydraulic Tank</td>
<td>64.5/15</td>
</tr>
</tbody>
</table>

### Transmission Speeds

<table>
<thead>
<tr>
<th>Mode</th>
<th>Forward Speed (kph/mph)</th>
<th>Reverse Speed (kph/mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward — 1</td>
<td>6/4</td>
<td></td>
</tr>
<tr>
<td>Forward — 2</td>
<td>12/7</td>
<td></td>
</tr>
<tr>
<td>Forward — 3</td>
<td>20/13</td>
<td></td>
</tr>
<tr>
<td>Forward — 4</td>
<td>32/20</td>
<td></td>
</tr>
<tr>
<td>Reverse — 1</td>
<td>6/4</td>
<td></td>
</tr>
<tr>
<td>Reverse — 2</td>
<td>12/7</td>
<td></td>
</tr>
<tr>
<td>Reverse — 3</td>
<td>20/13</td>
<td></td>
</tr>
</tbody>
</table>

### Boom Performance

<table>
<thead>
<tr>
<th>Mode</th>
<th>Time (Seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom Up</td>
<td>17</td>
</tr>
<tr>
<td>Boom Down</td>
<td>13</td>
</tr>
<tr>
<td>Tele In</td>
<td>14</td>
</tr>
<tr>
<td>Tele Out</td>
<td>14</td>
</tr>
<tr>
<td>Crowd Forward (dump)</td>
<td>3</td>
</tr>
<tr>
<td>Crowd Backward</td>
<td>3</td>
</tr>
<tr>
<td>Combined — Up and Out</td>
<td>36</td>
</tr>
<tr>
<td>Combined — Down and In</td>
<td>20</td>
</tr>
<tr>
<td>Boom Control</td>
<td>Joystick</td>
</tr>
<tr>
<td>Number of Sections</td>
<td>3</td>
</tr>
<tr>
<td>Maximum Boom Angle</td>
<td>75.3°</td>
</tr>
<tr>
<td>Minimum Boom Angle</td>
<td>-3°</td>
</tr>
</tbody>
</table>

### Brakes

<table>
<thead>
<tr>
<th>Brakes Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot Brake</td>
<td>4-wheel</td>
</tr>
</tbody>
</table>
Dimensions

All dimensions are approximate.

Load Charts and Dimensions
Load Charts and Dimensions (continued)

ft: 45 40 35 30 25 20 15 10 5 0

ft: 45 40 35 30 25 20 15 10 5 0

0° -3° 10° 20° 30° 40° 50° 60° 70° 75°

2'0" 19'11" 20'10" 21'11" 22'6" 23'6" 24'6" 25'3" 26'3" 27'3"

1700 lb 2000 lb 2300 lb 2600 lb 2900 lb 3200 lb 3500 lb 3800 lb 4000 lb 4200 lb

30'2" 33'3" 36'3" 39'3" 42'3" 45'3" 48'3" 51'3" 54'3" 57'3"

9000 lb 7000 lb 5000 lb 3000 lb 1000 lb 0 lb

2'0" 10'10" 12'3" 13'6" 15'2" 17'3" 19'11" 21'11" 23'6" 25'3"

-3° 10° 20° 30° 40° 50° 60° 70° 75°

30° 25° 20° 15° 10° 5° 0°

30'2" 28'6" 27'3" 26'0" 24'6" 23'3" 22'0" 20'6" 19'3" 18'0"
Standard Equipment

*Standard equipment may vary. Consult your Caterpillar dealer for details.*

**TELESCOPIC BOOM**
- Wear pads, non-metallic
- Lock valve on hydraulic cylinders
- Boom angle indicator

**POWER TRAIN**
- Engine, Cat 3054E (U.S. EPA Tier 2 and EU Stage II compliant)
- Air cleaner, dual element and filter condition indicator
- Thermal starting aid
- Water separator
- Transmission, Caterpillar 4 forward/3 reverse Powersyncro
- Direction change, single lever, column mounted
- Spin-on filters: engine oil filter, hydraulic/transmission filter
- Axles, Caterpillar; planetary drive, full time mechanical
  - 4-wheel drive, integrated steer cylinders protected above axles
- Steering, power assisted, enclosed oil disc brakes, front axle
- Parking brake, dry disc with transmission disconnect

**STRUCTURE**
- Chassis, frame level
- Rear axle lock
- Mechanical quick coupler

**ANTI-FREEZE**
- Anti-freeze, extended life –36° C (– 34° F)

**TIRES**
- Cat brand 14.00-24

**ELECTRICAL**
- Alternator, 90-amp
- Anti-restart key switch
- Battery, maintenance-free, 12 volt, 750 CCA
- Horn
- Alarm, backup
- Electronic Control Module
- Power sockets, 12 volt internal and external
- Caterpillar Electronic Technician diagnostic connection

**OPERATOR STATION**
- Canopy, ROPS/FOPS
- Joystick, electronic
- Adjustable joystick wristrest
- Low step, grab bars
- 2-way adjustable seat, 50 mm (2 in) seat belt, document pouch
- Steering wheel spinner knob
- Floor mat
- Right side rear view mirror
- Service door, cab air intake filter, fuel fill, hydraulic fill, level indicator, fuse panel and washer fill
- Instrument cluster with power train and system monitor, steering alignment indicator, fuel gauge, engine oil temperature gauge, engine water temperature gauge, hydraulic transmission temperature, SMU and air filter blockage indicator
- 2-piece entry door
- Cup holder
- Fixed steering column

**OTHER EQUIPMENT**
- Integrated lift and tie down points
- Padlock on power module
- Retrieval point
- Standard Cat color paint
Optional Equipment

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

TELESCOPIC BOOM
- Hydraulic quick coupler
- Auxiliary to the boom head

ELECTRICAL
- Light packages: boom lights, roading lights, cab lights
- Alternator, 105 amps
- Dual battery
- Battery disconnect
- Engine heater block, 120V/750 Watts

OPERATOR STATION
- Enclosed cab
- Air conditioning
- Heater
- Seats: cloth suspension, cloth air-suspension
- Headliner
- Door pocket
- Sun visor
- Screen guard
- Additional left hand mirror
- Rear wash/wipe
- Machine Security System (MSS)
- Beacon, magnetic mount
- Adjustable steering column
- Radio ready
- Auxiliary hydraulic continuous flow switch
- 75 mm (3 in) retractable seat belt

POWER TRAIN
- Differential lock
- Auto steering align

STRUCTURE
- Stabilizers

ANTI-FREEZE
- Anti-freeze, extended life –50° C (–58° F)

TIRES
- 14.00-24 SGG Goodyear
- 14-24 Cat (Trak n Seal)
- R24 Goodyear

OTHER EQUIPMENT
- Fenders
- Lockable storage drawer
- Steering cylinder lock

WORK TOOLS
- Carriage: standard, rotate, wide frame, wide frame (rotate), side-shift
- Forks:
  - Pallet forks 50 × 100 × 1220 mm (2 in × 4 in × 48 in)
  - Block forks 51 × 51 × 1219 mm (2 in × 2 in × 48 in)
  - Pallet forks 51 × 102 × 1524 mm (2 in × 4 in × 60 in)
- Buckets:
  - General Purpose 1.0 m³ (1.3 yd³)
  - Material Handling 1.5 m³ (1.95 yd³)
  - Multi Purpose 1.0 m³ (1.3 yd³)
  - Grapple 0.85 m³ (1.1 yd³)
- Material Handling Arm
- Self-tipping Hopper, 1.2 m³ (1.56 yd³)
- Lifting Hook
- Truss Boom

OTHER ATTACHMENTS
- Hitch, manual rear-tow