TH580B
Telehandler

**Engine**

<table>
<thead>
<tr>
<th>Model</th>
<th>Cat® 3054E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Power</td>
<td>92 kW</td>
</tr>
<tr>
<td></td>
<td>120 hp</td>
</tr>
</tbody>
</table>

**Weights**

| Operating Weight | 13 670 kg | 30,100 lb |

**Operating Specifications**

| Rated Load Capacity | 5000 kg | 11,000 lb |
| Maximum Lift Height | 17 000 mm | 56 ft |
TH580B Telehandler
Caterpillar Telehandlers offer performance and versatility.

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 TH580B. 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 TH580B 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 TH580B 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 TH580B is designed to perform in the toughest conditions. With its Cat 3054E Tier 2 engine and purpose designed Cat transmission and axles, you can depend on the TH580B to keep your job on schedule. pg. 7

Versatility
✓ The TH580B 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
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 both easy and convenient 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 Viewing Area. 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 TH580B. 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 unique slider switches.

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 brooms that require continuous flow for long periods of time.

Integrated System. The Cat 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.

Kick Down Switch. Engine revolutions can be controlled by pressing the joystick trigger, thus reducing hydraulic flow for fine controlled load replacement.
**Performance**

*The TH580B delivers high performance to meet your specific job site needs.*

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**Lift Height.** The TH580B can effectively and quickly place bricks, roofing materials and trusses to a maximum height of 17 m (56 ft).

**Reach.** Job site obstacles present challenges demanding a machine to place loads at greater distances – with a reach of 12 700 mm (42 ft), the TH580B delivers.

**Maneuverability.** The TH580B offers excellent maneuverability, due to its tight turning circle and its three different steering modes.

The TH580B has a 48 degree axle steering angle and no rear tail swing, allowing it to work productively and safely in confined areas.

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**Steering Modes.** The TH580B 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. Steering position sensors are fitted as standard to all steering modes to be changed while moving.
High Torque Rise Engine. The Cat 3054E electronic engine is U.S. EPA Tier 2 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. An electronic engine delivers:

- Improved low idle performance
- Improved fuel consumption
- Improved cold start
- Increased diagnostic and security capability

The TH580B is offered with one engine configuration – 92 kW (120 hp).

Transmission. The TH580B has a purpose designed Cat four speed forward, three speed reverse powersyncro transmission.

Axles. The TH580B is fitted with Caterpillar planetary reduction axles. 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 TH580B.

Quick Coupler. A hydraulic IT interface is standard on the TH580B.
For optimum versatility, machines can be equipped with the hydraulic quick coupler, allowing the operator to quickly and easily change non-hydraulic work tools without leaving the cab.

Hydraulic Services. Machines are equipped with an Auxiliary Hydraulic service, allowing the use of hydraulically operated work tools.
All B-Series Telehandlers are equipped with a single auxiliary hydraulic service and continuous hydraulic flow.

Work Tools. A wide range of work tools are available to meet most job site applications.
Cat 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.
Access Platform
General Purpose Bucket (1.0 m³/1.3 yd³)
Fixed Carriage
Rotate Carriage
Sideshift Carriage
Swing Carriage
Wide Carriage
Wide Rotate Carriage
Pallet Forks
Block Forks
Lift Hook
Truss Boom
Self-tipping Hopper
Material Handling Arm
Contact your Cat dealer for additional work tool options.

Tow Hitch. A manual rear tow hitch is available for off-highway towing as an option.
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, 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 routine checks.

**Selection.** Make detailed comparisons before you buy. Your Cat dealer can give answers to your questions.

**Purchase.** Look at the value that the TH580B 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>Model</th>
<th>Cat 3054E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Power</td>
<td>92 kW</td>
</tr>
<tr>
<td>Net Power</td>
<td>87.5 kW</td>
</tr>
<tr>
<td>Maximum Torque</td>
<td>450 N·m</td>
</tr>
<tr>
<td>Bore</td>
<td>105 mm</td>
</tr>
<tr>
<td>Stroke</td>
<td>127 mm</td>
</tr>
<tr>
<td>Displacement</td>
<td>4.4 L</td>
</tr>
</tbody>
</table>

- Engine is U.S. EPA Tier 2 compliant.

### Hydraulic System

<table>
<thead>
<tr>
<th>Maximum System Pressure</th>
<th>250 bar</th>
<th>3,626 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Pump Flow</td>
<td>113 L/min</td>
<td>30 gal/min</td>
</tr>
<tr>
<td>Auxiliary Hydraulic</td>
<td>60 L/min</td>
<td>16 gal/min</td>
</tr>
<tr>
<td>Pump Type</td>
<td>Variable Displacement Load Sensing Axial Piston Pump</td>
<td></td>
</tr>
</tbody>
</table>

### Service Refill Capacities

<table>
<thead>
<tr>
<th>Fuel Tank</th>
<th>100 L</th>
<th>26 gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Tank</td>
<td>65 L</td>
<td>17 gal</td>
</tr>
</tbody>
</table>

### Transmission Speeds

<table>
<thead>
<tr>
<th>Forward – 1</th>
<th>6 kph</th>
<th>4 mph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward – 2</td>
<td>12 kph</td>
<td>7 mph</td>
</tr>
<tr>
<td>Forward – 3</td>
<td>20 kph</td>
<td>12 mph</td>
</tr>
<tr>
<td>Forward – 4</td>
<td>40 kph</td>
<td>25 mph</td>
</tr>
<tr>
<td>Reverse – 1</td>
<td>6 kph</td>
<td>4 mph</td>
</tr>
<tr>
<td>Reverse – 2</td>
<td>12 kph</td>
<td>7 mph</td>
</tr>
<tr>
<td>Reverse – 3</td>
<td>20 kph</td>
<td>12 mph</td>
</tr>
</tbody>
</table>

### Boom Performance

<table>
<thead>
<tr>
<th>Boom Up</th>
<th>26 Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom Down</td>
<td>16 Seconds</td>
</tr>
<tr>
<td>Tele In</td>
<td>12 Seconds</td>
</tr>
<tr>
<td>Tele Out</td>
<td>15 Seconds</td>
</tr>
<tr>
<td>Crowd Forward (dump)</td>
<td>3 Seconds</td>
</tr>
<tr>
<td>Crowd Backward</td>
<td>3 Seconds</td>
</tr>
<tr>
<td>Combined – Up and Out</td>
<td>27 Seconds</td>
</tr>
<tr>
<td>Combined – Down and In</td>
<td>17 Seconds</td>
</tr>
</tbody>
</table>

### Weights

| Operating Weight | 13 670 kg | 30,100 lb |

### Operating Specifications

<table>
<thead>
<tr>
<th>Rated Load Capacity</th>
<th>5000 kg</th>
<th>11,000 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Lift Height</td>
<td>17 000 mm</td>
<td>56 ft</td>
</tr>
<tr>
<td>Load at Max Height – Stabilizers Down</td>
<td>2500 kg</td>
<td>5,500 lb</td>
</tr>
<tr>
<td>Load at Max Height – Stabilizers Up</td>
<td>2000 kg</td>
<td>4,400 lb</td>
</tr>
<tr>
<td>Maximum Forward Reach</td>
<td>12 700 mm</td>
<td>42 ft</td>
</tr>
<tr>
<td>Load at Max Reach – Stabilizers Down</td>
<td>1133 kg</td>
<td>2,500 lb</td>
</tr>
<tr>
<td>Load at Max Reach – Stabilizers Up</td>
<td>226 kg</td>
<td>500 lb</td>
</tr>
<tr>
<td>Top Travel Speed</td>
<td>40 kph</td>
<td>25 mph</td>
</tr>
</tbody>
</table>

### Dimensions

| Turning Radius over Tires | 4020 mm | 13.19 ft |
Dimensions
All dimensions are approximate.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Length to Fork Face</td>
<td>6622 mm</td>
<td>21.73 ft</td>
</tr>
<tr>
<td>2</td>
<td>Width</td>
<td>2545 mm</td>
<td>8.35 ft</td>
</tr>
<tr>
<td>3</td>
<td>Height</td>
<td>2715 mm</td>
<td>8.91 ft</td>
</tr>
<tr>
<td>4</td>
<td>Wheelbase</td>
<td>3250 mm</td>
<td>10.66 ft</td>
</tr>
<tr>
<td>5</td>
<td>Ground Clearance</td>
<td>521 mm</td>
<td>20.51 in</td>
</tr>
<tr>
<td>6</td>
<td>Track</td>
<td>2150 mm</td>
<td>84.65 in</td>
</tr>
<tr>
<td>7</td>
<td>Cab Width</td>
<td>900 mm</td>
<td>35.43 in</td>
</tr>
<tr>
<td>8</td>
<td>Rear Overhang</td>
<td>1328 mm</td>
<td>4.33 ft</td>
</tr>
<tr>
<td>9</td>
<td>Length to Front of Tire</td>
<td>5246 mm</td>
<td>17.25 ft</td>
</tr>
<tr>
<td>10</td>
<td>Height to Top of Hood</td>
<td>2182 mm</td>
<td>7.15 ft</td>
</tr>
</tbody>
</table>

Load Charts and Dimensions
Load Charts and Dimensions (continued)
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
- Single auxiliary to the boom head

ELECTRICAL
- Alternator, 105-amp
- Anti-restart key switch
- Battery, maintenance-free, 12 volt, 750 CCA with disconnect
- Horn
- Alarm, backup
- Electronic Control Module
- Power sockets, 12 volt internal and external
- Cat Electronic Technician diagnostic connection

OPERATOR STATION
- Canopy, ROPS/FOPS
- Joystick, electronic
- Adjustable joystick wristrest
- Low step, grab bars
- 2-way adjustable vinyl suspension seat,
  50 mm (2 in) seat belt, document pouch
- Steering wheel spinner knob
- Floor mat
- Right and left 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
- Cup holder
- Fixed steering column
- Boom lights

POWER TRAIN
- Engine, Cat 3054E (U.S. EPA Tier 2 compliant)
  (92 kW/120 hp)
- Air cleaner, dual element and filter condition indicator
- Thermal starting aid
- Water separator
- Self aligned steering
- Transmission, Cat 4 forward/3 reverse Powersyncro
- Direction change, single lever, column mounted
- Spin-on filters: engine oil filter, hydraulic/transmission filter
- Axles, Cat; planetary drive, full time mechanical 4-wheel
  drive, integrated steer cylinders protected above axles,
  with steer sensors
- Steering, power assisted, enclosed oil disc brakes, front axle
  Parking brake, dry disc with transmission disconnect

STRUCTURE
- Stabilizers, complete with access platform sensors
- Chassis, frame level
- Hydraulic quick coupler

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

TIRES
- Cat brand 14.00-24

OTHER EQUIPMENT
- Integrated lift and tie down points
- Padlock on power module
- Retrieval point
- Continuous flow hydraulics
Optional Equipment
Optional equipment may vary. Consult your Caterpillar dealer for details.

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

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

- POWER TRAIN
  - Differential lock

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

- TIRES
  - 14.00-24 SGG Goodyear
  - 14-24 Cat (Arnco ReSeal)
  - 14-24 Cat (foam fill)
  - 14-24 Cat
  - 17.5 R25 XHA Michelin

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

- WORK TOOLS
  - Access platform
  - Carriage: standard, rotate, wide frame, wide frame (rotate), side-shift, swing
  - 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 Arm
    - Self-tipping Hopper 1.2 m³ (1.56 yd³)
    - Lifting Hook
    - Truss Boom

- OTHER ATTACHMENTS
  - Hitch, manual rear-tow