

T-SERIES BACKHOE LOADERS

580ST | 590ST



1300 99 CASE | www.casece.com

CASE
CONSTRUCTION

CASE CONSTRUCTION KING



580ST

CASE DNA SINCE 1957

Case has been an innovative construction equipment market leader since 1912.

In the Spring of 1957 Case introduced the Model 320, the world's first factory-built Tractor Loader Backhoe (TLB). Since that time we have continuously developed and improved our Loader/Backhoe range, to meet the changing needs of our customers around the world.

- Case was the first manufacturer to develop an extending dipper, the patented Case Extendahoe.

- Case was the first to offer Ride Control on a Loader/Backhoe.
- Case was the first company to offer a Powershift transmission on a Loader/Backhoe.

In 2005 Case produced its 500,000th Loader/Backhoe, and today we are well on the way to three quarters of a million. No other manufacturer comes close, a pedigree that guarantees strong residual values for your machine.





THE CASE DEALER

Your professional partner

Your success starts with world-class Case machinery and attachments. Your Case dealer will help you work smarter and faster by selecting equipment that delivers performance and operator comfort. Your dealer has the knowledge and experience necessary to help you choose the right attachments so you can:

- Work faster and extend equipment life.
- Increase machine utilisation.
- Increase your capabilities.

Let your Case dealer service your machine on the jobsite, so you'll be back on the job faster. Advantages include:

- Responsive jobsite service to keep your equipment running.
- Increased machine uptime.
- Certified service staff and improved parts availability.

CASE CARE PROTECTION

CASECARE is an extra protection programme that can be purchased for 4 years / 4000 hours, whichever comes first. It gives you peace of mind. Check with your local Case dealer for more details.

CASECARE is also transferable. If you decide to trade in or sell your Backhoe during the CASECARE period and as long as you have followed the CASECARE conditions, you can transfer the remaining CASECARE to the next owner with the added benefit of a higher resale value.

Ask your local Case dealer about adding value to your machine and peace of mind to your workday with these helpful products.

To contact your local Case dealer call **1300 99 CASE**.



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Save Time

- Daily check and fill points are accessible from ground level, saving time.
- The braking system uses the machine's main hydraulic oil reservoir, so there is no requirement for a separate fluid.
- The Case Electronic Service Tool ensures rapid common rail engine diagnostics, cutting downtime.
- Large capacity fuel tank ensures longer working hours between refills, increasing working hours on site.



Work Faster!

- Proven reliable Tier 3 compliant engines are available with a choice of 97 hp or 110 hp, 10% more than our main competitors.
- These fuel-efficient engines provide the power to get more work done.



Save Fuel

- Our new variable displacement pump hydraulic system reduces fuel consumption by 10%, a saving that represents up to \$3,000 per year.



Site Security

- The hydraulic tank features a secure oil cap breather to prevent siphoning.
- Lockable battery box and battery isolator.

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The DNA of the King

- Customers around the world have built their success on the power and performance of the Case Backhoe.
- Overlapping boom cylinders provide lower transport height and a slimmer boom width for improved visibility.
- The curved main boom ensures increased digging ability and easier loading over a truck.
- Boom dipper and swing cylinders have standard hydraulic end stroke cushioning to improve precision, prolong component life and ensure smooth operation.
- Major hydraulic circuits are protected.

Lower cost of ownership, more comfort

- The Case Loader/Backhoe offers a tailored working position to improve control and reduce your fatigue.
- Internal cab noise levels are just 77 dB, offering you an improved working environment.
- Fully adjustable control lever towers provide you a comfortable working position, whatever your size.
- In Backhoe operation, return to idle button is positioned under your thumb for ease of operation.
- Super Deluxe air suspended seat standard on all ST models
- Power brakes as standard – Less effort and better braking efficiency.



Welcome on all job sites

In residential areas everyone will appreciate that your Case machine has low noise levels, reduced exhaust emissions and a secure footprint.

- Tier 3 low emission engines.
- Low exterior noise levels (103 dB).



Reduced transport height

- 580ST less than 3.5m
- 590ST less than 3.75m
- Improved all-round transportability
- Hydraulic boom lock standard

Backhoe tradition

- Strength and robustness...the foundation of Case
- Overlapped cylinders for reduced transport dimensions:
- Transport height: reduced up to 22 cm
- Lateral over hang: reduced up to 8 cm
- Outer extendahoe allows:
- Reduces damages when clamping a stone
- Reduces problem of rubble inside the extendahoe



Saves you time

New electro-hydraulic side shift, takes just 5 seconds to move the backhoe from one side to the other.

Benefits for:

- shifting the backhoe without damaging the surface
- precise positioning of the backhoe

Mechanical Quick Coupler as standard:

- Factory mounted and integrated inside the dipper. No additional components needed.
- Maintains machine breakout force
- No interference with the boom in travelling position



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Improved Productivity

- Powershift transmission offers greater tractive effort and improved bucket fill, thanks to the kick-down button.
- Easy grading, thanks to
 - float position on the control lever.
 - flat-bottomed bucket
- Automatic return-to-dig function and mechanical self-levelling feature reduce your effort and fatigue.



Ride Control – Keeps the bucket full at 40 km/h

- Ride Control reduces loader arm bounce during travel, maintaining maximum material retention on all surfaces, for higher travel speeds and reduced journey times.
- The front axle offers +/- 11 degrees of oscillation, to maintain traction on the toughest terrain, improving bucket retention and maintaining productivity.
- Wide front tyres available as an option for ultimate cross country travel.



In the most difficult worksite conditions

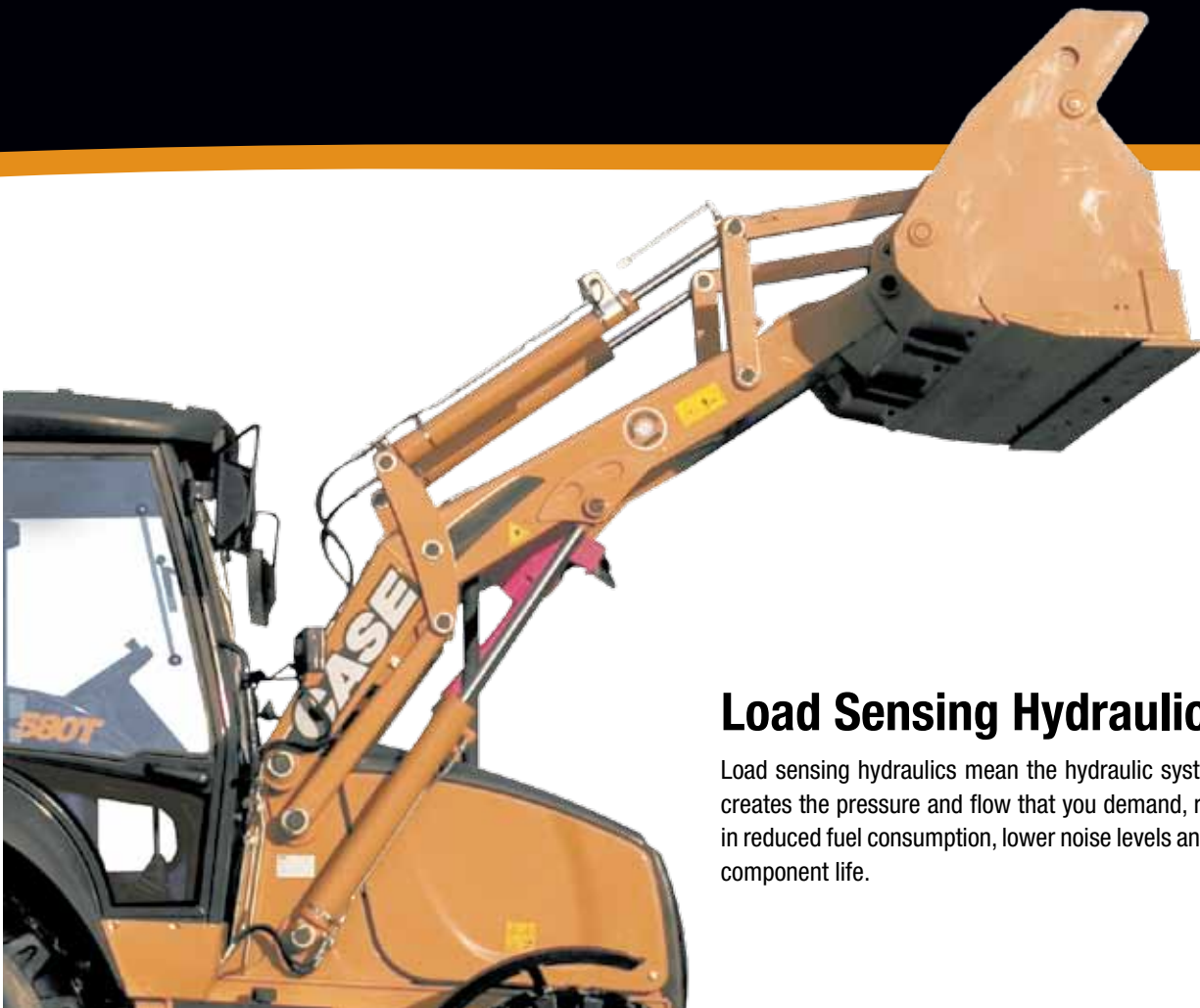
- An engine pre-filter is available for dusty working conditions.
- 4 wheel drive and 100% locking differential fitted to the rear axle provide all-weather traction in the toughest site conditions.
- For night working the Case Loader Backhoe comes with up to 10 working lights, including two on the sides for maximum visibility.



Loads and unloads easily

- Curved front loader arms improve truck loading while mechanical self-levelling assists the operator.
- Return-to-dig function significantly reduces your effort in repetitive loading operations.
- Excellent front loader visibility and mechanical self-leveling feature make pallet loading and unloading simple.





Load Sensing Hydraulics

Load sensing hydraulics mean the hydraulic system only creates the pressure and flow that you demand, resulting in reduced fuel consumption, lower noise levels and longer component life.



New Variable Displacement Pumps

Standard on all Case ST machines, with the new variable displacement pump you're guaranteed short and smooth cycles whilst increasing productivity and saving fuel. The new automatic hydraulic speed controller allows the correct amount of oil on demand for any working condition. This provides further fuel savings, whilst allowing maximum productivity.



A single control joystick for simultaneous movements

A single control joystick for all the Loader's functions:

- Raise/lower the loader
- Bucket tilt
- Proportional control of the closing and opening of the 4-in-1 bucket or other hydraulic accessories
- Floating bucket position
- Differential lock
- Transmission switch
- Automatic return to dig position.

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- **Tailored working position:**

Pilot control columns and wrist rests are fully adjustable to suit your size.

- **The sound of silence:**

The cab is secured on insulating mountings, reducing vibration and noise levels.
Interior 77 dB(A)/ Exterior 103 dB(A)

- **Excellent visibility equals improved safety:**

The rear screen is fully tiltable to provide an unobstructed view to the digging area. The stowed rear screen also provides rain protection in the open position.

- **King Class Seat:**

You can set the height and the suspension of the seat pneumatically. Lumbar adjustment and fully adjustable armrests ensure a comfortable position throughout the working day.

- **Enhanced cab ventilation:**

All four cab windows can be opened partially or fully, to provide maximum ventilation in the cab.

- **Plenty of storage space:**

A new overhead radio position and document storage box, combined with a lockable storage compartment make the Case cab your convenient office.

- **Access to the King:**

Wide steps and sturdy grab handles make it easy to get in and out of the cab. Large door apertures without obstacles make access to the seat equally easy.

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Long life easy maintenance design

- A** - Greasing points and protected cylinders
- B** - Hydraulic connections are well protected, flexible and easy to use
- C** - Bucket teeth are pin mounted for rapid replacement and bolted dozing blade for easy replacement. (optional)



Steering cylinder protection



Heavy duty rear axle



Rear road lights can be fitted on the stabilizer legs while traveling and on the cab when digging, providing maximum visibility and protection



Maintenance friendly

- Single piece tilting engine canopy offers excellent top and side access for safe and easy maintenance.
- Hydraulic and steering pressure control points are conveniently located between the cab and the fuel tank for easy checking.
- Common rail engines are compatible with the Case Electronic Service Tool (EST), making fault diagnosis easier and reducing possible downtime.
- All Case TLBs are equipped with a strong 4.5 litre turbocharged engine that complies with Tier 3 emissions legislation.



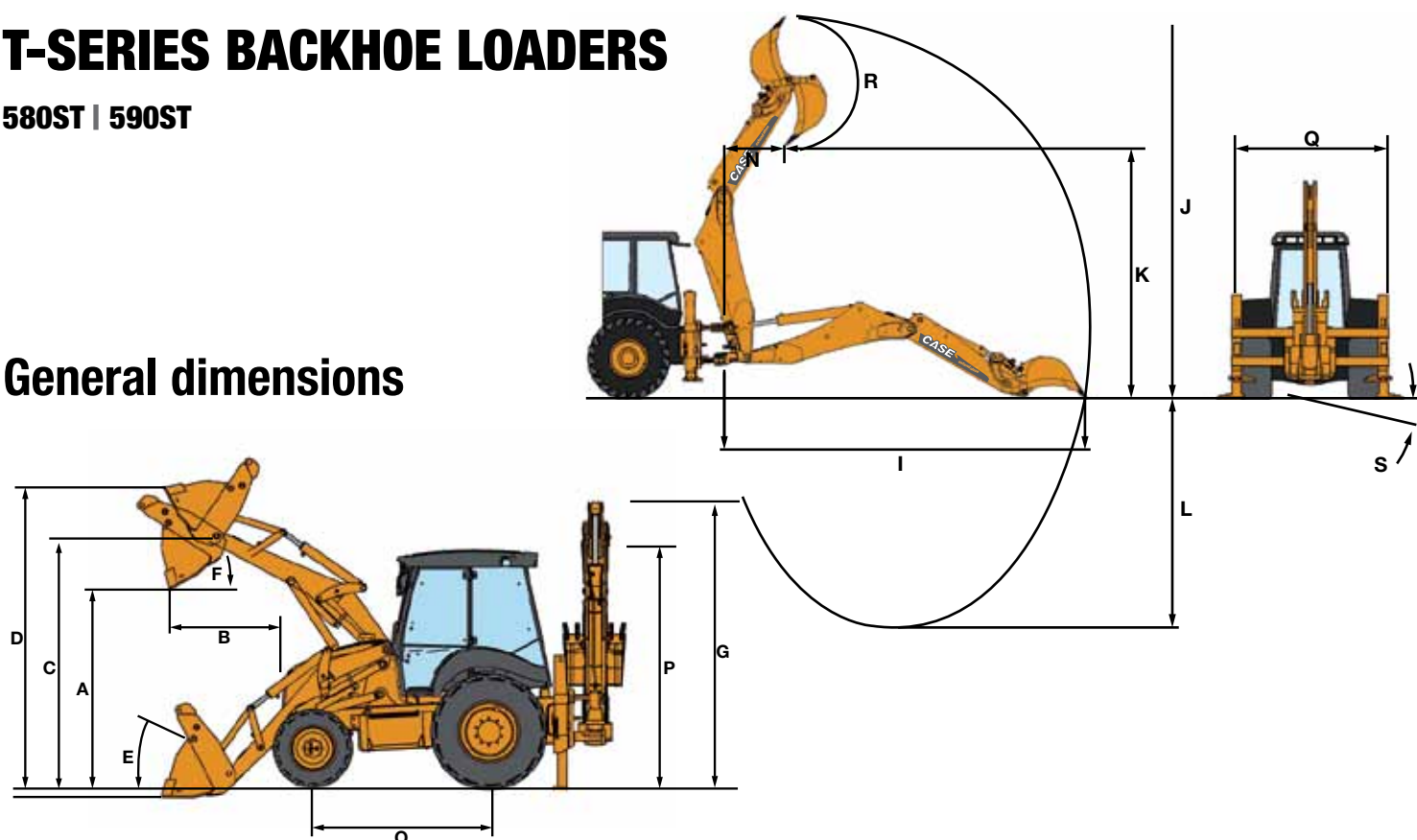
Safety throughout

- Pilot controls automatically deactivate when not in use for improved safety. They are immediately reactivated at the touch of a switch.
- Stabilizer legs are equipped with safety valves.
- Multiple disc, oil-immersed service brakes on the rear axle, together with automatic front wheel drive engagement, ensure safe operation in all travel conditions.
- Case ST Backhoe now includes standard safety hose burst valves on the boom and dipper cylinders along with an overload warning device.
- Large glass area with slim pillars offers excellent all round visibility, increasing safety on site.
- Single piece tilting engine hood offers access to regular service points, all of which can be reached from the ground level for safety.

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General dimensions



LOADER	Bucket	580 ST 4-IN-1 / 6-IN-1	Bucket	590ST 4-IN-1 / 6-IN-1
A	Maximum dump height under bucket at 45°	2693 mm		2693 mm
B	Maximum reach with bucket at 45°	813 mm		813 mm
C	Maximum height pin	3458 mm		3458 mm
D	Maximum bucket height	4405 mm		4405 mm
M	Horizontal bucket digging depth	125 mm		125 mm
E	Bucket angle (on ground)	43°		43°
F	Bucket angle (in the transport position)	46°		46°
	Lift capacity (at bucket load centre of gravity)	4610 kg		4610 kg
	Maximum height lifting capacity	3195 kg		3195 kg
	Lift force (boom cylinders)	4070 daN		4070 daN
	Breakout force (bucket cylinders)	6650 daN		6650 daN
BACKHOE		Extended		Extended
	Swinging angle	180°		180°
L	Maximum digging depth	5435 mm		5887 mm
I	Maximum reach from swing centre	6238 mm		6655 mm
	Maximum reach at rear axle	7563 mm		7960 mm
J	Maximum operating height	6789 mm		7141 mm
K	Load height	4834 mm		5196 mm
	Central offset	0.62 m		0.62 m
	Lift capacity at max outreach	1049 kg		1097 kg
	Breakout force (bucket cylinder)	5323 daN		6111 daN
	Breakout force (bucket cylinder)	2441 daN		2488 daN
R	Bucket rotation	200°/195° hyd. QC		198°/195° hyd. QC
DIMENSIONS				
G	Boom height (transport position)	3480 mm		3707mm
	Overall length - with standard bucket		5560 mm	
O	Wheelbase		2175 mm	
P	Cab height		2950 mm	
Q	Overall width - with standard bucket		2430 mm	
	Width outside tires		2230 mm	
S	Stabilizer levelling compensation angle		14°	

T-SERIES BACKHOE LOADERS

580ST | 590ST Specifications

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Conform to 97/68/CE Tier 3 standards for reduced pollution - 4 cylinders Turbocharged 4.5 litre

ENGINE		
Injection system	High pressure Common Rail	High pressure Common Rail
Make	CNH 445TA\EEA	CNH 445TA\EGH
Power (according to ISO 14396)	72 kW / 97 hp	82 kW / 110 hp
Maximum torque (according to EC/97/68)	453 Nm @ 1400 1/min	516 Nm @ 1400 1/min
TRANSMISSION		
Powershuttle		
Forward speeds	6-10-21-40 Km/h	-
Reverse speeds	7-12-25-47 Km/h	-
Powershift		
Forward speeds	6-10-22-39 Km/h	6-10-22-39 Km/h
Reverse speeds	7-12-26 Km/h	7-12-26 Km/h
HYDRAULICS		
Type of pump	Variable Displacement	Variable Displacement
Maximum flow	6 to 156 l/min @ 2200 l/min	6 to 156 l/min @ 2200 l/min
Maximum pressure level	205 bars	205 bars
BATTERY		
		12 Volts / 12V 95Ah, 900A (SAE) / 120
OPERATING WEIGHT		
In sideshift version, with the standard tooth loader bucket, 610 mm rear bucket, full fuel tank and 75 kg operator 4 WD, extendible dipper/Ext	8050Kg	8120Kg
TURNING RADIUS		
Front tires 12.5/80-18, wheel not braked, 4WD engaged	4300mm at ext.edge of front tires	4300mm at ext.edge of front tires
	5600mm at bucket corner	5600mm at bucket corner
AXLES, TIRES & BRAKE		
Brake	Power braking: brake with friction area of 2,472m ²	
- Front tyres	18" front with 28" rear	18" front with 28" rear
- Rear tyres		
Front axle: oscillation of +/- 11°	differential lock	differential lock
CAPACITIES		
Fuel tank	145L	145L
Cooling system	241	241
Hydraulic oil	140L	140L
Gear box oil:		
Power Shuttle 4 WD	20.81	20.81
PowerShift:		
Front axle 4WD Differential	6.51	6.51
Output stage	0.8 l+0.8 l	0.8 l+0.8 l
Rear axle 4WD Total	21.2 l	21.2 l
EMISSIONS (G/KWH)		
CO2 emission	744	744
NOx emission	3.6	3.6
HC emission	0.1	0.1
CO emission	0.9	0.9
PM emission	0.13	0.13
NOx + HCNM emission	3.7	3.7
NOISE		
Internal dB(A)	77	77
External dB(A)	102	103
VIBRATION		
	Upper limbs 2.5 m/s ² Abdomen 0.5 m/s ²	

STANDARD EQUIPMENT & OPTIONS

Standard Equipment

Design

- 72 kW (580ST) and 82 kW (590ST) common rail Case 4.5 turbo engine
- 4 Wheel Drive
- Powershuttle or Powershift transmission
- Variable pump flow sharing/load sensing hydraulics
- 1000L 4in1 loader bucket
- Centrifugal air pre-cleaner
- Rear differential lock
- Ride Control (Powershift model only)

Backhoe

- Pilot hydraulic controls for SAE/ISO pattern (Pilot only)
- Low effort servo mechanical controls SAE pattern (Mechanical only)
- Two way auxiliary hydraulic circuit (Pilot only)
- Extendable dipper with wear pads
- Safety valves on stabilizers
- Hydraulic transport lock
- Angled sliding rail on side frame
- Safety valves on boom and dipper cylinders

Loader

- Single lever with 4in1 proportional thumb control with detent
- Loader automatic return to dig
- Loader float position
- Reinforced loader structure
- Mechanical self leveling on loader
- Self storing safety loader strut
- 4in1 bucket with blade – with check valves

Cab

- 4 tilting and click-on side windows
- Tilting over rear – window
- Air Conditioning
- Tilting steering wheel
- Door latches
- Sun visor
- Working lights on top of cab (2 front/2 rear/2 side)
- Deluxe spring suspension seat with belt and elbow rests
- Steering wheel spinner knob
- Reversing audible alarm
- Radio pre wiring
- Radio compartment
- Lockable storage

Safety

- Seat Belt
- Safety decals
- Battery isolator switch
- Tyre valve protection
- Safety strut loader
- Basic tool kit
- Backhoe overload warning buzzer

Options

- Hammer circuit
- Safety valves on loader
- Fork kits on 4in1
- Remote battery terminals
- Front wheel fenders

Conforms to directive 98/37/CE

IMPORTANT: CNH reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your Case dealer/distributor will be able to give you details of the products and their specifications available in your area. Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

Contact your local dealer
on 1300 99 CASE

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