

# R

**CASE**

## SERIES 2 BACKHOE LOADERS 580-590 Super R



P R O F E S S I O N A L P A R T N E R

# BACKHOE LOADERS

## CASE 580 Super R Series 2/ 590 Super R Series 2

### NEW BACKHOE "PILOT CONTROL" OPTION

The fully adjustable control lever towers (sideways / backwards & forward) ensure a comfortable working position for all types and sizes of operators. For safety, the pilot control can be disabled. If required, the control systems can be switched between backhoe and excavator patterns to suit all operators.

### POWERSHUTTLE OR POWERSHIFT

For comfort, on both models 580 Super R and 590 Super R, there is a **choice of "PowerShuttle" or "PowerShift" transmission** to adapt to different user needs and applications as required.

### NEW CAB

Comfortable and safe operation is achieved with **all-round visibility from the cab**. Ergonomics, instrumentation and design have been further improved to enable the operator to safely concentrate on the job at hand. **The rear glass is fully tiltable.**

### NEW HYDRAULICS

Effective, comfortable and top quality work can be achieved with the **new flow compensation hydraulics**. This new Load Sensing, flow compensation hydraulic system allows the machines to perform with **co-ordination, soft operation and precision in all movements**.

Three pressure control checks are now grouped together making possible an easier and immediate diagnosis in any situation.

On the "Pilot" version an optional additional valve is now available for special attachments (e.g. Auger) which features a proportional control.

### NEW TILTING HOOD

The engine tilting hood is **easy to open thanks to 2 handles** on the left side for quicker maintenance. **All checking points can be accessed from the ground**. To prevent vandalism, the bonnet latch has been placed inside the cab.



## ENGINE

### 580 Super R - Series 2    590 Super R - Series 2

<b>Make</b>	CASE - FAMILY III	
<b>Model</b>	445T/M2	445TA/M2
<b>Type</b>	Turbo-charged	Turbo-charged intercooler
<b>Capacity</b>	4.5 l	
<b>Number of cylinders</b>	4	
<b>Bore x stroke</b>	104 x 132 mm	
<b>Injection system</b>	Direct	
<b>Maximum speed without load</b>	2450±50 rpm	2430±50 rpm
<b>Power ISO 14396</b>	71 kW/95 hp	82 kW/110 hp
<b>Rated speed under load</b>	2200 rpm	
<b>Maximum torque, EC/97/68</b>	400 Nm	480 Nm
<b>Speed at maximum torque</b>	1400 rpm	
<b>Air filter</b>	Dry type - two elements	
<b>Oil filter</b>	Full flow type, with screw-on element	

The engines conform to 97/68/CE Tier 2 standards for reduced pollution. Their reliability and low cost of operation are a byword among Case users.

## TRANSMISSION

Two types of transmission

### POWERSHUTTLE

<b>Type</b>	PowerShuttle
<b>Speeds</b>	4 FWD / 4 REV
<b>Maximum speeds</b>	
FWD 1st, 2nd, 3rd and 4th	6.4, 10.3, 21.9 and 39 kph
REV 1st, 2nd, 3rd and 4th	7.6, 12.3, 26.2 and 46.4 kph
<b>Torque converter stall ratio</b>	2.31:1

Simplicity is also synonymous with strength, that is why CASE uses a mechanical gearbox on its backhoe-loader. It has been tested over long periods and the latest version is the result of long experience.

### POWERSHIFT

<b>Type</b>	PowerShift
<b>Speed</b>	4 FWD / 2 REV
<b>Maximum travel speeds</b>	
1st, 2nd, 3rd and 4th	6.3, 11.8, 23.4 et 41.4 kph
1st and 2nd	7.5 and 14.0 kph
<b>Stall ratio of torque converter</b>	2.31:1

The management of the "PowerShift" gearbox provides smooth gearshifts, using synchronised gears for longer life of the mechanical parts and increased convenience for the operator. The inverter lever is ergonomically located to the left of the steering wheel.

## HYDRAULIC SYSTEM

<b>Type of pump</b>	Gear
<b>Number of bodies</b>	2
<b>Maximum flow</b>	
580 Super R	160 l/min
590 Super R	170 l/min
<b>Maximum pressure level</b>	210 bar
<b>Filtration</b>	7µ

The hydraulic system combines the simplicity and strength of a two body gear pump with the ease of use of a modular type circuit.

## CAB

The new side instrument/control panel is just one example of CASE's expertise in ergonomics. All the main indicators are centralised in the same visual area around the tachometer. Clear indicators allow the operator to concentrate on the essential task at hand, whilst **the controls are placed in an ergonomic position** close to the operator's hand for both loader and backhoe operation. The **fully glazed cab** gives a **panoramic view over the work area** of both the loader and the backhoe. Access is by two wide doors, with anti-slip steps. The cab structure is certified **ROPS/FOPS**. The **rear window swings up** for easy ventilation.



## NOISE LEVELS

<b>LpA (inside) 580 &amp; 590 Super R</b>	77 dBA
<b>LwA (outside) 580 &amp; 590 Super R</b>	105 dBA

## CAPACITIES

<b>Fuel tank</b>	128 l
<b>Hydraulic reservoir</b>	55 l
<b>Total hydraulic circuit</b>	118 l
<b>Engine oil</b>	13.6 l
<b>Cooling system</b>	24 l
<b>Gear box oil</b>	18 l
<b>Front axle 4WD</b>	
Differential	7.0 l
Final reduction	0.7 + 0.7 l
<b>Rear axle 4WD</b>	
Total	22.0 l

The high capacity fuel tank provides long periods of work between fill-ups to reduce stoppage time.

## ELECTRICAL CIRCUIT

<b>Voltage</b>	12 Volts
<b>Battery</b>	12 V x 95 Amp/h
<b>Alternator</b>	90 Amp



## BRAKES

Multi-disc, oil-immersed service brakes on the rear wheels, together with automatic engagement of the front wheel drive, ensure optimum safety in all travel conditions.

<b>Disc diameter</b>	203 mm
<b>Total friction area</b>	2878 cm <sup>2</sup>

## STEERING

### 580 & 590 Super R Series 2

#### Turning radius

at ext. edge of front tyres	4250 mm
at bucket corner	5525 mm
at bucket tooth	5625 mm

Note: front tyres 12.5/80-18, wheel not braked, 4WD engaged



## AXLES

### FIXED REAR AXLE

Lockable differential 100%

### 4WD OSCILLATING FRONT AXLE

Oscillation 11° / 11°

## TYRES

### 580 e 590 Super R Series 2

4 WD Front 12.5/80 x 18 - 10 PR

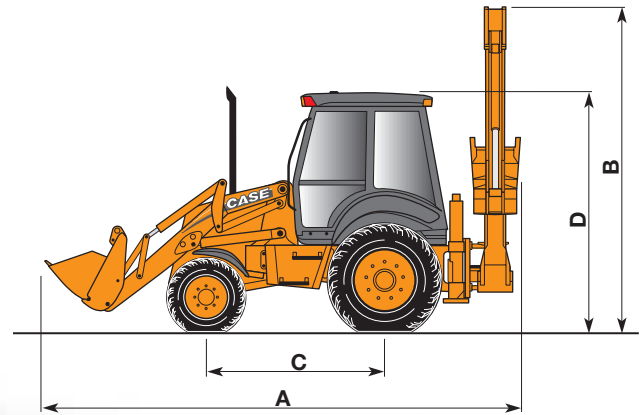
4 WD Rear 18.4 x 26 - 10 PR

16.9 x 28 - 10 PR



## GENERAL DIMENSIONS

	Side-shift
<b>A</b> Overall length - with standard bucket	5.77 m
<b>B</b> Boom height transport position	3.90 m
<b>C</b> Wheelbase	2.18 m
<b>D</b> Cab height	2.90 m
Overall width - with standard bucket	2.43 m
Width outside tyres	2.23 m
Stabiliser levelling compensation angle	14°



## WEIGHT

In the Sideshift version, with the standard tooth loader bucket, 610 mm rear bucket, full fuel tank and operator (75 kg).

### 580 & 590 Super R Series 2

4 WD, standard dipper/Ext. kg 7910 / 8140

# LOADER AND BACKHOE EQUIPMENT

## LOADER

All the controls for the loader attachment are centralised on a single control lever ergonomically located to the right hand of the operator. Using simple movements the operator can safely control the loader arm, the bucket and the opening/closing of the 4X1, using just one lever. This allows for concentration on his work and on the area surrounding the machine. The PowerShift version is equipped with an additional switch on loader lever to engage the rear lock differential.

### LOADER ATTACHMENT

		Digging bucket	4 in 1 bucket
<b>A</b> Maximum dump height under bucket at 45°	mm	2685	2693
<b>B</b> Maximum reach with bucket at 45°	mm	830	813
<b>C</b> Maximum height pin	mm	3460	3458
<b>D</b> Maximum bucket height	mm	4250	4405
<b>E</b> Horizontal bucket digging depth	mm	120	125
<b>F</b> Bucket angle (on ground)		43°	43°
Bucket angle (in the transport position)		46°	46°
Lift capacity (at bucket load centre of gravity)	kg	4830	4610
Maximum height lifting capacity	kg	3450	3195
Lift force (boom cylinders)	daN	3565	3577
Breakout force (bucket cylinders)	daN	6545	6650

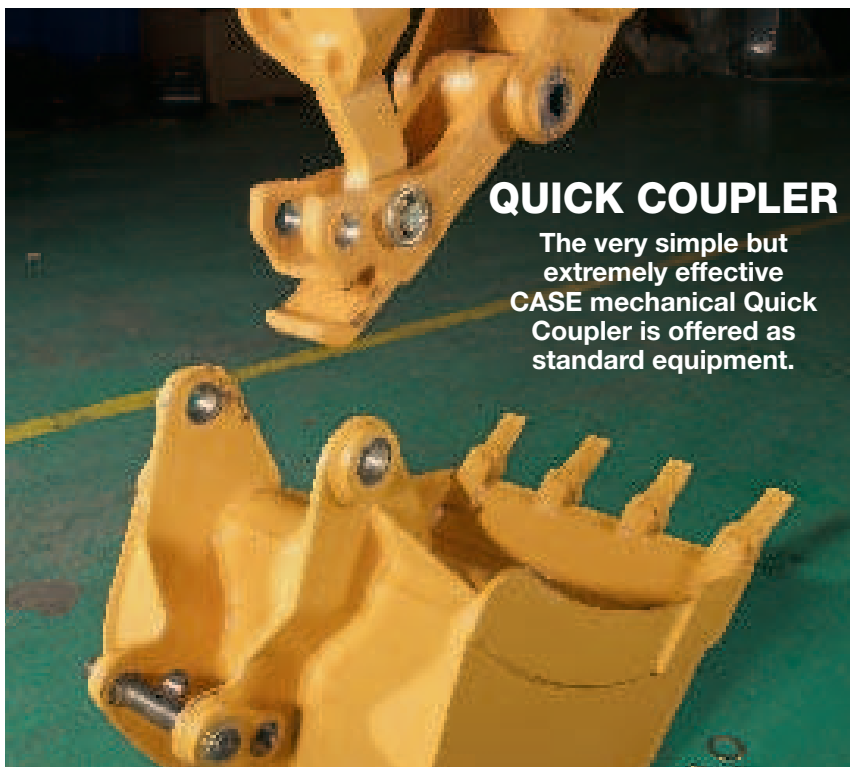
Dimensions and specifications measured as per SAE J 732 c standard using a 4WD backhoe loader.



The reinforced structure of the loader arm gives exceptional rigidity when loading, providing the operator with efficient, precise movements in the toughest conditions. The loader attachment also has two additional functions to provide faster cycles: Float position and automatic return-to-dig.

## BACKHOE

		MECHANICAL QUICK COUPLER		
		STANDARD DIPPER	EXTENDIBLE DIPPER	
			Retracted	Extended
Swinging angle		180°	180°	180°
<b>G</b> Maximum digging depth	mm	4612	4612	5799
<b>H</b> Maximum reach from swing centre	mm	5906	5906	6992
<b>J</b> Maximum operating height	mm	5837	5831	6537
<b>K</b> Load height	mm	3917	3938	4645
<b>L</b> Maximum reach at rear axle	mm	7231	7231	8317
<b>M</b> Capacity at maximum load height	mm	1828	1787	2757
Central offset	m	0.62	0.62	0.62
Lift capacity at max outreach	kg	1495	1370	1090
Breakout force (bucket cylinder)	daN	5603	5603	5603
Digging force (dipper cylinder)	daN	3744	3775	2643



Courtesy of Machine.Market

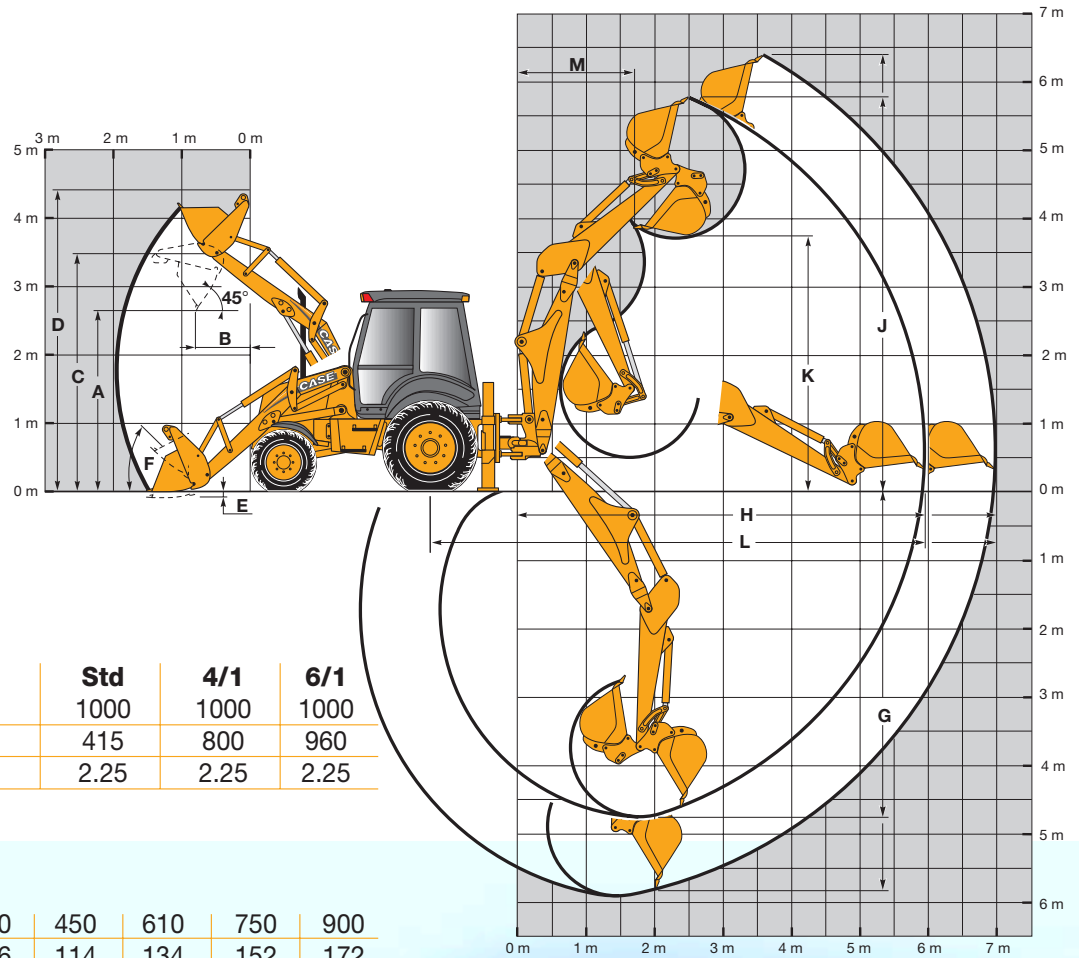
# BUCKETS

## LOADER BUCKETS

		Std	4/1	6/1
Capacity	l	1000	1000	1000
Weight	kg	415	800	960
Width at blade	m	2.25	2.25	2.25

## BACKHOE BUCKETS

Width	mm	300	400	450	610	750	900
Weight	kg	92	106	114	134	152	172



# 580-590 Super R Series 2

## STANDARD EQUIPMENT

- Mechanical quick coupler
- Loader boom safety support
- Steering wheel spinner knob
- Heating and defrosting
- Cold start
- Sun shield
- 2 front and 2 rear work lights
- Loader bucket automatic return to dig
- Loader float position
- Left rear view mirror
- Operator safety belt

## POSSIBLE ADDITIONAL OPTIONS

- Air-conditioning
- Compressed air suspension seat
- Tilttable steering wheel
- Right rear view mirror
- Extra cab roof lights
- Front mudguards
- Rotating beacon
- Ride Control
- Hydraulic extendable dipperstick
- On-board hammer circuit
- ISO, SAE, and other loader mechanical controls
- Safety valves for stabilisers, boom and dipper
- Two batteries
- Extreme cold start
- Anti-theft device/alarm
- Rubber street pads
- Industrial or agricultural tyres
- Loader buckets: standard, 4x1, 6x1 with forks
- Backhoe buckets
- Lift hook on bucket
- ISO or SAE hydraulic backhoe Pilot controls

Standard equipment is subject to change in different countries



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### WORLDWIDE CASE CONSTRUCTION EQUIPMENT CONTACT INFORMATION

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**NOTE:** Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings - consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.

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