#### T-SERIES BACKHOE LOADERS 580ST I 590ST I 695ST





# THE CONSTRUCTION KING

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EXPERTS FOR THE REAL WORLD
SINCE 1842

#### **MAIN REASONS**

#### **TO CHOOSE THE T-SERIES**



#### "IN-LINE" BACKHOE GEOMETRY

- Higher visibility thanks to the narrower frame, high stress resistance due to balanced effort distribution along the boom.



### LOAD SENSING HYDRAULIC SYSTEM

- The variable displacement pump combined with Tier 4i engine reduces fuel consumption by up to 14%.



#### **LOW PROFILE FOR EASY TRANSPORT**

- The design with overlapping cylinders reduces the overall boom transport height to 3.5 m for 580ST and 3.7 m for 590ST and 695ST.



#### PROTECTED BACKHOE OPERATION

- The outer extendahoe is the perfect solution for tough working conditions: the sliding part never touches the soil preserving its efficiency.
- The gripper teeth provide an excellent material retention.





#### **TIME SAVING**

- The patented integrated hydraulic quick coupler allows changing over the backhoe attachments from the cab with a simple switch.
- The hydraulic side shift enables easy and quick backhoe replacement in all work conditions.



#### **AUTO RIDE CONTROL**

- Auto Ride Control offers 3 settings to match different working conditions.



#### **COST SAVINGS**

- The 4,5 litre FPT engine with high power and torque density dramatically reduces service time ensuring the lowest maintenance costs in the market.



#### **FAST LOADING CYCLE**

- The return to dig mode guarantees precise automatic loader repositioning and easy to control loading operations.



#### **SAFE AND EASY MAINTENANCE**

- All the main check points are easily accessible from the ground.
- The front tilting engine hood and the perfect layout of the components enable fast routine maintenance operations.



### CASE STANDARD WARRANTY 3 YEARS / 3,000 HOURS

CASE standard warranty is designed to keep your equipment working well while taking away the concerns of the cost and inconvenience of mechanical failure.



### COMFORTABLE AND SAFE CAB

- Excellent visibility for all operations with loader or backhoe.
- Fully openable front and rear windscreens for excellent cab ventilation.

### ENGINE

#### A POWERFUL HEART

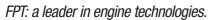


#### **COST SAVINGS**

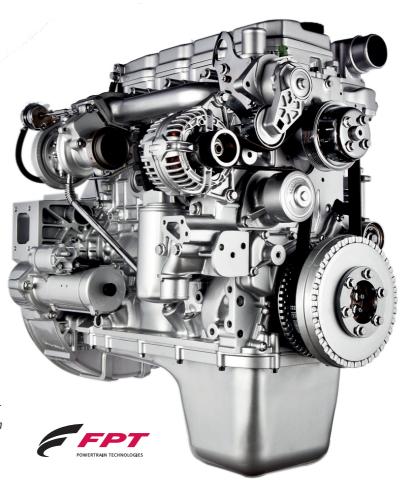
#### **FPT Multijet Engine**

The 4.5 lt. FPT engine delivers a big performance in a small package with the lowest maintenance cost in the market:

- The air intake system with centrifugal pre-filter reduces the cleaning intervals
- High turbulence piston and air intake manifold
- High pressure multi-injection common rail for a perfect air-fuel mix and greater burning efficiency
- Viscous fan: no power is wasted with its low cooling demands



- Fiat invented the «Common Rail» technology in the 80s
- Fiat Power Train produces over 600.000 industrial engines per year
- Our engines are used not only in earthmoving equipment but also in trucks, agricultural equipment, marine and military applications.





#### SAFE AND EASY MAINTENANCE

- Oil and filter check points are easily accessible on the left side of the bonnet. The front opening provides the operator with a full view of the engine components.
- The anti bumping frame surrounding the radiators prevents damage if the machine hits an obstacle at speeds up to 5 km/h, reducing unforeseen maintenance costs due to cracks in the radiators.



#### **CASE STANDARD WARRANTY - 3 YEARS / 3,000 HOURS**

When the unexpected occurs, you need to know your equipment is protected.

We understand the importance of your machinery being in good working order and in addition to the STANDARD WARRANTY, PROCover 2.0 plans can be customised to meet individual needs.

#### **BACKHOE**

#### **TAILORED MADE SOLUTIONS**





#### PROTECTED BACKHOE OPERATION

#### The King's DNA

- The exclusive outer extendahoe is part of the CASE DNA: all the components in contact with the soil are protected against impact and material accumulation
- The gripper teeth provide perfect material retention especially when working on pipe placement
- The curved main boom provides greater digging ability and makes it easier to load a truck
- Pilot controls automatically deactivate when not in use for improved safety. They are immediately reactivated at the touch of a switch.



#### LOAD SENSING HYDRAULIC SYSTEM

#### Modulated power

The load sensing hydraulics provide just the right amount of oil for each task, even when the engine is running at low rpm. This results in fuel savings of up to 14% compared to traditional gear pumps. CASE is the only Backhoe loader manufacturer offering closed hydraulic centre whatever the choice of pump. Closed hydraulics enable simultaneous movements independent from work load and functions delivering constant power, better operator controllability and fast cycles.



#### "IN-LINE" BACKHOE GEOMETRY

#### No Stress power

Case has enriched the offering introducing a new backhoe design with "In-Line" cylinder geometry and inner extendahoe. The aligned cylinders ensure perfect visibility across the boom and reduce the structure bending distributing the stresses. This is the typical solution adopted on large excavators where productivity and reliability are a must. The new technology will flank the well known and more backhoe oriented CASE DNA boom with overlapping cylinders and outer extendahoe.

#### **LOADER:**

### **STRAIGHT TO PERFORMANCE**



#### **AUTO RIDE CONTROL**

Safe productivity

- Auto Ride Control reduces loader arm bounce during travel, maintaining maximum material retention on all surfaces, for higher travel speeds and reduced journey times. The system offers a choice of 3 settings to match customer preferences or different soil conditions.
- The front axle offers +/-11 degrees of oscillation, to maintain traction on the toughest terrain, improve bucket retention and maintain high productivity.
- Different tyre designs (from industrial to agricultural) and technologies (radial or bias) are available to meet the different requirements for traction or resistance to impact and stress.



#### **FAST LOADING CYCLE**

The job has never been so easy!

Curved front loader arms improve truck loading while mechanical self-levelling assists the operator. Return-to-dig function significantly reduces the operator effort on repetitive loading operations and speeds up the whole cycle. Excellent front loader visibility and the mechanical self-levelling feature make loading and unloading pallets really quick and simple.



### CAB AND SEAT





### CAB AND SEAT

#### A CAB FIT FOR A KING



#### **COMFORTABLE AND SAFE CAB**

#### Get settled on your seat

- Pilot control columns and wrist rests are fully adjustable to suit your size.
- The cab sits on insulating mountings, reducing vibration and noise levels to 77 dB(A)
- Excellent visibility equals greater safety: the rear screen is fully tiltable to provide an unobstructed view of the digging area. The stowed rear screen also provides rain protection in the open position.
- Lumbar adjustment and fully adjustable armrests ensure a comfortable position throughout the working day.
- All four cab windows can be opened partially or fully, to provide maximum ventilation in the cab.
- A new overhead radio position and document storage box, combined with a lockable storage compartment make the CASE cab your comfortable office.
- 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.

For night working the CASE backhoe loader comes with 10 working lights, including two on each side, for maximum visibility.



#### A single control joystick for all the loader 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 (except on the 695ST, which features a limited slip differential)
- Cut off transmission switch
- Automatic return to dig position



Rear pilot joystick as option. Standard: mechanical controls.

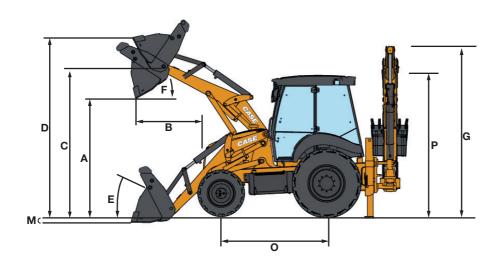


### **SPECIFICATIONS**

Injection system		FOORT	FORCE	COECT
High pressure Common Rail   High pressure Common Rail   Make		580ST	590ST	695ST
Make   COM 445TALEEA   COM 445TALEEH   COM 445TALEEH   COM 45TALEEH   COM 45TAL				
Power (according to ISO 14396)   72 kW / 97 hp   82 kW / 110 hp   82 kW / 110 hp				
Maximum torque (secording ISO 14963)   453 Nm @ 1400 1/min   516 Nm   510 1/min	-			
TRANSISSION		· · · · · · · · · · · · · · · · · · ·	•	· · · · · ·
Powershuttle		453 Nm @ 1400 1/min	516 Nm @ 1400 1/min	516 Nm @ 1400 1/min
Forward speeds   G-10-21-40 Km/h   G-10-21-40 Km/h   G-10-21-40 Km/h   Forward speeds   T-12-25-47 Km/h   T-12-25-47 K				
Reverse speeds				
Powershift				-
Forward speeds   6 - 10 - 22 - 39 Km/h   6 - 10 - 22 - 39 Km/h   7 - 12 - 26 Km/h   7 - 26 Km	•	7-12-25-47 Km/h	7-12-25-47 Km/h	-
Reverse speeds   7 - 12 - 26 Km/h   7 - 12 - 26 Km/h   7 - 12 - 26 Km/h   NTORAULICS   Variable Displ. 6 to 156 I/min © 2200 rpm m min (Gear Pump 151 I/min © 2200 rpm min (Gea	Powershift		,	
Variable Displacement   Var	Forward speeds	6 - 10 - 22 - 39 Km/h	6 - 10 - 22 - 39 Km/h	6 - 10 - 22 - 39 Km/h
Variable Displ. 6 to 156 l/min	Reverse speeds	7 - 12 - 26 Km/h	7 - 12 - 26 Km/h	7 - 12 - 26 Km/h
Type of pump and flow         © 2200 rpm win Gear Pump Ist I/min © 2200 rpm win Gear Pump Ist I/min © 2200 rpm         Variable Displacement of to 165 I/min © 2200 rpm         Available Displacement of to 165 I/min © 2200 rpm           BATTERY         205 bars         8740 Kg         8740 Kg         8740 Kg         8840 Kg         8740 Kg         400 patron disper/Ext         200 50 Kg         8120 Kg         8840 Kg         8840 Kg         100 kg         100 kg         100 kg         8840 Kg         8840 Kg         100 kg         100 kg         100 kg         100 kg         8840 Kg         100 kg         100 kg         100 kg         8840 Kg         100 kg <t< td=""><td>HYDRAULICS</td><td></td><td></td><td></td></t<>	HYDRAULICS			
Twin Gear Pump 151 //min   © 200 rpm   € to 165 //min © 2200 rpm   € to 165 //min © 2200 rpm   € 200 fpm   € 20				
■ 2200 rpm   205 bars   205 ba	Type of pump and flow			
Maximum pressure level   205 bars   205 ba			6 to 165 1/min @ 2200 rpm	6 to 165 1/min @ 2200 rpm
BATTERY   OPERATING WEIGHT   A WD, standard dipper/Ext.   7950 Kg   8020 Kg   8740 Kg   4 WD, standard dipper/Ext.   8050 Kg   8120 Kg   8840 Kg   TURNING RADIUS	Maximum pressure level	•	205 hars	205 hars
OPERATING WEIGHT   A WD, standard dipper/Ext   R050 Kg   8120 Kg   8740 Kg   8840 Kg	•	203 bars	203 bars	203 bars
A WD, standard dipper/Ext.				
A WD, extendible dipper/Ext   8050 Kg   8120 Kg   8840 Kg		7050 Va	9020 Ka	9740 Va
TURNING RADIUS   Front tires 12.5/80-18, wheel not braked, 4WD engaged   A300 mm at ext. edge of front tires - 5600 mm at bucket corner	<u> </u>	-		
Front tires 12.5/80-18, wheel not braked, 4WD engaged  AXLES, TIRES & BRAKE  Brake  Tires  - Front tires  - Front tires  - Rear tires  - Rear tires  - Rear axle WD engaged  AXLES, TIRES & BRAKE  Brake  - Front tires  - Front tires  - Front tires  - Rear tires  - Pear tires  - Tond axle: oscillation of +/- 11°  - Differential lock  - Differential lock		8050 Kg	8120 Kg	6040 Kg
AXLES, TIRES & BRAKE		4200 at aut	adva of from times. FC00 mm.	t husbat same
Brake   Tires   18" front with 26" or 28" rear   18" front with 26" or 28" rear   26" front with 26"   20" front with 30" rear   20" front with 30" rear   24" front with 24"   24" front with 26" or 28" rear   26" front with 26"   24" front with 26" or 28" rear   26" front with 26"   24" front with 30" rear   24" front with 24"   24" front with 30" rear   24" front with 24"   24" front with 24"   24" front with 30" rear   24" front with 30" rear   24" front with 24"   24" front with 26" or 28" rear   26" front with 26" or 28" rear   24" front with 30" rear   24" front with 26" or 28" rear   24" front with 30" rear   24" front with 26" or 28" rear   26		4300 mm at ext	. eage of front tires - 5600 mm a	at bucket corner
Tires	,			
Front tires   18" front with 26" or 28" rear   18" front with 26" or 28" rear   26" front with 26" or 28" rear   20" front with 30" rear   20" front with 30" rear   20" front with 30" rear   24" front with 24"				
- Rear tires         20" front with 30" rear         20" front with 30" rear         24" front with 24"           Front axle: oscillation of +/- 11°         Differential lock         Differential lock         Limited-slip differential           CAPACITIES           Fuel tank         1451         1451         1451         1451           Cooling system         241         241         241         1451 <td></td> <td>4011 6 1 111 0011 0011</td> <td>40" ( 1 '11 00" 00"</td> <td>00111 1 11 0011</td>		4011 6 1 111 0011 0011	40" ( 1 '11 00" 00"	00111 1 11 0011
Pront axte: oscillation of +/- 11°   Differential lock   Differential lock   Limited-slip differential				
CAPACITIES       Fuel tank     145 l     145 l     145 l       Cooling system     24 l     24 l     24 l       Hydraulic oil     122 l     122 l     126 l       Gear box oil: Power Shuttle 4 WD     20.8 l     20.8 l     20.8 l       PowerShift: Front axle 4WD Differential     6.5 l     6.5 l     6.5 l       Output stage     0.8 l + 0.8 l     0.8 l + 0.8 l     0.8 l + 0.8 l       Rear axle 4WD Total     21.2 l     21.2 l     21.2 l     21.2 l       EMISSIONS (g/kWh)     202 emission     790     744     744       NOx emission     4.4     3.6     3.6       HC emission     0.1     0.1     0.1       CO emission     1.8     0.9     0.9       PM emission     0.25     0.13     0.13       NOX + HCNM emission     4.5     3.7     3.7       NOISE       Internal dB(A)       External dB(A)     102     103     103				
Fuel tank         145 I         145 I         145 I           Cooling system         24 I         24 I         24 I           Hydraulic oil         122 I         122 I         122 I           Gear box oil: Power Shuttle 4 WD         20.8 I         20.8 I         20.8 I           PowerShift: Front axle 4WD Differential         6.5 I         6.5 I         6.5 I           Output stage         0.8 I + 0.8 I         0.8 I + 0.8 I         0.8 I + 0.8 I           Rear axle 4WD Total         21.2 I         21.2 I         21.2 I           EMISSIONS (g/kWh)         790         744         744           NOx emission         790         744         744           NOx emission         4.4         3.6         3.6           HC emission         0.1         0.1         0.1           C0 emission         1.8         0.9         0.9           PM emission         0.25         0.13         0.13           NOx + HCNM emission         4.5         3.7         3.7           NOISE         Internal dB(A)         102         103         103		Differential lock	Differential lock	Limited-slip differential
Cooling system       24 I       24 I       24 I       24 I         Hydraulic oil       122 I       122 I       126 I         Gear box oil: Power Shuttle 4 WD       20.8 I       20.8 I       20.8 I         PowerShift: Front axle 4WD Differential       6.5 I       6.5 I       6.5 I         Output stage       0.8 I + 0.8 I       0.8 I + 0.8 I       0.8 I + 0.8 I         Rear axle 4WD Total       21.2 I       21.2 I       21.2 I         EMISSIONS (g/kWh)       20.2 emission       790       744       744         NOx emission       4.4       3.6       3.6         HC emission       0.1       0.1       0.1         CO emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         NOx + HCNM emission       4.5       3.7       3.7         NOISE       Internal dB(A)       102       103       103		T		
Hydraulic oil   122   122   126				
Gear box oil: Power Shuttle 4 WD       20.81       20.81       20.81         PowerShift: Front axle 4WD Differential       6.51       6.51       6.51         Output stage       0.81+0.81       0.81+0.81       0.81+0.81         Rear axle 4WD Total       21.21       21.21       21.21         EMISSIONS (g/kWh)         C02 emission       790       744       744         NOx emission       4.4       3.6       3.6         HC emission       0.1       0.1       0.1         C0 emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         NOX + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103				
PowerShift: Front axle 4WD Differential         6.51         6.51         6.51           Output stage         0.81 + 0.81         0.81 + 0.81         0.81 + 0.81           Rear axle 4WD Total         21.21         21.21         21.21           EMISSIONS (g/kWh)           C02 emission         790         744         744           NOx emission         4.4         3.6         3.6           HC emission         0.1         0.1         0.1           C0 emission         1.8         0.9         0.9           PM emission         0.25         0.13         0.13           NOX + HCNM emission         4.5         3.7         3.7           NOISE           Internal dB(A)         102         103         103				
Output stage         0.81+0.81         0.81+0.81         0.81+0.81           Rear axle 4WD Total         21.21         21.21         21.21           EMISSIONS (g/kWh)           CO2 emission         790         744         744           N0x emission         4.4         3.6         3.6           HC emission         0.1         0.1         0.1           CO emission         1.8         0.9         0.9           PM emission         0.25         0.13         0.13           NOx + HCNM emission         4.5         3.7         3.7           NOISE           Internal dB(A)         102         103         103				
Rear axle 4WD Total     21.21     21.21     21.21       EMISSIONS (g/kWh)       CO2 emission     790     744     744       NOx emission     4.4     3.6     3.6       HC emission     0.1     0.1     0.1       CO emission     1.8     0.9     0.9       PM emission     0.25     0.13     0.13       NOx + HCNM emission     4.5     3.7     3.7       NOISE       Internal dB(A)       External dB(A)     102     103     103	PowerShift: Front axle 4WD Differential			
EMISSIONS (g/kWh)         C02 emission       790       744       744         N0x emission       4.4       3.6       3.6         HC emission       0.1       0.1       0.1         C0 emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         N0x + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103				
CO2 emission       790       744       744         NOx emission       4.4       3.6       3.6         HC emission       0.1       0.1       0.1         CO emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         NOx + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103		21.2	21.2 I	21.2 l
NOx emission       4.4       3.6       3.6         HC emission       0.1       0.1       0.1         C0 emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         NOx + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103	EMISSIONS (g/kWh)			
HC emission       0.1       0.1       0.1         CO emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         NOx + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103	CO2 emission	790	744	744
CO emission       1.8       0.9       0.9         PM emission       0.25       0.13       0.13         NOx + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103	NOx emission	4.4	3.6	3.6
PM emission       0.25       0.13       0.13         NOx + HCNM emission       4.5       3.7       3.7         NOISE         Internal dB(A)       102       103       103	HC emission	0.1	0.1	0.1
NOX + HCNM emission       4.5       3.7       3.7         NOISE       Internal dB(A)         External dB(A)       102       103       103	CO emission	1.8	0.9	0.9
NOISE           Internal dB(A)         102         103         103	PM emission	0.25	0.13	0.13
Internal dB(A)         102         103         103	NOx + HCNM emission	4.5	3.7	3.7
External dB(A) 102 103 103	NOISE			
External dB(A) 102 103 103	Internal dB(A)			
VIBRATION LEVELS		102	103	103
	VIBRATION LEVELS			

## T-SERIES BACKHOE LOADERS

#### **GENERAL DIMENSIONS**



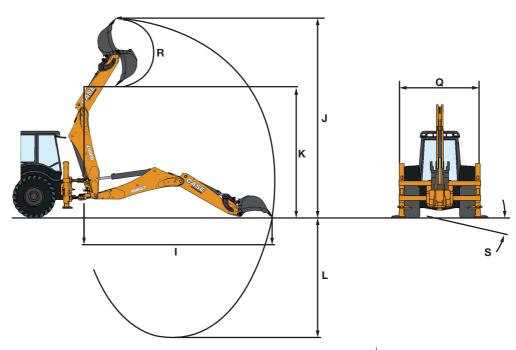
l e e e e e e e e e e e e e e e e e e e
TOOL CARRIER
2685 mm
830 mm
3460 mm
4250 mm
120 mm
43°
46°
4830 kg
3450 kg
4050 daN
6545 daN

BACK	CHOE	EXTENDED	STD/RETRACTED
	Swinging angle	180°	180°
L	Maximum digging depth	5435 mm	4369 mm
I	Maximum reach from swing centre	6238 mm	5229 mm
	Maximum reach at rear axle	7563 mm	6554 mm
J	Maximum operating height	6789 mm	5875 mm
K	Load height	4834 mm	3923 mm
	Central offset	0.62 m	0.62 m
	Lift capacity at max outreach (without bucket)	1049 kg	1393/1296 kg
	Breakout force (bucket)	5323 daN	5323 daN
	Breakout force (dipperstick)	2441 daN	3352 daN
R	Bucket rotation	200°/195° hyd. QC	200°/195° hyd. QC

#### DIMENSIONS

G	Boom height (transport position)	3455 mm
	Overall length - with standard bucket	5560 mm
0	Wheelbase	2175 mm
P	Cab height	2950 mm
Q	Overall width - with standard bucket	2430 mm
	Width outside tires	2230 mm
S	Stabiliser leveling compensation angle	14°

### **SPECIFICATIONS**



		590ST	695ST
LOAD	DER	TOOL CARRIER	TOOL CARRIER
Α	Maximum dump height under bucket at 45°	2685 mm	2750 mm
В	Maximum reach with bucket at 45°	830 mm	750 mm
C	Maximum height pin	3460 mm	3520 mm
D	Maximum bucket height	4250 mm	4350 mm
M	Horizontal bucket digging depth	120 mm	85 mm
E	Bucket angle (on ground)	43°	45°
F	Bucket angle (in the transport position)	46°	46°
	Lift capacity (at bucket load centre of gravity)	4830 kg	4770 kg
	Maximum height lifting capacity	3450 kg	3550 kg
	Lift force (boom cylinders)	4050 daN	7400 daN
	Breakout force (bucket cylinders)	6545 daN	5520 daN

BACK	CHOE	EXTENDED	STD/RETRACTED	EXTENDED	STD/RETRACTED
	Swinging angle	180°	180°	180°	180°
L	Maximum digging depth	5887 mm	4670 mm	5810 mm	4595 mm
I	Maximum reach from swing centre	6655 mm	5497 mm	6645 mm	5185 mm
	Maximum reach at rear axle	7960 mm	6510 mm	7960 mm	6510 mm
J	Maximum operating height	7141 mm	6111 mm	7215 mm	6192 mm
K	Load height	5196 mm	4166 mm	5271 mm	4249 mm
	Central offset	0.62 m	0.62 m	0.62 m	0.62 m
	Lift capacity at max outreach (without bucket)	1097 kg	1472/1369 kg	1097 kg	1472/1369 kg
	Breakout force (bucket)	6111 daN	6111 daN	6111 daN	6111 daN
	Breakout force (dipperstick)	2488 daN	3482 daN	2488 daN	3482 daN
R	Bucket rotation	198°/195° hyd. QC	198°/195° hyd. QC	198°/195° hyd. QC	198°/195° hyd. QC

#### DIMENSIONS

G	Boom height (transport position)	3682 mm	3647 mm
	Overall length - with standard bucket	5560 mm	5499 mm
0	Wheelbase	2175 mm	2200 mm
Р	Cab height	2950 mm	2900 mm
Q	Overall width - with standard bucket	2430 mm	2480 mm
	Width outside tires	2230 mm	-
S	Stabiliser leveling compensation angle	14°	14°





#### **PARTS AND SERVICE**

Wide network of customer support across the world.

No matter where you work, we're here to support and protect your investment and exceed your expectations. You can count on Case and your Case dealer for full-service solutions-productive equipment, expert advice, flexible financing, genuine Case parts and fast service. We're here to provide you with the ultimate ownership experience. To locate a Case dealer or learn more about Case equipment or customer service, go to www.casece.com

CASE CONSTRUCTION EQUIPMENT CONTACT INFORMATION AUSTRALIA

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NOTE: CASE provides specific outfits for various countries and many optional fittings (OPT). The illustrations on this or other leaflets may relate to standard or optional fittings. Please consult your CASE dealer for any information in this regard and any possible updating on components. CNH Industrial reserves the right to modify machine specifications without incurring any obligation relating to such changes.