

F-SERIES WHEEL LOADERS
521F | 621F

CASE
CONSTRUCTION



TIER 2
EU STAGE II

FASTER,
FUEL EFFICIENT

www.casece.com
EXPERTS FOR THE REAL WORLD
SINCE 1842

FASTER, FUEL EFFICIENT

EASIER MAINTENANCE, LOWER COSTS

- A single piece engine hood lifts clear of the engine for service and maintenance
- There are remote fluids drain taps for the engine oil, coolant and hydraulic oil.



PREMIUM ENGINE TECHNOLOGY

The electronically-controlled engine offers the operator a choice of four power and torque ratings, MAX, STANDARD, ECONOMY or AUTOMATIC modes. This boosts productivity and reduces fuel consumption.



MORE COMFORT FOR MORE PRODUCTIVITY

ACCESS FIT FOR A KING

Getting in the cab is easy; the wide steps and the handle make you feel safe, while the wide door provides unobstructed access.

OUTSTANDING VISIBILITY

You'll feel more confident and work faster with the great all round visibility. The curved rear hood shape is very low, reducing the risk of accidents and improving safety on site.

FEEL CONFIDENT WITH ROPS

All F Series cabins are reinforced and guarantee the operator protection against roll over (**ROPS certified**).



ALL CONTROLS AT YOUR FINGERTIPS

Greater focus on the job and less stress with fewer arm movements thanks to the ergonomic positioning of the control panel under your right hand.

GREAT STORAGE SPACE

The overhead radio placement and the storage make the Case cab even more convenient for you

MID-MOUNT COOLING SYSTEM

This unique design, with the five radiators mounted to form a cube instead of overlapping, ensures that each radiator receives fresh air and that clean air enters from the sides and the top, maintaining constant fluid temperatures. The high efficiency of the cooling system lengthens the life of the coolant to 1500 hours. The standard reversible fan can be activated from the cab and is very effective thanks to the mid-mount cooling system. The engine is mounted at the rear of the machine, therefore minimizes the need for an additional counterweight. This, together with the lower fan speed (just 1200 rpm), results in lower noise and vibration levels in the cab.





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 utilization.**
- **Increase your capabilities.**

Let your Case dealer service your machine on the jobsite.

You'll be back on the job faster.

Advantages include...

- **Responsive job site service to keep your equipment running.**
- **Increase machine uptime.**
- **Certified service staff and improved parts availability.**



PARTS

When you're looking for superior parts options to maximize the performance and lower the operating costs of your Case machinery, turn to CNH Industrial Genuine Parts to keep you equipped for success.

CNH Industrial Genuine Parts fit better, install faster and last longer and in an industry where "high impact" and "heavy lifting" are the norm, the smallest mechanical differences can lead to big problems.

CNH Industrial Genuine Parts from Case are manufactured from superior materials and specifically designed for Case construction equipment to continually and reliably withstand the punishment of everyday construction. So steer clear of mechanical problems and future breakdowns, by choosing CNH Industrial Genuine Parts from Case. They're the only parts that are field-tested and proven to keep your Case equipment performing its best.

SERVICE. RELY ON CASE TO DELIVER FOR YOU

Your commitment to your operation is evident every day, but that doesn't minimize the enormous pressure you face to reduce operating costs and improve productivity. So when you're on the job, make sure you have top-notch service and support of Case behind you every step of the way.

With our factory trained technicians, you can ensure that top-notch service professionals are working on your maintenance needs, so you can focus on your business and the big job challenges ahead, not on the tasks of servicing your equipment.

With your Case Service, you get more than mere oil changes. A Case Service ensures your Case equipment receives a thorough service that meets all requirements of its service schedules and properly maintains it for the day-in, day-out punishment of construction work.

Don't give another thought to time-consuming maintenance tasks. Simply rest easy and make certain that your service needs are taken care of by a Case factory trained technician.



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

At Case Construction we understand the importance of your machinery being in good working order when it counts.

ProCover is designed to help keep your equipment working well beyond the manufacturer's base warranty period while taking away the concerns of the cost and inconvenience of mechanical failure.

WHAT ARE THE ADVANTAGES OF PROCOVER?

PEACE OF MIND

Provides protection beyond the Manufacturer's Base Warranty Period.

FLEXIBLE OPTIONS

Plans can be customised to meet individual needs.

DEPENDABLE SERVICE

Eligible repairs completed by an authorised Case Construction Dealership and their trained service technician's using genuine OEM parts & lubricants.

TRANSFERABLE PROTECTION

New Equipment Plans may be transferred to a new owner at no charge

COVERAGE

- **STANDARD PROTECTION PLAN** **3 Years / 5000 Hours**
Additional years/hours can be purchased.
Please contact your local Case Construction dealer for further information.



STANDARD PROCOVER PLUS PROTECTION PLAN

CONSTRUCTION EQUIPMENT MASTER PARTS SCHEDULE

This plan provides coverage for the components listed below when a failure occurs due to a defect in material or workmanship, and may provide coverage for additional components not listed when the damage is caused by or resulting from a covered failure of a listed component.

PREMIER COMPONENTS COVERED

ENGINE AND ALL INTERNAL LUBRICATED COMPONENTS WITHIN	TRANSMISSIONS/AXLES/HYDROSTATICS	ELECTRICAL	HYDRAULICS
Accessory Gears	Axle Housing	Alternator	Accumulator And Related Relief Valve
Air Intake Hose	Axle Shaft	Gauges	Brake Accumulator
Camshaft	Clutch Discs (Wet Only)	Horn	Brake Pressure Sensor
Camshaft Bearings	Clutch Plates (Wet Only)	Indicators	Brake Pump, Brake Valve
Camshaft Drive Gear	Control Rods	Instruments	Differential Lock Valve
Catalytic Converter	Counter Shaft Clutch	Electronic Joysticks	Fan Pumps And Motors
Charge Air Cooler	Differential Housing	Electric Motors	Hydraulic Cylinders
Cold Start Enrichment Systems	Differential Pinion Gear / Ring Gear	Factory Installed Telematics	Hydraulic Hoses and Piping
Connecting Rods & Bearings	Drive Axle Hub	Sensors	Hydraulic Motors
Crankshaft Bearings & Gear	Drive Shaft Support Bearing	Solenoid Valves	Hydraulic Oil Coolers
Crankshaft Including Front And Rear Crankshaft Seals	Drive Shaft with Universal Joints	Starter And Starter Solenoid	Hydraulic Pumps
Cylinder Heads/ Head Gaskets	Electronic Transmission Controller and Valve	Switches	Hydraulic Reservoir
Cylinder Liners	Enclosed Oil Immersed Chains and Sprockets	Traction Control System	Hydraulic Valves
Diesel Exhaust Fluid Tank and Dispensing System	External Oil Lines	Voltage Regulator	Internal O-Rings and Bonded Washers
Diesel Particulate Filter	Filler Tubes (Transmission)	Wiring Harnesses	Pilot Control
EGR System Manifold	Final Drive Pinion	Wiring Harnesses Exclusions	Pressure Reducing Valves
Electronic Engine Control Module	Final Drive Planetary Gears	Rubbing, Chafing, Loose Or Corroded Connections	Unloading Valves
Engine Block	Front Wheel Drive Sensors	FACTORY INSTALLED HEAT AND AIR CONDITIONING	STRUCTURAL
Engine Mounts And Supports	Hydraulic Drive / Travel Motor	Accumulator	Backhoe Booms
Engine Oil Cooler	Hydraulic Drive Pump	Clutch	Backhoe/Excavator Dipper Sticks
Engine Speed Controls, Linkages, and Cables	Hydraulic Transmission-Control Valve	Compressor	C Frame
Exhaust Manifold and Muffler	Hydrostatic Motor	Condenser	Car Body
Fan And Fan Drive	Hydrostatic Transmission Charge Pump	Dryer	Chassis
Filter Mount	Hydrostatic Transmission Pump	Evaporator	Circle Frame
Flywheel, Ring Gear	Hydrostatic/Hydraulic Pump Drives	Expansion Valve	Engine Frame
Front And Rear Engine Covers And Seals	Internal Lubricated Clutch Housings	Heater Core	Equipment Frame
Front Damper	Internal Transmission Control Linkage	Hoses	Excavator Booms
Fuel Lines	Internal Wet Service Brakes	Pulley	Falling Object Protection Structure (FOPS)
Fuel Tank	MFWD Axle/Differential Assembly including Driveshaft and U Joint	Seals & Gaskets	Forklift Masts
Fuel Transfer Pump & Gasket	Planetary Gear Carrier	Temperature Control Programmers and Valves	Inner and Outer Dipper Arms of the Extendable Boom (Backhoe Loader)
Injection Pump	Pneumatic Valves	OPERATOR AREA	Main Frame
Injectors	Rotary Hydraulic Manifold	Covers and Panels	Rollover Protection Structure (ROPS)
Intake and Exhaust Manifold And Gaskets	Splitter Drive/Drop Box	Exterior/Interior Door/Panel Latches, Hinges & Struts	Swing Frame
Oil Filler Tube	Steering Clutches (Wet)	Exterior/Interior Moldings	Swing Tower Castings (Backhoe Loader)
Oil Lines	Swing Motor And Swing Gear Box	Knobs for Switches and Handles	Track Frame
Oil Pan And Gasket	Torque Converter	Mirrors	Wheel Loader/Skid steer Loader Arms
Oil Pump	Torque Converter Pump	Seat Frame & Suspension	
Pistons & Rings	Transfer Drive		
Pre-Cleaner/Air Cleaner Housing	Transmission Case		
Pressure/Temperature Sensors & Sending Units	Transmission Gears, Bearings, & Shafts		
Pulleys	Transmission Pump		
Radiator	Travel & Swing Sections (only) Of Main Control Valve		
Rocker Arm Assembly	Travel Control Valve		
Selective Catalytic Reduction System	Turntable Bearing		
Thermostats	Undercarriage Roller And Idler Seals And Bearings		
Timing Gears	Undercarriage Tensioners		
Turbocharger And Gasket	UNDERCARRIAGE EXCLUSIONS:		
Valve Cover And Gasket	Sprocket, Tracks, Pads, Bolts, Chains, Or Any Failure Due To Wear, Or Breakage Caused By Wear		
Water Piping			
Water Pumps			

THE DNA OF YOUR 521F

PRODUCTIVITY (50 meter distance cycle)

Considering density at 1,8 t/m³ and 100% fill factor
52 cycles/hour including 5 minute break _____ 52 loading cycles/h
with 2.1 m³ bucket _____ 110 m³/h or 198 t/h of material

ENGINE

Make _____ FPT engine F4HFA413A compliant with
EPA Tier2 or EU Stage II regulations
Number of cylinders _____ 4 cylinders - 4,7 liters - common rail
Max power SAE J1995 _____ 106kW / 142 hp @1800 rpm
Maximum torque SAE J995 _____ 608 Nm @1600 rpm

TRANSMISSION

All-wheel drive with planetary axles
Kick-down function
4-speed torque converter
4-speed auto Powershift ZF type 4WG130, switchable to manual shifting
forward speeds: 6-11-22-36 Km/h
reverse speeds: 6.4-12-23 Km/h
Adjustable transmission declutch

AXLES AND DIFFERENTIAL

29% Limited slip differential on front and rear axles
front and rear axle ZF type MT-L3065-II

TIRES

Tires _____ 17.5R25

BRAKES

Service brake _____ Maintenance free, self-adjusting wet 4-wheel
disc brakes
Area _____ 0.31 m²/hub
Parking brake _____ Disc brake on transmission activated from the
cab cluster
Area _____ 58 cm²

HYDRAULICS

Valves _____ Rexroth Closed-center, Load sensing hydraulic system.
Main valve with 3 sections
Steering _____ The steering orbitrol hydraulically is actuated with
priority valve
Type of pump _____ Variable displacement pump
(134 l/min @250 bar)Automatic hydraulic functions
- Bucket Return-to-dig
- Boom Return-to-travel
- Autolift (adjustable height)
Control type _____ Pilot control with single joystick or two levers

CAPACITIES

Fuel tank _____ 189 usable litres
Cooling system _____ 22 litres
Engine oil _____ 12 litres
Hydraulic oil _____ Tank: 57 litres, total system: 114 litres
Transmission oil _____ 19 litres

CAB

Cab complies to:
protection against falling objects (FOPS) _____ ISO EN3449
protection against roll over (ROPS) _____ ISO EN13510
Air flow _____ 8.5 m³ / min spread through 17 air vents

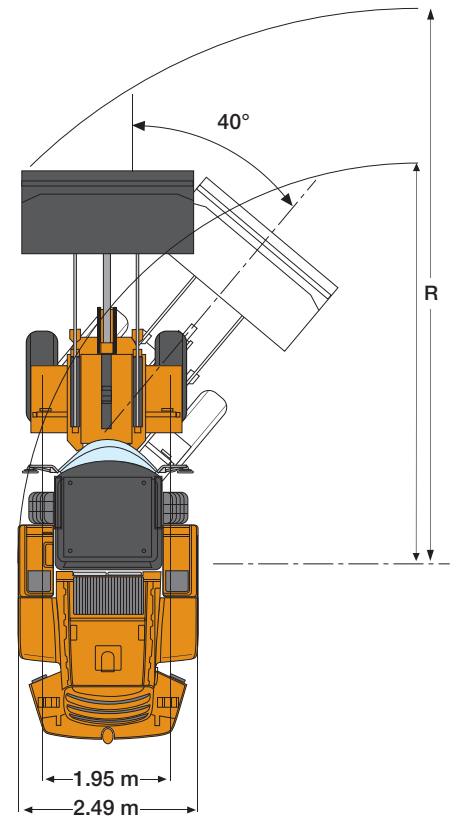
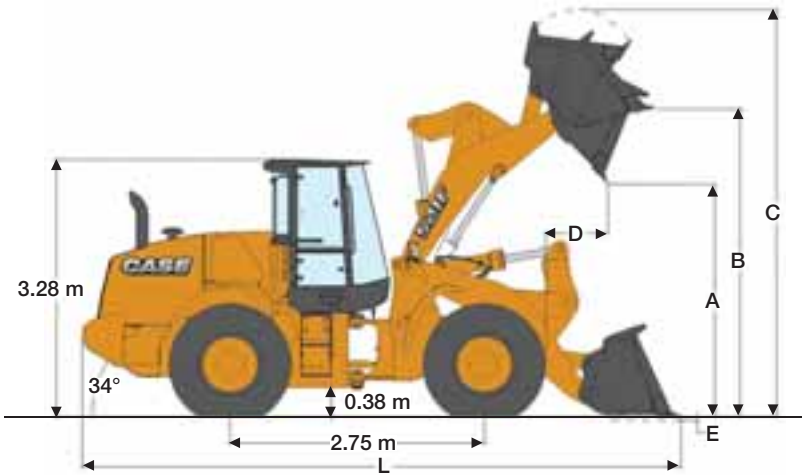
NOISE AND VIBRATION

Interior noise _____ 72 dB(A) according to ISO6595/6396/3744
Exterior noise _____ 72 dB(A) at 15 meters as per SAE J88 SEP80
103 dB(A) according to ISO6595/6396/3744
Reverse gear alarm
Vibrations _____ air-cushioned seat MSG 95A/732

ELECTRICAL

24 V. Batteries 2 x 12V.
Alternator _____ 70 A

SPECIFICATIONS



LOADER SPEED:

Raising time (loaded)	5.4 sec
Dump time (loaded)	1.2 sec
Lowering time (empty, power down)	3.9 sec
Lowering time (empty, float down)	3.9 sec

521F

		Z-bar 1.7 m ³ bucket	XT 1.7 m ³ bucket with quick coupler	
		edge	edge	teeth
Bucket with bolt on :				
Bucket volume (heaped)	m ³	1,76	1.70	1.70
Bucket Payload	kg	3680	3249	3296
Maximum material density	ton/m ³	2034	1.9	1.9
Bucket outside width	m	2550	2.44	2.44
Bucket weight	kg	818	1117	1045
Tipping load - straight	kg	8365	7634	7728
Tipping load - Articulated at 40°	kg	7151	6497	6591
Breakout force	kg	8756	8288	8124
Lift capacity from ground	kg	10165	10236	10365
A - Dump height at 45° at full height	m	2714	2.5	2.49
B - Hinge pin height	m	3608	3.75	3.75
C - Overall height	m	4685	4.94	4.94
D - Bucket reach at full height	m	1013	1.23	1.27
E - Dig depth	cm	7	19	18
L - Overall length with bucket on the ground	m	6685	7.05	7.07
R - Turning radius to front corner of the bucket	m	5.4	5.5	5.6
Bucket rollback in carry position		43°	52°	52°
Dump angle at full height		54°	62°	62°
Machine operating weight	kg	10409	11189	11117

F-SERIES WHEEL LOADERS





THE DNA OF YOUR 621F

PRODUCTIVITY (50 meter distance cycle)

Considering density at 1,8 t/m³ and 100% fill factor
52 cycles/hour including 5 minute break _____ 52 loading cycles/h
with 2.4 m³ bucket _____ 125 m³/h or 225 t/h of material

ENGINE

Make _____ FPT engine F4HFA613F compliant
with EPA Tier2 or EU Stage II regulations
Number of cylinders _____ 6 cylinders -6.7 liters - common rail
Max power SAE J1995 _____ 128 kW / 172 hp @1800 rpm
Maximum torque SAE J1995 _____ 730 Nm @1600 rpm

TRANSMISSION

All-wheel drive with planetary axles
4-speed auto Powershift ZF type 4WG160, switchable to manual shifting
Adjustable transmission declutch
forward speeds: 7-13-24-39 Km/h
reverse speeds: 7-14-25 Km/h
Kick-down function

Axles and differential
29% Limited slip differential on front and rear axles
Front and rear axle ZF type MT

TIRES

Tires _____ 20.5R25

BRAKES

Service brake _____ Maintenance free, self-adjusting wet 4-wheel
disc brakes
Area _____ 0.39 m²/hub
Parking brake _____ Disc brake on transmission activated from the
cab cluster
Area _____ 58 cm²

HYDRAULICS

Valves _____ Rexroth Closed-center, Load sensing hydraulic system.
Main valve with 3 sections
Steering _____ The steering orbitrol hydraulically is actuated with
priority valve
Type of pump _____ Tandem Variable displacement pump
(171 l/min @250 bar)

Automatic hydraulic functions
- Bucket Return-to-dig
- Boom Return-to-travel
- Auto.lift (to adjustable height)
Control type _____ Pilot control with single joystick or two levers

CAPACITIES

Fuel tank _____ 248 usable litres
Cooling system _____ 26.8 litres
Engine oil _____ 13 litres
Hydraulic oil _____ Tank: 91 litres, total system: 148 litres
Transmission oil _____ 27 litres

CAB

Cab complies to:
Protection against falling objects (FOPS) _____ ISO EN3449
Protection against roll over (ROPS) _____ ISO EN13510
Air flow _____ 8.5 m³ / min spread through 17 air vents

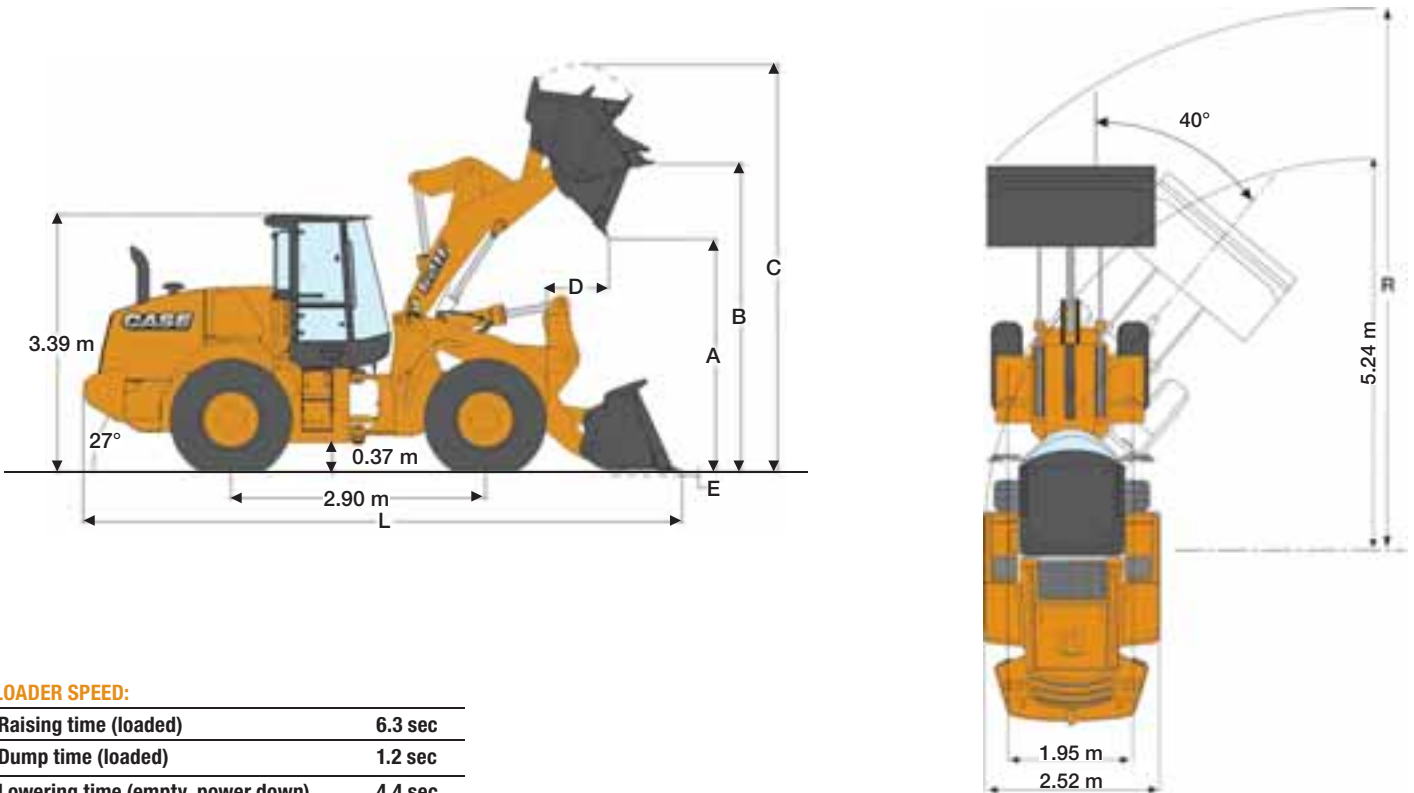
NOISE AND VIBRATION

Driving noise in dB (A) 82 to SAE J88 @ 15 meters
Interior noise _____ 71 dB(A) as per ISO 6595/6396/3744
Exterior noise _____ 72 dB(A) at 15 meters as per SAE J88 SEP80
103 dB (A) according to ISO 6595/6396/3744
Reverse gear alarm
Vibrations _____ air-cushioned seat MSG 95A/732
average 1,4 m/s² as per ISO/TR 25398:2006

ELECTRICAL

24V. Batteries 2 x 12V.
Alternator _____ 65 A

SPECIFICATIONS



LOADER SPEED:

Raising time (loaded)	6.3 sec
Dump time (loaded)	1.2 sec
Lowering time (empty, power down)	4.4 sec
Lowering time (empty, float down)	4.4 sec

		Z-bar	XT Buckets
621F		2.14 m³	1.9 m³ w/QC
Bucket with bolt on :		edge	edge general purpose
Bucket volume (heaped)	m ³	2,05	1,9
Bucket Payload	kg	4436	3747
Maximum material density	ton/m ³	1954	2
Bucket outside width	mm	2602	2605
Bucket weight	kg	902	1265
Tipping load - straight	kg	107	8590
Tipping load - Articulated at 40°	kg	8872	7493
Breakout force	kg	11533	10339
Lift capacity from ground	kg	11224	13633
A - Dump height at 45° at full height	mm	2847	2737
B - Hinge pin height	mm	3831	3958
C - Overall height	mm	4956	5353
D - Bucket reach at 45° full height	mm	969	1304
E - Dig depth	mm	80	64
L - Overall length with bucket on the ground	mm	7315	7679
R - Turning radius to front corner of the bucket	mm	5.75	5.9
Bucket rollback in carry position	°	23	58
Dump angle at full height	°	55	55
Machine operating weight	kg	12116	12562

www.casece.com
EXPERTS FOR THE REAL WORLD
SINCE 1842

CASE
CONSTRUCTION



CASE CONSTRUCTION EQUIPMENT
CONTACT INFORMATION
AUSTRALIA
31-53 Kurrajong Road
St. Marys nsw 2760

CASE Customer
Assistance
1300 99 CASE

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.

Form No. ANZ3403CCGB - Print in Australia - MediaCross Firenze - 06/15

