435S Wheeled Loading Shovel

Operating weight: 13,688kg  
Gross rated power: 230hp (171kW)  
Full turn tipping load: 7,972kg  
Standard shovel capacity: 2.4m³
CLEANER, QUIETER AND MORE EFFICIENT

Unbeatble performance pages 4 – 5
Efficient by design pages 6 – 7
A quality process pages 8 – 9
Comfortably superior pages 10 – 11
Low maintenance long intervals page 12 – 13
Drive safely page 14
LiveLink, work smarter page 15
Value added page 16
Specification pages 17 – 19
CLEANER, QUIETER AND MORE EFFICIENT
UNBEATABLE PERFORMANCE

THE 435S CAN PERFORM GREAT FEATS OF PRODUCTIVITY. DELIVERING A MASSIVE 230HP, AND WEIGHING UNDER 14 TONNES, THE MACHINE HAS A HUGE POWER-TO-WEIGHT RATIO OF 16.8HP/TONNE FOR ULTIMATE PUSHING, CLIMBING AND ROADING PERFORMANCE.

Engine productivity

1. The Cummins QSB 6.7 litre engine produces a huge 230 horsepower, with a peak engine torque of 945Nm at only 1500rpm for excellent response. The engine is Tier4i/stage 3b emissions compliant using a Diesel Particulate Filter and oxidation catalyst.
   A variable geometry turbocharger provides increased performance at low engine speed for improved cycle times and tractive effort.

Loading productivity

2. JCB’s optional quick hitch makes attachment changing quick and efficient. The quick hitch is designed to be compatible with aftermarket attachments too.
3. Powerful twin variable displacement piston pump hydraulics can circulate a massive 264 l/min for fast cycles and excellent multi function capability.
Loading productivity (continued)

1. The high torque (HT) arm design on the 435S gives great visibility to the loader end, as well as offering parallel lift, making it ideal for multi-attachment use.

Constant torque throughout the full carriage rotation provides excellent power and attachment control.

2. Choose a HT high lift on the 435S and you can use the machine for higher loading height applications (hopper, trailer and spreader loading).

Drivetrain productivity

3. The unique 6-speed transmission with torque converter lock-up in every gear provides closer gear ratios for better acceleration, hill climbing and roading performance. The lock-up element eliminates losses from the torque converter for faster cycle times and improved efficiency.

4. The innovative electronic management can perform progressive clutch cut-off for efficient, productive loader control. This feature controls tractive effort via the transmission, diverting maximum power to the loader hydraulics and reducing service brake wear and fuel consumption.

5. With a choice of axle options you can tailor a 435S to any application.

› Open differentials are ideal for hard standing ground conditions.
› Limited slip differential is perfect for soft, muddy terrain with reduced traction.
› Open differentials with an automatic locking front axle differential provide excellent traction in varied ground conditions – ideal for straight line pushing.
THE JCB 435S IS DESIGNED TO MOVE MORE MATERIAL FOR LESS. TO ACHIEVE THIS, WE’VE DESIGNED THE ENGINE, AXLES, DRIVELINE AND HYDRAULICS TO WORK IN HARMONY WITH EACH OTHER, FOR ULTIMATE EFFICIENCY.

An efficient engine
1. Automatic idle returns the engine to 700rpm after 30 seconds of inactivity.
2. Eco mode limits engine speed to 1800rpm for reduced fuel consumption. Productivity remains formidable.

An efficient driveline
3. Our torque lock-up 6-speed transmission option gives 100% efficiency in all gears for improved fuel consumption. Closer gear ratios provide lower engine speed in each gear.
4. Wheel speed braking means the brakes rotate at the same speed as the wheels for heat and drag reduction, as well as improved fuel economy.
An efficient hydraulic system

- A hydraulic cooling fan automatically reacts to ambient temperature and adjusts the fan speed to optimise cooling and reduce fuel consumption. This also lowers noise.

- Unloaded spool valves in the valve block mean that arms lower under gravitational, not hydraulic force, reducing fuel consumption.
WE KNOW THAT A WHEELED LOADING SHOVEL IS A KEY PART OF THE FARM’S PROCESS. THAT’S WHY THE JCB 435S IS BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY. THE PROCESSES WE’VE USED TO DESIGN AND MANUFACTURE THEM WILL SAFEGUARD YOUR WORKING PROCESS, HOUR AFTER HOUR, DAY AFTER DAY.

Quality built in

1. Finite element analysis and rig testing ensure superior structural strength and durability. Cold cell testing guarantees starting performance down to -20°C.

2. Precision machining provides high tolerances and accurate location of pins and bushes.

3. The 435S has been purpose built to meet the high demands of agricultural applications.

We use state-of-the-art manufacturing processes like robot machining, precision paint technology and innovative assembly techniques to achieve the very highest levels of quality.
Well articulated

1. The articulation joint has a heavy-duty box section – much stronger than a single plate with a boss. Steering rams are positioned high up and well protected from possible impact and damage.

2. Hoses are neatly routed and clamped through the articulation joint, well away from any pinch points.

Protecting ancillaries

3. Recessed rear lights are protected within the solid counterweight casting.

4. The rear counterweight and cast quarter pillars protect the cooling pack and the back end of the machine from damage.

The articulation joint has a heavy-duty centre pin and oversized bush, as well as twin taper roller bearings on the bottom box joints. This can tolerate both vertical and horizontal loadings for durability and rigidity.
KEEPING OPERATORS FRESH AND ALERT ALL DAY LONG RESULTS IN INCREASED SAFETY AND PRODUCTIVITY. WITH THAT IN MIND, THE 3M³ CAB IS ROOMY, EASY TO ACCESS, AND QUIET. IT ALSO HAS EXCELLENT VISIBILITY AND INTUITIVE TO USE ERGONOMIC CONTROLS.

In control

1. A tilting and telescopic steering column provides easy adjustment for maximum comfort.

2. A range of loader controls; multi-lever, joystick, or joystick with proportional auxiliary controls.

3. A stylish, modern central dash display combines analogue dials and a colour LCD screen – this can display machine health details, service requirements, operating information and more.

The 435S has a range of seat options: mechanical or air suspension, vinyl or fabric bases, or even our Actimo XXL option. It’s heated with air suspension, lumbar support, armrests, backrest extension and a headrest, all with full adjustment.
A comfortable environment

4 The 435S has air conditioning and automatic climate control options to create perfect working temperatures.

Exterior comforts

5 3 or 4 spool hydraulics and a quickhitch enable many attachments to be used easily for extra versatility.

6 The selectable loader arm detents mean operators can set loader arm height limitations, return to dig and float functions for improved safety and productivity.

7 JCB Smoothride load suspension limits shock loadings and therefore reduces material spillage and structural stress, as well as increasing operator comfort.

8 A 3-piece laminated front screen provides excellent visibility while interior mirrors, heated exterior mirrors, an optional reverse camera and a sloping rear bonnet give good rearward views.
A WHEELED LOADING SHOVEL NEEDS TO SPEND THE MAXIMUM AMOUNT OF TIME HARD AT WORK. WE’VE DESIGNED THE 435S TO DO JUST THAT, WITH LONG SERVICE INTERVALS AND QUALITY COMPONENTS.

Access all areas
1. Gain access to the engine bay and cooling pack areas easily with wide-opening gullwing doors.
2. The 435 has a large single faced cooling package for unrivalled quick, easy and safe cleaning.
3. Ground level daily check and grease point access makes life easier and safer.

Looking after itself
4. An electronic monitoring system relays machine condition giving real time alerts, safeguarding the machine and operator.
5. With the optional auto lubrication kit your machine will take care of its own greasing requirements.
6. The standard widecore cooling pack and optional reversing fan will ensure cooling efficiency in environments with large amounts of airborne debris.

Green = standard operation  Blue = reverse operation
Quality built in

7 By using top components in the 435S (Cummins engine, ZF transmissions and axles, Rexroth pumps and Parker valve blocks), we’ve built in long service life as standard.

8 Full hydraulic dual circuit braking with multiple oil immersed disks gives the braking system a virtually maintenance-free lifespan.

9 Check brake, steering and hydraulic system pressures easily on a 435S with group test ports.
THE 435S IS DESIGNED TO KEEP THE OPERATOR SAFE AT ALL TIMES. GREAT VISIBILITY, NON-SLIP SURFACES AND AIR FILTRATION IS JUST THE START.

Safety first

1. Our optional rear-view camera displays an unobstructed rear view on an in-cab colour monitor.

2. Access steps are inclined and equally spaced, complemented by well positioned grab handles for three points of contact at all times.

3. The 435 has interior mirrors, heated exterior mirrors and bonnet mirrors for superb all round visibility.

4. The cab is isolator-mounted, compliant with ROPS/FOPS standards, and positively pressurised against dust. You can choose from fresh air, carbon and P3 – HEPA recirculation filters as well.
LIVELINK, WORK SMARTER

LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MANAGE JCB MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. ACCESS EVERYTHING FROM MACHINE ALERTS TO FUEL REPORTS AND HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.

Productivity and cost benefits
By providing information like idle time monitoring and machine fuel consumption, JCB Livelink helps reduce your fuel usage, saving money and improving productivity. Machine location information can help improve efficiency and perhaps even reduce insurance costs.

Maintenance benefits
Manage machine maintenance easily – accurate hours monitoring and service alerts improve maintenance planning, while real-time location data helps you manage your fleet. Critical machine alerts and maintenance history records are also available.

Security benefits
Livelink’s real-time geofencing alerts tell you when machines move out of predetermined zones, and real-time curfew alerts inform you of unauthorised usage. Further benefits include real-time location information, advanced ECU matching (pairs Livelink with the immobiliser or ECU), and PIN code management (to remotely authorise usage – perfect for plant hire).
VALUE ADDED

JCB’S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE’LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.

1. Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

2. The global network of JCB Parts Centres is another model of efficiency; with 15 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.

3. JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.

Note: JCB LIVELINK and JCB ASSETCARE may not be available in your region, so please check with your local dealer.
STATIC DIMENSIONS – HT (HIGH-TORQUE)
Max. engine power: 171kW (230hp) Max. operating weight: 14765kg Standard shovel capacity 2.4m³

A Overall length mm 6831 7244
B Axle to pivot pin mm 1096 1509
C Wheel base mm 3000 3000
D Axle to counterweight face mm 1816 1816
E Minimum ground clearance mm 494 494
F Height over exhaust mm 3236 3236
G Width over cab mm 1400 1400
H Width over tyres mm 2740 2740
H1 Wheel track mm 2152 2152
J Height over cab mm 3387 3387
Pin height (maximum) mm 3958 4388

Overall operating height mm 5147 5577
Front axle weight kg 6430 6550
Rear axle weight kg 7258 7391
Total weight kg 13688 13941
Inside radius mm 2791 2791
Maximum radius over shovel mm 5790 5985
Articulation angle degrees ± 40° ± 40°

435S data based on machine equipped with quickhitch mounted 1.9m³ bucket with bolt-on toeplates and 620/75 R26 MegAXBIB tyres.

ENGINE
6-cylinder, charge air cooled, variable geometry turbocharged, electronically controlled high pressure common rail injection, cooled exhaust gas recirculation diesel particulate filter and diesel oxidation catalyst. A remote sump oil drain facility simplifies servicing.

Type 4 stroke direct injection
Model QSB6.7
Capacity litres 6.7
Aspiration Turbo charged
Cylinders 6
Max gross power to SAE J1995/ISO 14396 kW (hp) @ 1600rpm 172 (230)
Rated gross power to SAE J1995/ISO 14396 kW (hp) @ 2100rpm 164 (220)
Nett power to SAE J1349/EEC 80/1269 kW (hp) @ 2100rpm 154 (206)
Max torque Nm @ 1500rpm 945

Emissions: US EPA Tier 4i, EU Stage IIIIB

TRANSMISSION
4 wheel drive, automatic smooth shift transmission electrically operated selector and gear change incorporating a speed inhibitor and modulation for smooth, responsive on-the-move direction and ratio changes. Single stage integral torque converter with lock-up in every gear. 6 forward and 3 reverse gears.

Gearbox options

Gearbox
435S
435S HL

<table>
<thead>
<tr>
<th>Gear</th>
<th>Gearbox options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(6WG210) 6 Speed + LUC</td>
</tr>
<tr>
<td>2</td>
<td>5.82</td>
</tr>
<tr>
<td>3</td>
<td>9.03</td>
</tr>
<tr>
<td>4</td>
<td>14.45</td>
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<tr>
<td>5</td>
<td>22.13</td>
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<tr>
<td>6</td>
<td>34.25</td>
</tr>
<tr>
<td>6</td>
<td>40 (48)*</td>
</tr>
</tbody>
</table>

*48kph available where local homologation allows

AXLES
Type Open, limited slip or automatic differential locking
Make & model Standard ZF MT-L3085 II (front) ZF MT-L3075 II (rear)
Overall axle ratio 21.53:1
Rear axle oscillation 21°
Weight Front axle 1080 kg Rear axle 815 kg

Bias Ratio: Open differential – 12%, limited slip differential – 30%, open differential with locking front- 100%

STEERING
Priority steer hydraulic system with emergency steering. Piston pump meters flow through steer valve @ 190 bar (2756 psi) to provide smooth low effort response. Steering angle ± 40°. Steer rams located high in the chassis fabrication to provide protection from damage. Adjustable steering column.

BRAKES
Hydraulic power braking on all wheels, operating pressure 60 bar (870psi). Dual circuit with accumulator back-up provide maximum safety under all conditions. Hub mounted, oil immersed, multi-plate disc brakes with organic brake linings are environmentally acceptable. Also available with sintered-linings for increased wear resistance, recommended in re-handling duties with extensive forward/reverse shuttling. Parking brake, mechanical type operating on transmission output shaft.

TYRES
620/75 R26 MEGAXBIB, 620/75 R26 DT824, 750/65 R26 MEGAXBIB, 750/65 R26 DT824.
## Loader Dimensions

Assumes machine is fitted with 20.5R25 Michelin XHA2 tyres.

### Model: 435S - Standard Height Arm

<table>
<thead>
<tr>
<th>Bucket type</th>
<th>Direct</th>
<th>Quickhitch</th>
<th>General purpose</th>
<th>General purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucket capacity (SAE heaped) m³</td>
<td>1.8 2 1.9 2.1 2.4 2.7</td>
<td>1.8 2 1.9 2.1 2.4 2.7</td>
<td>1.8 2 1.9 2.1 2.4 2.7</td>
<td>1.8 2 1.9 2.1 2.4 2.7</td>
</tr>
<tr>
<td>Bucket capacity (Sstruck) m³</td>
<td>1.6 1.8</td>
<td>1.6 1.8</td>
<td>1.6 1.8</td>
<td>1.6 1.8</td>
</tr>
<tr>
<td>Bucket width mm</td>
<td>2550</td>
<td>2550</td>
<td>2550</td>
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<tr>
<td>Bucket weight kg</td>
<td>810 850</td>
<td>810 850</td>
<td>810 850</td>
<td>810 850</td>
</tr>
<tr>
<td>Maximum material density kg/m³</td>
<td>2374 2116</td>
<td>2214 1972</td>
<td>1974 1758</td>
<td>1741 1538</td>
</tr>
<tr>
<td>Tipping load straight kg</td>
<td>9751 9662</td>
<td>9134 9034</td>
<td>8796 8678</td>
<td>8338 8258</td>
</tr>
<tr>
<td>Tipping load full turn kg</td>
<td>8546 8462</td>
<td>7972 7838</td>
<td>7513 7400</td>
<td>7105 7005</td>
</tr>
<tr>
<td>Payload kg</td>
<td>4273 4231</td>
<td>3986 3944</td>
<td>3552 3517</td>
<td>3380 3328</td>
</tr>
<tr>
<td>Maximum breakout force kN</td>
<td>138 128</td>
<td>138 128</td>
<td>138 128</td>
<td>138 128</td>
</tr>
<tr>
<td>N Rollback angle at full height degrees</td>
<td>49° 49°</td>
<td>49° 49°</td>
<td>49° 49°</td>
<td>49° 49°</td>
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<tr>
<td>O Rollback at carry degrees</td>
<td>48° 48°</td>
<td>48° 48°</td>
<td>48° 48°</td>
<td>48° 48°</td>
</tr>
<tr>
<td>Q Load over height mm</td>
<td>3627 3627</td>
<td>3612 3612</td>
<td>3612 3612</td>
<td>3612 3612</td>
</tr>
<tr>
<td>R Height (45° dump) mm</td>
<td>2817 2767</td>
<td>2505 2455</td>
<td>2455 2405</td>
<td>2455 2405</td>
</tr>
<tr>
<td>S Dig depth</td>
<td>50 50</td>
<td>50 50</td>
<td>50 50</td>
<td>50 50</td>
</tr>
<tr>
<td>T Reach at dump height mm</td>
<td>1071 1021</td>
<td>1021 1021</td>
<td>1052 1112</td>
<td>1052 1112</td>
</tr>
<tr>
<td>T Reach maximum (45° dump) - horizontal arm mm</td>
<td>1818 1686</td>
<td>1775 1725</td>
<td>1900 1865</td>
<td>2041 2001</td>
</tr>
<tr>
<td>Operating weight (includes 80kg operator and full fuel tank) kg</td>
<td>13122 13166</td>
<td>13122 13166</td>
<td>13122 13166</td>
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</tbody>
</table>

### Model: 435S - Hi Lift Arm

<table>
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<th>Bucket type</th>
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<td>1.6 1.8</td>
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<td>Tipping load full turn kg</td>
<td>8546 8462</td>
<td>7972 7838</td>
<td>7513 7400</td>
<td>7105 7005</td>
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<tr>
<td>Payload kg</td>
<td>4273 4231</td>
<td>3986 3944</td>
<td>3552 3517</td>
<td>3380 3328</td>
</tr>
<tr>
<td>Maximum breakout force kN</td>
<td>138 128</td>
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<td>138 128</td>
<td>138 128</td>
</tr>
<tr>
<td>M Dump angle maximum degrees</td>
<td>49° 49°</td>
<td>49° 49°</td>
<td>49° 49°</td>
<td>49° 49°</td>
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<tr>
<td>N Roll back angle full height degrees</td>
<td>58° 58°</td>
<td>58° 58°</td>
<td>58° 58°</td>
<td>58° 58°</td>
</tr>
<tr>
<td>O Roll back at carry degrees</td>
<td>48° 48°</td>
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<td>Q Load over height mm</td>
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</tr>
</tbody>
</table>

### Electrical System

24 volt negative ground system, 70 Amp alternator with 2 x 110 Amp hour low maintenance batteries. Isolator located in rear of machine. Ignition key start/stop and pre-heat cold start. Primary fuse box. Other electrical equipment includes quartz halogen, twin filament working lights, front/rear wash/wipe, heated rear screen, full road going lights, clock, gauge and warning light monitoring. Connectors to IP67 standard.

### Tyre Size

<table>
<thead>
<tr>
<th>Tyre size</th>
<th>Manufacturer</th>
<th>Type</th>
<th>Op weight kg STL kg</th>
<th>FTTL kg STL kg</th>
<th>FTTL kg Vertical mm Width mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>750/75 R26</td>
<td>Michelin</td>
<td>X818</td>
<td>272 183 161 154 136 10 218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>620/75 R26</td>
<td>Good Year</td>
<td>DT824</td>
<td>148 100 88 84 74 -6 24</td>
<td></td>
<td></td>
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<tr>
<td>750/75 R26</td>
<td>Good Year</td>
<td>DT820</td>
<td>384 259 228 218 192 16 254</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Heavy duty counterweight

- - 890 1608 1323 1356 1115 0 0
LOADERS

Widely spaced four ram geometry provides the combination of excellent visibility with high bucket torque characteristics throughout the working arc. The pin, bush and sealing design on all pivot points provide extended maintenance intervals.

LOADERS HYDRAULICS

Twin variable displacement piston pumps feed a "load sensing" system providing a fuel efficient and responsive distribution of power as required. Main services are servo actuated from a single lever (joystick) loader control or separate multi-levers. Auxiliary circuits (3 or 6) controlled via additional lever next to joystick, joystick mounted proportional buttons or additional multi lever with column mounted changeover switch. Accumulator back-up is available to control loader in the event of loss of pump pressure.

<table>
<thead>
<tr>
<th>Pump Type</th>
<th>Twin variable displacement piston pumps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump 1 max. flow</td>
<td>l/min 132</td>
</tr>
<tr>
<td>Pump 1 max. pressure</td>
<td>bar 250</td>
</tr>
<tr>
<td>Pump 2 max. flow</td>
<td>l/min 132</td>
</tr>
<tr>
<td>Pump 2 max. pressure</td>
<td>bar 160</td>
</tr>
<tr>
<td>Hydraulic cycle times at full engine revs</td>
<td>Seconds 4.7</td>
</tr>
<tr>
<td>Arms raise (full bucket)</td>
<td>4.7</td>
</tr>
<tr>
<td>Arms lower (empty bucket)</td>
<td>2.8</td>
</tr>
<tr>
<td>Total cycle</td>
<td>9.3</td>
</tr>
</tbody>
</table>

CAB

Resiliently mounted ROPS/FOPS structure (tested in accordance with EN3471:2008/EN3449:2008 (Level 2). Entry/ exit is via a large rear hinged door, grab handles giving 3 points of contact and anti-slip inclined steps. Forward visibility through a curved, laminated windscreen with lower glazed quarter panels, two interior mirror and heated exterior mirrors. Instrumentation analogue/digital display gauges along with full colour LCD screen including selectable machine and operator menus along with service and diagnostic screens. Heating/ventilation provides balanced and filtered air distribution throughout the cab via a powerful 8kW capacity heater, with air conditioning and climate control system as options. Provision of speakers and antenna for radio/fm (radio/CD not included). The cab environment is positively pressurised preventing the ingress of dust including in-cab recirculation filter. Fabric mechanical suspension seat as standard with various options including vinyl material, air suspension, heating and deluxe Grammer Actimo XXL air suspension seat with headrest, twin armrests, lumbar support, backrest extension, heating and full adjustment. Coat hook, cup holder and additional stowage space. Fuse box positioned at rear for access to fuses, relays and diagnostic connectors. In-cab noise level -70db(A).

SERVICE FILL CAPACITIES

<table>
<thead>
<tr>
<th>System</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic system</td>
<td>litres 210</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>litres 230</td>
</tr>
<tr>
<td>Engine oil sump</td>
<td>litres 18</td>
</tr>
<tr>
<td>Transmission oil system</td>
<td>litres 36</td>
</tr>
<tr>
<td>Axle oil (front)</td>
<td>litres 35</td>
</tr>
<tr>
<td>Axle oil (rear)</td>
<td>litres 23</td>
</tr>
<tr>
<td>Engine coolant system</td>
<td>litres 35</td>
</tr>
</tbody>
</table>

STANDARD EQUIPMENT

Loader: Bucket reset mechanism, loader arm kickout mechanism, loader control isolator, high torque true parallel lift geometry combines with excellent visibility between the arms.

Engine: Engine: Powercore air cleaner with scavenge system, silencer and exhaust stack with diesel particulate filter and diesel oxidation catalyst, sedimentor, twin bowl fuel filters, fan guards. Isolated cooling package with hydraulically driven low speed cooling fan. Low idle speed of 700rpm, engine idle shutdown timer. ECO (Economy) mode.

Transmission: Single lever column shift control, speed inhibitor, neutral start, progressive intelligent clutch cut-out, direction changes and kickdown on column lever and loader controls.

Brakes: Multi plate "oil-immersed" wet disc brakes, wheel speed braking, organic linings.

Hydraulics: Piston pumps with priority steer, emergency steer back-up, 2 spool loader circuit with accumulator support, 3rd spool auxiliary hydraulic circuit as standard. Hydraulic tank located in the rear chassis fabrication.

Steering: Adjustable steering column, "soft feel" steering wheel 5 turns lock to lock, resilient stops on max lock.

Cabs: ROPS/FOPS safety structure, interior reading light, centre mounted master warning light. Electronic monitoring panel with LCD message display. Two speed intermittent front windscreen wipe/wash and self-park, single speed rear windscreen wipe/wash and self park. 3 speed heater/demister with replaceable air filter, LH and RH opening windows, sun visor, internal rear view mirror, external mirrors, adjustable suspension seat with belt and headrest, operator storage facilities, laminated windscreen, heated rear screen, loader control isolator, horn, adjustable armrest.

Electrical: Road lights front and rear, parking lights, front and rear working lights, reverse alarm and light, rear fog light, battery isolator, radio wiring and speakers, 70 amp alternator, rotating beacon.

Bodywork: Front and rear fenders, side and rear access panels, flexible bottom step, full width rear counterweight, recovery lugs, lifting lugs.

OPTIONAL EQUIPMENT

Air conditioning, automatic temperature control option. Open, limited slip differentials front/rear, or automatic differential locking axles, Turbo 2 pre-cleaner, tooth guard, replaceable bucket wearparts, epoxy coated radiator/coolers, automatically reversing cooling fan, smooth ride system (SRS), hydraulic quick hitch, full rear fenders, reversing camera (colour), additional front and rear working lights, auto greasing system, joystick or multi-lever hydraulic controls, auxiliary hydraulic control on separate lever or joystick mounted (proportional), smart reverse alarm, white noise (BBS) reverse alarm, parallel lift links (recommended for pallet forks), Liveline telematics, sealed electrics, grease gun and cartridge, belly guard kit, ARV kit, safety strut, non-heated mirrors, 24V to 12V in cab converter, cab screen guards, additional front and rear work lights, vinyl seat, air suspension seat with or without heating, Grammer Actimo XXL deluxe seat, extra counterweight, light guards, front and rear blinds, engine block heater, biodegradable hydraulic oil, cab filtration options, fire extinguisher, number plate light kit, auxiliary 4th spool hydraulic service, high lift arms, rear fender grab rails, red and white chevrons, rear hinged guard protection.
435S Wheeled Loading Shovel

Operating weight: 13688kg
Max. Engine power: 230hp (171kW)
Full turn tipping load: 7972kg
Standard shovel capacity: 2.4m³