



ENGINE

Model..... Case 422/M2 diesel
Tier II certified
Type..... 4-stroke, naturally aspirated
Cylinders..... 4
Bore/Stroke 3.3" x 3.93"
(84 x 100 mm)
Displacement 134 in³ (2.2 L)
Fuel injection..... Indirect
Fuel #2 Diesel
Fuel filter..... In-line strainer
Air intake Cross-flow
Cooling Liquid
Engine speeds (rpm)
High idle – no load..... 3050±50
Rated – full load 2900
Low idle..... 1050
Horsepower per SAE J1349
Gross..... 51 (38 kW) @ 2900 rpm
Net 49 (37 kW) @ 2900 rpm
Peak torque
@ 1700 rpm 110 lb-ft (149 N·m)

ENGINE COOLING

Radiator
Core type Square wave
serpentine
Core size area..... 450 in² (.290 m²)
Rows of tubes 3
Cap pressure 13 psi (89.6 kPa)
Fan
Diameter 20.4" (518 mm)
Ratio 1.1:1
Water pump
Style..... Centrifugal
Flow..... 18.5 gpm (70 L/min)
Engine lubrication
Pump operating angle ratings
Side-to-side..... Rated 30°
Fore and aft Rated 30°
Oil filtration Replaceable,
full-flow cartridge

POWERTRAIN

Drive pump Tandem, axial piston
hydrostatic transmission
w/integral charge pump driven
directly off engine flywheel
Pump to engine ratio 1:1
Displacement .. 0 to 2.1 in³ (34.7 cc)
Pump flow @ rated rpm... 28.9 gpm
(109 L/min)
Flow Bi-directional
Charge pressure 360 psi
(24.8 bar)
System relief 4350 psi
(300 bar)
Controls Servo
Drive motors Fixed displacement
radial piston
Maximum displacement..... 24 in³
(393 cc)
Speed @ rated engine rpm
@ max displacement..... 260 rpm
Torque @ max displacement
and relief pressure..... 1,267 lb-ft
(1719 N·m)
Travel speed 0 - 6.8 mph
(11.0 km/h)
Final drive..... Single-reduction
chain drive
Drive chain
Size ASA #80HS
Tensile strength 21,000 lb
(93 413 N)
Axles..... One-piece, forged
induction-hardened
high carbon steel
Torque @ rated rpm 4,436 lb-ft
(6014 N·m)
Diameter 2.0" (51 mm)
Length 14.61" (371 mm)
Parking brakes Spring applied,
hydraulic release disc
Engagement Depress on/off
brake button, raise seat bar,
get off seat, or stop engine

HYDRAULIC SYSTEM

Standard equipment
pump Gear pump
Displacement.. 1.55 in³/rev (25.4 cc)
Pump flow @ rated engine rpm
Total 18 gpm (68.3 L/min)
Loader control valve..... 3-spool
open-center series with
power beyond port
Relief pressure .. 3000 psi (207 bar)
Port relief pressures
#1B Raise..... 3350 psi (230 bar)
Hydraulic lines
Tubing 37° JIC Flare
Loop hoses SAE 100 R12
Hydraulic oil cooler
Core type Two row in-line
Hydraulic filter 6 micron spin-on
replaceable element
on the return line with
warning indicator

INSTRUMENTATION

Digital hourmeter
 Fuel level LED bar graph
 Warning lights
 Fuel level
 Voltage
 Engine coolant temperature
 Engine oil pressure
 Air cleaner restriction
 Hydraulic filter restriction
 Hydraulic oil temperature
 Systems normal
 Seat belt reminder
 Warning alarms
 Engine coolant temperature
 Engine oil pressure
 Hydraulic oil temperature
 Seat belt reminder

ELECTRICAL SYSTEM

Alternator..... 41 amp
 Starter 2.5 kW
 Battery 12-volt low-maintenance
 850 cold-cranking amps
 @ 0° F (-18° C)

OPERATOR ENVIRONMENT

Tilt ROPS/FOPS canopy
 w/side screens
 Water-shedding vinyl seat
 Seat presence switch
 2" (51 mm) retractable seat belt
 Seat bar w/integral armrests
 Two servo-assist, adjustable,
 hands-only control levers
 Hand throttle
 Loader control lockout system
 Front and rear halogen floodlights
 Floor cleanout access

CYLINDERS

Lift cylinder
 Bore diameter..... 2.5" (63.5 mm)
 Rod diameter 1.5" (38.1 mm)
 Stroke 35.16" (893.1 mm)
 Closed length ... 46.18" (1173.0 mm)
 Bucket cylinder
 Bore diameter..... 2.5" (63.5 mm)
 Rod diameter 1.37" (35 mm)
 Stroke 14.5" (369 mm)
 Closed length 26.9" (683 mm)

OPERATING WEIGHTS

Unit equipped with 10.00 x 16.5
 Solideal Hauler SKS tires,
 60" (1.5 m) short lip bucket,
 mechanical attachment coupler,
 full fuel and 165 lb (75 kg)
 operator 5,483 lb (2488 kg)
 Shipping weight... 4,815 lb (2185 kg)
 Add-on weights
 Side cab glass +70 lb (32 kg)
 Lexan® door +50 lb (22.6 kg)
 Glass door w/wiper.. +77 lb (35 kg)
 Suspension seat +10 lb (4.5 kg)

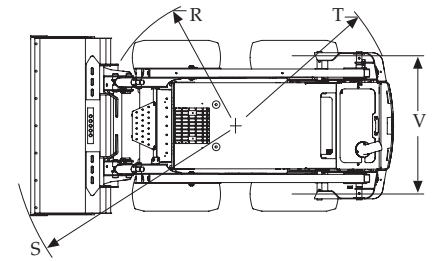
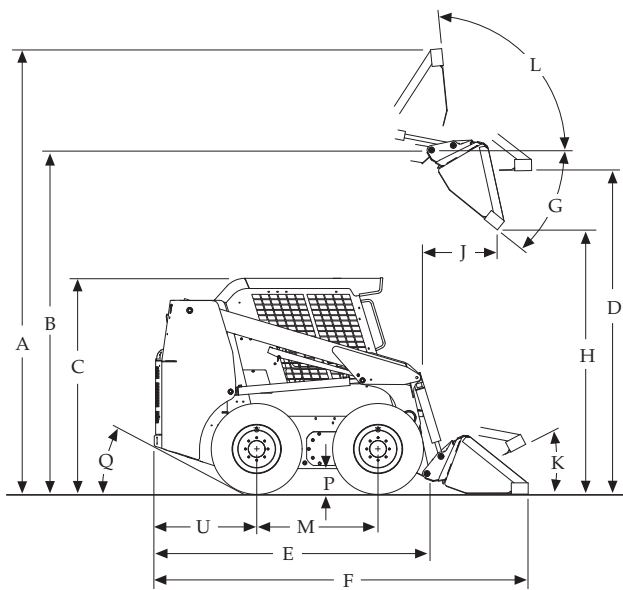
SERVICE CAPACITIES

Fuel tank..... 22.0 gal (83.3 L)
 Engine oil w/filter 2.2 gal (8.7 L)
 Engine cooling system 18 qt
 (17 L)
 Hydraulic system
 Reservoir 7.1 gal (32.4 L)
 Total 13.3 gal (50.2 L)
 Chain tanks (per side) 6 qt (5.7 L)

TIRE SELECTION

	Size	Ply Rating	Tread Depth	Tire Width	Width Over Tires	Tire Weight*	Max Travel Speed
Solideal Hauler SKS.....	10.00 x 16.5	8	0.75" (19 mm)	11.2" (284 mm)	59" (1.50 m)	63 lb (28.6 kg)	6.8 mph (11.0 km/h)
Galaxy Beefy Baby II	10.00 x 16.5	8	0.75" (19 mm)	10.2" (259 mm)	59" (1.50 m)	59 lb (26.8 kg)	6.8 mph (11.0 km/h)
Galaxy King Kong.....	10.00 x 16.5	10	1.25" (32 mm)	10.2" (259 mm)	59" (1.50 m)	91 lb (41.3 kg)	6.8 mph (11.0 km/h)
Galaxy Hippo	13.00 x 16.5	10	1.38" (35 mm)	12.8" (325 mm)	64" (1.63 m)	77 lb (34.9 kg)	6.8 mph (11.0 km/h)

*tire weight does not include the wheel weight



DIMENSIONS

- A. Overall operating height
 w/foundry/excavating bucket – short lip 145.3" (3.69 m)
 w/low profile bucket – standard lip 150.9" (3.83 m)
 w/low profile extended bucket – long lip 155.9" (3.96 m)
- Height to*
- B. Bucket hinge pin 114.6" (2.91 m)
- C. Top of rollover protective structure 75.5" (1.92 m)
- D. Bottom of level bucket, loader arm fully raised 107.3" (2.73 m)
- Overall length
- E. w/o attachment w/coupler 100" (2.54 m)
- F. w/foundry/excavating bucket on ground 123.2" (3.13 m)
- F. w/low profile bucket on ground 129" (3.28 m)
- F. w/low profile extended bucket on ground 133.9" (3.40 m)
- G. Dump angle at maximum height 40°
- H. Dump height – loader arm fully raised
 w/foundry/excavating bucket 89.4" (2.27 m)
 w/low profile bucket 85.9" (2.18 m)
 w/low profile extended bucket 82.7" (2.10 m)
- J. Reach – loader arm fully raised
 w/foundry/excavating bucket 23.6" (0.60 m)
 w/low profile bucket 28.1" (0.71 m)
 w/low profile extended bucket 31.9" (0.81 m)
- Maximum attachment rollback
- K. Bucket on ground 32°
- L. Bucket at full height 80°
- M. Wheelbase 41.2" (1.05 m)
- Ground clearance
- P. Bottom of belly pan 8" (203 mm)
- Q. Angle of departure 27°
- Clearance circle front
- R. Less bucket 48.1" (1.22 m)
- S. w/60" (1.52 m) foundry/excavating bucket on ground 73.2" (1.86 m)
- S. w/60" (1.52 m) low profile bucket on ground 78.4" (1.99 m)
- S. w/60" (1.52 m) low profile extended bucket on ground... 83.1" (2.11 m)
- T. Clearance circle rear 57.6" (1.46 m)
- U. Rear axle to bumper 35.4" (0.90 m)
- V. Tread width, centerline to centerline 49" (1.25 m)

NOTE: *Equipped with 10.00 x 16.5 Solideal Hauler SKS tires.

PERFORMANCE SPECS

Operating load	1,500 lb (681 kg)
Tipping load.....	3,000 lb (1361 kg)
Breakout force	
Lift cylinder.....	3,454 lbf (15 365 N)
Bucket cylinder	4,129 lbf (18 367 N)
Dig depth	
w/bucket flat	0" (0 mm)
Cycle time	
Raise	4.0 seconds
Lower	2.4 seconds
Dump	1.9 seconds
Rollback	1.8 seconds

NOTE: SAE rated lift capacities. Breakout force and cycle time measured with rated load in F/E bucket.

OPTIONAL BUCKETS

Type	Width inch (m)	Weight lb (kg)	Heaped Capacity ft ³ (m ³)
Foundry/ Excavating ...	60	270	11.5
	(1.5)	(122)	(0.33)
	66	370	15.2
	(1.6)	(168)	(0.43)
	72	390	16.7
	(1.8)	(177)	(0.47)
Low Profile ..	60	330	11.5
	(1.5)	(150)	(0.33)
	66	400	13.2
	(1.6)	(181)	(0.37)
	72	425	14.5
	(1.8)	(193)	(0.41)
Low Profile Extended	60	360	14.3
	(1.5)	(163)	(0.40)
	66	434	15.5
	(1.6)	(197)	(0.44)
Utility/Light Material	60	(350)	19.7
	(1.5)	(159)	(0.56)
	72	434	23.7
	(1.8)	(197)	(0.67)
	84	497	27.9
	(2.1)	(225)	(0.79)
Manure/ Slurry	60	340	16.7
	(1.5)	(154)	(0.47)
	72	465	19.1
	(1.8)	(211)	(0.54)

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS/FOPS canopy w/side screens
Tilt ROPS/FOPS
Instrument panels
Water-shedding vinyl seat
2" (51 mm) retractable seat belt
Hand throttle
Ergonomic hand controls
Seat bar w/integral armrests
Loader control lockout system
Electric brake control
Floor cleanout panel

LOADER

Radial loader arm design
Mechanical attachment coupler

ENGINE

Case 422/M2 diesel
Automatic fan belt tensioner
Integral engine oil cooling
Fuel filter w/water trap
Dual element air cleaner
41 amp alternator
850 CCA 12-volt battery
Glow plug
Heavy-duty radiator

POWERTRAIN

Hydrostatic four wheel drive
Servo controls
ASA #80HS drive chain
SAHR disc parking brakes

HYDRAULICS

Auxiliary hydraulics 3000 psi
(207 bar) – 19.1 gpm (72.2 L/min)
Hydraulic circuit pedal lock

Loader arm-mounted ISO flat face connectors
Auxiliary function lockout override
Loader function lockout system
Loader lift lockout override
3-spool loader control valve
Heavy-duty oil cooler
Loader arm float position

OTHER

Integral bumper counterweight
Lockable service access hood
Single-point daily servicing
Halogen lights, 2-front, 1-rear
Rear tail lights
Options harness

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Vinyl suspension seat w/2" (51 mm) retractable seat belt
Vinyl suspension seat w/3" (76 mm) retractable seat belt
Auxiliary front electric controls
Glass front door w/wiper & washer
Sliding side windows
Heater (deluxe)
Rear window w/emergency escape feature
Foot throttle
Accessory power outlet

LOADER

Auxiliary front electric control
Ride control
Hydraulic attachment coupler
Hydraulic one-way self-leveling

ENGINE

Coolant block heater

OTHER

Backup alarm/horn package
Rotating beacon
Lift hooks
Special paint
Language decals
Factory-installed tires – see page 2
Buckets – see page 3
Bolt-on bucket cutting edges
42" (1.07 m) and 48" (1.22 m) pallet forks
Battery disconnect switch/
jump start terminals
Steel tracks

NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

NOTE: All engines meet current EPA emissions requirements.

IMPORTANT: CNH America LLC reserves the right to change these specifications without notice and without incurring any obligation relating to such change. CNH America LLC does not warrant the safety or reliability of attachments from other manufacturers.

Case is a registered trademark of CNH America LLC. Any trademarks referred to herein, in association with goods and/or services of companies other than CNH America LLC, are the property of those respective companies.



www.casece.com



CASE IS A BRAND OF CNH, A GLOBAL LEADER FOR CONSTRUCTION EQUIPMENT, AGRICULTURAL EQUIPMENT AND FINANCIAL SERVICES.