

ENGINE

Model	
Case Family III 445	/M2 diesel, Tier II certified
Type 4-st	troke, naturally aspirated
Cylinders	4
Bore/Stroke	4.1 x 5.2 in (104 x 132 mm)
Displacement	274 in³ (4.5 L)
Fuel injection	Direct
Fuel	#2 Diesel
Fuel filter	In-line strainer
Air intake	Cross-flow
Cooling	Liquid
Engine speeds (rpm)	
High idle – no load	2480 <u>+</u> 50
Rated - full load	2300
Low idle	1050 <u>+</u> 50
Horsepower per SAE	J1349
Gross Net	80 (60 kW) @ 2300 rpm 74 (55 kW) @ 2300 rpm
Peak torque	
@ 1400 rpm	236 lb·ft (320 N·m)

ENGINE COOLING

Radiator		
Core type	Square wave serpentine	
Core size area	450 in ² (.290 m ²)	
Rows of tubes	3	
Cap pressure	13 psi (89.6 kPa)	
Fan		
Diameter	18.9 in (480 mm)	
Ratio	1.1:1	
Water pump		
Style	Integral	
Flow	52.8 gpm (182 L/min)	
Engine lubrication		
Pump	Deep sump with plate cooler and pressurized under-piston nozzles	
Pump operating angle ratings		
Side-to-side	Rated 35°	
Fore and aft	Rated 35°	
Oil filtration	Replaceable, full-flow cartridge	

POWERTRAIN

POWERTRAIN	
Drive pump	
Tandem, axial piston hy with integral charge pure engine flywheel	
Pump to engine ratio	1:1
Displacement	0 to 2.81 in ³ (46 cc)
Pump flow @ rated rpm	28.0 gpm (106 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 displacemen	t 28.7 in ³ (470 cc)
Speed @ rated engine	rpm
@ max displacement	225 rpm
Optional high speed	376 rpm
Torque @ max displace	ment
and relief pressure	1,655 lb·ft (2245 N·m)
Travel speed mph (km/h)	
Low range	7.0 (11.2)
High range (optional)	11.4 (18.3)
Final drive	Single-reduction chain drive
Drive chain	
Size	ASA #100HV
Tensile strength	30,000 lb (133 447 N)
Axles	
One-piece, forged indu carbon steel	ction-hardened high
Torque @ max displace	ment

Torque @ max displacement and relief pressure 5,148 lb·ft (6980 N·m) Diameter 2.0 in (51 mm) Length 14.6 in (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 p	ump		
Type	Gear pump		
Displacement	2.2 in ³ /rev (36 cc)		
Pump flow @ rated e	engine rpm		
Total	21.9 gpm (83 L/min)		
Optional high flow @	rated engine rpm		
Total	32.6 gpm (123 L/min)		
Loader control valve			
3-spool open-center series with power beyond port			
Relief pressure	3050 psi (210 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 onreplaceable element on the

return line withwarning indicator

Page 1 of 4

INSTRUMENTATION

Indicators

Digital Hourmeter

Fuel level LCD bar graph with alarm

Warning lights with alarms

Engine coolant temperature

Engine oil pressure

Air cleaner restriction

Hydraulic charge pressure

Hydraulic filter restriction

Hydraulic oil temperature

Warning alarms

Battery voltage (plus display)

Indicator light

Engine preheat

Parking brake

Seat bar reminder

ELECTRICAL SYSTEM

Alternator	95 amp
Starter	3.3 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 in (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

2.5 in (63.5 mm)
1.5 in (38.1 mm)
35.8 in (910 mm)
46.8 in (1190 mm)
2.75 in (69.9 mm)
1.37 in (34.9 mm)
14.6 in (370 mm)
26.9 in (683 mm)

OPERATING WEIGHTS

Unit equipped with 12.00 x 16.5 Solideal Hauler SKS tires, 66 in (1.6 m) foundry/excavating bucket, mechanical attachment coupler, full fuel tank and 165 lb (75 kg) operator

	6,718 lb (3047 kg)
Shipping weight	6,135 lb (2783 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)

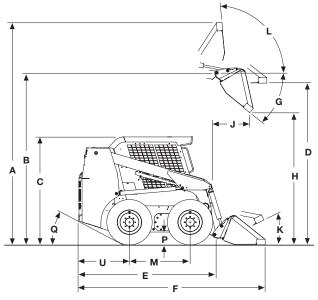
SERVICE CAPACITIES

Fuel tank	22.0 gal (83.3 L)
Engine oil w/filter	12.7 qt (12 L)
Engine cooling system	18 qt (17 L)
Hydraulic system	
Reservoir	7.1 gal (26.8 L)
Total	13.2 gal (50 L)
Chain tanks (per side)	8 qt (7.6 L)

TIRE SELECTION

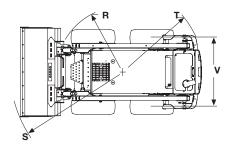
					Width	
	Size	Ply Rating	Tread Depth	Tire Width	Over Tires	Tire Weight*
Solideal Hauler SKS	12.00 x 16.5	10	0.75 in (19 mm)	13.1 in (333 mm)	64 in (1.63 m)	74 lb (33.6 kg)
Solideal Hauler SKS (offset wheel)	12.00 x 16.5	10	0.75 in (19 mm)	13.1 in (333 mm)	71 in (1.80 m)	74 lb (33.6 kg)
Galaxy Beefy Baby II	12.00 x 16.5	10	0.81 in (21 mm)	12.4 in (315 mm)	64 in (1.63 m)	82 lb (37.2 kg)
Galaxy Beefy Baby II (offset wheel)	12.00 x 16.5	10	0.81 in (21 mm)	12.4 in (315 mm)	71 in (1.80 m)	82 lb (37.2 kg)
Galaxy Hippo	33/15.50 x 16.5	12	0.81 in (21 mm)	15.2 in (386 mm)	70 in (1.78 m)	94 lb (42.6 kg)
Galaxy Hulk	12.00 x 16.5	12	1.37 in (35 mm)	12.0 in (305 mm)	64 in (1.63 m)	96 lb (43.5 kg)
Galaxy Bulky Hulk	33/15.50 x 16.5	14	1.37 in (35 mm)	15.1 in (384 mm)	70 in (1.78 m)	117 lb (53.1 kg)

^{*}tire weight does not include wheel weight.



DIMENSIONS*

Overall operating height	
	450 44 (0.05)
	152.4 in (3.87 m)
	158.0 in (4.01 m)
· • • • • • • • • • • • • • • • • • • •	163.0 in (4.14 m)
.	121.5 in (3.09 m)
	76.7 in (1.95 m)
<u> </u>	114.2 in (2.90 m)
3	
•	103.9 in (2.64 m)
	127.2 in (3.23 m)
1	132.9 in (3.38 m)
	137.9 in (3.50 m)
	39°
,	96.6 in (2.45 m)
•	93.1 in (2.37 m)
·	90.0 in (2.29 m)
Dump reach – loader arm fully raised	
w/foundry/excavating bucket	21.3 in (0.54 m)
•	25.9 in (0.66 m)
<u> </u>	29.7 in (0.75 m)
Maximum attachment rollback	
Bucket on ground	32°
Bucket at full height	84°
Wheelbase	43.1 in (1.10 m)
Ground clearance	
Bottom of belly pan	9 in (229 mm)
Angle of departure	28°
Clearance circle front	
less bucket	50.3 in (1.28 m)
w/66 in (1.68 m) foundry/excavating bucket on ground	76.7 in (1.95 m)
	81.9 in (2.08 m)
w/66 in (1.68 m) low profile extended bucket on ground	83.1 in (2.20 m)
Clearance circle rear	59.1 in (1.50 m)
Rear axle to bumper	36.6 in (0.93 m)
Tread width, centerline to centerline	52.6 in (1.34 m)
	w/low profile bucket w/low profile extended bucket Maximum attachment rollback Bucket on ground Bucket at full height Wheelbase Ground clearance Bottom of belly pan Angle of departure Clearance circle front less bucket w/66 in (1.68 m) foundry/excavating bucket on ground w/66 in (1.68 m) low profile bucket on ground w/66 in (1.68 m) low profile extended bucket on ground Clearance circle rear Rear axle to bumper



PERFORMANCE SPECS

Operating load	2,000 lb (907 kg)
Tipping load	4,000 lb (1814 kg)
Breakout force	
Lift cylinder	4,304 lbf (19 145 N)
Bucket cylinder	5,784 lbf (25 728 N)
Dig depth	
w/bucket flat	0 in (0 mm)
Cycle time	
Raise	4.1 seconds
Lower	2.6 seconds
Dump	1.9 seconds
Rollback	1.7 seconds

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

OPTIONAL BUCKETS

Туре	Width inch (m)	Weight lb (kg)	Heaped Capacity ft³ (m³)
Foundry/ Excavating	66 (1.6)	370 (168)	15.2 (0.43)
	72 (1.8)	390 (177)	16.7 (0.47)
	78 (2.0)	495 (225)	18.4 (0.52)
Low Profile	66 (1.6)	400 (181)	13.2 (0.37)
	72 (1.8)	425 (193)	14.5 (0.41)
Low Profile Extended	66 (1.6)	434 (197)	15.5 (0.44)
	72 (1.8)	477 (216)	17.1 (0.48)
	78 (2.0)	502 (228)	18.6 (0.53)
Utility/Light Material	72 (1.8) 84 (2.1)	434 (197) 497 (225)	23.7 (0.67) 27.9 (0.79)
Heavy-Duty/ Dirt	66	474	13.3
	(1.6) 72 (1.8)	(215) 501 (227)	(0.37) 14.6 (0.41)
	78 (2.0)	527 (239)	15.9 (0.45)

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS/FOPS canopy w/side screens

Tilt ROPS/FOPS

Instrument panels

Water-shedding vinyl seat

2 in (51 mm) retractable seat belt

Hand throttle

Ergonomic hand controls

Seat bar w/integral armrests

Loader control lockout system

Floor cleanout panel

Rear window w/emergency escape feature

LOADER

Radial loader arm design

Mechanical attachment coupler

ENGINE

Case Family III 445/M2 diesel

Tier II certified

Automatic fan belt tensioner

Integral engine oil cooling

Fuel filter w/water trap

Dual element air cleaner

95 amp alternator

850 CCA 12-volt battery

Heavy-duty radiator

POWERTRAIN

Hydrostatic four wheel drive

Servo controlled pumps

ASA #100HS drive chain

SAHR disc parking brakes

HYDRAULICS

Auxiliary hydraulics 3050 psi (210 bar) – 21.9 gpm (83 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

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Vinyl suspension seat w/2 in (51 mm) retractable seat belt

Vinyl suspension seat w/3 in (76 mm)

retractable seat belt

Electric auxiliary hydraulic control

Glass front door w/wiper & washer

Sliding side windows

Air conditioning (adds 3 inches to height to top

of ROPS)

Heater (deluxe)

Foot throttle
Accessory power outlet

Headliner

LOADER

Auxiliary front electric control

Ride control

Hydraulic attachment coupler

Hydraulic one-way self-leveling

HYDRAULICS

High-flow auxiliary hydraulics

3050 psi (210 bar) - 32.6 gpm (123 L/min)

Second auxiliary hydraulics

Attachment case drain plumbing

ENGINE

Coolant block heater

Grid heater

OTHER

2 speed ground drive

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 in (1.07 m) and 48 in (1.22 m) pallet forks

Battery disconnect switch/jump start terminals

Steel tracks

Lift cylinder guards

Heavy-duty rear door

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.

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