

ENGINE

Model	N844LT-D-ROW
Emissions Certification	Tier 3/Tier 4 Interim
Type	Diesel 4-stroke, Turbo, I.D.I.
Cylinder	4
Bore/Stroke	3.31 x 3.94 in (84 x 100 mm)
Displacement	135.2 in ³ (2.216 L)
Fuel injection	Indirect
Fuel	#2 diesel
Fuel filter	In-line strainer
Oil filtration	Replaceable, full-flow spin-on cartridge
Air intake	Turbocharged w/ Internal EGR
Cooling	Liquid
Engine speeds	RPM
High idle – no load	3140 +/- 40
Rated – full load	2800
Low idle	1200 +/- 50
Horsepower – SAE J1349 @ 2800 RPM:	
Gross	60 hp (44.7 kW)
Net	57 hp (42.4 kW)
Peak torque	126 lb-ft (171 N-m) @ 1800 RPM
Radiator:	
Core type	All aluminum
Core size area	399 in ² (0.257 m ²)
Rows of tubes	43 x 3
Cap pressure	16 +/- 2 psi (110 +/- 14 bar)
Fan:	
Diameter	17.32 in (440 mm)
Ratio	1.1:1
Water pump:	
Style	Centrifugal
Flow	18.8 gpm (71.2 L/min)
Engine lubrication:	
Pump	Pressure feed w/ Trichoid pump, deep sump & plate cooler
Pump operating angle ratings:	
Side to side	35°
Bucket up	35°
Bucket down	35°

DRIVETRAIN

Drive pump controls	Direct mechanical
Pump to engine ratio	1:1
Displacement	2.14 in ³ (35 cm ³)
Flow at rated engine RPM	
@ 97% efficiency	25.9 gpm (98 L/min)
Charge pressure	360 psi (25 bar)
System relief	5,000 psi (345 bar)
Drive pump controls	Electro-hydraulic
Pump to engine ratio	1:1
Displacement	2.14 in ³ (35 cm ³)
Flow at rated engine RPM	
@ 97% efficiency	25.4 gpm (96 L/min)
Charge pressure	362 psi (25 bar)
System relief	5,220 psi (360 bar)

DRIVETRAIN (cont.)

Drive motors:	
Max. displacement	19.83 in ³ (325 cm ³)
Optional high speed	12.2 in ³ (200 cm ³)
Speed @ high idle engine RPM	
97% efficiency @ rated engine RPM	313
Speed @ optional high speed RPM	443
Torque @ max. displacement and relief pressure	1,315 lb-ft (1 783 N-m)
Travel speed:	
Low range	7.9 mph (12.7 kph)
High range – optional	11.2 mph (18 kph)
Final drive	Single-reduction chain drive
Drive chain:	
Size	ASA #80
Tensile strength	21,000 lb (93.4 kN)
Axles:	
Torque @ max. displacement and relief pressure	4,381 lb-ft (5 940 N-m)
Diameter	2 in (50.8 mm)
Length	15.1 in (384 mm)
Parking brake:	
Type	Spring-applied, hydraulic release disc
Engagement	Depress on/off brake button on handle or instrument panel, raise seat bar, get off seat, or stop engine

ELECTRICAL

Alternator	120 amp
Starter	2.2 kW
Battery	12-volt low-maintenance 925 cold-cranking amps @ 0° F (-18° C)

OPERATOR ENVIRONMENT

ROPS/FOPS Level 1 canopy w/ side screens; Keyed start ignition; Tilt ROPS/FOPS; Rear window w/ emergency escape; Suspension Seat, vinyl w/ 2 in (51 mm) retractable 3 point lap seat belt; Hand and Foot throttle; Alarm package – back-up and horn; Headliner; Dome Light; Top window; Cup holder; 12V Power plug socket; Foot rest; Seat Pocket; Padded seat bar w/ integral armrests; Loader control lockout system; Electric parking brake control; Operator's compartment floor cleanout; Proportional auxiliary hydraulic control – on joystick; Advanced Instrument Cluster w/ digital hour meter, tachometer, Fuel level LCD bar graph w/ alarm, diagnostic features and security lockout.

Warning lights with alarms:

Engine coolant temperature; Engine oil pressure; Engine malfunction; Hydraulic charge pressure; Hydraulic filter restriction; Hydraulic oil temperature; Critical system stop, Engine system, Hydraulic system, Electrical and diagnostic system.

OPERATOR ENVIRONMENT (cont.)

Warning alarms:	Battery voltage – plus display; Oil service.
Indicator light:	Engine preheat; Parking brake; Seat bar reminder.

OPERATING WEIGHT

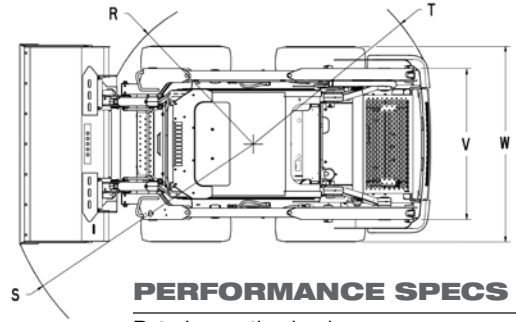
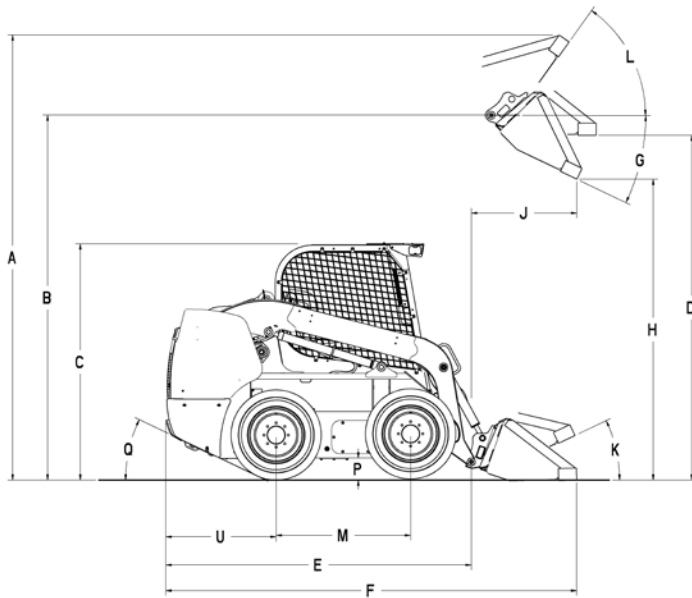
Operating weight	6,570 lb (2 980 kg)
Shipping weight	6,270 lb (2 840 kg)
Add-on weights:	
Side cab glass	47 lb (21.3 kg)
Lexan® door	74 lb (33.6 kg)
Glass door w/ wiper	134 lb (60.8 kg)
Suspension seat	22.1 lb (10 kg)

HYDRAULICS

Standard equipment pump type	Gear
Displacement:	
Standard aux.	1.52 in ³ (24.9 cm ³)
High flow aux.	0.76 in ³ (12.5 cm ³)
Pump flow @ rated engine RPM:	
@ 100% efficiency	19.1 gpm (72 L/min)
Optional high flow @ rated engine RPM:	
@ 100% efficiency	28.7 gpm (109 L/min)
Loader control valve:	
Type	3 Spool/Open center/Series
Relief pressure	3,000 psi (207 bar)
Port relief pressures:	
Loader raise	3,263 psi (225 bar)
Bucket dump	3,770 psi (260 bar)
Bucket curl	1,160 psi (80 bar)
Hydraulic lines:	
Tubing	37° JIC Flare
Loop hoses	SAE 100 R13
Hydraulic oil cooler:	
Number of fins	10 per in (0.394 per mm)
Number of tubes	9 x 1
Area	137.5 in ² (889 cm ²)
Hydraulic filter	6 micron/Spin on
Lift cylinder:	
Bore diameter	2.5 in (63.5 mm)
Rod diameter	1.75 in (44.45 mm)
Stroke	26.81 in (681 mm)
Closed length	38.66 in (982 mm)
Bucket cylinders:	
Bore diameter	2.5 in (63.5 mm)
Rod diameter	1.375 in (34.9 mm)
Stroke	16.14 in (410.0 mm)
Closed length	24 in (610.0 mm)

SERVICE CAPACITIES

Fuel tank	20 gal (75.7 L)
Engine oil w/ filter	7.5 qt (7.1 L)
Hydraulic system:	
Reservoir	4.3 gal (16.3 L)
Total	40 qt (38.1 L)
Chain tanks – per side	7.9 qt (7.4 L)



PERFORMANCE SPECS

Rated operating load:	
50%	1,850 lb (840 kg)
Tipping load	3,700 lb (1 678 kg)
Breakout forces:	
Lift cylinder	3,450 lb (15.3 kN)
Bucket cylinder	5,550 lb (24.7 kN)
Dig depth with bucket flat	0
Cycle times:	
Raise	3.7 sec
Lower	2.4 sec
Dump	2.2 sec
Roll back	1.6 sec

DIMENSIONS

A. Overall operating height:	
with foundry/excavating bucket short lip	150.4 in (3.82 m)
with low profile/standard lip bucket	154.6 in (3.9 m)
with low profile extended/long lip bucket	159.6 in (4.1 m)
Height to:	
B. Bucket hinge pin	120 in (3.05 m)
C. Top of ROPS	77.7 in (1.97 m)
D. Bottom of level bucket, fully raised	113.3 in (2.9 m)
Overall length:	
E. without attachment with coupler	105.7 in (2.71 m)
F. with foundry excavation bucket on ground	131.7 in (3.5 m)
with low profile bucket	135.8 in (3.5 m)
with low profile extended bucket	140.9 in (3.6 m)
G. Dump angle	51.9°
H. Dump height:	
with foundry/excavating bucket short lip	93.7 in (2.38 m)
with low profile/standard lip bucket	90.7 in (2.31 m)
with low profile extended bucket	87.2 in (2.21 m)
J. Dump reach – max. height	30.8 in (0.78 m)
Maximum attachment rollback:	
K. Bucket on ground	35°
L. Bucket at full height	87.6°
M. Wheelbase	44.4 in (1.13 m)
P. Ground clearance – bottom of belly pan	7 in (0.18 m)
Q. Angle of departure	23°
Clearance circle:	
R. without bucket	50.7 in (1.3 m)
S. with 66 in (1.68 m) foundry bucket in carry position	79.6 in (2.0 m)
with 66 in (1.68 m) low profile bucket on ground	83.9 in (2.1 m)
with 66 in (1.68 m) extended low profile on ground	88.6 in (2.3 m)
T. Clearance circle rear	62.9 in (1.60 m)
U. Rear axle to bumper	36.4 in (0.92 m)
V. Tread width with spec tires	53.9 in (1.37 m)
W. Over the tire width with spec tires	66.1 in (1.68 m)

TIRE SELECTION

Type	Size	Ply Rating	Tread Depth	Tire Width	Tread Width	Width Over Tires	Tire Weight*
Heavy-Duty	10 x 16.5	—	—	— 53.9 in (1 371 mm)	64.6 in (1 678 mm)		—
Premium	10 x 16.5	—	—	— 53.9 in (1 371 mm)	64.6 in (1 678 mm)		—
Premium-Lined	10 x 16.5	—	—	— 53.9 in (1 371 mm)	64.6 in (1 678 mm)		—
Severe Duty	10 x 16.5	—	—	— 53.9 in (1 371 mm)	64.6 in (1 678 mm)		—
Non-Pneumatic	10 x 16.5	—	—	— 53.9 in (1 371 mm)	64.6 in (1 678 mm)		—
Heavy-Duty	12 x 16.5	—	—	— 57 in (1 465 mm)	70 in (1 785 mm)		—
Premium	12 x 16.5	—	—	— 57 in (1 465 mm)	70 in (1 785 mm)		—
Premium – Lined	12 x 16.5	—	—	— 57 in (1 465 mm)	70 in (1 785 mm)		—

NOTE: *Tire weight does not include the wheel weight.

OPTIONAL BUCKETS

Type	Width	Weight	Heaped Capacity
Dirt & Foundry	66 in (1.68 m)	440 lb (200 kg)	14.8 ft ³ (0.42 m ³)
	72 in (1.83 m)	420 lb (190 kg)	16.2 ft ³ (0.46 m ³)
	78 in (1.98 m)	440 lb (200 kg)	17.7 ft ³ (0.50 m ³)
Low Profile	66 in (1.6 m)	470 lb (214 kg)	15.9 ft ³ (0.45 m ³)
	72 in (1.8 m)	510 lb (232 kg)	17.7 ft ³ (0.50 m ³)
Low Profile Extended	72 in (1.8 m)	510 lb (232 kg)	17.7 ft ³ (0.50 m ³)
	78 in (1.98 m)	540 lb (245 kg)	19.1 ft ³ (0.54 m ³)
	84 in (2.13 m)	575 lb (262 kg)	20.5 ft ³ (0.58 m ³)
Light Material	72 in (1.83 m)	475 lb (216 kg)	23.3 ft ³ (0.66 m ³)
	84 in (2.13 m)	540 lb (245 kg)	27.5 ft ³ (0.78 m ³)
Manure & Slurry	72 in (1.83 m)	480 lb (218 kg)	19.1 ft ³ (0.54 m ³)
	84 in (2.13 m)	545 lb (248 kg)	22.6 ft ³ (0.64 m ³)
Heavy-Duty	66 in (1.6 m)	450 lb (205 kg)	13.1 ft ³ (0.37 m ³)
	72 in (1.81 m)	585 lb (265 kg)	14.1 ft ³ (0.40 m ³)
	78 in (1.98 m)	605 lb (275 kg)	15.5 ft ³ (0.44 m ³)
Heavy-Duty with spillguard	66 in (1.68 m)	520 lb (235 kg)	16.6 ft ³ (0.47 m ³)
	72 in (1.83 m)	585 lb (265 kg)	18.4 ft ³ (0.52 m ³)
	78 in (1.98 m)	605 lb (275 kg)	19.8 ft ³ (0.56 m ³)

STANDARD EQUIPMENT

OPERATOR ENVIRONMENT

See page 1

ENGINE

N844LT-D-ROW

135.2 CID (2.2 L) Turbo

Non-regulated

Tier 3/Tier 4 Interim

Turbocharged with internal EGR
Fuel Injection

Horsepower:

Gross: 60 (44.7 kW)

Net: 57 (42.4 kW)

Peak torque 126 lb-ft (171 N·m)

120 amp alternator

Dual element air cleaner

Organic Acid Technology (OAT)

Anti-freeze solution to -34° F

Fuel tank - 20 gal (U.S.)

Over and under radiator and oil cooler

3-stack after cooler/radiator/oil
cooler configuration

Glow Plugs

ENGINE (CONTINUED)

Integral engine oil cooler

Fuel filter with water trap

925 CCA 12V battery

Master electrical disconnect

DRIVETRAIN

2-speed hydrostatic four wheel drive

ASA #80HS drive chain

SAHR disc parking brake

HYDRAULICS

Auxiliary hydraulics:

@ 3,050 psi (210 bar) – 23.8 gpm (90 L/min)

6 micron oil filtration system

3-spool loader control valve

Auxiliary hydraulic disconnects, ISO flat-face –
connect-under-pressure with case drain

Hydraulic circuit pedal lock

Auxiliary function lockout override

Loader lift lockout override

Heavy-duty hydraulic oil cooler

Loader arm float position

Loader function lockout system

Hydraulic one-way self-leveling

Ride Control

LOADER

Manual attachment coupler

Vertical Lift Geometry

Loader lift arm support strut

SAE operating load: 1,850 lbs

Tipping load: 3,700 lbs

In-CAB loader lock

TIRES

10 X 16.5 Heavy Duty - 64 inch

Over-the-Tire Width (OTW)

Galaxy XD2002

OTHER STANDARD FEATURES

Halogen Lights - 2 front, 2 side, 2 rear flood

Heavy Duty Front Lights

Pre-wired for rotating beacon

Lockable service access hood

Single point daily service

Rear tail lights

Remote oil drain

Remote oil and fuel filters

Block Heater

Debris Ingression Sealing

Machine protection auto shutdown

Mounting points for add-on counterweights

OPTIONAL EQUIPMENT

OPERATOR ENVIRONMENT

Enclosed Cab:

Fully sealed and pressurized – FSP

Glass door with wiper and washer

Sliding side windows – removable

Ventilation system with integrated heater

Heater and air conditioner

AM/FM radio with 2 speakers

Keyless start ignition

Electro-hydraulic controls:

For drive/steering, loader functions

Switchable between H and ISO patterns

Adjustable sensitivity of controls

Mechanical hand controls

Hand and Foot controls:

Hand controls the loader drive function and
foot controls the bucket and boom

OPERATOR ENVIRONMENT (CONTINUED)

Non suspension seat

Deluxe cloth, air suspension seat, with heater
and lumbar support

Open cab interior trim package

Demolition cab door with polycarbonate

FOPS level 2

Heavy Duty Rear Door

HYDRAULICS

High-flow auxiliary hydraulics – combined:

@ 3,050 psi (210 bar) – 33.2 gpm (126 L/min)

Second auxiliary hydraulics

LOADER

Auxiliary front electric control

Hydraulic attachment coupler

DRIVETRAIN

1-speed hydrostatic four wheel drive

OTHER

Language decals

Factory-installed tires – see page 3

Buckets – see page 3

Bolt-on bucket cutting edges

Bolt-on heavy-duty bucket spill guard

Special paint

Offsite Service Arrangement

Telematics

FACTORY SUPPLIED ATTACHMENTS

Interior mirror

Add-on counterweights

Road lights

Rotating beacon

Four-corner LED strobe

Bolt-on heavy-duty bucket teeth

48 in (1.22 m) pallet forks

SERVICE PARTS

3 inch (76.2 mm) retractable seat belt



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

NOTE: All engines meet current EPA emissions requirements.

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

CASE is a trademark registered in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates. CNH Industrial Capital is a trademark in the United States and many other countries, owned by or licensed to CNH Industrial N.V., its subsidiaries or affiliates.



www.casece.com

