

ENGINE

Model	Cummins QSX 11.9
Emissions Certification	Tier 4 Interim
Type	4-stroke, turbocharged and air-to-air cooled
Cylinders	6-cylinder in-line
Bore/Stroke	5.12 x 5.91 in (130 x 150 mm)
Displacement	726 in ³ (11.9 L)
Fuel	DF1 and DF2, ULSD – Ultra Low Sulfur Diesel
Fuel injection	Direct injection – electronic
Fuel filter	Replaceable, full flow spin-on cartridge
Fuel pump	Cummins HP
Gradeability:	
Side-to-side	45°
Fore and aft	45°
Air filter	2-element dry-type w/ warning restriction indicator
Mid-mount cooling module:	Mid-mount air/water
Fan – hydraulic driven:	
Style	9 blade puller
Diameter	34.5 in (876 mm)
Water pump	Integral
Engine oil pump operating angle ratings:	
Side-to-side	35°
Fore and aft	35°
Oil filtration	Replaceable, full flow spin-on cartridge
Engine speeds	RPM
Rated – full load	2100
Horsepower:	
Peak gross @ 1800 RPM	370 hp (276 kW)
Rated:	
Gross @ 2000 RPM	355 hp (265 kW)
Net @ 2200 RPM	351 hp (262 kW)
Torque:	
Peak @ 1400 RPM:	1,250 lb-ft (1 695 N·m)
Torque rise:	
Maximum power range	40%

NOTE: Gross horsepower and torque per SAE J1995. Net horsepower and torque per SAE J1349.

DRIVETRAIN

Transmission:	4F/3R Proportional w/ Electronic Control Module torque sensing autoshift/manual shift and modulation	
Gears	Helical cut	
Torque converter stall ratio:	Torque converter 2.51:1	
Differential:	Limited slip w/ 30% transfer on front and rear axles	
Rear axle oscillation	26° total	
Front and rear axles:		
Differential ratio	4.25	
Planetary ratio	6.35	
Final axle ratio	27.00	
Planetaries	Outboard	
Service brakes:	Hydraulically actuated, maintenance-free, multiple wet disc w/ accumulator to all four wheels	
Brake surface area:		
Front hub – each	1,144 in ² (0.74 m ²)	
Rear hub – each	1,144 in ² (0.74 m ²)	
Parking brakes:	Spring-applied hydraulic release disc on transmission output shaft neutralizes power flow to wheels when engaged	
Travel speeds – 4-speed transmission:		
	Forward	Reverse
	mph (kph)	mph (kph)
1st	3.8 (6.1)	3.8 (6.1)
2nd	7.1 (11.4)	7.1 (11.4)
3rd	11.1 (17.9)	15.4 (24.8)
4th	22.4 (36.0)	–
Travel speeds – 5-speed transmission:		
	Forward	Reverse
	mph (kph)	mph (kph)
1st	3.8 (6.1)	3.8 (6.1)
2nd	7.3 (11.8)	7.3 (11.8)
3rd	11.4 (18.3)	16.5 (26.6)
4th	16.5 (26.6)	–
5th	25.5 (41.0)	–

NOTE: Travel speeds at full engine throttle w/ 29.5 x 25.0 XHA tires.

ELECTRICAL

Voltage	24 Volts, negative ground
Alternator	80 amp
Batteries (2)	12-volt

OPERATOR ENVIRONMENT

ROPS cab w/ A/C, heat; Key start; Articulated power steering w/ tilt column; Fully adjustable, heated, cloth-covered air-suspension seat; Foot throttle; Single lever 2-spool loader control w/ wrist rest; Cup holder; 2 Interior rearview mirrors; Rear view camera; 2 in (51 mm) retractable seat belt; Storage tray; Single brake pedal; F/N/R shuttle switch; External, heated rearview mirrors; Pressurized air filtering; Anti-glare window strip; Cab air-conditioning w/ heater; Defroster; Side window, partial/fully open; Roll screen for rear window; Dome light; Wipers, rear and intermittent front; Windshield washers, front and rear; Rubber floor mat; Sunscreen; 12V Power outlet; Horn; AM/FM/MP3 radio; DC converter.

Displays/Gauges:

Speedometer; Engine coolant temperature; Fuel level; Transmission oil temperature; Hydraulic oil temperature; Battery voltmeter.

Audible/Visual alarms:

Warning lights:
Clutch cut-off; High beam; Turn signal.
Caution alarm:
Parking brake; Coolant temperature; Hydraulic oil temperature; Transmission error; Air filter clogging; Alternator voltage; Fuel level.
Critical alarm:
Engine oil pressure; Brake oil pressure; Hydraulic oil temperature; Service brake oil pressure.
Backup alarm

NOTE: *If equipped w/ option.

OPERATING WEIGHT

Z-Bar

Unit equipped w/ ROPS cab w/ heater and A/C; Standard counterweight; 29.5 x 25.0 XHA tires; 6.8 yd³ (5.2 m³) GP Pin-on w/ bolt on edge; Full fuel; 175 lb (79 kg) operator: 66,425 lb (30 130 kg)

XR

Unit equipped w/ ROPS cab w/ heater and A/C, standard counterweight; 29.5 x 25.0 XHA tires; 7.1 yd³ (5.4 m³) GP Pin-on w/ bolt on edge; Full fuel; 175 lb (79 kg) operator: 68,564 lb (31 100 kg)

HYDRAULICS

Hydraulic system:

Load sensing hydraulic system,
electro-hydraulic controls

Piston pump @ 2000 RPM:

111 gpm (420 L/min)

Relief setting 3,983 psi (280 kg/cm²)

Steering system:

Full hydraulic power steering, flow amplified,
load sensing

Pilot pump @ 2000 RPM:

58.1 gpm @ 2,990 psi

(220 L/min @ 20 615 kPa)

Loader control valve:

3-Function valve w/ single or three-lever
controls – w/ auxiliary lever

SERVICE CAPACITIES

Fuel tank 113.6 gal (430 L)

Hydraulic system:

Reservoir 62.0 gal (234 L)

Total 90.9 gal (344 L)

Transmission:

Service w/ filter 11.4 gal (43 L)

Front and rear axle w/o coolers:

Front axle 15.3 gal (58 L)

Rear axle 15.3 gal (58 L)

Engine oil w/ filter 11.4 gal (43 L)

Cooling system 17.7 gal (67 L)

OTHER SPECIFICATIONS

Lift cylinder:

Bore diameter 7.1 in (180 mm)

Rod diameter 4.1 in (105 mm)

Stroke 34.0 in (863 mm)

Dump cylinder:

Bore diameter 5.5 in (140 mm)

Rod diameter 3.1 in (80 mm)

Stroke 22.8 in (580 mm)

Loader:

Z-Bar loader linkage; Single control for
lift and tilt; Positive hold float; Automatic
return-to-dig; Automatic height control;
Automatic return-to-travel; Brake pedal
transmission disconnect; Bucket position
indicator on bucket.

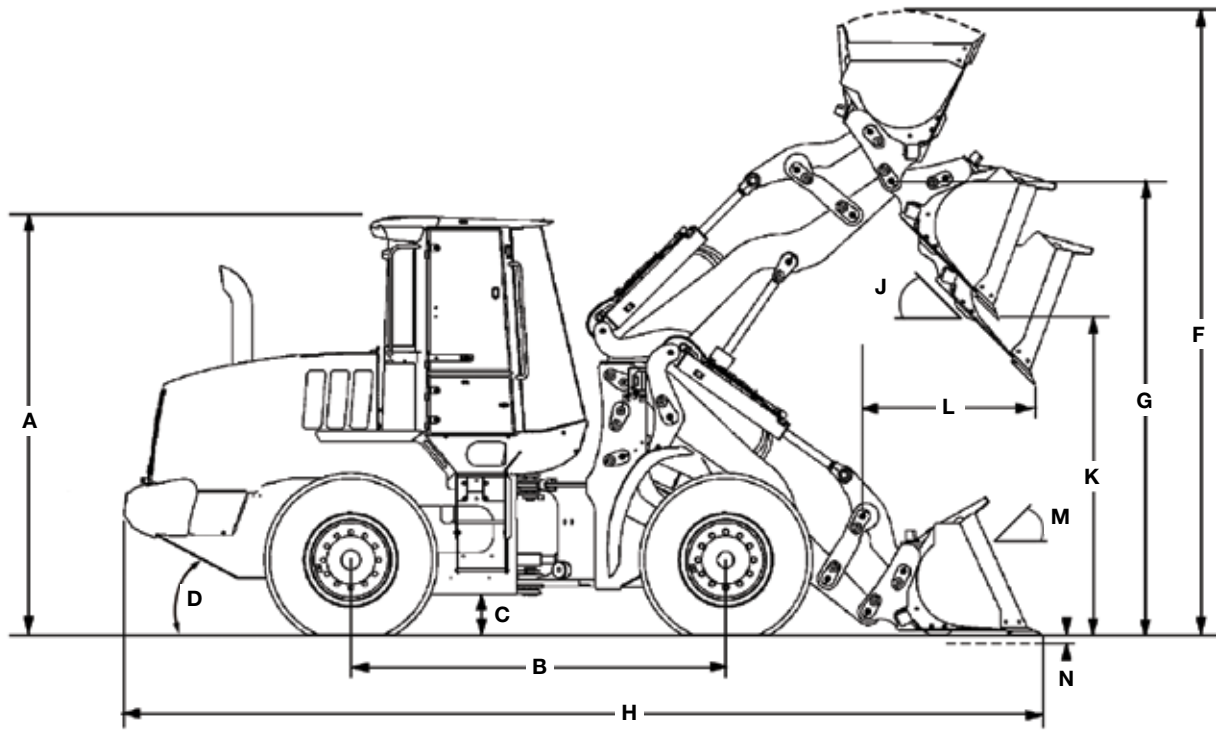
Cycle time:

Raise w/ rated bucket load 6.1 sec

Dump w/ rated bucket load 1.4 sec

Power down 4.8 sec

Float down 4.1 sec



Line drawings are for illustrative purpose only and may not be exact representation of unit.

DIMENSIONS

A. Height to top of ROPS cab	152.2 in (3 865 mm)
Height to drawbar	46.7 in (1 185 mm)
B. Wheelbase	145.7 in (3 700 mm)
C. Ground clearance	19.5 in (495 mm)
D. Angle of departure	23°
Width:	
Overall* without bucket	126.8 in (3 220 mm)
Centerline tread	96.1 in (2 440 mm)
Turning radius* – outside	298.6 in (7 585 mm)
Turning angle:	
From center	40°
Total angle	80°
Rear axle oscillation, total	26°

NOTE: *Dimensions taken with 29.5 x 25.0 XHA tires. Additional dimensions on page 4.

WEIGHT ADJUSTMENTS

Select Options	Weight Adjustment	Tipping Load Adjustment Straight	Tipping Load Adjustment 40° Turn
26.5 x 25 L3 Goodyear	-284 lb (-129 kg)	-190 lb (-86 kg)	-556 lb (-252 kg)
26.5 x 25 L4 Goodyear	+880 lb (+399 kg)	+1,303 lb (+591 kg)	+1,107 lb (+502 kg)
26.5 x 25 L5 Goodyear	+1,307 lb (+593 kg)	+2,101 lb (+953 kg)	+2,105 lb (+955 kg)

NOTE: Unit equipped with Z-Bar loader arms, 7.1 yd³ (5.4 m³) general purpose pin on bucket, 29.5 x 25.0 XHA tires, ROPS cab with heater, counterweight, standard batteries, front and rear fenders, full fuel and 175 lb (79 kg) operator. Adjust select options from rated weight.

PERFORMANCE DATA

1221F Z-Bar	6.8 yd³ (5.2 m³) GP Pin On Bucket with Bolt-on Adapters and Pin On Teeth	7.1 yd³ (5.4 m³) GP Pin On Bucket with Bolt-on Edge
SAE bucket capacity – struck	5.8 yd ³ (4.4 m ³)	6.0 yd ³ (4.6 m ³)
Heaped	6.8 yd ³ (5.2 m ³)	7.1 yd ³ (5.4 m ³)
Bucket width – outside	135.8 in (3 450 mm)	135.8 in (3 450 mm)
Bucket weight	5,699 lb (2 585 kg)	6,063 lb (2 750 kg)
F. Operating height – fully raised with spillguard	247.8 in (6 295 mm)	247.8 in (6 295 mm)
G. Hinge pin height – fully raised	179.5 in (4 560 mm)	179.5 in (4 560 mm)
H. Overall length – bucket level on ground	386.6 in (9 820 mm)	379.1 in (9 630 mm)
J. Dump angle – fully raised	47°	47°
K. Dump height – fully raised, 45° dump	123.8 in (3 145 mm)	129.9 in (3 300 mm)
L. Bucket reach – fully raised, 45° dump	63.0 in (1 600 mm)	56.3 in (1 430 mm)
Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	87.8 in (2 230 mm)	84.6 in (2 150 mm)
Operating load – ISO	22,862 lb (10 370 kg)	22,972 lb (10 420 kg)
Maximum material density – ISO	3,531 lb/yd ³ (2 095 kg/m ³)	3,253 lb/yd ³ (1 930 kg/m ³)
Tipping load – ISO:		
Straight	52,624 lb (23 870 kg)	52,823 lb (23 960 kg)
40° turn	45,724 lb (20 740 kg)	45,944 lb (20 840 kg)
Lift capacity:		
Full height	30,909 lb (14 020 kg)	30,710 lb (13 930 kg)
Maximum reach	50,662 lb (22 980 kg)	50,376 lb (22 850 kg)
Ground	74,670 lb (33 870 kg)	73,767 lb (33 460 kg)
Breakout force with tilt cylinder	55,733 lb (25 280 kg)	52,360 lb (23 750 kg)
Maximum rollback:		
M. Ground	42°	42°
Carry position	48°	48°
@ Maximum reach	63°	63°
@ Full height	63°	63°
N. Dig depth	2.6 in (65 mm)	4.1 in (105 mm)
Maximum grading angle with bucket – back dragging	59°	59°
Loader clearance circle with bucket	606.7 in (15 410 mm)	589.4 in (14 970 mm)

1221F XR	6.8 yd³ (5.2 m³) GP Pin On Bucket with Bolt-on Adapters and Pin On Teeth	7.1 yd³ (5.4 m³) GP Pin On Bucket with Bolt-on Edge
F. Operating height – fully raised with spillguard	262.6 in (6 670 mm)	262.6 in (6 670 mm)
G. Hinge pin height – fully raised	194.3 in (4 935 mm)	194.3 in (4 935 mm)
H. Overall length – bucket level on ground	403.5 in (10 250 mm)	396.1 in (10 060 mm)
J. Dump angle – fully raised	47°	47°
K. Dump height – fully raised, 45° dump	138.6 in (3 520 mm)	144.5 in (3 670 mm)
L. Bucket reach – fully raised, 45° dump	61.4 in (1 560 mm)	58.3 in (1 480 mm)
Bucket reach – 7 ft 0 in (2.13 m) height, 45° dump	100.8 in (2 560 mm)	97.2 in (2 470 mm)
Operating load – ISO	19,048 lb (8 640 kg)	20,018 lb (9 080 kg)
Maximum material density – ISO	3,042 lb/yd ³ (1 805 kg/m ³)	2,860 lb/yd ³ (1 697 kg/m ³)
Tipping load – ISO:		
Straight	46,914 lb (21 280 kg)	48,876 lb (22 170 kg)
40° turn	38,095 lb (17 280 kg)	40,036 lb (18 160 kg)
Lift capacity:		
Full height	29,476 lb (13 370 kg)	29,542 lb (13 400 kg)
Maximum reach	46,833 lb (21 243 kg)	46,811 lb (21 233 kg)
Ground	63,903 lb (28 986 kg)	63,427 lb (28 770 kg)
Breakout force with tilt cylinder	54,300 lb (24 630 kg)	50,993 lb (23 130 kg)
Maximum rollback:		
M. Ground	42°	42°
Carry position	49°	49°
@ Maximum reach	63°	63°
@ Full height	65°	65°
N. Dig depth	3.0 in (75 mm)	4.5 in (115 mm)
Maximum grading angle with bucket – back dragging	62°	62°
Loader clearance circle with bucket	609.4 in (15 480 mm)	603.0 in (15 310 mm)

NOTE: Performance data unit equipped with 29.5 x 25.0 XHA tires, ROPS cab with heater and air conditioner, standard counterweight, standard batteries, wide front and rear fenders, full fuel and 175 lb (79 kg) operator. Specifications per SAE J732, J1234, J695, J742, and J818.

STANDARD EQUIPMENT

OPERATOR ENVIRONMENT

See page 1

ENGINE

Cummins QSX 11.9
Tier 4 Interim Certified
Turbocharger
Charge air cooling
Automatic fan belt tensioner
Integral engine oil cooling
Fuel filter with water trap
Dual element air cleaner
Liquid-cooled radiator
Non spark-arresting muffler
Grid heater
Fuel heater

HYDRAULICS

3-spool joystick and auxiliary control lever
Low-effort steering
Hydraulic driven fan
Reversing fan
Temperature controlled
8 Diagnostic quick couplers

POWERTRAIN

4-wheel drive
Axle coolers
4F/3R Selectable autoshift/manual shift transmission
Electronic Control Module – programmable, computer controlled proportional shifting with programmable gear selection
Onboard diagnostics
Single lever electronic shift control
Downshift button
Torque converter
Outboard planetary axles
Front locking differentials
Transmission oil cooler
Brake pedal transmission disconnect
Hydraulic wet disc brakes
Spring-applied hydraulic release parking brake

LOADER

See page 2

ELECTRICAL

70 amp alternator
(2) 1000 CCA 12-volt batteries
Lights:
2 front driving headlights – high/low beam
2 front flood
2 stop/tail lights
2 rear flood
Front and rear turn signal/flash
Backup alarm

OTHER

Front and rear fenders
Standard counterweight
Drawbar hitch
Articulation locking bar
Lift and tie-down points – front/rear
RH steps and platform
Heated side mirrors
DC converter – 24 Volt to 12 Volt
Radio/USB/CD player – Bluetooth hands-free

TELEMATICS

CASE SiteWatch™ Telematics – includes hardware. Use special instructions for the 3-yr Advanced data subscription activation and reimbursement

OPTIONAL EQUIPMENT

OPERATOR ENVIRONMENT

Fire extinguisher
Additional cab lights:
2 front
2 rear
Rotating beacon
Second brake pedal
Two pedal brake

ENGINE

Engine air pre-cleaner

POWERTRAIN

F/N/R switch in loader control joystick handle
5-speed transmission

HYDRAULICS

Ride Control
3-spool loader valve with 3-lever loader control
Joystick steering
Emergency steering system

LOADER

XR configuration

TIRES

29.5 X 25.0, 28PR L5 Bias
29.5 X 25.0, 22PR L3 Radial – Triangle
26.5 X 25.0, Bias Ply

OTHER

Tool box
Sound Shield noise suppression package
Wheel chocks
XTD counterweight on standard machine – additional 1,210 lb (549 kg)



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

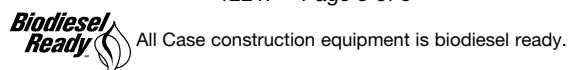
NOTE: All engines meet current EPA emissions requirements.

IMPORTANT: Case Construction Equipment Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case Construction Equipment 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.

Form No. CCE2015031221F
Replaces Form No. CCE2013111221F

Printed in U.S.A.
1221F • Page 5 of 5



www.casece.com

© 2015 CNH Industrial America LLC
All Rights Reserved