

# SKID STEER LOADER

# CASE

CONSTRUCTION

SINCE 1842.

## SV300B

### ENGINE

Brand	CASE/FPT
Model	F5CE5454C*A003
Type	4 strokes, turbocharged with Tier 3 certification
Cylinders	4
Bore x Stroke	99 x 104 mm (3.9 x 4.1")
Displacement	3,195 cm <sup>3</sup> (195 in <sup>3</sup> )
Fuel injection	Direct
Fuel	Diesel
Fuel filter	In-line filter
Air inlet	Turbocharged with external EGR
Cooling system	Liquid
Engine speed	
High - no load (rpm)	2675 +/- 75
Rated - full load (rpm)	2500
Low - no load (rpm)	1075 +/- 75
Power at 2,500 rpm	
Gross SAE J1995	90 hp (67 kW)
Net SAE J1349	84 hp (63 kW)
Maximum torque at 1,400 rpm	340 N.m (251 lbf.ft)

### ENGINE COOLING SYSTEM

Radiator	
Core type	Fully aluminum
Core area	0.266 m <sup>2</sup>
Rows of tubes	44
Pressure on the lid	1.1 ± 0.1 bar (16 ± 2 psi)
Fan	
Diameter	518 mm (20.4")
Ratio	0.96:1
Water pump	
Type	Centrifuge
Flow	110 l/min (29 gpm)
Engine lubrication	
Pump Operational Angles	
Side by side	45°
Raised bucket	35°
Lowered bucket	45°

Oil filtration	Full flow cartridge, disposable
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### POWER TRAIN

Drive Pump - Mechanical	
Pump / motor ratio	1:1
Displacement	46 cm <sup>3</sup> (2.81 in <sup>3</sup> )
Pump flow rate with rated motor rotation	111 l/min (29.4 gpm)
Charging pressure	24.5 bar (360 psi)
System relief pressure	360 bar (5,220 psi)
Servo Control	mechanical
Drive pump - Electrohydraulic	
Pump / motor ratio	1:1
Displacement	45 cm <sup>3</sup> (2.75 in <sup>3</sup> )
Pump flow rate with rated motor rotation	109 l/min (28.8 gpm)
Charging pressure	25 bar (363 psi)
System relief pressure	360 bar (5,220 psi)
Control	Electrohydraulic
Traction engines	
Displacement	470 cm <sup>3</sup> (28.68 in <sup>3</sup> )
Displacement - optional high speed	282 cm <sup>3</sup> (17.21 in <sup>3</sup> )
Speed at rated motor rotation	241 rpm
high speed - optional	355 rpm
Torque at full flow and relief pressure	2,694 N.m (1,987 lbf.ft)
Displacement speed	
Low	11.3 km/h (7.0 mph)
High (optional)	16.9 km/h (10.5 mph)
Final reduction	Chain drive with single reduction
Drive chain	
Size	ASA #100 HS
Tensile strength	133.4 kN (30,000 lbf)
Axles	
Maximum torque at full flow and relief pressure	8,975 N.m (6,620 lbf.ft)
Diameter	62 mm (2.44")
Length	396 mm (15.6")
Parking break	

Type	Spring applied, hydraulic disc release
Actuation	Application of the parking brakes by actuating the brake knob on the hand control or on the instrument panel, by raising the safety bar of the operator's seat, when the operator rises from the seat or by switching off the engine

### HYDRAULIC SYSTEM

Standard pump	
Type	Gear pump
Displacement	
Standard	34.1 cm <sup>3</sup> (2.08 in <sup>3</sup> )
Optional High Flow	20.4 cm <sup>3</sup> (1.24 in <sup>3</sup> )
Pump flow at rated motor rotation	85 l/min (22.5 gpm)
Flow with optional High Flow at rated motor rotation	142.5 l/min (37.6 gpm)
Skid Steer control valve	
Type	3 spools / Open Center / In-line
Relief pressure	210 bar (3,046 psi)
Relief pressures	
Arm lift	225 bar (3,263 psi)
Bucket discharge	260 bar (3,770 psi)
Bucket retraction	80 bar (1,160 psi)
Hydraulic oil cooler	
Flaps numbers	3.94 per centimeter
Number of tubes	11
Area	843 cm <sup>2</sup> (130.7 in <sup>2</sup> )
Hydraulic filter	6 microns / Threaded

## INSTRUMENT PANEL

Indicators	
Digital hour meter	
LCD fuel level bar graph with low level alarm	
Warning lights with alarms	
High engine coolant temperature	
Low engine oil pressure	
Engine malfunction	
Low hydraulic charging pressure	
Hydraulic oil filter restriction	
High hydraulic oil temperature	
Alert alarms	
Low battery voltage (including indicator light)	
Indicator lights	
Engine pre-heating	
Parking break	
Notice to place the safety bar	

## ELECTRIC SYSTEM

Alternator	120 A
Starting motor	3.2 kW
Battery	12 V, low maintenance, 925 CCA for cold cranking at -18 °C (0 °F)

## OPERATOR ENVIRONMENT

ROPS / FOPS cab with side screens
Tilting ROPS / FOPS frame
Rear window with emergency exit
Instrument panel
51mm retractable seat belt (2")
Manual and foot throttle
Alarm package
Cabin roof lining
Solar roof
Cup holder
Power outlet
Foot rest
Storage tray
Ergonomic low effort manual controls
Padded safety bar with integrated armrest
Loader controls locking system
Electric parking brake control
Rubber mat for floor protection / cleaning
Suspension vinyl seat

## CYLINDERS

Lift cylinder	
Cylinder diameter	69.9 mm (2.75")
Stem diameter	44.5 mm (1.75")
Stroke	886.5 mm (2' 11")
Closed length	1,205 mm (3' 11")
Bucket cylinders	
Cylinder diameter	76.2 mm (3")
Stem diameter	38.1 mm (1.5")
Stroke	410 mm (1' 4.1")
Closed length	610 mm (2')

## OPERATIONAL WEIGHTS

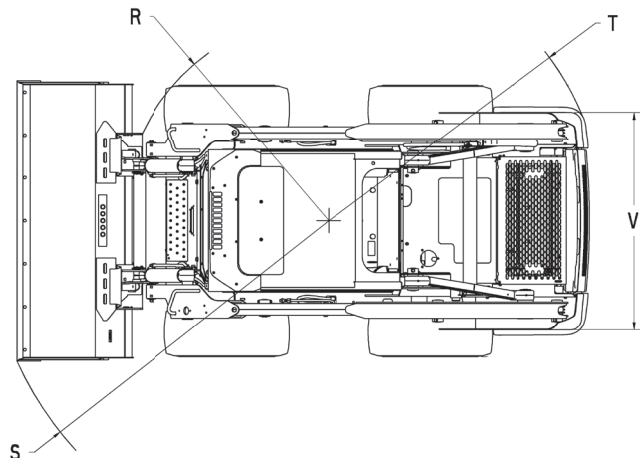
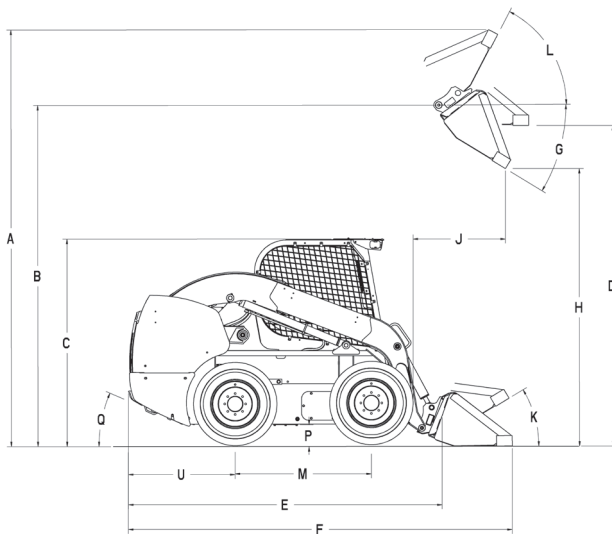
Operational weight	3,765 kg (8,300 lb)
Transport weight	3,610 kg (7,959 lb)
Cab side windows	21.3 kg (46.9 lb)
Lexan® Door	34 kg (75 lb)
Glass door with windshield wiper	34 kg (75 lb)
Suspension seat	10 kg (22 lb)

## SERVICE CAPACITIES

Fuel tank	96.5 l (25.5 gal)
Engine oil pan (with filter)	9.5 l (10.0 qt)
Hydraulic system	
Storage	22.7 l (6 gal)
Storage for chains (on each side)	22.2 l (23.5 qt)

## TIRE SELECTION

	Size	Overall width
Galaxy XD 2002 (12x16.5 Heavy Duty (70 OTW))	12x16.5	1,785 mm (5' 10.3")
TWEEL All Terrain (12X16.5 TWEEL 70 OTW )	12x16.5	1,785 mm (5' 10.3")
Galaxy Beef Baby III (14x17.5 Premium (76 OTW))	14x17.5	1,930 mm (6' 4")



## DIMENSIONS

<b>A. Total operational height</b>	
With foundry bucket	4.07 m (13' 4")
With low profile extended bucket	4.30 m (14' 1")
Height up to:	
<b>B. Bucket hinge pin</b>	3.30 m (10' 10")
<b>C. Cabin top</b>	2.00 m (6' 6.7")
<b>D. Leveled bucket bottom with fully raised loader arm</b>	3.04 m (10' 0")
Total length:	
<b>E. Without accessories, with coupling device</b>	2.99 m (9' 10")
<b>F. With foundry bucket at ground level</b>	3.60 m (11' 9.7")
With low-profile extended bucket at ground level	3.84 m (12' 7")
<b>G. Dump angle at maximum height</b>	53.5°
<b>H. Dump height - fully raised loader arm</b>	
With foundry bucket	2.63 m (8' 7.5")
With low profile extended bucket	2.47 m (8' 1")
<b>J. Reach - fully raised loader arm</b>	0.84 m (2' 9")
Attachment maximum retraction angle:	
<b>K. Bucket at ground level</b>	35°
<b>L. Bucket at maximum height</b>	86°
<b>M. Wheelbase</b>	1.32 m (4' 4")
<b>P. Ground clearance (bottom of protection plate)</b>	0.20 m (7.8")
<b>Q. Output angle</b>	23.5°
Front turning radius:	
<b>R. Without the bucket</b>	1.42 m (4' 8")
<b>S. With foundry / excavation bucket at ground level</b>	2.14 m (7' 0")
With low-profile extended bucket at ground level	2.35 m (7' 8.5")
<b>T. Rear turning radius</b>	1.79 m (5' 10.5")
<b>U. Rear axle to bumper</b>	1.03 m (3' 4.5")
<b>V. Machine gauge, measure between the wheel centers</b>	1.45 m (4' 9")

## SPECIFICATIONS

Operational load	1,364 kg (3,000 lb)
with optional counterweight	1,451 kg (3,200 lb)
Dump load	2,727 kg (6,000 lb)
with optional counterweight	2,903 kg (6,400 lb)
Tear force	
Lifting arm	25.5 kN (5,730 lbf)
Bucket	33.7 kN (7,570 lbf)
Cycle times (in seconds)	
To raise arms	4.8
To lower arms	2.8
To unload attachment	2.7
To retract attachment	2.0

## OPTIONAL BUCKETS

Type	Width m (in)	Weight kg (lb)	Heaped capacity m <sup>3</sup> (yd <sup>3</sup> )
Foundry / excavation	1,83 (72)	190 (420)	0,46 (0,60)
	1,83 (72)	232 (510)	0,50 (0,65)
Extended low profile	1,98 (78)	245 (540)	0,54 (0,71)
	2,13 (84)	262 (575)	0,58 (0,76)
Heavy Duty	1,83 (72)	230 (510)	0,40 (0,52)

## STANDARD EQUIPMENT

### Operator Environment

ROPS / FOPS cabin with side screens  
Tilting ROPS / FOPS frame  
Rear window with emergency exit  
Instrument panel  
Suspension vinyl seat  
51mm (2") retractable seat belt  
Manual and foot accelerator  
Alarm package  
Cabin roof lining  
Solar roof  
Cup holder  
Power outlet  
Foot rest  
Storage tray  
Ergonomic low effort manual controls  
Padded safety bar with integrated armrest  
Loader controls locking system  
Electric parking brake control  
Rubber mat for protection / cleaning of the floor

### Loader

Loader arm vertical design  
Mechanical device of attachment coupling  
Lift arm support beam of the loader

### Engine

CASE/FPT F5CE5454C\*A003 diesel  
Integrated oil cooling system of the engine  
Fuel filter with water separator  
Dual element air filter.  
95 A alternator  
12V 925 CCA battery  
Glow plug  
Overlapped oil heat exchanger and radiator  
Spark-arresting silencers  
Maintenance free chain

### Power train

Hydrostatic four-wheel drive  
Servo controls  
ASA #100HS Drive chain  
SAHR parking disc brakes

### Hydraulic system

210 bar auxiliary hydraulic system (3,046 psi) 85 l/min (22.5 gpm)

Hydraulic circuit pedal lock  
ISO flat face couplers mounted on loader arm  
Cancellation of auxiliary functions  
Operational blocking system of the loader  
Loader lift neutralizer  
Loader 3-spool control valve  
Oil exchanger for severe applications  
Loader arm fluctuation position

### Others

Lockable maintenance access hood  
Single point daily maintenance  
Halogen lights, 2 frontal, 2 lateral, 2 rear  
Rear lights  
Remote oil drain  
2 speed drive  
Heavy Duty rear door

## OPTIONAL EQUIPMENT

### Operator Environment

Suspension seat Deluxe coated with special fabric, with lumbar support and heating system  
76 mm retractable seat belt (3")  
Internal mirror  
Radio  
Air conditioning and heating  
Door for demolition purposes  
Front auxiliary electric control  
Front glass door with windshield wiper and washer  
Sliding side windows

### Loader

Ride Control  
Attachment coupling hydraulic device  
One-way hydraulic self-leveling (climb)  
Electrohydraulic controls (EH)

### Hydraulic system

High flow hydraulic system (*High Flow*) of 210 bar (3,046 psi) 142.5 l/min (37.6 gpm)  
Crankcase drain pipe fittings

### Engine

Engine block heater  
Battery disconnect key

### Others

Deluxe Dashboard  
Headlights for highway traffic  
Giroflex  
Lifting hooks  
Special paint  
Stickers  
Factory installed tires – refer to page 2  
Buckets – refer to page 3  
Bolt-on bucket cutting blades  
Forks to 1.07 m (42") and 1.22 m (48") pallets  
Steel tracked  
Additional counterweights



Fleet management and monitoring system by satellite or cell phone tracking.

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CCEIO053 - 01/2021 - Printed in Brazil

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