

SV300 SKID STEER LOADER

ENGINE

Model	Case 432T / M3
Туре	Diesel 4-stroke, Turbo, D.I.
Cylinder	4
Bore/Stroke	3.9 x 4.1 in (99 x 104 mm)
Displacement	195 cu in (3.2 L)
Fuel injection	Direct
Fuel	#2 diesel
Fuel filter	In-line strainer
Air intake	Turbocharged w/ external EGR
Cooling	Liquid
Engine speeds	
High idle - no	load (rpm) 2675 +/- 75
Rated -full loa	d (rpm) 2500
Low idle (rpm	1075+/- 75
Horsepower per	SAE J1349
Gross	90 hp (67 kW) @ 2500 rpm
Net	84 hp (63 kW) @ 2500 rpm
Peak torque	251 lb-ft (340 Nm) @ 1400 rpm

ENGINE COOLING

All aluminum
a 0.266 m ²
s 42
16 +/-2 psi
20.4 in (518 mm)
0.96:1
Centrifugal
29 gpm (110 L/min)
on
Rotor pump w/ deep sump pan,
plate cooler, and pressurized
under-piston nozzles
angle ratings
45°
35°
45°
Replaceable, full-flow cartridge

POWERTRAIN

Drive pump - Mechanical	
Pump to engine ratio	1:1
Displacement cc (cu in)	2.81 cu in (46 cc)
Flow at rated engine rpr	n
@100% efficiency	30.4 gpm (115 L/min)
Charge Pressure	363 psi (25 bar)
System relief	5,220 psi (360 bar)
Control	Mechanical servo
Drive pump – Electro Hydr	aulic
Pump to engine ratio	1:1
Displacement cc (cu in)	2.81 cu in (46 cc)
Flow at rated engine rpr	n
@100% efficiency	30.4 gpm (115 L/min)
Charge Pressure	363 psi (25 bar)
System relief	5,220 psi (360 bar)
Control	Electro Hydraulic
Drive motors -	
Max. displacement	28.68 cu in (470 cc)
Displacement - optional	
high speed	17.21 cu in (282 cc)
Speed @ high idle engin	e rpm
(100% eff. at rated eng	gine rpm) 244
Speed @ optional high s	speed rpm 408
Torque @ max displacer	nent and relief
pressure (calculated)	1,987 lb-ft
	(2694 N-m)
Travel speed -	
Low range	7.2 mph
High range (optional)	11.9 mph
Final drive Single	-reduction chain drive
Drive chain -	
Size	ASA #100
Tensile strength	30,000 lb (133.4 kN)
Axles -	
Torque @ max. displace	ment and relief
pressure (calculated) 6	
Diameter	2.44 in (61.94 mm)
Length	15.7 in (398.7 mm)
Parking brake	
Туре	Spring-applied,
••	hydraulic release disc
Engagement Depre	ss on/off brake button
	e or instrument panel,
	seat bar, get off seat,
	or stan ansina

HYDRAULIC SYSTEM

Standard equipment pu	ump –
Type	Gear
Displacement -	
Standard Aux.	2.08 cu in (34.1 cc)
High Flow Aux.	1.12 cu in (18.3 cc)
Pump flow @ rated e	engine rpm
@ 100 % efficiency	/ 22.5 gpm (85 L/min)
Optional high flow @	rated engine rpm
@ 100 % efficiency	/ 12.1 gpm (46 L/min)
Loader control valve -	
Type 3 Spo	ool / Open Center / Series
Relief pressure	3,000 psi (207 Bar)
Port relief pressures –	
Loader raise	3,263 psi (225 bar)
Bucket dump	3,481 psi (240 bar)
Bucket curl	3,336 psi (230 bar)
Hydraulic lines -	
Tubing	37° JIC Flare
Loop hoses	SAE 100 R13
Hydraulic oil cooler -	
Number of fins	10 per inch (3.94 per cm)
Number of Tubes	11
Area	130.7 sq in (843 cm ²)
Hydraulic filter	6 micron / Spin on

or stop engine

INSTRUMENTATION

Indicators

Digital Hourmeter

Fuel level LCD bar graph with alarm

Warning lights with alarms

Engine coolant temperature

Engine oil pressure

Engine Malfunction

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 4.0 kW

Battery

12-volt low-maintenance 1000 cold-cranking

amps @ 0° F (-18° C)

OPERATOR ENVIRONMENT

ROPS/FOPS level 1 canopy w/side screens
Tilt ROPS/FOPS
Rear window w/ emergency escape
Instrument panels
Suspension vinyl seat
2 in (51 mm) retractable seat belt
Hand throttle
Foot throttle
Alarm package
Headliner
Top window
Cup holder
Power plug socket
Foot rest
Storage tray
Low effort ergonomic hand controls
Padded seat bar w/integral armrests
Loader control lockout system
Electric parking brake control

Floor cleanout panel

CYLINDERS

Lift cylinder -	
Bore diameter	2.5 in (63.5 mm)
Rod diameter	1.75 in (44.5 mm)
Stroke	35 in (891.5 mm)
Closed length	47.2 in (1200 mm)
Bucket cylinders -	
Bore diameter	3.0 in (76.2 mm)
Rod diameter	1.5 in (38.1 mm)
Stroke	16.14 in (410.0 mm)
Closed length	24 in (610.0 mm)

WEIGHTS

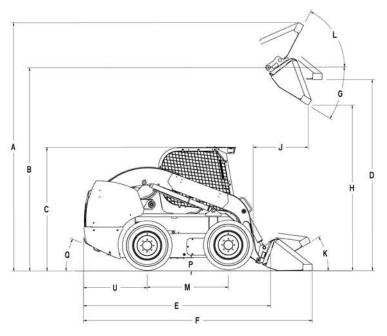
Operating weight	8,300 lb (3765 kg)
Shipping weight	7,965 lb (3610 kg)
Add-on weights –	
Side cab glass	46.9 lb (21.3 kg)
Lexan door	74 lb (33.6 kg)
Glass door with wiper	134 lb (60.8 kg)
Suspension seat	22.1 lb (10 kg)

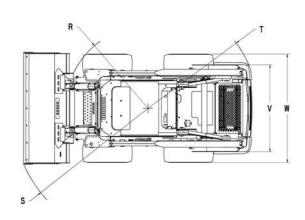
SERVICE CAPACITIES

Fuel tank	25.5 gal (96.5 L)
Engine oil with filter	10.5 qt (10 L)
Hydraulic system –	
Reservoir	6 gal (22.75 L)
Total	NA
Chain tanks (per side)	7.8 qt (7.4 L)

TIRE SELECTION

						Width	
	0:	Ply	Tread	Tire	Tread	Over	Tire
	Size	Rating	Depth	Width	Width	Tires	Weight*
Heavy-Duty	12 x 16.5	_	_	_	57	70	_
					(1465)	(1785)	
Premium	12 x 16.5	_	_	_	57	70	_
					(1465)	(1785)	
Premium-Lined	12 x 16.5	_	_	_	57	70	_
					(1465)	(1785)	
Severe Duty	12 x 16.5	_	_	_	57	70	_
,					(1465)	(1785)	
Mining	12 x 16.5	_	_	_	57	70	_
3					(1465)	(1785)	
Non-Pneumatic	12 x 16.5	_	_	_	57	70	_
					(1465)	(1785)	
Flotation	33 x 15.5	_	_	_	60	76	_
					(1544)	(1930)	
Premium	14 x 17.5	_	_	_	62	76	_
					(1579)	(1930)	





DIMENSIONS

DIMENSIONS	
A. Overall operating height - in (m) —	
with foundry/excavating bucket short lip	164.4 (4.2)
with low profile/standard lip bucket	164.4 (4.2)
with low profile extended / long lip bucket	169.5 (4.3)
Height to - in (m) -	
B. Bucket hinge pin	130 (3.3)
C. Top of ROPS	78.8 (2.0)
D. Bottom of level bucket, fully raised	123.2 (3.1)
Overall length - in (m) -	
E. without attachment with coupler	117.7 (3.0)
F. with foundry excavation bucket on ground	141.9 (3.6)
with low profile bucket	146 (3.7)
with low profile extended bucket	151 (3.8)
G. Dump angle	53.5°
H. Dump height - in (m) -	
with foundry/excavating bucket short lip	102.9 (2.6)
with low profile/standard lip bucket	100.6 (2.6)
J. Dump reach (max. height) - in (m)	29.3 (0.7)
Maximum attachment rollback –	
K. Bucket on ground	35°
L. Bucket at full height	86°
M. Wheelbase - in (m)	52 (1.3)
P. Ground clearance (bottom of belly pan) - in (m)	8 (0.2)
Q. Angle of departure	23.5°
Clearance circle - in (m) -	
R. without bucket	56.2 (1.4)
S. with 72-inch (1.8 m) foundry bucket in carry position	83.8 (2.1)
with 72-inch (1.8 m) low profile bucket on ground	87.2 (2.2)
with 72-inch (1.8 m) extended low profile on ground	91.9 (2.3)
T. Clearance circle rear - in (m)	70.4 (1.8)
U. Rear axle to bumper - in (m)	40.7 (1.0)
Rolling radius - in (m)	16.1 (0.4)
V. Tread width with spec tires - in (m) -	56.9 (1.4)
W. Over the tire width with spec tires - in (m) -	69.6 (1.7)

PERFORMANCE SPECS

Rated Operating Load -	
50%	3,000 lb (1361 kg)
Tipping load	6,000 lb (2722 kg)
Breakout forces (calculated @	3150 psi) –
Lift cylinder	5,090 lb (22.6 kN)
Bucket cylinder	8,585 lb (38.2 kN)
Cycle Times (seconds)-	
Raise	4.1
Lower	2.6
Dump	2.7
Roll back	2.0

OPTIONAL BUCKETS

Туре	Width inch (m)	Weight lb (kg)	Heaped Capacity ft ³ (m ³)
Dirt & Foundry	72 (1.8) 78 (2.0)	390 (177) 435 (197)	16.7 (0.47) 18.4 (0.52)
Low Profile	72 (1.8)	425 (193)	14.5 (0.41)
Low Profile Extended	72 (1.8) 78 (2.0) 84 (2.1)	477 (216) 502 (228) 607 (275)	17.1 (0.48) 18.6 (0.53) 20.2 (0.57)
Light Material	72 (1.8) 84 (2.1)	434 (197) 497 (225)	23.7 (0.67) 27.9 (0.79)
Manure & Slurry	72 (1.8) 84 (2.1)	465 (211) 535 (243)	19.1 (0.54) 22.5 (0.64)
Heavy Duty	72 (1.8) 78 (2.0) 84 (2.1)	501 (227) 527 (239) 550 (249)	14.6 (0.41) 15.9 (0.45) 19.4 (0.55)

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS/FOPS level 1 canopy w/side screens Tilt ROPS/FOPS

Rear window w/ emergency escape

Instrument panels

2 in (51 mm) retractable seat belt

Hand throttle

Foot throttle

Alarm package

Headliner

Top window

Cup holder

Power plug socket

Foot rest

Storage tray

Low effort ergonomic hand controls Padded seat bar w/integral armrests

Loader control lockout system

Electric parking brake control

Floor cleanout panel

LOADER

Vertical loader arm design Mechanical attachment coupler Loader lift arm support strut

ENGINE

Case/Iveco 432T/M3 diesel
No maintenance belt
Over & under radiator and oil cooler
Glow plug
Integral engine oil cooling
Fuel filter w/water trap
Dual element air cleaner
95 amp alternator
1000 CCA 12-volt battery

POWERTRAIN

Hydrostatic four wheel drive Servo controlled pumps ASA #100HS drive chain SAHR disc parking brakes

HYDRAULICS

Auxiliary hydraulics 3050 psi
(210 bar) – 23.8 gpm (90 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

2 speed transmission
Add-on counterweights
Lockable service access hood
Single-point daily servicing
Halogen lights, 2-front, 2 side, 2-rear (halogen)
Rear tail lights
Remote oil drain

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Vinvl suspension seat

Deluxe cloth suspension seat w/ heater and

lumbar support

Interior mirror

Electric auxiliary hydraulic control Glass front door w/wiper & washer

Sliding side windows

3 inch retractable seat belt

Heater and AC

Radio

Demolition door

LOADER

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

HYDRAULICS

High-flow auxiliary hydraulics 3050 psi (210 bar) – 33.2 gpm (126 L/min) Second auxiliary hydraulics Attachment case drain plumbing

ENGINE

Coolant block heater Battery disconnect switch

OTHER

Deluxe instrument panel
Road lights
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
Steel tracks

CASE Customer Assistance

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.

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Biodiesel |

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