

465

SERIES 3 SKID STEER TIER III CERTIFIED

ENGINE

Model	Case 445T/M3 diesel, Tier III certified	
Type	4-stroke, turbocharged	
Cylinders	4	
Bore/Stroke	4.1 in x 5.2 in (104 mm x 132 mm)	
Displacement	274 in ³ (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	2415±60	
Rated - full load	2300	
Low idle	1075±75	
Horsepower per SAE J1349		
Gross	90 (67 kW) @ 2300 rpm	
Net	83 (62 kW) @ 2300 rpm	
Peak torque		
@ 1300 rpm	288 lb-ft (390 N·m)	

ENGINE COOLING

Radiator		
Core type	Square wave serpentine	
Core size area	377 in ² (0.243 m ²)	
Rows of tubes	4	
Cap pressure	14 psi (97.4 kPa)	
Fan		
Diameter	20.4 in (518 mm)	
Ratio	1.1:1	
Water pump		
Style	Centrifugal	
Flow	29 gpm (110 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

Drive pump	Tandem, axial piston hydrostatic transmission with integral charge pump driven directly off engine flywheel	
Pump to engine ratio	1:1	
Displacement	0 to 2.81 in ³ (46 cc)	
Pump flow @ high idle engine rpm	29.4 gpm (111 L/min)	
Flow	Bi-directional	
Charge pressure	360 psi (24 bar)	
System relief	5,220 psi (360 bar)	
Controls	Servo	
Drive motors	Fixed displacement radial piston	
Maximum displacement	40.3 in ³ (660 cc)	
Speed @ rated engine rpm		
@ max displacement	168 rpm	
high speed	309 rpm	
Torque @ max displacement and relief pressure	2,789 lb-ft (3,781 N·m)	
Travel speeds – mph (km/h)		
Low range	6.2 (10.0)	
High range	11.3 (18.1)	
Final drive	Single-reduction chain drive	
Drive chain		
Size	ASA #120HS	
Tensile strength	41,000 lb (182,384 N)	
Axles		
One-piece, forged induction-hardened high carbon steel		
Max torque @ max displacement and relief pressure	6,012 lb-ft (8152 N·m)	
Diameter	2.5 in (63.5 mm)	
Length	14.92 in (379 mm)	
Parking brakes	Spring-applied, hydraulic release	
Engagement	Depress on/off brake button on handle or instrument panel, raise seat bar, get off seat, or stop engine	

HYDRAULIC SYSTEM

Standard equipment pump		
Type	Gear pump	
Displacement	2.2 in ³ /rev (36 cc)	
Pump flow @ rated engine rpm		
Total	21.9 gpm (83 L/min)	
Optional high flow @ rated engine rpm		
Total	41.8 gpm (158 L/min)	
Loader control valve	3-spool open-center series with power beyond port	
Relief pressure	3050 psi (210 bar)	
Port relief pressures –		
Loader Raise	3120 psi (215 bar)	
Bucket Dump	3800 psi (260 bar)	
Bucket Curl	3350 psi (230 bar)	
Hydraulic lines		
Tubing	37° JIC flare	
Loop hoses	SAE 100 R12	
Hydraulic oil cooler		
Core type	Four row in-line	
Hydraulic filter	6-micron spin-on replaceable element on the return line with warning indicator	

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	2.7 kW
Battery	
12-volt low-maintenance 1125 cold-cranking amps @ 0° F (-18 C)	

OPERATOR ENVIRONMENT

ROPS/FOPS level 1 canopy w/side screens
Tilt ROPS/FOPS
Rear window w/escape provision
Instrument panels
Suspension vinyl seat
2 in (51 mm) retractable seat belt
Hand & foot throttles
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 (44.4 mm)
Stroke	49 in (1245 mm)
Closed length	60.7 in (1543 mm)
Bucket cylinder	
Bore diameter	2.75 in (69.8 mm)
Rod diameter	1.375 in (34.9 mm)
Stroke	20.67 in (525 mm)
Closed length	31.5 in (800 mm)

OPERATING WEIGHTS

Unit equipped with 12 x 16.5 Galaxy Beefy Baby II tires, 73 in (1.85 m) long lip bucket, mechanical attachment coupler, 165 lb (75 kg) operator and full fuel tank		8,875 lb (4026 kg)
Shipping weight		8,060 lb (3546 kg)
Add-on weights		
Side cab glass		+70 lb (32 kg)
Glass door w/wiper		+77 lb (35 kg)
Heater		+60 lb (27 kg)
Suspension seat		+10 lb (4.5 kg)
High flow auxiliary hydraulics		269 lb (122 kg)
Hydraulic attachment coupler		+38 lb (17 kg)
Counterweight		+850 lb (385 kg)

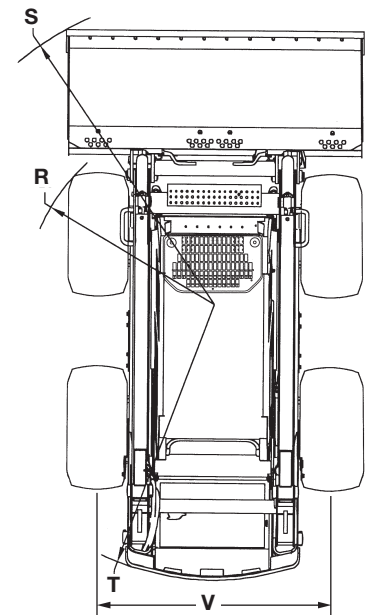
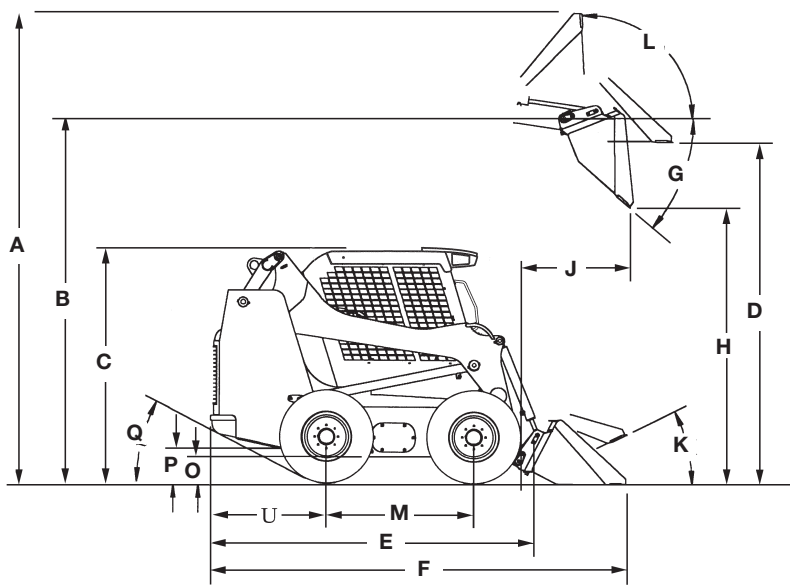
SERVICE CAPACITIES

Fuel tank	20.2 gal (76.4 L)
Engine oil w/filter	12.7 qt (12 L)
Engine cooling system	12 qt (11.5 L)
Hydraulic system	
Reservoir	7.0 gal (26.5 L)
Total	17 gal (64.4 L)
Chain tanks (per side)	8 qt (7.6 L)

TIRE SELECTION

	Size	Ply Rating	Tread Depth	Tire Width	Width Over Tires	Tire Weight*
Galaxy XD 2002	12.00 x 16.5	10	0.69 in (17 mm)	12.4 in (315 mm)	72 in (1.83 m)	72 lb (32.7 kg)
Galaxy Beefy Baby II	12.00 x 16.5	10	0.81 in (21 mm)	12.4 in (315 mm)	72 in (1.83 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)	72 in (1.83 m)	94 lb (42.6 kg)
Galaxy King Kong	12.00 x 16.5	12	1.25 in (32 mm)	11.6 in (295 mm)	72 in (1.83 m)	97 lb (44 kg)
Galaxy Bulky Hulk	33/15.50 x 16.5	14	1.37 in (35 mm)	15.1 in (384 mm)	80 in (2.03 m)	117 lb (53.1 kg)
Galaxy Hulk	12.00 x 16.5	12	1.37 in (35 mm)	12.0 in (305 mm)	72 in (1.83 m)	96 lb (43.5 kg)
Galaxy Solid Flex	12.00 x 16.5	n/a	0.8 in (20 mm)	11 in (279 mm)	71 in (1.80 m)	280 lb (127 kg)
Galaxy Solid Flex (offset wheel)	12.00 x 16.5	n/a	0.8 in (20 mm)	11 in (279 mm)	77 in (1.95 m)	280 lb (127 kg)

NOTE: *Tire weight does not include wheel weight. †Equals grouser depth. ØEquals track width.



DIMENSIONS*

A.	Overall operating height	
	Dirt bucket	163.0 in (4.14 m)
	Light material bucket	170.4 in (4.33 m)
	Height to	
B.	Bucket hinge pin	125.5 in (3.19 m)
C.	Top of rollover protective structure	83.2 in (2.11 m)
D.	Bottom of level bucket, loader arm fully raised	117.4 in (2.98 m)
	Overall length	
E.	w/o attachment w/coupler	112.2 in (2.85 m)
F.	w/dirt bucket on ground	143.0 in (3.63 m)
F.	w/light material bucket on ground	150.7 in (3.83 m)
G.	Dump angle at maximum height	
	Dirt bucket	42°
	Light material bucket	35°
H.	Dump height – loader arm fully raised	
	Dirt bucket	94.8 in (2.41 m)
	Light material bucket	93.1 in (2.36 m)
J.	Reach – loader arm fully raised	
	Dirt bucket	40.3 in (1.02 m)
	Light material bucket	45.2 in (1.15 m)
	Maximum attachment rollback	
K.	Bucket on ground	27°
L.	Bucket at full height	93°
M.	Wheelbase	51.4 in (1.31 m)
	Ground clearance	
O.	Bottom of chain case	9.2 in (234 mm)
P.	Bottom of belly pan	11.1 in (282 mm)
P.	Bottom of optional counterweight	9.2 in (234 mm)
Q.	Angle of departure	26°
	Clearance circle front	
R.	less bucket	56.3 in (1.43 m)
S.	w/73 in (1.85 m) dirt bucket in carry position	86.2 in (2.19 m)
S.	w/84 in (2.08 m) dirt bucket on ground	88.4 in (2.24 m)
S.	w/82 in (2.08 m) light material bucket on ground	93.7 in (2.38 m)
T.	Clearance circle rear	65.6 in (1.66 m)
V.	Tread width, centerline to centerline	58.5 in (1.49 m)

NOTE: *Equipped with 12 x 16.5 Galaxy Beefy Baby II tires.

PERFORMANCE SPECS

Operating load	3,000 lb (1361 kg)
w/counterweight	3,200 lb (1451 kg)
Tipping load	6,000 lb (2722 kg)
w/counterweight	6,400 lb (2903 kg)
Breakout force	
Lift cylinder	6,500 lbf (28 915 N)
Bucket cylinder	7,400 lbf (32 916 N)
Dig depth	
w/bucket flat	0.2 in (5 mm)
Cycle time	
Raise	5.4 seconds
Lower	3.3 seconds
Dump	2.1 seconds
Rollback	1.7 seconds

NOTE: SAE rated lift capacities.

OPTIONAL BUCKETS

Type	Width inch (m)	Weight lb (kg)	Heaped Capacity ft ³ (m ³)
Long Lip Dirt	73 (1.9)	553 (251)	16.8 (.48)
	84 (2.1)	620 (281)	19.4 (.55)
HD Dirt	73 (1.9)	621 (282)	16.8 (.48)
	84 (2.1)	676 (307)	19.4 (.55)
Utility	73 (1.9)	628 (285)	22.4 (.63)
	84 (2.1)	674 (306)	25.7 (.73)
HD Utility	73 (1.9)	696 (316)	22.4 (.63)
	84 (2.1)	755 (343)	25.7 (.73)
Light Material	82 (2.1)	584 (265)	32.5 (.94)

STANDARD EQUIPMENT

OPERATOR'S COMPARTMENT

ROPS/FOPS level 1 canopy w/side screens
Tilt ROPS/FOPS
Rear window w/escape provision
Instrument panels
Suspension vinyl seat
2 in (51 mm) retractable seat belt
Hand & foot throttles
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

Heavy lift-and-reach linkage
Mechanical attachment coupler

ENGINE

Case 445T/M3 diesel
Tier III Certified
Integral engine oil cooling
Automatic belt tensioner
Grid heater
Battery disconnect and jump start terminal
Fuel filter w/water trap
Dual element air cleaner
95 amp alternator
1125 CCA 12-volt battery
Side-by-side radiator and oil cooler

POWERTRAIN

Hydrostatic four wheel drive
Servo controls
ASA #120HS drive chain
SAHR disc parking brakes

HYDRAULICS

Auxiliary hydraulics 3050 psi
(210 bar) - 21.9 gpm (83 L/min)
Auxiliary interlock system
Loader arm mounted ISO flat face hydraulic quick connectors
Auxiliary function lockout override
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, 2 side, 1-rear flood (halogen)
Rear tail lights
Options harness
Heavy-duty rear door
Remote oil drain

OPTIONAL EQUIPMENT

OPERATOR'S COMPARTMENT

Deluxe cloth suspension seat w/heater and lumbar support
3 in (76 mm) retractable seat belt
Electric auxiliary hydraulic control
Glass front door w/wiper & washer
Demolition door
Sliding side windows
Air conditioning
Heater (deluxe)
Radio

LOADER

Auxiliary front electric control
Ride Control
Hydraulic attachment coupler
Hydraulic one-way self-leveling

ENGINE

Coolant block heater

HYDRAULICS

Auxiliary high-flow 3050 psi
(210 bar) - 41.8 gpm (158 L/min)
Attachment case drain plumbing

OTHER

2-speed ground drive
Rotating beacon
Deluxe instrument panel
Road lights
925 lb (420 kg) counterweight
Lift hooks
Drawbar
Language decals
Special paint
Buckets - see page 3
42 in (1.07 m)/48 in (1.22 m) pallet forks
Bolt-on bucket edges
Steel tracks
Factory installed tires - see page 2
Bolt-on spill guard

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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