

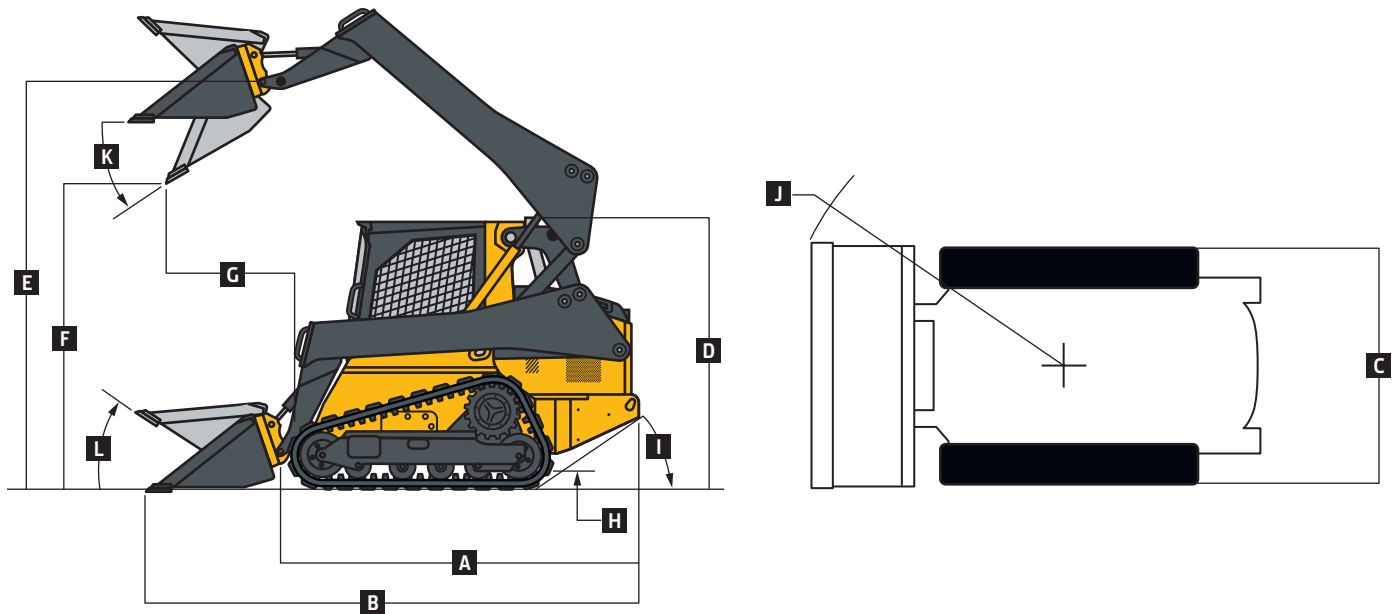
# 319E / 323E



Engine	319E	323E
Manufacturer and Model	Yanmar 4TNV98C (optional 4TNV98CT)	Yanmar 4TNV98CT
Non-Road Emission Standards	EPA Final Tier 4/EU Stage IV	EPA Final Tier 4/EU Stage IV
Cylinders	4	4
Net Peak Power (SAE J1349 / ISO 9249)	49.4 kW (66 hp) at 2,500 rpm	52.5 kW (70 hp) at 2,500 rpm
Gross Rated Power (ISO 14396)	51.7 kW (69 hp) at 2,500 rpm	54.8 kW (74 hp) at 2,500 rpm
Peak Torque	241 Nm (178 ft.-lb.) at 1,625 rpm	280 Nm (207 ft.-lb.) at 1,800 rpm
Displacement	3.3 L (203 cu. in.)	3.3 L (203 cu. in.)
Rated Engine Speed	2,500 rpm	2,500 rpm
Torque Rise	22% at 1,625 rpm	34% at 1,800 rpm
Aspiration	Naturally aspirated (optional turbocharger)	Turbocharged
Air Cleaner	Dry dual element	Dry dual element
Cooling	319E / 323E	
Fan Type	Variable-speed hydraulic drive (optional reversing fan drive)	
Powertrain	319E	323E
Pump	Axial-piston hydrostatic	Axial-piston hydrostatic
Controls	Manual or electrohydraulic	Manual or electrohydraulic
Travel Speeds		
Single Speed, Standard	9.3 km/h (5.8 mph)	10.0 km/h (6.2 mph)
2 Speed, Optional		
Low	—	9.0 km/h (5.6 mph)
High	—	14.0 km/h (8.7 mph)
<b>Brakes</b>	Integral, automatic, spring-applied, hydraulically released wet-disc brake	
Undercarriage	319E / 323E	
<b>Rubber Tracks</b>	Smooth-ride long-life rubber with steel inserts	Smooth-ride long-life rubber with steel inserts
Track Width		
Standard	320 mm (12.6 in.)	320 mm (12.6 in.)
Optional	—	400 mm (15.8 in.)
Ground Pressure		
Standard 320-mm (12.6 in.) Track	39.3 kPa (5.7 psi)	39.3 kPa (5.7 psi)
Optional 400-mm (15.8 in.) Track	—	32.4 kPa (4.7 psi)
Track Rollers (per side)	4 triple-flange smooth-ride all-steel rollers	4 triple-flange smooth-ride all-steel rollers
Track Idlers (per side)	2 double-flange smooth-ride all-steel rollers	2 double-flange smooth-ride all-steel rollers
Bearings/Seals (rollers/idlers)	Heavy-duty journal bearings and metal face seals	Heavy-duty journal bearings and metal face seals
Tractive Effort	3859 kgf (8,500 lbf)	3859 kgf (8,500 lbf)
Hydraulics	319E / 323E	
Pump Flow		
Standard	57 L/m (15 gpm)	68 L/m (18 gpm)
Total with High-Flow Option	—	95 L/m (25 gpm)
System Pressure at Couplers	22 408 kPa (3,250 psi)	22 408 kPa (3,250 psi)
Hydraulic Horsepower Flow (calculated)		
Standard	21.2 kW (28.4 hp)	25.5 kW (34.1 hp)
High	—	35.3 kW (47.4 hp)
Cylinders	319E / 323E	
Type	John Deere heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins	
Electrical	319E / 323E	
Voltage	12 volt	
Battery Capacity	750 CCA (optional 925 CCA)	
Alternator Rating	70 amp	
Lights	Halogen, 2 front and 1 rear	
Operator's Station	319E / 323E	
	ROPS (ISO 3471) / FOPS (ISO 3449) structure with quick-pivot standard	



Serviceability		319E / 323E	
<b>Refill Capacity</b>			
Fuel Tank	76 L (20 gal.)		
<b>Operating Weights</b>			
	<b>319E</b>	<b>323E</b>	
With Standard 320-mm (12.6 in.) Track	4286 kg (9,440 lb.)	4286 kg (9,440 lb.)	
With Optional 400-mm (15.8 in.) Track	—	4358 kg (9,600 lb.)	
<b>Machine Dimensions</b>			
<b>A</b> Length without Bucket	2.85 m (112 in.) (9 ft. 4 in.)	2.85 m (112 in.) (9 ft. 4 in.)	
<b>B</b> Length with Foundry Bucket	3.47 m (136.8 in.) (11 ft. 5 in.)	3.47 m (136.8 in.) (11 ft. 5 in.)	
<b>C</b> Width without Bucket			
With 320-mm (12.6 in.) Track	1.82 m (71.8 in.) (6 ft. 0 in.)	1.82 m (71.8 in.) (6 ft. 0 in.)	
With 400-mm (15.8 in.) Track	—	1.91 m (75.2 in.) (6 ft. 3 in.)	
<b>D</b> Height to Top of ROPS	2.05 m (80.6 in.) (6 ft. 9 in.)	2.05 m (80.6 in.) (6 ft. 9 in.)	
<b>E</b> Height to Hinge Pin	3.12 m (122.8 in.) (10 ft. 3 in.)	3.12 m (122.8 in.) (10 ft. 3 in.)	
<b>F</b> Dump Height with Foundry Bucket	2.50 m (98.4 in.) (8 ft. 2 in.)	2.50 m (98.4 in.) (8 ft. 2 in.)	
<b>G</b> Dump Reach			
With Foundry Bucket	0.72 m (28.5 in.)	0.72 m (28.5 in.)	
With Construction Bucket with Edge	0.92 m (36.1 in.) (3 ft. 0 in.)	0.92 m (36.1 in.) (3 ft. 0 in.)	
<b>H</b> Ground Clearance	0.25 m (9.8 in.)	0.25 m (9.8 in.)	
<b>I</b> Angle of Departure	31.4 deg.	31.4 deg.	
<b>J</b> Front Turn Radius with Foundry Bucket	2.03 m (80.1 in.) (6 ft. 8 in.)	2.03 m (80.1 in.) (6 ft. 8 in.)	
<b>K</b> Dump Angle (full lift height)	42 deg.	42 deg.	
<b>L</b> Bucket Rollback (ground level)	32 deg.	32 deg.	



Loader Performance		319E		323E	
Tipping Load	2789 kg (6,143 lb.)		3360 kg (7,400 lb.)		
<b>SAE Rated Operating Capacity with Foundry Bucket</b>					
At 35% Tipping Load	976 kg (2,150 lb.)		1176 kg (2,590 lb.)		
At 50% Tipping Load	1394 kg (3,017 lb.)		1634 kg (3,600 lb.)		
Boom Breakout	1589 kg (3,500 lb.)		1952 kg (4,300 lb.)		
Bucket Breakout Force	2724 kg (6,000 lb.)		3178 kg (7,000 lb.)		