

FCA Canada: 2021 Ram 1500

SPECIFICATIONS

Specifications are based on the latest product information available at the time of publication.

All dimensions are in millimetres (inches) unless otherwise noted.

All dimensions measured at curb weight with standard tires and wheels.

GENERAL INFORMATION

Vehicle Type	Quad Cab and Crew Cab: 4x2, 4x4
Assembly Plant	Sterling Heights Assembly Plant, Sterling Heights, Michigan (USA)
EnerGuide Vehicle Class	Standard Pickup

BODY/CHASSIS

Layout	4x2 — Longitudinal, front engine
	4x4 — Longitudinal, front engine, transfer case
Construction	4x2 — Ladder-type frame, steel cab, double-wall steel pickup box
	4x4 — Ladder-type frame, steel cab, double-wall steel pickup box

ENGINE: 3.6-LITRE PENTASTAR V-6 WITH eTORQUE

Type and Description	60-degree gasoline V-6 with variable valve timing, V-type, liquid-cooled
Hybrid Battery	48-volt, 12-cell lithium-ion, nickel manganese cobalt (NMC) graphite chemistry, .43 kWh
Belt-starter Generator	9kW power, 90 lb.-ft. launch torque
Displacement	3,604 cu. cm (220 cu. in.)
Bore x Stroke	96.0 x 83.0 (3.78 x 3.27)
Valve System	Chain-driven DOHC, 24 valves and hydraulic end-pivot roller rockers
Fuel Injection	Sequential, multiport, electronic, returnless
Construction	Aluminum deep-skirt block, aluminum alloy heads
Compression Ratio	11.3:1
Power	305 hp (224 kW) @ 6,400 rpm
Torque	269 lb.-ft. (364 N•m) @ 4,800 rpm
Max. Engine Speed	6,400 rpm (electronically limited)
Fuel Requirement	Unleaded regular, 87 octane

Oil Capacity	5.7 litres (6.0 quarts)
Coolant Capacity	13.25 litres (14.0 quarts)
Emission Controls	Dual three-way catalytic converters, heated oxygen sensors
EnerGuide Fuel Economy L/100km (mpg – imp. gal.) (city/hwy)	11.9/9.4 (24/30)

ENGINE: 3.0-LITRE EcoDiesel V-6

Type and Description	90-degree diesel V-6
Displacement	2,988 cu. cm (182 cu. in.)
Bore x Stroke	83 x 92 (3.27 x 3.60)
Valve System	Chain driven DOHC, 24 valves
Fuel Injection	Common rail, 29,000 psi (2000 bar), solenoid injectors
Construction	Cast-iron block, aluminum alloy heads
Compression Ratio	16.0:1
Power	260 hp (194 kW) @ 3,600 rpm
Torque	480 lb.-ft. (651 N•m) @ 1,600 rpm
Max. Engine Speed	5,800 rpm
Fuel Requirement	Ultra-low sulfur diesel
Oil Capacity	7.8 litres (10.5 quarts)
Coolant Capacity	11.4 litres (12.0 quarts)
Emission Controls	Cooled EGR, oxidation catalyst, diesel particulate filter, SCR with urea injection
EnerGuide Fuel Economy L/100km (mpg – imp. gal.) (city/hwy)	10.5/7.3 (27/39)

ENGINE: 5.7-LITRE HEMI® V-8

Type and Description	90-degree gasoline, V-8 with variable cam timing
Displacement	5,654 cu. cm (345 cu. in.)
Bore x Stroke	99.5 x 90.9 (3.92 x 3.58)
Valve System	Variable-cam timing, pushrod-operated overhead valves, 16 valves, hydraulic lifters with roller followers
Fuel Injection	Sequential, multiport, electronic, returnless

Construction	Deep-skirt cast-iron block with cross-bolted main bearing caps, aluminum alloy heads with hemispherical combustion chambers
Compression Ratio	10.5:1
Power	395 hp (291 kW) @ 5,600 rpm
Torque	410 lb.-ft. (556 N•m) @ 3,950 rpm
Max. Engine Speed	5,800 rpm
Fuel Requirement	Unleaded mid-grade, 89 octane — recommended Unleaded regular, 87 octane — acceptable
Oil Capacity	6.6 litres (7.0 quarts)
Coolant Capacity	13.33 litres (14.0 quarts)
Emission Controls	Three-way catalytic converters, heated oxygen sensors and internal engine features
EnerGuide Fuel Economy L/100km (mpg – imp. gal.) (city/hwy)	16.2/10.5 (17/27)

ENGINE: 5.7-LITRE HEMI V-8 eTORQUE

Type and Description	90-degree gasoline V-8 with variable cam timing
Hybrid Battery	48-volt, 12-cell lithium-ion, nickel manganese cobalt (NMC) graphite chemistry, .43 kWh
Belt-starter Generator	12kW power, 130 lb.-ft. launch torque
Displacement	5,654 cu. cm (345 cu. in.)
Bore x Stroke	99.5 x 90.9 (3.92 x 3.58)
Valve System	Variable-cam timing, pushrod-operated overhead valves, 16 valves, hydraulic lifters with roller followers
Fuel Injection	Sequential, multiport, electronic, returnless
Construction	Deep-skirt cast-iron block with cross-bolted main bearing caps, aluminum-alloy heads with hemispherical combustion chambers
Compression Ratio	10.5:1
Power	395 hp (291 kW) @ 5,600 rpm
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Max. Engine Speed	5,800 rpm
Fuel Requirement	Unleaded mid-grade, 89 octane — recommended Unleaded regular, 87 octane — acceptable

Oil Capacity	6.6 litres (7.0 quarts)
Coolant Capacity	13.33 litres (14.0 quarts)
Emission Controls	Three-way catalytic converters, heated oxygen sensors and internal engine features
EnerGuide Fuel Economy L/100km (mpg – imp. gal.) (city/hwy)	14.1/10.3 (20/27)

TRANSMISSION: TORQUEFLITE 850RE EIGHT-SPEED AUTOMATIC

Availability	Standard with 3.6-litre Pentastar V-6
Description	Adaptive electronic control, automatic or Electronic Range Select (ERS) manual control. Five-clutch-pack design with only two open clutches in any gear. Torque converter lock with turbine torsional damper for low lock-up speeds in 1st through 8th gear
Gear Ratios	
1 st	4.71
2 nd	3.14
3 rd	2.10
4 th	1.67
5 th	1.29
6 th	1.00
7 th	0.84
8 th	0.67
Reverse	3.30
Axle Ratios	3.21, 3.55, 3.92 (Rebel only)

TRANSMISSION: TORQUEFLITE 8HP75 EIGHT-SPEED AUTOMATIC

Availability	Standard with 3.0-litre EcoDiesel V-6, 5.7-litre HEMI V-8 and 5.7-litre V-8 with eTorque
Description	Adaptive electronic control, automatic or ERS manual control. Five-clutch-pack design with only two open clutches in any gear. Torque converter lock with turbine torsional damper for low lock-up speeds in 1st through 8th gear
Gear Ratios	
1 st	4.71
2 nd	3.14
3 rd	2.10

4 th	1.67
5 th	1.29
6 th	1.00
7 th	0.84
8 th	0.67
Reverse	3.30
Axle Ratios	3.21, 3.55 (excluding 5.7-litre HEMI V-8), 3.92

TRANSFER CASE: BW 48-12 PART-TIME

Availability	3.6-litre Pentastar V-6 4x4 with eTorque, 3.0-litre EcoDiesel V-6, 5.7-litre HEMI V-8 4x4 and 5.7-litre HEMI V-8 with eTorque assist
Shift Mechanism	Electric
Available Speeds	Two-speed
Operating Modes	2WD High; 4WD High, Locked; Neutral; 4WD Low, Locked
Low-range Ratio	2.64
Centre Differential Type	None

TRANSFER CASE: BW 48-11 ON-DEMAND

Availability	3.0-litre EcoDiesel V-6, 5.7-litre HEMI V-8 4x4 and 5.7-litre HEMI V-8 with eTorque assist
Shift Mechanism	Electric
Available Speeds	Two-speed
Operating Modes	2WD High; 4WD Auto; 4WD High, Locked; Neutral; 4WD Low, Locked
Low-range Ratio	2.64
Centre Differential Type	None

AXLES

Front	215mm
Rear	235mm (standard) with available open, limited-slip or electronic-locking differential 256mm (optional max tow with Dana Super 60 centre section)
Available Ratios	3.21, 3.55, 3.92

ELECTRICAL SYSTEM	
Architecture	Powernet
Alternator	160-amp, 180-amp, 220-amp (Special Services Package)
Battery	Group 94R, low-maintenance H7 730 CCA
SUSPENSION	
Front	Upper and lower A-arms, coil springs, twin-tube shock absorbers and stabilizer bar. Optional air suspension replaces twin-tube shock absorbers and progressive rate coil springs
Rear	Five-link with track bar, progressive rate coil springs, stabilizer bar, twin-tube shock absorbers, solid axle. Optional air suspension replaces progressive rate coil springs
BRAKES	
Front	
Size and Type	378 x 30 (14.9 x 1.2) vented disc with 57 mm (2.2 in.) two-piston pin-slider caliper and anti-lock braking system (ABS)
Swept Area	3,184 sq.cm (493.6 sq.in.)
Rear	
Size and Type	375 x 22 (14.8 x 0.87) disc with 57 mm (2.2 in.) single-piston pin-slider caliper and ABS
Swept Area	2,371.9 sq.cm (367.6 sq.in.)
Power-assist	Dual-rate, tandem diaphragm vacuum
STEERING	
Power assist	Electric power steering
AIR BAGS	
Quad Cab	6
Crew Cab	6

CARGO BOX

NOMINAL BOX SIZE	5FT., 7IN. (CREW)	6FT., 4IN. (REGULAR, QUAD OR CREW)
SAE volume, Litres (cu. ft.)	1,526 (53.9)	1,741 (61.5)
Length-at-Floor, Tailgate Closed	1,711 (67.4)	1,937 (76.3)
Cargo Width	1,687 (66.4)	1,687 (66.4)
Distance Between Wheelhouses	1,295 (51.0)	1,295 (51.0)
Depth	543 (21.4)	545 (21.5)
Tailgate Opening Width	1,525 (60.0)	1,525 (60.0)

EXTERIOR DIMENSIONS

QUAD CAB PICKUP, 6FT., 4IN. BOX		
MODEL – TIRE SIZE	4x2 - 275/55R20	4x4 - 275/55R20
Wheelbase (nominal)	3,569 (140.5)	3,569 (140.5)
Track, Front	1,741 (68.5)	1,741 (68.5)
Track, Rear	1,729 (68.1)	1,729 (68.1)
Overall Length	5,814 (228.9)	5,814 (228.9)
Overall Width	2,084 (82.1)	2,084 (82.1)
Overall Height	1,971 (77.6)	1,973 (77.7)

GROUND CLEARANCE	4x2 - 275/55R20	4x4 - 275/55R20
Front Axle	199 (7.8)	208 (8.2)
Rear Axle	221 (8.7)	221 (8.7)
Open Tailgate to Ground	979 (34.6)	875 (34.4)
Pickup Body Height	545 (21.4)	545 (21.4)
Approach Angle, degrees	18.1	18.9
Departure Angle, degrees	25.2	25.0

Ramp Breakover Angle Without Skid Plate, degrees	19.5	19.9
Ramp Breakover Angle With Skid Plate, degrees	—	17.8
Ground Clearance Without Skid Plate	213 (8.4)	221 (8.7)
Ground Clearance With Skid Plate	—	208 (8.2)
Fuel Tank Capacity	87-litre (23-gal.) (standard) 98-litre (26-gal.) (standard) 125-litre (33-gal.) (optional)	87-litre (23-gal.) (standard) 98-litre (26-gal.) (standard) 125-litre (33-gal.) (optional)

EXTERIOR DIMENSIONS

QUAD CAB PICKUP, 6FT., 4IN. BOX – AIR SUSPENSION, 4x2 AND 4x4

TIRE SIZE: 275/55R20

SUSPENSION MODE	ENTRY / EXIT	NORMAL RIDE HEIGHT	OFF ROAD 1	OFF ROAD 2
Wheelbase (nominal)	3,569 (140.5)	3569 (140.5)	3,569 (140.5)	3,569 (140.5)
Track, Front	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)
Track, Rear	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)
Overall Length	5,814 (228.9)	5,814 (228.9)	5,814 (228.9)	5,814 (228.9)
Overall Width	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)
Overall Height	1,927 (75.9)	1,973 (77.7)	1,998 (78.7)	2,025 (79.7)
Front Axle	208 (8.2)	208 (8.2)	208 (8.2)	208 (8.2)
Rear Axle	221 (8.7)	221 (8.7)	221 (8.7)	221 (8.7)
Open Tailgate to Ground	836 (32.9)	875 (34.4)	893 (35.1)	925 (36.4)
Pickup Body Height	545 (21.4)	545 (21.4)	545 (21.4)	545 (21.4)
Approach Angle, degrees	14.4	18.9	21.5	23.1
Departure Angle, degrees	22.5	25.0	25.9	27.3
Ramp Breakover Angle Without Skid Plate, degrees	16.5	19.9	21.8	23.5

Ramp Breakover Angle With Skid Plate, degrees	14.4	17.8	19.7	21.3
Ground Clearance Without Skid Plate	169 (6.7)	221 (8.7)	(251) (9.9)	(273) (10.7)
Ground Clearance With Skid Plate	156 (6.1)	208 (8.2)	238 (9.4)	260 (10.2)
Fuel Tank Capacity	87-litre (23-gal.) (standard) 98-litre (26-gal.) (standard) 125-litre (33-gal.) (optional)			

EXTERIOR DIMENSIONS

CREW CAB PICKUP

MODEL – TIRE SIZE	4x2 – 275/55R20		4x4 – 275/55R20	
BOX LENGTH	5FT., 7IN.	6FT., 4IN.	5FT., 7IN.	6FT., 4IN.
Wheelbase (nominal)	3,672 (144.6)	3,898 (153.5)	3,672 (144.6)	3,898 (153.5)
Track, Front	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)
Track, Rear	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)
Overall Length	5,916 (232.9)	6,142 (241.8)	5,916 (232.9)	6,142 (241.8)
Overall Width	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)
Overall Height	1,968 (77.5)	1,966 (77.4)	1,971 (77.6)	1,968 (77.5)

GROUND CLEARANCE	5FT., 7IN.	6FT., 4IN.	5FT., 7IN.	6FT., 4IN.
Front Axle	199 (7.8)	199 (7.8)	209 (8.2)	207 (8.1)
Rear Axle	220 (8.6)	220 (8.7)	220 (8.7)	220 (8.6)
Open Tailgate to Ground	877 (34.5)	875 (34.4)	872 (34.3)	871 (34.3)
Pickup Body Height	543 (21.4)	545 (21.4)	543 (21.4)	545 (21.4)
Approach Angle, degrees	18.0	18.1	19.0	18.9
Departure Angle, degrees	25.1	25.0	24.9	24.9

Ramp Breakover Angle Without Skid Plate, degrees	19.0	18.4	19.5	18.7
Ramp Breakover Angle With Skid Plate, degrees	—	—	17.5	16.7
Ground Clearance Without Skid Plate	8.3 (211)	8.3 (212)	8.7 (222)	8.6 (220)
Ground Clearance With Skid Plate	—	—	8.2 (209)	8.1 (207)
Fuel Tank Capacity	87-litre (23-gal.) (standard) 98-litre (26-gal.) (standard) 125-litre (33-gal.) (optional)			

EXTERIOR DIMENSIONS

CREW CAB, 5FT., 7IN. BOX – AIR SUSPENSION, 4x2 AND 4x4

TIRE SIZE: 275/55R20

SUSPENSION MODE	ENTRY / EXIT	NORMAL RIDE HEIGHT	OFF ROAD 1	OFF ROAD 2
Wheelbase (nominal)	3,672 (144.6)	3,672 (144.6)	3,672 (144.6)	3,672 (144.6)
Track, Front	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)
Track, Rear	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)
Overall Length	5,916 (232.9)	5,916 (232.9)	5,916 (232.9)	5,916 (232.9)
Overall Width	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)
Overall Height	1,926 (75.8)	1,971 (77.6)	1,996 (78.6)	2,023 (79.6)
Front Axle	209 (8.2)	209 (8.2)	209 (8.2)	209 (8.2)
Rear Axle	220 (8.7)	220 (8.7)	220 (8.7)	220 (8.7)
Open Tailgate to Ground	833 (32.8)	872 (34.3)	890 (35.0)	923 (36.3)
Pickup Body Height	543 (21.4)	543 (21.4)	543 (21.4)	543 (21.4)
Approach Angle, degrees	14.6	19.0	21.7	23.3
Departure Angle, degrees	22.4	24.9	25.8	27.2
Ramp Breakover Angle Without Skid Plate, degrees	16.2	19.5	21.4	23.0

Ramp Breakover Angle With Skid Plate, degrees	14.2	17.5	19.3	21.0
Ground Clearance Without Skid Plate	170 (6.7)	222 (8.7)	252 (9.9)	273 (10.8)
Ground Clearance With Skid Plate	157 (6.2)	209 (8.2)	239 (9.4)	261 (10.3)
Fuel Tank Capacity	87-litre (23-gal.) (standard) 98-litre (26-gal.) (standard) 125-litre (33-gal.) (optional)			

EXTERIOR DIMENSIONS

CREW CAB, 6FT., 4IN. BOX – AIR SUSPENSION, 4x2 AND 4x4

TIRE SIZE: 275/55R20

SUSPENSION MODE	ENTRY / EXIT	NORMAL RIDE HEIGHT	OFF ROAD 1	OFF ROAD 2
Wheelbase (nominal)	3,898 (153.5)	3,898 (153.5)	3,898 (153.5)	3,898 (153.5)
Track, Front	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)	1,741 (68.5)
Track, Rear	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)	1,729 (68.1)
Overall Length	6,142 (241.8)	6,142 (241.8)	6,142 (241.8)	6,142 (241.8)
Overall Width	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)	2,084 (82.1)
Overall Height	1,922 (75.7)	1,968 (77.5)	1,993 (78.4)	2,019 (79.5)

GROUND CLEARANCE	ENTRY / EXIT	NORMAL RIDE HEIGHT	OFF ROAD 1	OFF ROAD 2
Front Axle	207 (8.1)	207 (8.1)	207 (8.1)	207 (8.1)
Rear Axle	220 (8.6)	220 (8.6)	220 (8.6)	220 (8.6)
Open Tailgate to Ground	832 (32.7)	871 (34.3)	889 (35.0)	922 (36.3)
Pickup Body Height	545 (21.4)	545 (21.4)	545 (21.4)	545 (21.4)
Approach Angle, degrees	14.5	18.9	21.5	23.1
Departure Angle, degrees	22.7	24.9	25.8	27.1
Ramp Breakover Angle Without Skid Plate, degrees	15.5	18.7	20.6	22.1

Ramp Breakover Angle With Skid Plate, degrees	13.5	16.7	18.5	20.1
Ground Clearance Without Skid Plate	168 (6.6)	220 (8.6)	250 (9.8)	271 (10.7)
Ground Clearance With Skid Plate	155 (6.1)	207 (8.1)	237 (9.3)	259 (10.2)
Fuel Tank Capacity	87-litre (23-gal.) (standard) 98-litre (26-gal.) (standard) 125-litre (33-gal.) (optional)			

INTERIOR DIMENSIONS

ACCOMMODATIONS

MODEL	QUAD CAB	CREW CAB
Seating Capacity, F/R	3/3	3/3

FRONT	QUAD CAB	CREW CAB
Headroom	1,038 (40.9)	1,038 (40.9)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,676 (66.0)	1,676 (66.0)
Hip Room	1,610 (63.4)	1,610 (63.4)
Seat Travel	220 (8.7)	220 (8.7)

Recliner Range (degrees)	Total travel 71 degrees (from full forward) 18 degrees forward (from design) 53 degrees rearward (from design)
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REAR	QUAD CAB	CREW CAB
Headroom	995 (39.2)	1,011 (39.8)
Legroom	903 (35.6)	1,147 (45.2)
Shoulder Room	1,668 (65.7)	1,670 (65.7)
Hip Room	1,610 (63.4)	1,611 (63.4)

INTERIOR VOLUME	QUAD CAB	CREW CAB
Front – Litres (cu. ft.)	1,809 (63.9)	1,809 (63.9)
Rear – Litres (cu. ft.)	1,509(53.3)	1,940 (68.5)

STEERING SPECIFICATIONS

QUAD CAB PICKUP

MEASUREMENT	2WD SHORT BED	2WD LONG BED	4WD SHORT BED	4WD LONG BED	4WD REBEL
Wheelbase (nominal; mm/in.)	3,569/ 140.5	3,569/ 140.5	3,569/ 140.5	3,569/ 140.5	3,569/ 140.5
Overall Ratio	16.3:1	16.3:1	16.3:1	16.3:1	17.8:1
Steering Wheel Turns (lock-to-lock)	3.1	3.1	3.1	3.1	3.4
18-in. Tire Turning Diameter (M / ft.)*	14.1 / 46.2	14.1 / 46.2	14.1 / 46.2	14.1 / 46.2	14.1 / 46.2
20-in. Tire Turning Diameter (M / ft.)*	13.74 / 45.1	13.74 / 45.1	13.74 / 45.1	13.74 / 45.1	NA

CREW CAB PICKUP

MEASUREMENT	2WD SHORT BED	2WD LONG BED	4WD SHORT BED	4WD LONG BED	4WD REBEL
Wheelbase (nominal)	3,672 / 144.6	3,898 / 153.5	3,572 / 144.6	3,898 / 153.5	3,572 / 144.6
Overall Ratio	16.3:1	15.5:1	16.3:1	15.5:1	17.8:1
Steering Wheel Turns (lock-to-lock)	3.1	2.9	3.1	2.9	3.4
18-in. Tire Turning Diameter (M / ft.)*	14.08 / 46.2	14.84 / 48.7	14.08 / 46.2	14.84 / 48.7	14.1 / 46.2
20-in. Tire Turning Diameter (M / ft.)*	14.08 / 46.2	14.84 / 48.7	14.08 / 46.2	14.84 / 48.7	NA

* = Curb-to-curb turning diameter is measured at the outside of the tires at curb height. Turning diameters and steering wheel turns, lock-to-lock may differ with optional tires and wheels.

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