

FCA CANADA

2020 Ram 3500, 4500 & 5500 Chassis Cab

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	Regular Cab, Crew Cab: 4x2, 4x4
Assembly Plant	Saltillo Truck Assembly Plant, Coahuila, Mexico

BODY/CHASSIS

Model	4x2	4x4
Layout	Longitudinal, front engine	Longitudinal, front engine, transfer case
Construction	Ladder-type frame, steel cab	Ladder-type frame, steel cab

ENGINE: 6.4-LITRE HEMI® V-8 (SIX-SPEED)

Type and Description	90-degree gasoline V-8 with variable cam timing
Displacement	6,417 cu cm (392 cu. in.)
Bore x Stroke	103.9 x 94.6 (4.09 x 3.72)
Valve System	Pushrod-operated overhead valves, 16 valves, eight de-activating and eight hydraulic lifters, all with roller followers
Fuel Injection	Sequential, multiport, electronic, returnless
Construction	Deep-skirt cast-iron block with cross-bolted main bearing caps, 356 aluminum cylinder heads with hemispherical combustion chambers
Compression Ratio	10.0:1
Power	370 hp (306 Kw) @ 5,600 rpm
Torque	429 lb.-ft. (582 N•m) @ 4,000 rpm
Maximum Engine Speed	5,800 rpm limited
Fuel Requirement	Unleaded regular, 87 octane
Oil Capacity	6.6 litres (7.0 quarts)

Coolant Capacity	15.75 litres (16.6 quarts)
Emission Control	Three-way catalytic converters, heated oxygen sensors, cooled electronic exhaust-gas recirculation (EGR) and individual cylinder fuel control

ENGINE: 6.4-LITER HEMI V-8 (EIGHT-SPEED)

Type and Description	90-degree gasoline V-8 with variable cam timing
Displacement	6,417 cu cm (392 cu. in.)
Bore x Stroke	103.9 x 94.6 (4.09 x 3.72)
Valve System	Pushrod-operated overhead valves, 16 valves, eight de-activating and eight hydraulic lifters, all with roller followers
Fuel Injection	Sequential, multiport, electronic, returnless
Construction	Deep-skirt cast-iron block with cross-bolted main bearing caps, 356 aluminum cylinder heads with hemispherical combustion chambers
Compression Ratio	10.0:1
Power	370 hp (306 Kw) @ 5,600 rpm
Torque	429 lb.-ft. (582 N•m) @ 4,000 rpm
Maximum Engine Speed	5,800 rpm limited
Fuel Requirement	Unleaded regular, 87 octane (R+M)/2
Oil Capacity	6.6 litres (7.0 quarts)
Coolant Capacity	15.75 litres (16.6 quarts)
Emission Control	Three-way catalytic converters, heated oxygen sensors, cooled electronic exhaust-gas recirculation (EGR) and individual cylinder fuel control

ENGINE: 6.7-LITRE CUMMINS TURBO DIESEL I-6

Type and Description	Inline six-cylinder turbocharged, intercooled diesel
Displacement	6,690 cu cm (408 cu. in.)
Bore x Stroke	107 x 124 (4.21 x 4.88)
Valve System	Pushrod-operated overhead valves, 24 valves, hydraulic lifters
Fuel Injection	Electronic high-pressure common rail

Construction	Compacted graphite iron (CGI) block cast-iron head
Compression Ratio	16.2:1
Power	360 hp (268 Kw) @ 2,800 rpm (68RFE automatic transmission)
Torque	800 lb.-ft. (1,084 N•m) @ 1,800 rpm
Maximum High-Idle Engine Speed	3,200 rpm
Fuel Requirement	Ultra-low sulfur diesel
Oil Capacity	11.3 litres (12.0 quarts) with filter
Coolant Capacity	22.50 litres (23.8 quarts)
Emission Controls	Selective catalytic reduction (SCR)

TRANSMISSION: AISIN AS69RC — AUTOMATIC SIX-SPEED

Availability	6.7-litre diesel
Description	Three planetary gear sets, full electronic control, electronically controlled converter clutch
Gear Ratios	
1st	3.75
2nd	2.00
3rd	1.34
4th	1.00
5th	0.77
6th	0.63
Reverse	3.54
Axle Ratios	3.73, 4.10, 4.44, 4.89
PTO Capability	Left or right

TRANSMISSION: ZF 8HP75 — AUTOMATIC EIGHT-SPEED (3500 ONLY)

Availability	6.4-litre HEMI V-8
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	
1st	4.71
2nd	3.14
3rd	2.10
4th	1.67
5th	1.29
6th	1.00
7th	0.84
8th	0.67
Reverse	3.30
Axle Gear Ratios	4.10

TRANSMISSION: AISIN AS66RC — AUTOMATIC SIX-SPEED

Availability	6.4-litre HEMI V-8
Description	Three planetary gear-sets, one overrunning clutch, full electronic control, electronically controlled converter clutch
Gear Ratios	
1st	3.23
2nd	1.84
3rd	1.41
4th	1.00
5th	0.82
6th	0.63
Reverse	4.44

Axle Ratios	4.44, 4.89
PTO Capability	Left or right

TRANSFER CASE: BW 44-46, BW 44-47

Availability	Optional on 6.7-litre diesel and 6.4-litre HEMI V-8
Type	Part-time – BW 44-47 manual shift and BW 44-46 electric shift
Operating Modes	2WD; 4WD High; Neutral; 4WD Low
Low-Range Ratio	2.64
Center Differential	None

TRANSFER CASE: BW 44-48, 44-49

Availability	6.7-litre diesel high output
Type	44-48 part-time with electric shift, 44-49 part-time manual shift
Operating Modes	2WD; 4WD High; Neutral; 4WD Low
Low-Range Ratio	2.64
Center Differential	None

AXLES

Front (4x4)	AAM 10.5-in. beam front axle with center disconnect
Rear	AAM 12.0-in. beam rear axle

ELECTRICAL SYSTEM

Alternator	
Rating	160-amp included with 6.4-litre HEMI V-8 and 6.7-litre diesel 220-amp included with 6.7-litre Laramie and Limited
Rating	Dual (220 and 160) optional on 6.4-litre HEMI V-8
Rating	Dual 220-amp optional on 6.7-litre diesel

Battery	
Description	Group 65, maintenance-free, 730 CCA on 6.4-litre HEMI V-8
	Dual Group 65, maintenance-free, 730 CCA on 6.7-litre diesel

SUSPENSION 3500 (INCLUDES 10,000 GVWR MODEL)

Model	4x2	4x4
Front	Three-link with track bar, coil springs, stabilizer bar, solid axle	Three-link with track bar, coil springs, stabilizer bar, solid axle
Rear	Two-stage longitudinal leaf solid axle	Two-stage longitudinal leaf solid axle

SUSPENSION 4500/5500

Model	4x2	4x4
Front	Five-link with track bar, coil springs, stabilizer bar, solid axle	Five-link with track bar, coil springs, stabilizer bar, solid axle
Rear	Two-stage longitudinal leaf solid axle	Two-stage longitudinal leaf solid axle

BRAKES 3500

Front	
Size and Type	359.9 x 39.1 (14.17 x 1.54) disc with twin-piston pin-slider caliper and ABS
Rear	
Size and Type	357.9 x 34.0 (14.09 x 1.34) disc with twin-piston pin-slider caliper and ABS
Power-Assist Type	Dual-rate, tandem diaphragm vacuum (gas)
	Hydro-boost

BRAKES 4500/5500

Front	
Size and Type	390 x 39 (15.35 x 1.54) disc with twin-piston pin-slider caliper and ABS
Rear	
Size and Type	390 x 39 (15.35 x 1.54) disc with twin-piston pin-slider caliper and ABS
Power-Assist Type	Hydro-boost

STEERING

Power Assist	Hydraulic Assist
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EXTERIOR DIMENSIONS

REGULAR CAB 60 CA SRW (3500)	4x2	4x4
Wheelbase (nominal)	3,639 (143.3)	3,639 (143.3)
Track Width – Front	1,716 (67.6)	1,716 (67.6)
Track Width – Rear	1,703 (67.0)	1,703 (67.0)
Overall Length	5,977 (235.3)	5,977 (235.3)
Overall Width	2,099 (82.6)	2,099 (82.6)
Overall Height	2,055 (80.9)	2,055 (80.9)
Ground Clearance		
Ground Clearance w/o Skid Plate	347 (13.7)	347 (13.7)
Ground Clearance w/ Skid Plate	N/A	347 (13.7)
Axle to Ground – Front	240 (9.4)	240 (9.4)
Axle to Ground – Rear	221 (8.7)	221 (8.7)
Rear of Frame to Ground	922 (36.3)	922 (36.3)
Approach Angle (degrees)	22.2	22.2
Departure Angle (degrees)	27.5	27.5
Ramp Breakover Angle w/o Skid Plate (degrees)	21.8	21.8
Ramp Breakover Angle w/ Skid Plate (degrees)	N/A	21.8

CREW CAB 60 CA SRW (3500)	4x2	4x4
Wheelbase (nominal)	4,373 (172.2)	4,373 (172.2)
Track Width – Front	1,716 (67.6)	1,716 (67.6)
Track Width – Rear	1,703 (67.0)	1,703 (67.0)
Overall Length	6,710 (264.2)	6,710 (264.2)
Overall Width	2,099 (82.6)	2,099 (82.6)
Overall Height	2,046 (80.6)	2,046 (80.6)
Axle to Ground – Front	238 (9.4)	238 (9.4)
Axle to Ground – Rear	220 (8.7)	220 (8.7)
Rear of Frame to Ground	906 (35.7)	906 (35.7)
Approach Angle (degrees)	22.5	22.5
Departure Angle (degrees)	26.7	26.7
Ramp Breakover Angle w/o Skid Plate (degrees)	19.6	19.6
Ramp Breakover Angle w/ Skid Plate (degrees)	N/A	19.6
Ground Clearance w/o Skid Plate	339 (13.3)	339 (13.3)
Ground Clearance w/ Skid Plate	N/A	339 (13.3)
REGULAR CAB 60 CA DRW (3500)	4x2	4x4
Wheelbase (nominal)	3,645 (143.5)	3,645 (143.5)
Track Width – Front	1,768 (69.6)	1,768 (69.6)
Track Width – Rear	1,825 (71.9)	1,825 (71.9)
Overall Length	5,977 (235.3)	5,977 (235.3)
Overall Width	2,341 (92.2)	2,341 (92.2)
Overall Height	2,036 (80.2)	2,036 (80.2)
Axle to Ground – Front	219 (8.6)	219 (8.6)
Axle to Ground – Rear	208 (8.0)	208 (8.0)
Rear of Frame to Ground	911 (35.9)	911 (35.9)
Approach Angle (degrees)	20.4	20.4

REGULAR CAB 60 CA DRW (3500) (CONTINUED)	4x2	4x4
Departure Angle (degrees)	26.9	26.9
Ramp Breakover Angle w/o Skid Plate (degrees)	20.7	20.7
Ramp Breakover Angle w/ Skid Plate (degrees)	N/A	20.7
Ground Clearance w/o Skid Plate	328 (12.9)	328 (12.9)
Ground Clearance w/ Skid Plate	N/A	328 (12.9)
REGULAR CAB 84 CA DRW (3500)	4x2	4x4
Wheelbase (nominal)	4,249 (167.3)	4,249 (167.3)
Track Width – Front	1,768 (69.6)	1,768 (69.6)
Track Width – Rear	1,825 (71.9)	1,825 (71.9)
Overall Length	6,586 (259.3)	6,586 (259.3)
Overall Width	2,341 (92.2)	2,341 (92.2)
Overall Height	2,029 (79.9)	2,029 (79.9)
Axle to Ground – Front	222 (8.7)	222 (8.7)
Axle to Ground – Rear	203 (8.0)	203 (8.0)
Rear of Frame to Ground	886 (34.9)	886 (34.9)
Approach Angle (degrees)	21.0	21.0
Departure Angle (degrees)	25.7	25.7
Ramp Breakover Angle w/o Skid Plate (degrees)	17.1	18.1
Ramp Breakover Angle w/ Skid Plate (degrees)	N/A	18.1
Ground Clearance w/o Skid Plate	322 (12.7)	322 (12.7)
Ground Clearance w/ Skid Plate	N/A	322 (12.7)

CREW CAB 60 CA DRW (3500)	4x2	4x4
Wheelbase (nominal)	4,379 (172.4)	4,379 (172.4)
Track Width – Front	1,768 (69.6)	1,768 (69.6)
Track Width – Rear	1,825 (71.9)	1,825 (71.9)
Overall Length	6,710 (264.2)	6,710 (264.2)
Overall Width	2,341 (92.2)	2,341 (92.2)
Overall Height	2,022 (79.6)	2,022 (79.6)
Axle to Ground – Front	217 (8.5)	217 (8.5)
Axle to Ground – Rear	202 (8.0)	202 (8.0)
Rear of Frame to Ground	872 (34.3)	872 (34.3)
Approach Angle (degrees)	21.0	21.0
Departure Angle (degrees)	25.1	25.1
Ramp Breakover Angle w/o Skid Plate (degrees)	18.0	18.0
Ramp Breakover Angle w/ Skid Plate (degrees)	N/A	18.0
Ground Clearance w/o Skid Plate	316 (12.4)	316 (12.4)
Ground Clearance w/ Skid Plate	N/A	316 (12.4)
REGULAR CAB 4x2 AND 4x4 (4500/5500)		
	60 CA	84 CA
Wheelbase (nominal)	144.6 (3,674)	168.7 (4,284)
Track Width – Front	77.1 (1,958)	77.1 (1,958)
Track Width – Rear	73.6 (1,870)	73.6 (1,870)
Overall Length	236.3 (6,001)	260.2 (6,610)
Overall Width	93.2 (2,368)	93.2 (2,368)
Overall Height	81.7 (2,075)	81.5 (2,071)
Axle to Ground – Front	8.7 (221)	8.7 (221)
Axle to Ground – Rear	8.0 (202)	8.0 (202)
Rear of Frame to Ground	36.4 (925)	36.2 (920)
Approach Angle (degrees)	25.4	25.7

REGULAR CAB 4x2 AND 4x4 (4500/5500) (CONTINUED)	60 CA	84 CA
Departure Angle (degrees)	27.7	27.5
Ramp Breakover Angle w/o Skid Plate (degrees)	22.6	20.8
Ramp Breakover Angle w/ Skid Plate (degrees)	22.6	20.8
Ground Clearance w/o Skid Plate	348 (13.7)	344 (13.5)
Ground Clearance w/ Skid Plate	348 (13.7)	344 (13.5)
REGULAR CAB 4x2 AND 4x4 (4500/5500)		
	108 CA	120 CA
Wheelbase (nominal)	4,893 (192.6)	5,191 (204.4)
Track Width – Front	1,958 (77.1)	1,958 (77.1)
Track Width – Rear	1,870 (73.6)	1,870 (73.6)
Overall Length	7,221 (284.3)	7,525 (296.3)
Overall Width	2,368 (93.2)	2,368 (93.2)
Overall Height	2,071 (81.5)	2,068 (81.4)
Axle to Ground – Front	221 (8.7)	221 (8.7)
Axle to Ground – Rear	206 (8.1)	206 (8.1)
Rear of Frame to Ground	936 (36.9)	930 (36.6)
Approach Angle (degrees)	25.7	25.8
Departure Angle (degrees)	28.2	27.6
Ramp Breakover Angle w/o Skid Plate (degrees)	20.2	19.6
Ramp Breakover Angle w/ Skid Plate (degrees)	20.2	19.6
Ground Clearance w/o Skid Plate	345 (13.6)	342 (13.5)
Ground Clearance w/ Skid Plate	345 (13.6)	342 (13.5)

CREW CAB 4x2 AND 4x4 (4500/5500)	60 CA	84 CA
Wheelbase (nominal)	4,407 (173.5)	5,017 (197.5)
Track Width – Front	1,958 (77.1)	1,958 (77.1)
Track Width – Rear	1,870 (73.6)	1,870 (73.6)
Overall Length	6,735 (265.2)	7,345 (289.2)
Overall Width	2,368 (93.2)	2,368 (93.2)
Overall Height	2,068 (81.4)	2,068 (81.4)
Axle to Ground – Front	220 (8.7)	219 (8.6)
Axle to Ground – Rear	206 (8.1)	206 (8.1)
Rear of Frame to Ground	901 (35.5)	932 (36.7)
Approach Angle (degrees)	25.4	25.5
Departure Angle (degrees)	27.3	28.0
Ramp Breakover Angle w/o Skid Plate (degrees)	20.4	19.9
Ramp Breakover Angle w/ Skid Plate (degrees)	20.4	19.9
Ground Clearance w/o Skid Plate	342 (13.5)	342 (13.5)
Ground Clearance w/ Skid Plate	342 (13.5)	342 (13.5)

ACCOMMODATIONS

REGULAR CAB 60 CA SRW (3500)	4x2	4x4
Seating Capacity, F/R	3/-	3/-
Front		
Headroom	1,011 (39.8)	1,011 (39.8)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0

REGULAR CAB 60 CA SRW (3500) (CONTINUED)	4x2	4x4
Interior Volume		
Front – litres (cu. ft.)	1761.362.2)	1761.3 (62.2)
CREW CAB 60 CA SRW (3500)		
Seating Capacity, F/R		
	3/3	3/3
Front		
Headroom	1,038 (40.9)	1,038 (40.9)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0
Rear		
Headroom	1,010 (39.8)	1,010 (39.8)
Legroom	1,022 (40.2)	1,022 (40.2)
Shoulder Room	1,666 (65.6)	1,666 (65.6)
Hip Room	1,593 (62.7)	1,593 (62.7)
Interior Volume		
Front – litres (cu. ft.)	1809.4 (63.9)	1809.4 (63.9)
Rear – litres (cu. ft.)	1718.8 (60.7)	1718.8 (60.7)

REGULAR CAB 60 CA DRW (3500)	4x2	4x4
Seating Capacity, F/R	3/-	3/-
Front		
Headroom	1,011 (39.8)	1,011 (39.8)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0
Interior Volume		
Front – litres (cu. ft.)	1761.3 (62.2)	1761.3 (62.2)
REGULAR CAB 84 CA DRW (3500)		
	4x2	4x4
Seating Capacity, F/R	3/-	3/-
Front		
Headroom	1,011 (39.8)	1,011 (39.8)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0
Interior Volume		
Front – litres (cu. ft.)	1761.3 (62.2)	1761.3 (62.2)

CREW CAB 60 CA DRW (3500)	4x2	4x4
Seating Capacity, F/R	3/3	3/3
Front		
Headroom	1,038 (40.9)	1,038 (40.9)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0
Rear		
Headroom	1,010 (39.8)	1,010 (39.8)
Legroom	1,022 (40.2)	1,022 (40.2)
Shoulder Room	1,666 (65.6)	1,666 (65.6)
Hip Room	1,593 (62.7)	1,593 (62.7)
Interior Volume		
Front – litres (cu. ft.)	1809.4 (63.9)	1809.4 (63.9)
Rear – litres (cu. ft.)	1718.8 (60.7)	1718.8 (60.7)
REGULAR CAB 4x2 AND 4x4 (4500/5500)		
	60 CA	84 CA
Seating Capacity, F/R	3/-	3/-
Front		
Headroom		
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0

REGULAR CAB 4x2 AND 4x4 (4500/5500) (CONTINUED)	60 CA	84 CA
Interior Volume		
Front – litres (cu. ft.)	1761.3 (62.2)	1761.3 (62.2)
REGULAR CAB 4x2 AND 4x4 (4500/5500)		
	108 CA	120 CA
Seating Capacity, F/R	3/-	3/-
Front		
Headroom	1,011 (39.8)	1,011 (39.8)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0
Interior Volume		
Front – litres (cu. ft.)	1761.3 (62.2)	1761.3 (62.2)
CREW CAB 4x2 AND 4x4 (4500/5500)		
	60 CA	84 CA
Seating Capacity, F/R	3/3	3/3
Front		
Headroom	1,038 (40.9)	1,038 (40.9)
Legroom	1,040 (40.9)	1,040 (40.9)
Shoulder Room	1,675 (65.9)	1,675 (65.9)
Hip Room	1,598 (62.9)	1,598 (62.9)
Seat Travel	230 (9.1)	230 (9.1)
Recliner Range (degrees)	59.0	59.0
Rear		
Headroom	1,010 (39.8)	1,010 (39.8)
Legroom	1,022 (40.2)	1,022 (40.2)

CREW CAB 4x2 AND 4x4 (4500/5500) (CONTINUED)	60 CA	84 CA
Shoulder Room	1,666 (65.6)	1,666 (65.6)
Hip Room	1,593 (62.7)	1,593 (62.7)
Interior Volume		
Front – litres (cu. ft.)	1809.4 (63.9)	1809.4 (63.9)
Rear – litres (cu. ft.)	1718.8 (60.7)	1718.8 (60.7)