

# Features & Specifications

## 2018 VanVan 200



**RV200L8**

*YZ: Pearl Mira Red*

### Key Features

- Step back in awe, here's the VanVan 200. This unique bike is the sport's cult, and retro, funky machine. The VanVan is a machine that stands out from the crowd and one that certainly punches well above its weight and class.
- The VanVan has long been a traditional urban adventurer and has grown into a cult bike that's now taking enthusiasts on long-distance riding trips just for the fun of it. Its distinctive retro look gives the VanVan its traditional charm and unique character.
- A wide and spacious seat with low ride height, lightweight handling and plenty of room – not to mention great economy - makes the VanVan live up to that old saying – 'the best things do come in small packages.' The VanVan is a practical runabout, which also happens to be pretty cool and unique. It's a proper motorcycle in every sense, but one with individuality and flair.

### Key Features

- Classic, air-cooled 199cc, 4-stroke, single-cylinder, engine is built for durability and excellent throttle response.
- Easy, push-button electric starting.
- Advanced, compact fuel injection system and well-designed exhaust are tuned with an emphasis on low-to-mid range power delivery that's street friendly.
- Carefully selected transmission ratios provide smooth acceleration through each gear.
- Air-cooled oil cooler helps stabilize the engine's performance.
- Wide 18-inch front and extra-wide 14-inch balloon tires, boost the VanVan's classic retro look and add to its unique character.
- Wide, pleated and plush seat has a low seat height great for both rider and passenger.
- Classic round headlight upfront and a bold, distinctively designed rear tail/stop light.
- Easy-to-read speedometer with black face and white numbers that glow with color in the dark.

## Engine Features

- The 199cc, 4-stroke, single-cylinder, engine provides steady, reliable power.
- Precise manual clutch feeds a five speed transmission with gear ratios that provide brisk acceleration and smooth cruising.
- Robust charging system supplies the battery so the VanVan's electric start is push-button easy.
- Advanced, compact EFI system features an integrated fuel pump/ injector assembly for precise fuel delivery that results in outstanding performance and economy.
- Automatic idle speed control (ISC) means start up is easy with no choke and the idle speed is always right, no matter the condition.
- Air-cooled oil cooler (like the cooler used on the DR650S) helps control engine temperature to stabilize performance.
- Catalyzer-equipped exhaust system helps control emissions while the bullet-shaped muffler produces a pleasant exhaust note.

## Chassis Features

- Strong, steel diamond-style frame is the foundation for low-slung fun.
- Slim shaped 1.7 gal. (6.5L) fuel tank is low and out of the way when riding while providing great range.
- The wide 18-inch 130/80 front tire on an aluminum rim wheel and extra-wide 14-inch 180/80 rear balloon tire, enhance the VanVan's classic retro look and add to its unique character.
- Front disc brake with two-piston caliper and rear drum brake provide strong stopping power.
- Widely spaced, 33mm-inner-tube telescopic front fork and single-shock absorber rear suspension with 5.35 in. (136mm) of wheel travel for supple handling performance.
- Wide, spacious and generously cushioned seat has a low 30.3 inch (770 mm) seat height that delivers a comfortable experience for both the rider and passenger.
- Rubber-covered, large-sized footpegs add even more comfort to the ride.
- Well-spaced tubular handlebar and control levers make guiding the VanVan an easy task.
- Compact round 60/55W headlight, chrome body turn signals and bright rear combination light bring classic functionality to the VanVan.
- Convenient one-piece grab bar with luggage hooks for cargo strap attachment points.
- Fender mounted pouch provides storage for the owner's manual and hand tools.



**RV200L8**

*019: Solid Black*

## Additional Features

- Stylized Suzuki "S" 3-D emblem on the fork upper bracket denotes the quality, sophistication and performance legacy of the brand.
- A variety of Genuine Suzuki Accessories for VanVan owners are available including a large selection of Suzuki logo apparel.
- The 12-month unlimited-mileage, limited warranty can be lengthened via the Suzuki Extended Protection program (SEP).
- For more details, please visit [www.suzukicycles.com](http://www.suzukicycles.com).

# Specifications RV200L8

E-03: USA, E-33: California

## DIMENSIONS

Overall length.....	84.25 in. (2140 mm)
Overall width.....	33.82 in. (860 mm)
Overall height.....	44.09 in. (1120 mm)
Wheelbase.....	54.52 in. (1385 mm)
Ground clearance.....	8.46 in. (215 mm)
Seat height.....	30.31 in. (770 mm)
Curb mass.....	282.19 lbs. (128 kg)

## ENGINE

Type.....	4-stroke, air-cooled, OHC
Number of cylinder.....	1
Bore.....	66.0 mm (2.59 in.)
Stroke.....	58.2 mm (2.29 in.)
Displacement.....	199 cm <sup>3</sup> (12.14 cubic in.)
Compression ratio.....	9.4: 1
Fuel system.....	Fuel injection
Air cleaner.....	Polyurethane foam element
Starter system.....	Electric
Lubrication system.....	Wet sump

## TRANSMISSION

Clutch.....	Wet multi-plate type
Transmission.....	5-speed constant mesh
Gearshift pattern.....	1-down, 4-up
Primary reduction ratio.....	3.157 (60/19)
Gear ratios, Low.....	3.000 (33/11)
2 <sup>nd</sup> .....	1.933 (29/15)
3 <sup>rd</sup> .....	1.437 (23/16)
4 <sup>th</sup> .....	1.095 (23/21)
Top.....	0.913 (21/23)
Final reduction ratio.....	3.066 (46/15)
Drive chain.....	DID520DMA4, 112 links

# Specifications RV200L8

E-03: USA, E-33: California

## SUSPENSION

Front suspension .....	Telescopic, coil spring, oil damped
Rear suspension .....	Swing arm type, coil spring, oil damped
Front suspension stroke.....	4.33 in. (110 mm)
Rear wheel travel .....	5.35 in. (136 mm)
Caster .....	26°
Trail.....	3.58 in./91 mm
Steering angle.....	45° (right & left)
Turning radius .....	6.88 feet (2.1 m)
Front brake.....	Disk brake
Rear brake .....	Drum brake
Front tire size .....	130/80-18 M/C 66P, tube type
Rear tire size.....	180/80-14 M/C 78P, tube type

## ELECTRICAL

Ignition type.....	Electronic ignition (Transistorized)
Spark plug.....	NGK DR8EA or DENSO X24ESR-U
Battery type.....	YTX7L-BS or FTX7L-BS
Battery capacity .....	12V 21.6 kC (6 Ah) / 10 HR
Generator.....	Three-phase A.C. generator
Fuse (main).....	20A
Headlight.....	12V 60/55W
Brake light/Taillight.....	12V 21/5W
Position light (if equipped).....	12V 5W
Turn signal light.....	12V 21W
Speedometer light.....	12V 1.7W
Neutral indicator light .....	12V 3.4W
High beam indicator .....	12V 1.7W
Turn signal indicator light .....	12V 3.4W
Fuel indicator light .....	12V 3.4W
Fuel injection indicator light.....	12V 3W

## CAPACITIES

Fuel tank .....	1.71 US gal. (6.5 L)
Engine oil, oil change.....	1.0 US qt. (950 ml)
Filter change .....	1.10 US qt. (1050 ml)
Overhaul .....	1.47 US qt. (1400 ml)

# Service Data RV200L8

## E-03: USA, E-33: California

### VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD		LIMIT
Valve diam.	IN.	33.0 (1.30)	—
	EX.	28.0 (1.10)	—
Valve clearance (when cold)	IN.	0.05 – 0.10 (0.0020-0.0039)	—
	EX.	0.08 – 0.13 (0.0031-0.0051)	—
Valve guide to valve stem clearance	IN.	0.025 – 0.052 (0.0010-0.0020)	—
	EX.	0.040 – 0.067 (0.0016-0.0026)	—
Valve guide I.D.	IN. & EX.	5.000 – 5.012 (0.1969-0.1973)	—
Valve stem O.D.	IN.	5.460 – 5.475 (0.2150-0.2156)	—
	EX.	5.445 – 5.460 (0.2144-0.2150)	—
Valve stem deflection	IN. & EX.	—	0.35 (0.014)
Valve stem runout	IN. & EX.	—	0.05 (0.002)
Valve head thickness	IN. & EX.	—	0.5 (0.020)
Valve stem end length	IN. & EX.	—	3.1 (0.122)
Valve seat width	IN. & EX.	0.9 – 1.1 (0.035-0.043)	—
Valve head radial runout	IN. & EX.	—	0.03 (0.001)
Valve spring free length (IN. & EX.)	INNER	—	36.4 (1.433)
	OUTER	—	39.9 (1.571)
Valve spring tension (IN. & EX.)	INNER	69.6 – 81.4 N (7.1 – 8.3 kgf) (15.6-18.3 lbf) at length 32.5 mm	—
	OUTER	169.7 – 199.1 N (17.3 – 20.3 kgf) (38.2-44.8 lbf) at length 36.0 mm	—

### CAMSHAFT + CYLINDER HEAD

Unit: mm

ITEM	STANDARD		LIMIT
Cam height	IN.	34.17 – 34.21 (1.345-1.347)	33.87 (1.333)
	EX.	33.80 – 33.84 (1.331-1.332)	33.50 (1.319)
Camshaft journal oil clearance	IN. & EX.	0.032 – 0.066 (0.0013-0.0026)	0.150 (0.006)
Camshaft journal holder I.D.	IN. & EX.	22.012 – 22.025 (0.8666-0.8671)	—
Camshaft journal O.D.	IN. & EX.	21.959 – 21.980 (0.86445-0.8654)	—
Camshaft runout	IN. & EX.	—	0.10 (0.004)
Rocker arm I.D.	IN. & EX.	12.000 – 12.018 (0.4724-0.4731)	—
Rocker arm shaft O.D.	IN. & EX.	11.977 – 11.995 (0.4715-0.4722)	—
Cylinder head distortion	—		0.05 (0.002)
Cylinder head cover distortion	—		0.05 (0.002)

**CYLINDER + PISTON + PISTON RING**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Compression pressure	1 300 – 1 700 kPa (13 – 17 kgf/cm <sup>2</sup> ) (189-247 psi)		900 kPa (9.0 kgf/cm <sup>2</sup> ) (130 psi)
Piston-to-cylinder clearance	0.040 – 0.050 (0.0016-0.0020)		0.120 (0.0047)
Cylinder bore	66.000 – 66.015 (2.5984-2.5990)		66.090 (2.6020)
Piston diam.	65.955 – 65.970 (2.5984-2.5990) Measure at 15 mm from the skirt end.		65.880 (2.5937)
Cylinder distortion	—		0.05 (0.002)
Piston ring free end gap	1st	R	Approx. 8.7 (0.34)
	2nd	R	Approx. 8.1(0.32)
Piston ring end gap	1st	0.10 – 0.25 (0.004-0.010)	
	2nd	0.10 – 0.25 (0.004-0.010)	
Piston ring to groove clearance	1st	—	
	2nd	—	
Piston ring groove width	1st	1.01 – 1.04 (0.0398-0.0409)	
	2nd	1.21 – 1.23 (0.0476-0.0484)	
	Oil	2.01 – 2.03 (0.0791-0.0799)	
Piston ring thickness	1st	0.970 – 0.990 (0.03822-0.0390)	
	2nd	1.170 – 1.190 (0.0461-0.0469)	
Piston pin bore	16.002 – 16.008 (0.6300-0.6302)		16.030 (0.6315)
Piston pin O.D.	15.996 – 16.000 (0.6298-0.6299)		15.980 (0.6291)

**CONROD + CRANKSHAFT**

Unit: mm

ITEM	STANDARD	LIMIT
Conrod small end I.D.	16.006 – 16.016 (0.6302-0.6306)	16.040 (0.6315)
Conrod deflection	—	3.0 (0.118)
Conrod big end side clearance	0.10 – 0.45 (0.004-0.018)	1.0 (0.040)
Conrod big end width	17.95 – 18.00 (0.7067-0.7087)	—
Crank web to web width	52.9 – 53.1 (2.083-2.091)	—
Crankshaft runout	—	0.080 (0.00315)

**OIL PUMP**

ITEM	STANDARD	LIMIT
Oil pressure (at 60 °C)	25 – 35 kPa (0.25 – 0.35 kgf/cm <sup>2</sup> ) (3.63-5.08 psi) at 3 000 r/min	—

**CLUTCH**

Unit: mm

ITEM	STANDARD	LIMIT
Clutch lever play	10 – 15 (0.39-0.59)	—
Drive plate thickness	2.9 – 3.1 (0.114-0.122)	2.60 (0.102)
Drive plate claw width	11.9 – 12.0 (0.468-0.472)	11.1 (0.437)
Driven plate distortion	—	0.10 (0.004)
Clutch spring free length	32.6 (0.283)	31.0 (1.220)

## DRIVE TRAIN + DRIVE CHAIN

Unit: mm (in) Except ratio

ITEM		STANDARD	LIMIT
Primary reduction ratio		3.157 (60/19)	—
Final reduction ratio		3.066 (46/15)	—
Gear ratios	Low	3.000 (33/11)	—
	2nd	1.933 (29/15)	—
	3rd	1.437 (23/16)	—
	4th	1.095 (23/21)	—
	Top	0.913 (21/23)	—
Shift fork to groove clearance		0.1 – 0.3 (0.004-0.012)	0.5 (0.02)
Shift fork groove width	No. 1	5.0 – 5.1 (0.197-0.201)	—
	No. 2, 3	5.0 – 5.1 (0.197-0.201)	—
Shift fork thickness	No. 1	4.8 – 4.9 (0.189-0.193)	—
	No. 2, 3	4.8 – 4.9 (0.189-0.193)	—
Drive chain	Type	DID 520DMA4	—
	Links	110	—
	20-pitch length	—	319.4 (12.57)
Drive chain slack		20 – 30 (0.79-1.18)	—
Gearshift lever height		20 (0.79) (between footrest top and gearshift lever top)	—

## FUEL INJECTOR + ISC VALVE

ITEM	SPECIFICATION	NOTE
Fuel injector resistance	Approx. 1.9 $\Omega$ at 20 °C	
Fuel injector voltage	(Battery voltage – 1.0 V) and more	⊕ R/W – ⊖ Ground
ISC valve resistance	Approx. 20 $\Omega$ at 20 °C	
ISC valve voltage	Battery voltage	

## FI SENSORS

ITEM	SPECIFICATION		NOTE
CKP sensor resistance	180 – 280 Ω		
CKP sensor peak voltage	2.0 V (When cranking) and more		⊕ G – ⊖ BI
IAP sensor input voltage	4.5 – 5.5 V		
IAP sensor output voltage	2.0 – 3.5 V at idle speed		⊕ G/B – ⊖ B/Br
TP sensor input voltage	4.5 – 5.5 V		
TP sensor output voltage	Closed	Approx. 0.7 V	⊕ P – ⊖ B/Br
	Opened	Approx. 3.9 V	
IAT sensor input voltage	4.5 – 5.5 V		
IAT sensor output voltage	Approx. 2.5 V at 23 °C/1.8 V at 40 °C		⊕ Dg – ⊖ Ground
IAT sensor resistance	Approx. 2.56 kΩ at 20 °C/1.20 kΩ at 40 °C		
ET sensor input voltage	4.5 – 5.5 V		
ET sensor resistance	5 – 13 kΩ at 20 – 40 °C		
TO sensor resistance	16.5 – 22.3 kΩ		
TO sensor voltage	Normal	0.4 – 1.4 V	⊕ Br/W – ⊖ B/Br
	Leaning 65°	3.7 – 4.4 V	
HO2 sensor output voltage	0.3 – 1.0 V at idle speed		⊕ W/G – ⊖ B/Br
	0.6 V and more at 7 500 r/min		
HO2 sensor resistance	6.5 – 8.9 Ω at 23 °C		W – W

## THROTTLE BODY

ITEM	SPECIFICATION
I.D. No.	13GA (For E-03, 28) 13GB (For E-33)
Bore size	26 mm (1.02 in)
Fast idle r/min.	1 600 – 1 800 r/min (When cold engine)
Idle r/min.	1 500 ± 100 r/min/Warmed engine
Throttle cable play	2.0 – 4.0 mm (0.08-0.16 in)



## ELECTRICAL

ITEM		SPECIFICATION	NOTE
Spark plug	Type	DENSO: X24ESR-U NGK: DR8EA	
	Gap	0.6 – 0.7 mm (0.024 - 0.028)	
Spark performance	Over 8 mm at 1 atm.		
Ignition coil resistance	Primary	1.8 – 3.5 Ω	⊕ tap – ⊖ tap
	Secondary	18 – 28 kΩ	Plug cap – ⊕ tap
Generator coil resistance	0.3 – 1.5 Ω		B – B
	∞ Ω		Ground – G
Ignition coil primary peak voltage	More than 200 V		⊕: B, ⊖: Ground
Generator no-load voltage (when engine is cold)	More than 60 V (AC) at 5 000 r/min		
Regulated voltage	13.5 – 15.5 V at 5 000 r/min		
Starter relay resistance	3 – 6 Ω		
Battery	Type designation	YTX7L-BS	
	Capacity	12 V 21.6 kC (6 Ah)/10 HR	
Fuse size	20 A		

## WATTAGE

Unit: W

ITEM		STANDARD/SPECIFICATION
		E-03, 28, 33
Headlight	HI	60
	LO	55
Position light		—
Brake light/Taillight		21/5
Turn signal light		21
Speedometer light		1.7
Turn signal indicator light		3.4
High beam indicator light		1.7
Neutral indicator light		3.4
FI indicator light		3
Fuel level indicator light		3.4

## BRAKE + WHEEL

Unit: mm (in)

ITEM	STANDARD		LIMIT
Rear brake pedal free travel	20 – 30 (0.8 – 1.2)		—
Rear brake pedal height	5 – 15 (0.2 – 0.6)		—
Brake disc thickness	Front	3.8 – 4.2 (0.15 – 0.17)	3.5 (0.14)
Brake disc runout	Front	—	0.30 (0.012)
Brake drum I.D.	Rear	—	110.7 (4.36)
Brake master cylinder bore	Front	12.700 – 12.743 (0.5000 – 0.5017)	—
Brake master cylinder piston diam.	Front	12.657 – 12.684 (0.4983 – 0.4994)	—
Brake caliper cylinder bore	Front	30.230 – 30.306 (1.1902 – 1.1931)	—
Brake caliper piston diam.	Front	30.150 – 30.200 (1.1870 – 1.1890)	—
Wheel rim runout	Axial	—	2.0 (0.08)
	Radial	—	2.0 (0.08)
Wheel rim size	Front	18 M/C × MT 2.50	—
	Rear	18 M/C × MT 4.50	—
Wheel axle runout	Front	—	0.25 (0.010)
	Rear	—	0.25 (0.010)

## TIRE

Unit: mm (in)

ITEM	STANDARD		LIMIT
Cold inflation tire pressure (Solo riding)	Front	125 kPa (1.25 kgf/cm <sup>2</sup> , 18 psi)	—
	Rear	125 kPa (1.25 kgf/cm <sup>2</sup> , 18 psi)	—
Cold inflation tire pressure (Dual riding)	Front	125 kPa (1.25 kgf/cm <sup>2</sup> , 18 psi)	—
	Rear	125 kPa (1.25 kgf/cm <sup>2</sup> , 18 psi)	—
Tire size	Front	130/80-18 M/C 66P	—
	Rear	180/80-14 M/C 78P	—
Tire type	Front	DUNLOP K180J	—
	Rear	DUNLOP K180J	—
Tire tread depth (Recommended depth)	Front	—	4.0 (0.16)
	Rear	—	4.0 (0.16)

## SUSPENSION

Unit: mm (in)

ITEM	STANDARD/SPECIFICATION	LIMIT
Front fork stroke	110 (4.33)	—
Front fork spring free length	382.9 (15.08)	375 (14.76)
Front fork oil level	171 (6.73)	—
Front fork oil type	SUZUKI FORK OIL #10 or an equivalent fork oil	—
Front fork oil capacity (each leg)	230 ml (0.24 US qt , 0.20 Imp qt)	—
Rear wheel travel	127.1 (5.004)	—
Swingarm pivot shaft runout	—	0.6 (0.024)

## FUEL + OIL

ITEM	SPECIFICATION	NOTE
Fuel type	Gasoline used should be graded 91 octane or higher. An unleaded gasoline type is recommended.	
Fuel tank capacity	6.5 L	
Engine oil type	SAE 10W-40, API SF/SG or SH/SJ with JASO MA	
Engine oil capacity	Change	950 ml (1.0 US qt , 0.8 Imp qt)
	Filter change	1 050 ml (1.1 US qt , 0.9 Imp qt)
	Overhaul	1 400 ml (1.5 US qt , 1.2 Imp qt)

## TIGHTENING TORQUE ENGINE

ITEM			N·m	kgf·m	lbf·ft
Cylinder head cover bolt			10	1.0	7.0
Cylinder head nut	8 mm	Initial	10	1.0	7.0
		Final	23	2.3	16.5
	6 mm		10	1.0	7.0
Cylinder base nut			10	1.0	7.0
Primary drive gear nut			50	5.0	36.0
Crankcase bolt			11	1.1	8.5
Exhaust pipe bolt			23	2.3	16.5
Muffler mounting bolt			23	2.3	16.5
Muffler connecting bolt			20	2.0	15.0
Cam chain tension adjuster bolt			7	0.7	5.5
Camshaft sprocket bolt			11	1.1	8.5
Rocker arm shaft bolt			9	0.9	6.6
Clutch sleeve hub nut			50	5.0	36.0
Clutch spring set bolt			5	0.5	4.0
Clutch cover bolt			10	1.0	7.0
Generator cover bolt			10	1.0	7.0
Generator rotor nut			90	9.0	66.5
Generator cover plug			11	1.1	8.5
Starter clutch bolt			26	2.6	19.5
Gearshift cam stopper bolt			11	1.1	8.5
Timing inspection plug			21	2.1	15.5
Valve clearance adjust screw lock nut			15	1.5	11.5
Oil strainer cap bolt			10	1.0	7.0
Oil gallery plug			23	2.3	16.5
Oil drain plug			28	2.8	21.0
Oil cooler bolt			10	1.0	7.0
Oil hose union bolt No. 1			24	2.4	18.0
Oil hose union bolt No. 2			19	1.9	14.0
Canister bracket bolt (If equipped)			10	1.0	7.0

## FI SYSTEM

ITEM	N·m	kgf·m	lbf·ft
ET sensor	9	0.9	6.6
HO2 sensor	25	2.5	18.5
ISC valve screw	2	0.2	1.5

## CHASSIS

ITEM	N·m	kgf-m	lbf-ft
Front axle	65	6.5	48.0
Front axle pinch bolt	23	2.3	16.5
Front fork cap bolt	23	2.3	16.5
Front fork damper rod bolt	30	3.0	22.5
Front fork lower clamp bolt	33	3.3	24.5
Front fork upper clamp bolt	23	2.3	16.5
Steering stem head nut	90	9.0	66.5
Steering stem nut	45	4.5	33.5
Handlebar clamp bolt	23	2.3	16.5
Front brake master cylinder mounting bolt	10	1.0	7.0
Front brake caliper mounting bolt	39	3.9	29.0
Front brake hose union bolt	23	2.3	16.5
Air bleeder valve	7.5	0.75	5.5
Brake disc bolt	23	2.3	16.5
Front footrest bolt	94	9.4	69.5
Swingarm pivot nut	65	6.5	48.0
Rear shock absorber mounting bolt/nut (Upper & Lower)	50	5.0	36.0
Rear axle nut	65	6.5	48.0
Rear sprocket mounting nut	60	6.0	44.5
Rear brake cam lever nut	7	0.7	5.5