# Features & Specifications 2018 DR200S



#### **Key Features**

- Excellent Fuel Economy at 88 MPG\*
- Rider-friendly push-button electric starter for easy starts.
- Comfortable low seat height at 33.3 in. and lightweight at just 278 lbs.
- Champion Approved RM-Z styling.
- Sharp yellow and black colors or new solid white bodywork with contrasting graphics.

#### **Engine Features**

- Ultra-reliable 199cc, 1-cylinder, air-cooled, SOHC engine provides just the right amount of torque and horsepower to power your ride.
- Suzuki Composite Electrochemical Material (SCEM) coated aluminum cylinder is used for durability, weight reduction and superior heat transfer.
- Push-button electric start fires up the bike consistently, powered by a small and reliable battery.
- Digitally controlled CDI ignition system to match ignition timing throughout the engine rpm range.
- Five-speed transmission with gear ratios suitable for a wide variety of riding conditions.
- Cable-operated, quick-action rack-and-pinion clutch design ensures light and positive operation.
- Engine power routes to the rear wheel via a low-maintenance, long-life sealed chain.

\*Suzuki's fuel economy estimates are based on EPA exhaust emission measurement tests conducted by Suzuki and are intended for comparison purposes only. Your actual mileage may vary depending on how you ride and maintain your vehicles, road and driving conditions, tires pressure, engine break-in, accessories, cargo, rider and passenger weight, and other factors.



#### **Chassis Features**

- Influenced by the high-performance style of the RM-Z series, the ergonomic design makes the DR200S a better fit to a wider range of riders for the dirt and the pavement.
- Compact and sturdy high-tensile strength steel pipe frame.
- Telescopic front forks and single shock absorber rear suspension with adjustable spring preload have sufficient wheel travels of both front and rear 8.1 inches.
- Front disc and rear drum brakes deliver reliable stopping power.
- Large front and thick rear tires with special tread patterns are designed for smooth riding for on and off the pavement.
- Backward-folding rearview mirrors, gearshift and brake pedals help reduce damage on the way of obstacles
- Electric start system provides convenient operation and features a lightweight starter motor and a compact, maintenance-free battery.

- A 60/55 watt H4 halogen headlight can help extend your riding session.
- The taillight and turn signals match the sleek style of the seat and bodywork.
- The on-road legal lighting is complemented with rubber-mounted turn signals and horn.

#### **Additional Features**

- Select Genuine Suzuki Accessories are available for the DR200S.
- 12-month limited warranty
- · For more details, please visit www.suzukicycles.com.

# **Specifications DR200SL8** E-03: USA, E-33: California

DIMENSIONS AND CURB MASS	
Overall length	2 155 mm (84.8 in)
Overall width	
Overall height	
Wheelbase	
Ground clearance Seat height	· · · · ·
Curb mass	
	120 kg (210 180)
ENGINE Type	Four strake, six essled, OUC
Number of cylinders	
Bore	
Stroke	58.2 mm (2.29 in)
Displacement	199 cm³ (12.1 cu. in)
Compression ratio	
Carburetor Air cleaner	
Starter system	
Lubrication system	Wet sump
Idle speed	1 500 ± 100 r/min
DRIVE TRAIN	
Clutch	Wet multi-plate type
Transmission	
Gearshift pattern	
Primary reduction	
Final reduction Gear ratios, Low	
2nd	
3rd	
4th	
Тор	
Drive chain	DID 520V, 112 links
CHASSIS	
Front suspension	
Rear suspension	
Front fork stroke Rear wheel travel	
Caster	
Trail	
Steering angle	43° (right`& left)
Turning radius	
Front brake	
Rear brake Front tire	
Rear tire	
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ELECTRICAL Ignition type	Electronic ignition (CDI)
Ignition timing	
Spark plug	NGK DR8EA or DENSO X24ESR-U
Battery	12 V 21.6 kC (6 Ah)/10 HR
Generator	
Fuse Headlight	
Brake light/Taillight	
Turn signal light	
Speedometer light	
Neutral indicator light	
Turn signal indicator light	
High beam indicator light	
CAPACITIES	
Fuel tank, including reserve	
reserve	12.0 L (3.2/2.6 US/Imp gal)California 2.5 L (0.7/0.5 US/Imp gal)
Engine oil change	
with filter change	
overhaul	

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# Service Data DR200SL8 E-03: USA, E-33: California

### **VALVE + VALVE GUIDE**

Unit: mm (in)

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ITEM		STANDARD	LIMIT
Valve diam.	IN.	33.0 (1.30)	—
	EX.	28.0 (1.10)	_
Valve clearance (when cold)	IN.	0.05 - 0.10 (0.002 - 0.004)	_
	EX.	0.08 - 0.13 (0.003 - 0.005)	_
Valve guide to valve stem clearance	IN.	0.010 - 0.037 (0.0004 - 0.0015)	_
	EX.	0.030 - 0.057 (0.0012 - 0.0022)	_
Valve guide I.D.	IN. & EX.	5.500 – 5.512 (0.2165 – 0.2170)	_
Valve stem O.D.	IN.	5.475 – 5.490 (0.2146 – 0.2161)	_
	EX.	5.455 – 5.470 (0.2148 – 0.2154)	_
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 (0.02)
Valve stem end length	IN. & EX.	—	2.6 (0.1)
Valve seat width	IN. & EX.	0.9 – 1.1 (0.04 – 0.05)	_
Valve head radial runout	IN. & EX.	—	0.03 (0.001)
Valve spring free length (IN. & EX.)	INNER	—	35.1 (1.38)
	OUTER	_	40.6 (1.60)
Valve spring tension (IN. & EX.)	INNER	70 – 90 N (7.1 – 9.2 kgf, 15.7 – 20.3 lbf) at length 32.5 mm (1.28 in)	_
	OUTER	170 – 209 N (17.3 – 21.3 kgf, 38.1 – 47.0 lbf) at length 36.0 mm (1.42 in)	_

# **CAMSHAFT + CYLINDER HEAD**

Unit: mm (in)

ITEM		STANDARD	LIMIT
Cam height	IN.	34.174 – 34.218 (1.3454 – 1.3472)	33.870 (1.3335)
	EX.	33.804 – 33.848 (1.3309 – 1.3326)	33.500 (1.3189)
Camshaft journal oil clearance	IN. & EX.	0.032 - 0.066 (0.0013 - 0.0026)	0.150 (0.0059)
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 (0.8645 – 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			980 kPa (9.8 kgf/cm², 139 psi)	
Piston to cylinder clearance			0.020 - 0.030 (0.0008 - 0.0012)	0.120 (0.0047)
Cylinder bore			65.980 – 65.995 (2.5976 – 2.5982)	66.115 (2.6030)
Piston diam.	Mea	sure	65.955 – 65.970 (2.5966 – 2.5972) at 15 mm (0.59 in) from the skirt end.	65.835 (2.5919)
Cylinder distortion			—	0.05 (0.002)
Piston ring free end gap	1st	R	Approx. 8.7 (0.34)	7.0 (0.27)
	2nd	R	Approx. 8.1 (0.32)	6.5 (0.26)
Piston ring end gap	1st		0.10 - 0.25 (0.004 - 0.010)	0.5 (0.02)
	2nd		0.10 - 0.25 (0.004 - 0.010)	0.5 (0.02)
Piston ring to groove clearance	1st		—	0.18 (0.007)
	2n	b	_	0.15 (0.006)



ITEM		STANDARD	LIMIT
Piston ring groove width	1st	1.01 – 1.04 (0.040 – 0.041)	
	2nd	1.21 – 1.23 (0.047 – 0.048)	
	Oil	2.01 – 2.03 (0.079 – 0.080)	
Piston ring thickness	1st	0.970 - 0.990 ( $0.038 - 0.039$ )	_
	2nd	1.170 – 1.190 (0.046 – 0.047)	_
Piston pin bore			16.030 (0.6311)
Piston pin O.D.	15.996 - 16.00015.980(0.6298 - 0.6299)(0.6291)		

# **CONROD + CRANKSHAFT**

Unit: mm (in)

ITEM	STANDARD	LIMIT
Conrod small end I.D.	16.006 – 16.016 (0.6302 – 0.6306)	16.040 (0.6315)
Conrod deflection	—	3.0 (0.12)
Conrod big end side clearance	0.10 – 0.45 (0.004 – 0.018)	1.00 (0.039)
Conrod big end width	17.95 – 18.00 (0.707 – 0.709)	_
Crank web to web width	53.0 ± 0.1 (2.09 ± 0.004)	_
Crankshaft runout	_	0.08 (0.003)

# **OIL PUMP**

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	2.000 (30/15)	—
Oil pressure (at 60 °C, 140 °F)	Above 15 kPa (0.15 kgf/cm², 2.1 psi) Below 35 kPa (0.35 kgf/cm², 4.9 psi) at 3 000 r/min	

# CLUTCH

Unit: mm (in)

ITEM	STANDARD	LIMIT
Clutch lever play	10 – 15 (0.4 – 0.6)	_
Clutch release screw	1/4 turn back	—
Clutch plate thickness	2.9 – 3.1 (0.114 – 0.122)	2.6 (0.10)
Driven plate distortion	_	0.10 (0.004)
Clutch spring free length	_	31.0 (1.22)



# **TRANSMISSION + DRIVE CHAIN**

Unit: mm (in) Except ratio

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ITEM			STANDARD	LIMIT
Primary reduction ratio	)	3.157 (60/19)		_
Final reduction ratio		3.000 (45/15)		_
Gear ratios	Low		3.000 (33/11)	_
	2nd		1.933 (29/15)	—
	3rd		1.437 (23/16)	_
	4th		1.095 (23/21)	—
	Тор		0.913 (21/23)	—
Shift fork to groove cle	arance	0.10 - 0.30 (0.004 - 0.012)		_
Shift fork groove width		No.1, 2, 3	5.0 – 5.1 (0.20 – 0.21)	—
Shift fork thickness		No.1, 2, 3	4.8 - 4.9 (0.18 - 0.19)	_
Drive chain		Туре	D.I.D. 520V5	_
		Links	112 links	—
		20-pitch length	—	319.4 (12.57)
Drive chain slack		25 – 40 (1.0 – 1.6)		

## CARBURETOR

ITEM		SPECIF	ICATION
		E-03	E-33 (For California)
Carburetor type		MIKUNI BST31SS	←
Bore size		31 mm	←
I.D. No.		42AC	42AE
Idle r/min		1 500 ± 100 r/min	←
Float height		13.0 ± 1.0 mm (0.51 ± 0.04 in)	←
Main jet	(M.J.)	#125	←
Jet needle	(J.N.)	5D77	←
Needle jet	(N.J.)	P-5M	←
Throttle valve	(Th.V.)	#125	←
Pilot jet	(P.J.)	# 35	←
Starter jet	(G.S.)	#25	←
Pilot screw	(P.S.)	PRE-SET	←
Throttle cable play		2 – 4 mm (0.08 – 0.16 in)	←

# ELECTRICAL

Unit: mm (in)

ITI	EM		SPECIFICATION	NOTE
Spark plug		Туре	DENSO: X24ESR-U NGK: DR8EA	
		Gap	0.6 – 0.7 (0.024 – 0.028)	
Spark performanc	e	C	Over 8 mm (0.3) at 1 atm.	
Signal coil resista	nce		148 – 222 Ω	B/R – G
Signal coil peak v	oltage		4.5 V or more	⊕ B/R – ⊝ G
Ignition coil resist	ance	Primary	0.14 – 0.18 Ω	Terminal – Ground (core)
		Secondary	15.0 – 17.4 kΩ	Plug cap – Terminal
Ignition coil prima	Ignition coil primary peak voltage		200 – 240 V	⊕ Ground (core) – ⊖ W
Generator coil res	sistance		0.54 – 0.66 Ω	
Generator no-load (When engine is d	d voltage cold)	55	– 85 V (AC) at 5 000 r/min	
Generator Max. o	utput		150 W at 5 000 r/min	
Regulated voltage	Э	13.0 – 16.0 V at 5 000 r/min		
Starter relay resis	tance	2-6Ω		
Battery	Type designation	YTX7L-BS		
	Capacity	12 V 21.6 kC (6 Ah)/10 HR		
Fuse size			20 A	

# WATTAGE

Unit: W

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ITEM		SPECIFICATION
Headlight	HI	60
	LO	55
Brake light/Taillight		21/5
Turn signal light		21
Speedometer light		1.7
Turn signal indicator light		2
High beam indicator light		2
Neutral indicator light		2

#### **BRAKE + WHEEL**

Unit: mm (in)

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ITEM		STANDARD		
Brake lever play		_		
Rear brake pedal free travel		_		
Rear brake pedal height		2.5 (0.10)		
Brake drum I.D.	Rear	—	130.7 (5.15)	
Brake lining thickness	Rear	—	1.5 (0.06)	
Brake disc thickness	Front	3.5 ± 0.2 (0.138 ± 0.008)	3.0 (0.12)	
Brake disc runout	Front	_	0.30 (0.012)	
Master cylinder bore	Front	12.700 – 12.743 (0.5000 – 0.5017)	_	
Master cylinder piston diam.	Front	12.657 – 12.684 (0.4983 – 0.4994)	_	
Brake caliper cylinder bore	Front	33.960 – 34.010 (1.3370 – 1.3390)		
Brake caliper piston diam.	Front	33.878 – 33.928 (1.3338 – 1.3357)	—	
Wheel rim runout	Axial	—	2.0 (0.08)	
	Radial	—	2.0 (0.08)	
Wheel axle runout	Front	—	0.25 (0.010)	
	Rear	—	0.25 (0.010)	
Wheel rim size	Front	J21 × 1.60	_	
	Rear	J18 × 2.15	—	
Tire size	Front	70/100-21 M/C 44P	_	
	Rear	100/90-18 M/C 56P	—	
Tire tread depth	Front	_	3.0 (0.12)	
	Rear	_	3.0 (0.12)	

# **SUSPENSION**

ITEM	STANDARD	LIMIT
Front fork stroke	205 (8.1)	—
Front fork spring free length	—	561 (22.1)
Front fork oil level	180 (7.1)	—
Rear shock absorber spring pre-set length	231 (9.1)	—
Rear wheel travel	205 (8.1)	—
Swingarm pivot shaft runout	—	0.6 (0.02)

#### **TIRE PRESSURE**

COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kgf/cm <sup>2</sup>	psi	kPa	kgf/cm <sup>2</sup>	psi
FRONT	150	1.50	22	150	1.50	22
REAR	175	1.75	25	200	2.00	29

# FUEL + OIL

ITEM			NOTE		
Fuel type		Use unleaded AKI or higher. Do not use lea Unleaded gas volume may b Unleaded gas volume may b Unleaded gas by volume ma ate cosolvents			
Fuel tank capacity	including reserve		For California		
			12.0 L (3.2/2.6 US/Imp qt)		
	reserve				
Engine oil type		SAE 10W-40,	API SF/SG or SH/SJ with JASO MA		
Engine oil capacity		Change	850 ml (0.9/0.7 US/Imp qt)		
		Filter change	950 ml (1.0/0.8 US/Imp qt)		
		Overhaul	1 100 ml (1.2/1.0 US/Imp qt)		
Front fork oil type					
Front fork oil capacity (each leg)					
Brake fluid type					



# TIGHTENING TORQUE ENGINE

ITEM		N∙m	kgf-m	lbf-ft
Cylinder head cover bolt		10	1.0	7.0
Camshaft sprocket bolt		11	1.1	8.0
Cylinder head nut	M8	27	2.7	19.5
Cylinder head nut	M6	10	1.0	7.0
Cylinder base nut		10	1.0	7.0
Starter clutch securing bolt		25	2.5	18.0
Cam drive chain tension adjuster bolt		7	0.7	5.0
Generator rotor nut		90	9.0	65.0
Crankcase bolt		11	1.1	8.0
Primary drive gear nut		50	5.0	36.0
Clutch cover bolt and generator cover bolt		10	1.0	7.0
Starter motor lead wire connecting bolt		2.5	0.25	1.8
Starter motor mounting bolt		10	1.0	7.0
Starter motor relay mounting screw		5.5	0.55	4.0
Clutch sleeve hub nut		50	5.0	36.0
Gearshift arm stopper		19	1.9	13.5
Engine oil drain plug		28	2.8	20.0
Oil filter cap nut and oil pump filter cap bolt		7	0.7	5.0
Engine sprocket bolt	25	2.5	18.0	
Engine mounting bolt (Top side)		41	4.1	29.5
Engine mounting bolt (Front side)		88	8.8	63.5
Engine mounting bolt (Rear side)		10	1.0	7.0
Engine mounting bracket bolt		41	4.1	29.5
Exhaust pipe bolt		23	2.3	16.5
Muffler connection bolt		23	2.3	16.5
Muffler mounting bolt (Front side)		23	2.3	16.5
Muffler mounting bolt (Rear side)		26	2.6	19.0
Exhaust pipe cover nut		5.5	0.55	4.0
Muffler cover screw		3	0.3	2.0
Muffler drain plug		61	6.1	44.0
Stator coil bolt		4.5	0.45	3.5
Signal coil bolt		4.5	0.45	3.5
Throttle cable lock nut (Carburetor side)		4.5	0.45	3.5
Ignition coil mounting screw		4.5	0.45	3.5
Regulator/rectifier mounting bolt		9	0.9	6.5
Fuel valve mounting bolt		4.4	0.44	3.0

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# CHASSIS

ITEM	N⋅m	kgf-m	lbf-ft
Front axle nut	48	4.8	34.5
Front fork damper rod bolt	20	2.0	14.5
Front fork lower clamp bolt	30	3.0	21.5
Front fork upper clamp bolt	30	3.0	21.5
Steering stem head nut	90	9.0	65.0
Handlebar clamp bolt	23	2.3	16.5
Handlebar holder nut	45	4.5	32.5
Front brake master cylinder mounting bolt	10	1.0	7.0
Front brake lever pivot bolt	1	0.1	0.5
Front brake lever pivot bolt lock nut	6	0.6	4.5
Front brake caliper mounting bolt	26	2.6	19.0
Front brake pad mounting bolt	18	1.8	13.0
Front brake caliper axle bolt	23	2.3	16.5
Front brake hose union bolt	23	2.3	16.5
Air bleeder valve	8	0.8	6.0
Front brake disc bolt	23	2.3	16.5
Swingarm pivot nut	65	6.5	47.0
Front footrest bolt	85	8.5	61.5
Rear torque link nut	13	1.3	9.5
Rear shock absorber nut (Upper & lower)	60	6.0	43.5
Rear cushion lever center nut	72	7.2	52.0
Rear cushion lever nut	78	7.8	56.5
Rear axle nut	65	6.5	47.0
Rear sprocket bolt	27	2.7	19.5
Rear brake cam lever bolt	11	1.1	8.0
Rear brake pedal nut	13	1.3	9.5
Spoke nipple	4.5	0.45	3.5
Seat rail bolt	23	2.3	16.5
Clutch lever holder bolt	10	1.0	7.0
Clutch lever pivot bolt lock nut	6.5	0.65	4.5
Headlight cover screw	5.5	0.55	4.0
Speedometer mounting nut	2.5	0.25	2.0
Speedometer bracket mounting bolt	10	1.0	7.0
Pilot light box mounting screw	2	0.2	1.5
Pilot light box holder mounting screw	2	0.2	1.5
Speedometer cable nut	5	0.5	3.5
Speedometer cable screw	10	1.0	7.0

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