# Features & Specifications 2018 DR-Z70



#### **Engine Features**

- 67cc 4-stroke, SOHC, air cooled engine is easy to operate and enjoyable to ride with both electric and kick starters as standard equipment so getting going is a snap.
- Keyed ignition for maximum parent control and an easy-to-use handlebar-mounted starter button and choke plunger for convenient operation.
- Easy-to-operate 3 speed semi-automatic transmission with centrifugal clutch. Perfect for young riders just starting out.
- Clean-burning 4-stroke engine easily achieves Environmental Protection Agency (EPA) emissions regulations (eligible for red-sticker registration in California).
- Spark-arrester equipped muffler is environmentally friendly, yet has a pleasant exhaust note.

#### Chassis Features

- Inverted front forks feature RM-Z inspired design to produce enjoyable riding on a variety of terrain surfaces with 3.8 inches of front wheel travel to absorb bumps.
- Adjustable front brake lever to fit various sized hands producing optimum control for young riders.
- Aggressive 2018 RM-Z450 inspired styling with bright yellow body work and matching back and blue graphics. Let's the rider enjoy a big bike look and appeal.
- Lightweight and durable steel frame and swingarm.
- Low 22-inch seat height for entry level riders with a slightly forward-leaning riding position for maximum rider mobility.
- Strong braking performance provided by front and rear drum brakes.

#### **Safety Features**

- The DR-Z70 is designed for use by children and off road use only do not use on public roads. Single rider only weight limit 40 kg (88 lbs.).
- The DR-Z70 is not recommended for children under age 7. Parental supervision required during operation. Rider must always wear a helmet, eye protection and protective clothing. Ride safety and be thoughtful of others.

#### **Additional Features**

- 6-month limited warranty
- For more details, please visit www.suzukicycles.com.



# **Specifications DR-Z70L8** E-03: USA, E-33: California

DIMENSIONS AND CURB MASS	
Overall length	1 320 mm (52.0 in)
Overall width	580 mm (22.8 in)
Overall height	790 mm (31.1 in)
Wheelbase	935 mm (36.8 in)
Ground clearance	135 mm (5.3 in)
Seat height	560 mm (22.0 in)
Curb mass	55 kg (121 lbs)
ENGINE	
Type	4-stroke, air-cooled, OHC
Number of cylinders	1
Bore	48.0 mm (1.890 in)
Stroke	37.0 mm (1.457 in)
Displacement	67 cm <sup>3</sup> (4.1 cu. in)
Corrected compression ratio	9.5 : 1
Carburetor	MIKUNI VM13
Air cleaner	Polyurethane foam element
Starter system	Electric & Kick
Lubrication system	Wet sump
Idle speed	1 600 ± 100 r/min
DRIVE TRAIN	
Clutch	Wet shoe, automatic, centrifugal type
Transmission	3-speed constant mesh
Gearshift pattern	3-up
Primary reduction ratio	3.823 (65/17)
Gear ratios, Low	3.400 (34/10)
2nd	1.812 (29/16)
3rd	1.200 (24/20)
Final reduction ratio	2.538 (33/13) DID428, 78 links
Dive diam	DID-120, 70 III K3
CHASSIS	
Front suspension	Inverted telescopic, coil spring
Rear suspension	Swingarm type, coil spring, oil damped
Front suspension stroke	96 mm (3.8 in)
Rear wheel travel	76 mm (3.0 in)
Caster	25 ° 20'
Trail	35 mm (1.38 in)
Steering angle	45 ° (right & left)
Turning radius	1.4 m (4.6 ft)
Front brake	Drum brake
Rear brake	Drum brake
Front tire	2.50-10 33J, tube type
Rear tire	2.50-10 33J, tube type
ELECTRICAL	
Ignition type	Electronic ignition (CDI)
Ignition timing	15 ° B.T.D.Č. at 1 600 r/min
Spark plug	NGK CR7HSA or DENSO U22FSR-U
Battery	12 V 8.28 kC (2.3 Ah)/10 HR
Generator	Single-phase A.C. generator
Fuse	10 A
CADACITIES	
CAPACITIES  Eval tapk including receive	2.01 (0.9/0.7116//mp.gol)
Fuel tank, including reserve	3.0 L (0.8/0.7 US/Imp gal)
reserve	0.8 L (0.2/0.2 US/Imp gal)
Engine oil, oil change	700 ml (0.7/0.6 US/Imp qt)
overhaul	800 ml (0.8/0.7 US/Imp qt)



# **Service Data DR-Z70L8**

E-03: USA, E-33: California

# SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM		STANDARD	LIMIT
Valve diam.	IN.	22.5 (0.89)	_
	EX.	19.0 (0.75)	_
Valve clearance (when cold)	IN.	0.04 - 0.07 (0.0016 - 0.0028)	_
	EX.	0.05 - 0.10 (0.0020 - 0.0039)	_
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.	4.960 - 4.975 (0.1953 - 0.1959)	_
	EX.	4.945 - 4.960 (0.1947 - 0.1953)	_
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.	_	2.2 (0.09)
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.	_	34.5 (1.36)
Valve spring tension	IN. & EX.	157 – 181 N (16.0 – 18.5 kgf, 35.3 – 40.8 lbs) at length 25.5 mm (1.00 in)	_

#### **CAMSHAFT + CYLINDER HEAD**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Cam height	IN.	27.39 - 27.43 (1.078 - 1.08)	27.09 (1.067)
	EX.	27.25 - 27.29 (1.073 - 1.074)	26.95 (1.061)
Rocker arm I.D.	IN. & EX.	10.003 - 10.018 (0.3938 - 0.3944)	
Rocker arm shaft O.D.	IN. & EX.	9.981 - 9.990 (0.3930 - 0.3933)	
Cylinder head distortion		<del>_</del>	0.05 (0.002



#### **CYLINDER + PISTON + PISTON RING**

Unit: mm (in)

ITEM			STANDARD	LIMIT
Compression pressure		(13	1 300 – 1 700 kPa – 17 kgf/cm², 185– 242 psi)	1 100 kPa (11 kgf/cm², 156 psi)
Piston to cylinder clearance			0.025 - 0.035 (0.0010 - 0.0014)	0.120 (0.0047)
Cylinder bore			48.000 - 48.015 (1.8898 - 1.8904)	48.105 (1.8939)
Piston diam.	Meas	ure a	47.970 – 47.985 (1.8886 – 1.8892) It 10 mm (0.4 in) from the skirt end.	47.880 (1.8850)
Cylinder distortion			_	0.05 (0.002)
Piston ring free end gap	1st	R	Approx. 5.0 (0.20)	4.0 (0.16)
	2nd	R	Approx. 6.6 (0.26)	5.3 (0.21)
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		_	0.180 (0.0071)
	2nd		_	0.150 (0.0059)
Piston ring groove width	1st		1.01 - 1.03 (0.0398 - 0.0405)	_
	2nd		1.21 - 1.23 (0.0476 - 0.0484)	_
	Oil		2.01 - 2.03 (0.0791 - 0.0799)	
Piston ring thickness	1st		0.97 - 0.99 (0.0382 - 0.0390)	_
	2nd		1.16 – 1.18 (0.0457 – 0.0465)	_
Piston pin bore I.D	13.002 – 13.008 (0.5119 – 0.5121)		13.030 (0.5130)	
Piston pin O.D.			12.992 – 13.000 (0.5115 – 0.5118)	12.980 (0.5110)



#### **CONROD + CRANKSHAFT**

Unit: mm (in)

ITEM	STANDARD	LIMIT
Conrod small end I.D.	13.006 - 13.014 (0.5120 - 0.5124)	13.040 (0.5134)
Conrod deflection	_	3.0 (0.12)
Conrod big end side clearance	0.10 - 0.45 (0.004 - 0.018)	1.0 (0.04)
Conrod big end width	13.95 - 14.00 (0.549 - 0.551)	_
Crank web-to-web width	$38.0 \pm 0.1$ (1.496 ± 0.004)	_
Crankshaft runout	_	0.08 (0.003)

#### **OIL PUMP**

ITEM	STANDARD	LIMIT
Oil pressure (at 60°C, 140°F)	Above 15 kPa (0.15 kgf/cm², 2.1 psi) Below 40 kPa (0.4 kgf/cm², 5.7 psi) at 3 000 r/min	

CLUTCH Unit: mm (in)

ITEM		STANDARD	LIMIT
Clutch release screw		1/8 turn back	
Clutch plate thickness	Drive	2.5 - 2.7 (0.098 - 0.106)	2.2 (0.092)
	Driven No. 1	2.02 - 2.18 (0.080 - 0.086)	1.72 (0.068)
	Driven No. 2	2.5 - 2.7 (0.098 - 0.106)	2.2 (0.092)
Clutch plate claw width	Drive	15.65 - 15.95 (0.616 - 0.628)	15.15 (0.596)
	Driven No. 1	11.8 - 12.0 (0.465 - 0.472)	11.3 (0.44)
	Driven No. 2	11.7 - 11.9 (0.460 - 0.469)	11.2 (0.44)
Clutch wheel I.D.	105.00 - 105.15 (4.133 - 4.140)		105.50 (4.154)
Clutch shoe thickness		No groove at any part	
Clutch engagement		_	
Clutch lock-up		2 900 – 3 500 r/min	_

# **DRIVE TRAIN + DRIVE CHAIN**

Unit: mm (in) (Except ratio)

ITEM			STANDARD	LIMIT
Primary reduction ratio		3.823 (65/17)		_
Final reduction ratio			2.538 (33/13)	
Gear ratios	Low		3.400 (34/10)	_
	2nd		1.812 (29/16)	_
	Тор		1.200 (24/20)	_
Gearshift fork to groove	clearance	No.1 & No. 2 0.1 – 0.3 (0.004 – 0.012)		0.5 (0.02)
Gearshift fork groove width		No.1 & No. 2	4.5 – 4.6 (0.177 – 0.181)	_
Gearshift fork thickness		No.1 & No. 2	4.3 – 4.4 (0.169 – 0.173)	_
Drive chain		Type	D.I.D 428	_
		Links	78	_
		20-pitch length	_	259.0 (10.20)
Drive chain slack			25 – 35 (1.0 – 1.4)	_

# **CARBURETOR**

ITEM		STANDARD/SPECIFICATION
Carburetor type		MIKUNI VM13SH
Bore size		13 mm (0.5 in)
I.D. No.		14H0
Idle r/min.		1 600 ± 100 r/min.
Float height		23.4 ± 1.0 mm (0.92 ± 0.04 in)
Main jet	(M.J.)	#55
Jet needle	(J.N.)	3L43
Needle jet	(N.J.)	E-5M
Pilot jet	(P.J.)	#17.5
Air screw	(A.S.)	PRE-SET (1 and 1/4 turns back)
Throttle cable play		2.0 – 4.0 mm (0.08 – 0.16 in)



ELECTRICAL Unit: mm (in)

ITEM		STA	ANDARD/SPECIFICATION	NOTE	
Spark plug		Туре	NGK: CR7HSA DENSO: U22FSR-U		
			Gap	0.6 - 0.7 (0.024 - 0.028)	
Spark performa	nce			Over 8 (0.3) at 1 atm.	
Ignition coil resi	stance		Primary	0.1 – 0.8 Ω	Terminal – Terminal
			Secondary	13 – 20 kΩ	Plug cap – Terminal
Ignition coil primary peak voltage			150 V and more	①: Ground, ②: B/Y	
Pick-up coil peak voltage		1.2 V and more		⊕: B/BI, ⊝: Ground	
Generator coil r	esistance	Charging		0.6 – 2.0 Ω	B/R – Ground
		Pick-up coil	150 – 240 Ω		B/BI – Ground
Generator no-load voltage (when engine is cold)		30 V (	AC) and more at 5 000 r/min.		
Regulated volta	ge(Chargi	ng output)	13.5 – 15.2 V at 5 000 r/min		
Starter relay resistance		70 – 90 Ω			
Battery	Type d	esignation		YT4B-BS	
Capacity		12 V 8.28 kC (2.3 Ah)/10 HR			
Fuse size			10 A		
Starter motor brush length		Standard	6.0 (0.24)		
		Limit	3.5 (0.14)		



# **BRAKE + WHEEL**

Unit: mm (in)

ITEM		STANDARD	LIMIT
Front brake lever play		15 –25 (0.6 – 1.0)	
Rear brake pedal free travel		15 – 20 (0.6 – 0.8)	_
Brake drum I.D.	Front	_	80.7 (3.18)
	Rear	_	80.7 (3.18)
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	10 × 1.40	_
	Rear	10 × 1.40	_
Tire size	Front	2.50 – 10 33J	_
	Rear	2.50 – 10 33J	_
Tire tread depth	Front	_	4.0 (0.16)
	Rear	_	4.0 (0.16)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD	LIMIT
Front fork stroke	96 (3.8)	
Front fork spring free length	157.8 (6.21)	154 (6.1)
Rear wheel travel	76 (3.0)	_
Swingarm pivot shaft runout	_	0.6 (0.02)

#### **TIRE PRESSURE**

COLD INFLATION TIRE PRESSURE	kPa	kgf/cm²	psi
FRONT	100	1.0	14
REAR	125	1.25	18



# TIGHTENING TORQUE ENGINE

ITEM	N⋅m	kgf-m	lb-ft
Engine mounting nut	31	3.1	22.5
Exhaust pipe bolt	10	1.0	7.0
Exhaust cover bolt	7	0.7	5.0
Muffler mounting nut	23	2.3	16.5
Spark arrester bolt	10	1.0	7.0
Intake pipe nut	10	1.0	7.0
Engine sprocket cover bolt	10	1.0	7.0
Spark plug	11	1.1	8.0
Cam chain tensioner bolt	8	0.8	6.0
Cylinder nut	10	1.0	7.0
Cylinder head nut	11	1.1	8.0
Cylinder head bolt	10	1.0	7.0
Valve adjuster lock-nut	10	1.0	7.0
Cam chain tension adjuster bolt	10	1.0	7.0
Camshaft sprocket bolt	11	1.1	8.0
Generator cover bolt	10	1.0	7.0
Generator cover plug	11	1.1	8.0
TDC plug	21	2.1	15.0
Generator rotor nut	55	5.5	40.0
Generator stator bolt	10	1.0	7.0
Pick-up coil set bolt	4.5	0.45	3.5
Generator lead wire clamp bolt	10	1.0	7.0
Clutch cover bolt	10	1.0	7.0
Main oil gallery plug	10	1.0	7.0
Oil filter case nut	63	6.3	45.5
Starter clutch bolt	10	1.0	7.0
Gearshift arm stopper bolt	19	1.9	13.5
Crankcase bolt	10	1.0	7.0
Engine oil drain plug	18	1.8	13.0
Starter motor mounting bolt	10	1.0	7.0

#### **FUEL SYSTEM**

ITEM	N⋅m	kgf-m	lb-ft
Fuel valve bolt	4.5	0.45	3.5
Carburetor mounting bolt	6.5	0.65	4.5



#### **CHASSIS**

ITEM	N⋅m	kgf-m	lb-ft
Handlebars set bolt	23	2.3	16.5
Front fork upper bracket bolt	45	4.5	32.5
Front axle nut	53	5.3	38.5
Brake cam lever nut (Front and Rear)	3	0.3	2.0
Spoke nipple	2	0.2	1.5
Footrest mounting bolt	23	2.3	16.5
Side-stand bolt	10	1.0	7.0
Side-stand nut	40	4.0	29.0
Swingarm pivot nut	42	4.2	30.5
Rear shock absorber mounting nut (Upper and Lower)	50	5.0	36.0
Rear axle nut	54	5.4	39.0
Rear sprocket bolt	27	2.7	19.5

# **FUEL + OIL**

ITEM		SPECIFICATION	NOTE
Fuel type	Use only unlea		
	octane ( $\frac{R+M}{2}$ ) (		
	Research Methr		
	Gasoline containing MTBE (Methyl Tertiary Butyl		
	Ether), less tha		
	methanol with		
	sion inhibitor is permissible.		
Fuel tank capacity	Including reserve	3.0 L (0.8/0.7 US/Imp gal)	
	Reserve	0.8 L (0.2/0.2 US/Imp gal)	
Engine oil type	SAE 10W-40, API SF/SG or SH/SJ with JASO MA		
Engine oil capacity	Change	700 ml (0.7/0.6 US/lmp qt)	
	Overhaul	800 ml (0.8/0.7 US/lmp qt)	

