

# Features & Specifications

## 2016 DR-Z70



### DR-Z70L6

GY8: Champion Yellow  
No.2 / Solid Black

### 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 four-stroke engine easily achieves California Air Resources Board (CARB) emissions regulations.
- 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 RM-Z inspired styling with bright yellow body work and matching 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](http://www.suzukicycles.com).

# Specifications DR-Z70L6

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)
Drive chain .....	DID428, 78 links

## 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.C. 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

## CAPACITIES

Fuel tank, including reserve .....	3.0 L (0.8/0.7 US/lmp gal)
reserve.....	0.8 L (0.2/0.2 US/lmp gal)
Engine oil, oil change .....	700 ml (0.7/0.6 US/lmp qt)
overhaul .....	800 ml (0.8/0.7 US/lmp qt)

# Service Data DR-Z70L6

## 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	—		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> , 185– 242 psi)		1 100 kPa (11 kgf/cm <sup>2</sup> , 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.	47.970 – 47.985 (1.8886 – 1.8892) Measure at 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 ± 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/cm <sup>2</sup> , 2.1 psi) Below 40 kPa (0.4 kgf/cm <sup>2</sup> , 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	1 700 – 2 100 r/min	—	
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)		—
	Top	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		STANDARD/SPECIFICATION		NOTE
Spark plug		Type	NGK: CR7HSA DENSO: U22FSR-U	
		Gap	0.6 – 0.7 (0.024 – 0.028)	
Spark performance		Over 8 (0.3) at 1 atm.		
Ignition coil resistance		Primary	0.1 – 0.8 Ω	Terminal – Terminal
		Secondary	13 – 20 kΩ	Plug cap – Terminal
Ignition coil primary peak voltage		150 V and more		⊕: Ground, ⊖: B/Y
Pick-up coil peak voltage		1.2 V and more		⊕: B/BI, ⊖: Ground
Generator coil resistance	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 voltage(Charging output)		13.5 – 15.2 V at 5 000 r/min		
Starter relay resistance		70 – 90 Ω		
Battery	Type designation	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/cm <sup>2</sup>	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 unleaded gasoline of at least 87 pump octane ( $\frac{R+M}{2}$ ) or 91 octane or higher rated by the Research Method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10 % ethanol, or less than 5 % methanol with appropriate cosolvents and corrosion 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/Imp qt)	
	Overhaul	800 ml (0.8/0.7 US/Imp qt)	