

# **VX800M ('91-MODEL)**

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## SPECIFICATIONS

### DIMENSIONS AND DRY MASS

Overall length	2280 mm (89.8 in) . . . E15, 16, 17, 22, 25, 39
	2355 mm (92.7 in) . . . E18
	2265 mm . . . . . E03, 33
	2255 mm (88.8 in) . . . Others
Overall width	805 mm (31.7 in)
Overall height	1115 mm (43.9 in) . . . E03, 28, 33
	1085 mm (42.7 in) . . . Others
Wheelbase	1565 mm (61.6 in) . . . E03, 33
	1555 mm (61.2 in) . . . Others
Ground clearance	145 mm ( 5.7 in)
Seat height	800 mm (31.5 in) . . . E01, 03, 28, 33
	795 mm (31.3 in) . . . Others
Dry mass	214 kg (472 lbs) . . . E33
	213 kg (470 lbs) . . . Others

### ENGINE

Type	Four-stroke, water-cooled, OHC, TSCC, 45° V-twin
Valve clearance	0.08 – 0.13 mm (0.003 – 0.005 in)
Number of cylinders	2
Bore	83.0 mm (3.268 in)
Stroke	74.4 mm (2.929 in)
Piston displacement	805 cm <sup>3</sup> (49.12 cu. in)
Compression ratio	10.0 : 1
Carburetor, Front	MIKUNI BDS36SS, single
Rear	MIKUNI BS36SS, single
Air cleaner	Non woven fabric element
Starter system	Electric starter motor
Lubrication system	Wet sump

### TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	1.690 (71/42)
Gear ratios, Low	2.285 (32/14)
2nd	1.631 (31/19)
3rd	1.227 (27/22)
4th	1.000 (25/25)
Top	0.851 (23/27)
Secondary reduction ratio	1.133 (17/15 x 30/30) . . . E03, 33
	1.096 (17/15 x 30/31) . . . Others
Final reduction ratio	3.090 (34/11)
Drive system	Shaft drive

**CHASSIS**

Front suspension	Telescopic, coil spring, oil damped
Rear suspension	Swingarm, coil spring, gas/oil damped, spring preload 5-way adjustable; rebound damping force 4-way adjustable ... E01, 03, 28, 33; compression damping force 4-way adjustable and rebound damping force 4-way adjustable ... Others
Front suspension stroke	150 mm (5.9 in)
Rear wheel travel	118 mm (4.6 in) ... E01, 03, 28, 33 119 mm (4.7 in) ... Others
Caster	59°
Trail	143 mm (5.63 in) ... E01, 28, 129 mm ... E03,33 142 mm (5.59 in) ... Others
Steering angle	35° (right & left)
Turning radius	3.2 m (10.5 ft)
Front brake	Disc
Rear brake	Disc
Front tire size	110/80-18 58H, tubeless
Rear tire size	150/70-17 69H, tubeless ... E03,28,33 150/70B-17 69H, tubeless ... Others

**ELECTRICAL**

Ignition type	Fully transistorized
Ignition timing	5° B.T.D.C. below 1650 r/min and 30° B.T.D.C. above 3500 r/min ... E03, 33 5° B.T.D.C. below 1625 r/min. and 35° B.T.D.C. above 3500 r/min ... E-18 5° B.T.D.C. below 1625 r/min and 32° B.T.D.C. above 3750 r/min ... Others
Spark plug	NGK DPR8EA-9 or NIPPON DENSO X24EPR-U9
Battery	12V 57.6 kC (16Ah)/10HR
Fuse	25/10/10/10A
Headlight	12V 60/55W
Position light	12V 4W ... except E03, 28, 33
Turn signal light	12V 21W
Tail/Brake light	12V 5/21W
License plate light	12V 5W
Speedometer light	12V 3.4W
Tachometer light	12V 1.7W
Neutral indicator light	12V 3.4W
High beam indicator light	12V 1.7W
Turn signal light indicator light	12V 3.4W
Oil pressure indicator light	12V 3.4W
Coolant temperature check light	12V 3W
Speedometer light	12V 3.4W
Tachometer light	12V 1.7W (x2pcs.)

**SERVICE DATA****VALVE + GUIDE**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Valve diam.	IN.	30 (1.18)	—
	EX.	26 (1.02)	—
Valve lift	IN.	8.5 (0.33)	—
	EX.	8.5 (0.33)	—
Valve clearance (when cold)	IN. & EX.	0.08–0.13 (0.003–0.005)	—
Valve guide to valve stem clearance	IN.	0.020–0.047 (0.0008–0.0019)	0.35 (0.014)
	EX.	0.035–0.062 (0.0014–0.0024)	0.35 (0.014)
Valve guide I.D.	IN. & EX.	5.500–5.512 (0.2165–0.2170)	—
Valve stem O.D.	IN.	5.465–5.480 (0.2152–0.2157)	—
	EX.	5.450–5.465 (0.2146–0.2152)	—
Valve stem runout	IN. & EX.	—	0.05 (0.002)
Valve head thickness	IN. & EX.	—	0.5 (0.02)
Valve stem end length	IN. & EX.	—	4.0 (0.16)
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	INNER	—	38.3 (1.51)
	OUTER	—	40.1 (1.58)
Valve spring tension	INNER	6.51–7.49 kg (14.35–16.51 lbs) at length 32.5 mm (1.28 in)	—
	OUTER	12.09–13.91 kg (26.65–30.67 lbs) at length 36.0 mm (1.42 in)	—

**CAMSHAFT + CYLINDER HEAD**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Cam height	IN.	35.954–35.994 (1.4155–1.4171)	35.660 (1.4039)
	EX.	36.919–36.959 (1.4535–1.4551)	36.620 (1.4417)
Camshaft journal oil clearance	0.032–0.066 (0.0013–0.0026)		0.150 (0.0059)

ITEM	STANDARD		LIMIT
Camshaft journal holder I.D.	No.1 Left side	20.012–20.025	—
	No.2 Right side	(0.7879–0.7884)	—
Camshaft journal O.D.	No.1 Right side	25.012–25.025	—
	No.2 Left side	(0.9847–0.9852)	—
Camshaft journal O.D.	No.1 Left side	19.959–19.980	—
	No.2 Right side	(0.7858–0.7866)	—
Camshaft journal O.D.	No.1 Right side	24.959–24.980	—
	No.2 Left side	(0.9826–0.9835)	—
Camshaft runout	—		0.10 (0.004)
Cam chain 20-pitch length	—		128.9 (5.07)
Rocker arm I.D.	IN. & EX.	12.000–12.018 (0.4724–0.4731)	—
Rocker arm shaft O.D.	IN. & EX.	11.966–11.984 (0.4711–0.4718)	—
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	1 300–1 600 kPa (13–16 kg/cm <sup>2</sup> ) (185–228 psi)		1100 kPa (11 kg/cm <sup>2</sup> ) (156 psi)
Compression pressure difference	—		200 kPa (2 kg/cm <sup>2</sup> ) (28 psi)
Piston to cylinder clearance	0.045–0.055 (0.0018–0.0022)		0.120 (0.0047)
Cylinder bore	83.000–83.015 (3.2677–3.2683)		83.085 (3.2711)
Piston diam.	82.950–82.965 (3.2657–3.2663) Measure at 15 mm (0.6 in) from the skirt end.		82.880 (3.2630)
Cylinder distortion	—		0.05 (0.002)
Piston ring free end gap	1st	R	Approx. 10.5 (0.413)
	2nd	R	Approx. 11.8 (0.465)
Piston ring end gap	1st		0.20–0.35 (0.008–0.014)
	2nd		0.20–0.35 (0.008–0.014)
Piston ring groove clearance	1st		0.180 (0.007)
	2nd		0.150 (0.006)

ITEM	STANDARD		LIMIT
Piston ring groove width	1st	1.01 – 1.03 (0.0398 – 0.0406)	—
	2nd	1.21 – 1.23 (0.0476 – 0.0484)	—
	Oil	2.51 – 2.53 (0.0988 – 0.0996)	—
Piston ring thickness	1st	0.970 – 0.990 (0.0382 – 0.0390)	—
	2nd	1.170 – 1.190 (0.0461 – 0.0469)	—
Piston pin bore	20.002 – 20.008 (0.7875 – 0.7877)		20.030 (0.7886)
Piston pin O.D.	19.996 – 20.000 (0.7827 – 0.7874)		19.980 (0.7866)

**CONROD + CRANKSHAFT**

Unit: mm (in)

ITEM	STANDARD	LIMIT
Conrod small end I.D.	20.010 – 20.018 (0.7878 – 0.7881)	20.040 (0.7890)
Conrod big end side clearance	0.10 – 0.20 (0.004 – 0.010)	0.30 (0.012)
Conrod big end width	21.95 – 22.00 (0.864 – 0.866)	—
Crank pin width	22.10 – 22.15 (0.870 – 0.872)	—
Conrod big end oil clearance	0.024 – 0.042 (0.0009 – 0.0017)	0.080 (0.0031)
Crank pin O.D.	40.982 – 41.000 (1.6135 – 1.6142)	—
Crankshaft journal oil clearance	0.020 – 0.050 (0.0008 – 0.0020)	0.080 (0.0031)
Crankshaft journal O.D.	47.965 – 47.980 (1.8884 – 1.8890)	—
Crankshaft thrust bearing thickness	1.925 – 2.175 (0.0758 – 0.0856)	—
Crankshaft thrust clearance	0.05 – 0.10 (0.0020 – 0.0040)	—
Crankshaft runout	—	0.05 (0.002)

**OIL PUMP**

ITEM	STANDARD	LIMIT
Oil pump reduction ratio	1.859 (71/42 x 32/29)	—
Oil pressure (at 60°C, 140°F)	Above 350 kPa (3.5 kg/cm <sup>2</sup> , 50 psi) Below 650 kPa (6.5 kg/cm <sup>2</sup> , 92 psi) at 3 000 r/min.	—

**CLUTCH**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Clutch cable play	4 (0.2)		—
Clutch release screw	¼ – ½ turn back		—
Drive plate thickness	No.1	2.65 – 2.95 (0.104 – 0.116)	2.35 (0.093)
	No.2	3.45 – 3.55 (0.136 – 0.140)	3.15 (0.124)
Drive plate claw width	15.8 – 16.0 (0.62 – 0.63)		15.0 (0.59)
Driven plate thickness	1.60 ± 0.05 (0.063 ± 0.002)		—
Driven plate distortion	—		0.10 (0.004)
Clutch spring free length	No.1	—	24.6 (0.97)
	No.2	—	23.3 (0.92)

**TRANSMISSION**

Unit: mm (in) Except ratio

ITEM	STANDARD		LIMIT
Primary reduction ratio	1.690 (71/42)		—
Secondary reduction ratio	U.S.A. model	1.133 (30/30 x 17/15)	—
	Other models	1.096 (30/31 x 17/15)	—
Final reduction ratio	3.090 (34/11)		—
Gear ratios	Low	2.285 (32/14)	—
	2nd	1.631 (31/19)	—
	3rd	1.227 (27/22)	—
	4th	1.000 (25/25)	—
	Top	0.851 (23/27)	—
Shift fork to groove clearance	No.1	0.10 – 0.30 (0.004 – 0.012)	0.50 (0.020)
	No.2	0.10 – 0.30 (0.004 – 0.012)	0.50 (0.020)
Shift fork groove width	No.1	5.50 – 5.60 (0.217 – 0.220)	—
	No.2	4.50 – 4.60 (0.177 – 0.181)	—
Shift fork thickness	No.1	5.30 – 5.40 (0.209 – 0.213)	—
	No.2	4.30 – 4.40 (0.169 – 0.173)	—

**SHAFT DRIVE**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Secondary bevel gear backlash	0.05–0.32 (0.002–0.013)		—
Final bevel gear backlash	Drive side	0.03–0.064 (0.001–0.025)	—

**CARBURETOR**

ITEM	SPECIFICATION	
	E-02,04,16,21,25,28,34	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C00	←
Idle r/min.	1100 ± 100 r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 132.5	# 120
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5F108-3rd	5D49-3rd
Needle jet (N.J.)	P-4	←
Throttle valve (Th.V.)	# 115	←
Pilot jet (P.J.)	# 47.5	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET) 1 $\frac{3}{8}$ turns back	(PRE-SET) 1 $\frac{1}{8}$ turns back
Pilot air jet (P.A.J.)	No.1:(# 70), No.2:(2.0 mm)	No.1:(# 65), No.2:(1.2 mm)
Throttle cable play	0.5–1.0 mm (0.02–0.04 in)	←
Choke cable play	0.5–1.0 mm (0.02–0.04 in)	←

**CARBURETOR**

ITEM	SPECIFICATION	
	E-03	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C10	←
Idle r/min.	1200 ± 50 r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 132.5	# 122.5
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5E72-1st	5D47-1st
Needle jet (N.J.)	P-7	P-2
Throttle valve (Th.V.)	# 125	# 110
Pilot jet (P.J.)	# 45	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm

ITEM	SPECIFICATION	
	E-03	
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET)	(PRE-SET)
Pilot air jet (P.A.J.)	No. 1:(# 65), No. 2:(2.0 mm)	No. 1:(# 65), No. 2:(1.2 mm)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←
Choke cable play	0.5—1.0 mm (0.02—0.04 in)	←

**CARBURETOR**

ITEM	SPECIFICATION	
	E-33	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C20	←
Idle r/min.	1200 ± 50 r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 132.5	# 122.5
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5E72-1st	5D47-1st
Needle jet (N.J.)	P-7	P-2
Throttle valve (Th.V.)	# 125	# 110
Pilot jet (P.J.)	# 45	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET)	(PRE-SET)
Pilot air jet (P.A.J.)	No. 1:(# 65), No. 2:(2.0 mm)	No. 1:(# 65), No. 2:(1.2 mm)
Throttle cable play	0.5—1.0 mm (0.02—0.04 in)	←
Choke cable play	0.5—1.0 mm (0.02—0.04 in)	←

**CARBURETOR**

ITEM	SPECIFICATION	
	E-18	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C30	←
Idle r/min.	1200 ± $\frac{100}{50}$ r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 135	# 125
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5F107-3rd	5D48-3rd

ITEM	SPECIFICATION	
	E-18	
Needle jet (N.J.)	P-4	P-2
Throttle valve (Th.V.)	# 115	←
Pilot jet (P.J.)	# 45	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET) 2 turns back	(PRE-SET) 1¼ turns back
Pilot air jet (P.A.J.)	No.1:(# 55), No.2:(1.85 mm)	No.1:(# 65), No.2:(1.2 mm)
Throttle cable play	0.5–1.0 mm (0.02–0.04 in)	←
Choke cable play	0.5–1.0 mm (0.02–0.04 in)	←

**CARBURETOR**

ITEM	SPECIFICATION	
	E-01	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C40	←
Idle r/min.	1100 ± 100 r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 135	# 122.5
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5F108-3rd	5D49-3rd
Needle jet (N.J.)	P-4	←
Throttle valve (Th.V.)	# 115	←
Pilot jet (P.J.)	# 47.5	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET) 1½ turns back	(PRE-SET) 1⅛ turns back
Pilot air jet (P.A.J.)	No.1:(# 70), No.2:(2.0 mm)	No.1:(# 65), No.2:(1.2 mm)
Throttle cable play	0.5–1.0 mm (0.02–0.04 in)	←
Choke cable play	0.5–1.0 mm (0.02–0.04 in)	←

**CARBURETOR**

ITEM	SPECIFICATION	
	E-15,22,24,39	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C50	←
Idle r/min.	1100 ± 100 r/min.	←

ITEM	SPECIFICATION	
	E-15,22,24,39	
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 132.5	# 120
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5F108-3rd	5D49-3rd
Needle jet (N.J.)	P-4	←
Throttle valve (Th.V.)	# 115	←
Pilot jet (P.J.)	# 47.5	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET) 1 1/8 turns back	(PRE-SET) 1 turn back
Pilot air jet (P.A.J.)	No.1:(# 70), No.2:(2.0 mm)	No.1:(# 65), No.2:(1.2 mm)
Throttle cable play	0.5–1.0 mm (0.02–0.04 in)	←
Choke cable play	0.5–1.0 mm (0.02–0.04 in)	←

## CARBURETOR

ITEM	SPECIFICATION	
	U-type of E-22	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C60	←
Idle r/min.	1100 ± 100 r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 135	# 122.5
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5F108-3rd	5D49-3rd
Needle jet (N.J.)	P-4	P-6
Throttle valve (Th.V.)	# 115	←
Pilot jet (P.J.)	# 47.5	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET) 1 1/8 turns back	(PRE-SET) 1 1/16 turns back
Pilot air jet (P.A.J.)	No.1:(# 70), No.2:(2.0 mm)	No.1:(# 65), No.2:(1.2 mm)
Throttle cable play	0.5–1.0 mm (0.02–0.04 in)	←
Choke cable play	0.5–1.0 mm (0.02–0.04 in)	←

**CARBURETOR**

ITEM	SPECIFICATION	
	E-17	
Carburetor type	MIKUNI BS36SS (No.1)	MIKUNI BDS36SS (No.2)
Bore size	36 mm	←
I.D. No.	45C70	←
Idle r/min.	1100 ± 100 r/min.	←
Float height	27.7 ± 1.0 mm (1.09 ± 0.04 in)	9.1 ± 1.0 mm (0.36 ± 0.04 in)
Main jet (M.J.)	# 135	# 122.5
Main air jet (M.A.J.)	1.8 mm	←
Jet needle (J.N.)	5F108-3rd	5D49-3rd
Needle jet (N.J.)	P-4	P-6
Throttle valve (Th.V.)	# 115	←
Pilot jet (P.J.)	# 47.5	# 40
By-pass (B.P.)	0.8 mm x 2PCS	0.8 mm x 3PCS
Pilot outlet (P.O.)	0.8 mm	1.0 mm
Valve seat (V.S.)	1.5 mm	←
Starter jet (G.S.)	# 25	# 22.5
Pilot screw (P.S.)	(PRE-SET) 1 3/8 turns back	(PRE-SET) 1 1/4 turns back
Pilot air jet (P.A.J.)	No.1:(# 70), No.2:(2.0 mm)	No.1:(# 65), No.2:(1.2 mm)
Throttle cable play	0.5–1.0 mm (0.02–0.04 in)	←
Choke cable play	0.5–1.0 mm (0.02–0.04 in)	←

**ELECTRICAL**

Unit: mm (in)

ITEM	SPECIFICATION		NOTE
Ignition timing	5° B.T.D.C. Below 1 625 r/min. and 35° B.T.D.C. Above 3 500 r/min.		E-18 model
	5° B.T.D.C. Below 1 650 r/min. and 30° B.T.D.C. Above 3 500 r/min.		U.S.A. model
	5° B.T.D.C. Below 1 625 r/min. and 32° B.T.D.C. Above 3 750 r/min.		Other models
Firing order	1-2		
Spark plug	Type	N.D.: DPR8EA-9 N.G.K.: X24EPR-U9	
	Gap	0.8–0.9 (0.031–0.035)	
Spark performance	Over 8 (0.3) at 1 atm.		
Signal coil resistance	Approx. 117 Ω (G–BI)		U.S.A. model
	Approx. 230 Ω (G–BI)		Other models
Ignition coil resistance	Primary	2–6 Ω	⊕ tap – ⊖ tap
	Secondary	19–27 kΩ	Plug cap – ⊕ tap
Generator no-load voltage (When engine cold)	More than 65V (AC) at 5 000 r/min.		U.S.A. model
	More than 75 V (AC) at 5 000 r/min.		Other models
Regulated voltage	13.5–15.5 V at 5 000 r/min.		
Starter motor brush length	Limit: 9 (0.35)		N.D.

ITEM	STANDARD		NOTE
Commutator under-cut	Limit: 0.2 (0.008)		
Starter relay resistance	2 – 6 $\Omega$		
Battery	Type designation	YB16B-A	
	Capacity	12V57.6kC (16Ah)/10HR	
	Standard electrolyte S.G.	1.28 at 20°C (68°F)	
Fuse size	Headlight	10 A	
	Ignition/Fan	10 A	
	Signal	10 A	
	Main	25 A	

**WATTAGE**

Unit:W

ITEM		SPECIFICATION
Headlight	HI	60
	LO	55
Tail/Brake light		5/21
Turn signal light		21
Speedometer light		3.4
Tachometer light		1.7 x 2PCS
Water temp. indicator light		3
Turn signal indicator light		3.4
High beam indicator light		1.7
Neutral indicator light		3.4
Oil pressure indicator light		3.4
License light		5
Position light		4 (Execpt E-03,28,33 models)

**BRAKE + WHEEL**

Unit: mm (in)

ITEM	STANDARD		LIMIT
Rear brake pedal height	35 (1.4)		—
Brake disc thickness	Front	5.5 ± 0.2 (0.197 ± 0.008)	5.0 (0.20)
	Rear	6.0 ± 0.2 (0.236 ± 0.008)	5.5 (0.22)
Brake disc runout	Front	—	0.30
	Rear		(0.012)
Master cylinder bore	Front	12.700 – 12.743 (0.5000 – 0.5017)	—
	Rear		—
Master cylinder piston diam.	Front	12.657 – 12.684 (0.4983 – 0.4993)	—
	Rear		—
Brake caliper cylinder bore	Front	33.960 – 34.036 (1.3370 – 1.3400)	—
		27.000 – 27.076 (1.0630 – 1.0660)	—
	Rear	42.850 – 42.926 (1.6870 – 1.6900)	—

ITEM	STANDARD		NOTE
Brake caliper piston diam.	Front	33.884–33.934 (1.3340–1.3360)	—
		26.920–26.970 (1.0598–1.0618)	—
	Rear	42.770–42.820 (1.6839–1.6858)	—
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)
Tire size	Front	110/80-18 58H	—
	Rear	150/70-B17 69H	—
Tire tread depth	Front	—	1.6 (0.06)
	Rear	—	2.0 (0.08)

**SUSPENSION**

Unit: mm (in)

ITEM	STANDARD	LIMIT	NOTE
Front fork stroke	150 (5.9)	—	
Front fork spring free length	—	353 (13.9)	E-01,03,28,33 models
	—	348 (13.7)	Other models
Front fork oil level	142 (5.59)	—	E-01,03,28,33 models
	138 (5.43)	—	Other models
Rear wheel travel	118 (4.64)	—	E-01,03,28,33 models
	119 (4.68)	—	Other models
Swingarm pivot shaft runout	—	0.30 (0.012)	

**TIRE PRESSURE**

COLD INFLATION TIRE PRESSURE	NORMAL RIDING					
	SOLO RIDING			DUAL RIDING		
	kPa	kg/cm <sup>2</sup>	psi	kPa	kg/cm <sup>2</sup>	psi
FRONT	225	2.25	33	225	2.25	33
REAR	250	2.50	36	280	2.80	41

**FUEL + OIL + COOLANT**

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 $\frac{R+M}{2}$ 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.		U.S.A.model
	Use only unleaded gasoline of at least 87 pump octane ( $\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method.		Canada model
	Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended.		Other models
Fuel tank including reserve	18.0 L (4.8/4.0 US/lmp gal)		California model only
	19.0 L (5.0/4.2 US/lmp gal)		Other models
	reserve	4.0 L (1.1/0.9 US/lmp gal)	
Engine oil type	SAE 10W/40, API SE or SF		
Engine oil capacity	Change	2 400 ml (2.5/2.1 US/lmp qt)	
	Filter change	2 800 ml (3.0/2.5 US/lmp qt)	
	Overhaul	3 300 ml (3.5/2.9 US/lmp qt)	
Front fork oil type	Fork oil # 10		
Front fork oil capacity (each leg)	388 ml (13.1/13.7 US/lmp oz)		E-01,03,28,33, models
	392 ml (13.2/13.8 US/lmp oz)		Other models
Final bevel gear oil type	SAE 90 hypoid gear oil with GL-5 under API classification		
Final bevel gear oil capacity	200–220 ml (6.8/7.0–7.4/7.7 US/lmp oz)		
Brake fluid type	DOT4		
Coolant capacity	1 700 ml (1.8/1.5 US/lmp qt)		

**THERMOSTAT + RADIATOR + FAN**

ITEM		STANDARD	LIMIT
Thermostat valve opening temperature		75.0 ± 1.5 °C (167 ± 2.7 °F)	—
Thermostat valve lift		Over 6 mm (0.24 in) at 90 °C (194 °F)	—
Radiator cap valve release pressure		1.1 ± 0.15 kg/cm <sup>2</sup> (15.6 ± 2.1 psi, 110 ± 15 kPa)	—
Electric fan thermo-switch operating temperature	ON	Approx. 105 °C (221 °F)	—
	OFF	Approx. 100 °C (212 °F)	—

