

# Motorcycle Specifications

Model Name	XT600Z	Model Code	3AJ6
Model Year	1990	Destination	NETHERLANDS
Primary ID	3AJ-0057138		
Vehicle Identification Number			
Engine Serial Number			

Section/Item	Engine
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## Maintenance Specification (Engine)

### Engine

Engine type	Air cooled 4-stroke, SOHC
Displacement	595 cm <sup>3</sup>
Cylinder arrangement	Single cylinder
Bore × stroke	95.0 x 84.0 mm
Compression ratio	8.50 : 1
Standard compression pressure (at sea level)	11.0 kgf/cm <sup>2</sup>
Minimum-maximum	9.0-12.0 kgf/cm <sup>2</sup>
Lubrication system	Dry sump
Starting system	Electric starter

### Fuel

Recommended fuel	Regular unleaded gasoline
Fuel tank capacity	23.0 L
Fuel reserve amount	3.1 L

### Engine oil

Engine oil	SAE 20W-40SE or SAE 10W-30SE
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### Engine oil quantity

Periodic oil change	1.90 L
With oil filter replacement	2.00 L
Quantity (disassembled)	2.70 L

### Final transmission oil

Oil filter type	Paper
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### Oil pump

Oil pump type	Trochoid
Inner-rotor-to-outer-rotor-tip clearance	0.120 mm
Outer-rotor-to-oil-pump-housing clearance	0.03-0.08 mm
Bypass valve opening pressure	0.80-1.20 kgf/cm <sup>2</sup>
Relief valve operating pressure	0.80-1.20 kgf/cm <sup>2</sup>

Oil pressure	0.13 kgf/cm <sup>2</sup> /1300 r/min
Pressure check location	OIL FILTER CHAMBER
<b>Spark plug(s)</b>	
Manufacturer/model	NGK/DPR7EA-9, DPR8EA-9
Spark plug gap	0.8-0.9 mm
<b>Cylinder head</b>	
Combustion chamber volume	68.00-69.40 cm <sup>3</sup>
Warping limit	0.03 mm
<b>Camshaft</b>	
Drive system	Chain drive (left)
Camshaft cap inside diameter	23.000-23.021 mm
Camshaft journal diameter	22.967-22.980 mm
Camshaft-journal-to-camshaft-cap clearance	0.020-0.054 mm
<b>Camshaft lobe dimensions</b>	
Lobe height (Intake)	36.520-36.620 mm
Base circle diameter (Intake)	30.010-30.110 mm
Lobe height (Exhaust)	36.700-36.800 mm
Base circle diameter (Exhaust)	30.070-30.170 mm
Camshaft runout limit	0.030 mm
<b>Timing chain</b>	
Model/number of links	75-010/126
Tensioning system	Automatic
<b>Rocker arm/rocker arm shaft</b>	
Rocker arm inside diameter	12.000-12.018 mm
Rocker arm shaft outside diameter	11.976-11.991 mm
Rocker-arm-to-rocker-arm-shaft clearance	0.009-0.042 mm
<b>Valve clearance (cold)</b>	
Intake	0.07-0.12 mm
Exhaust	0.12-0.17 mm
<b>Valve dimensions</b>	
Valve head diameter (intake)	36.90-37.10 mm
Valve head diameter (exhaust)	31.90-32.10 mm
Valve face width (intake)	2.260 mm
Valve face width (exhaust)	2.260 mm
Valve seat contact width (intake)	1.00-1.20 mm
Valve seat contact width (exhaust)	1.00-1.20 mm
Valve margin thickness (intake)	1.00-1.40 mm
Valve margin thickness (exhaust)	0.80-1.20 mm
Valve stem diameter (intake)	6.975-6.990 mm
Valve stem diameter (exhaust)	6.955-6.970 mm
Valve guide inside diameter (intake)	7.000-7.012 mm
Valve guide inside diameter (exhaust)	7.000-7.012 mm
Valve-stem-to-valve-guide clearance (intake)	0.010-0.037 mm
Valve-stem-to-valve-guide clearance (exhaust)	0.030-0.057 mm
Valve stem runout	0.010 mm

**Inner spring**

Free length (intake)	40.10 mm
Free length (exhaust)	40.10 mm
Installed length (intake)	22.70 mm
Installed length (exhaust)	22.70 mm
Installed compression spring force (intake)	16.80-19.39 kgf
Installed compression spring force (exhaust)	16.80-19.39 kgf
Spring tilt (intake)	1.7 mm
Spring tilt (exhaust)	1.7 mm
Winding direction (intake)	Clockwise
Winding direction (exhaust)	Clockwise

**Outer spring**

Free length (intake)	43.80 mm
Free length (exhaust)	43.80 mm
Installed length (intake)	34.20 mm
Installed length (exhaust)	34.20 mm
Installed compression spring force (intake)	7.30-8.90 kgf
Installed compression spring force (exhaust)	15.20-18.60 kgf
Spring tilt (intake)	1.9 mm
Spring tilt (exhaust)	1.9 mm
Winding direction (intake)	Counterclockwise
Winding direction (exhaust)	Counterclockwise

**Cylinder**

Bore	94.970-95.020 mm
Out of round limit	0.010 mm

**Piston**

Piston-to-cylinder clearance	0.045-0.065 mm
Diameter	94.915-94.965 mm
Measuring point (from piston skirt bottom)	5.0 mm
Piston pin bore inside diameter	22.004-22.015 mm
Offset	2.00 mm
Offset direction	Intake side
Piston pin outside diameter	21.991-22.000 mm

**Top ring**

Ring type	Barrel
Dimensions (B × T)	1.20 × 3.80 mm
End gap (installed)	0.30-0.45 mm
Ring side clearance	0.040-0.080 mm

**2nd ring**

Ring type	Plain
Dimensions (B × T)	1.20 × 3.80 mm
End gap (installed)	0.30-0.45 mm
Ring side clearance	0.030-0.070 mm

**Oil ring**

Dimensions (B × T)	2.50 × 3.40 mm
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	End gap (installed)	0.20-0.70 mm
	Ring side clearance	0.020-0.060 mm
<b>Crankshaft</b>		
	Width A	74.95-75.00 mm
	Runout limit	0.030 mm
	Big end side clearance	0.250-0.750 mm
	Big end radial clearance	0.010-0.025 mm
	Small end free play	0.80 mm
<b>Balancer</b>		
	Balancer drive method	Gear
<b>Clutch</b>		
	Clutch type	Wet, multiple-disc
	Clutch release method	Inner push, cam push
	Clutch lever free play (pivot)	2.0-3.0 mm
	Friction plate thickness	2.72-2.88 mm
	Wear limit	2.60 mm
	Plate quantity	6 pcs
	Friction plate thickness	2.94-3.06 mm
	Wear limit	2.80 mm
	Plate quantity	2 pcs
	Clutch plate thickness	1.20 mm
	Plate quantity	7 pcs
	Warping limit	0.20 mm
	Clutch spring free length	42.80 mm
	Spring quantity	5 pcs
	Limit	40.80 mm
	Clutch housing thrust clearance	0.07-0.07 mm
<b>Transmission</b>		
	Transmission type	Constant mesh 5-speed
	Primary reduction ratio	71/34 (2.088)
	Secondary reduction ratio	45/15 (3.000)
	Final drive	Chain
	Operation	Left foot operation
<b>Gear ratio</b>		
	1st	31/12 (2.583)
	2nd	27/17 (1.588)
	3rd	24/20 (1.200)
	4th	21/22 (0.954)
	5th	19/24 (0.792)
	Main axle runout limit	0.08 mm
	Drive axle runout limit	0.08 mm
<b>Shifting mechanism</b>		
	Shift mechanism type	Shift drum and guide bar
<b>Air filter</b>		
	Air filter element	Wet element



Grado del aceite del filtro de aire		Yamaha foam air filter oil or other quality foam air filter oil
Carburetor		
Type × quantity	Y27PV x 1	
Manufacturer	TEIKEI	
ID mark	3AJ 10	
Main jet	#1:#155 #2:#125	
Main air jet	#1:1.0 #2:1.2	
Jet needle	#1:5C47-3/5 #2:5X76-3/5	
Needle jet	2.600	
Pilot air jet 1	0.6	
Pilot outlet	0.8	
Pilot jet	#48	
Bypass 1	1.0	
Pilot screw turns out	1-5/8	
Valve seat size	2.5	
Starter jet 1	#80	
Float height	25.0-27.0 mm	
Fuel level A (using fuel level gauge)	6.0-8.0 mm	
Idling condition		
Engine idling speed	1250-1350 r/min	
Intake vacuum	200 mmHg	
Oil temperature	60.0 °C	
Shaft drive		