








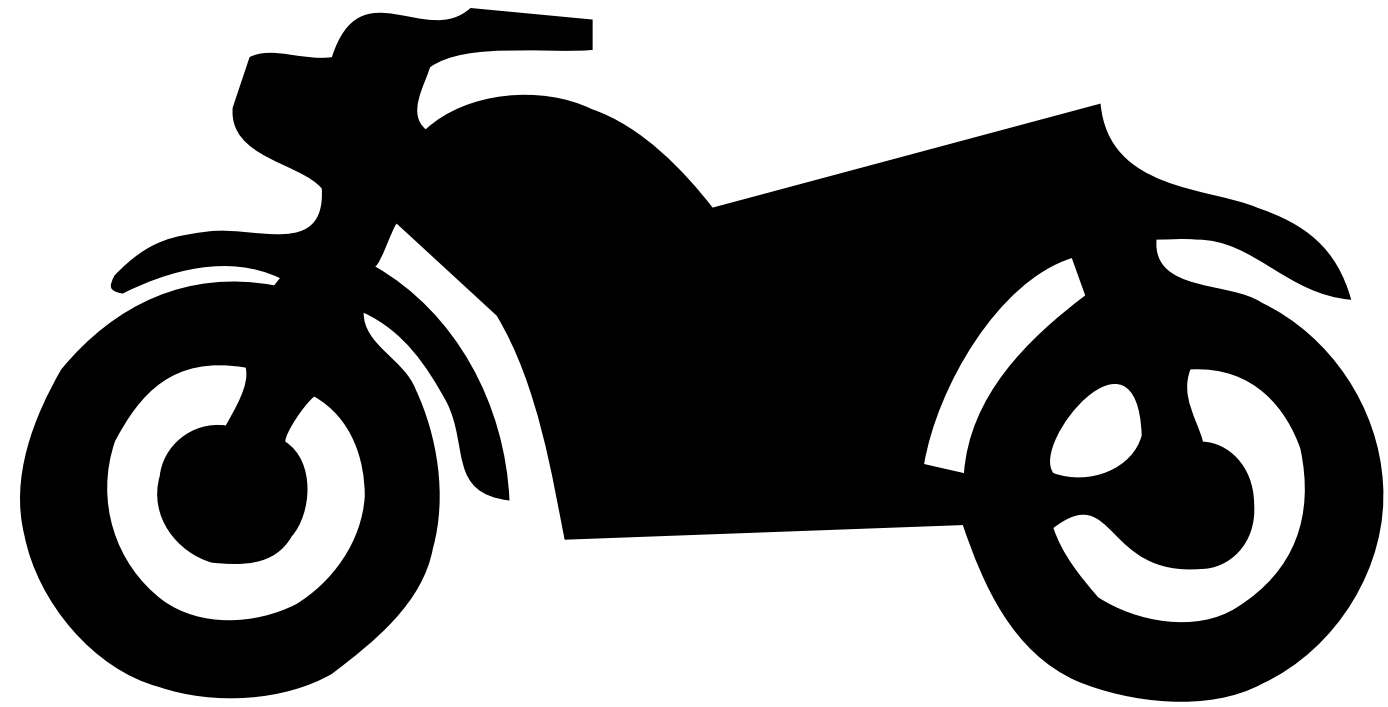


# TABLE OF CONTENTS

<b>GENERAL INFORMATION</b>	
	GEN INFO <b>1</b>
<b>SPECIFICATIONS</b>	
	SPEC <b>2</b>
<b>PERIODIC CHECKS AND ADJUSTMENTS</b>	
	CHK ADJ <b>3</b>
<b>ENGINE OVERHAUL</b>	
	ENG <b>4</b>
<b>COOLING SYSTEM</b>	
	COOL <b>5</b>
<b>CARBURETOR</b>	
	CARB <b>6</b>
<b>CHASSIS</b>	
	CHAS <b>7</b>
<b>ELECTRICAL SYSTEM</b>	
	ELEC <b>8</b>
<b>TROUBLESHOOTING</b>	
	TRBL SHTG <b>9</b>



**GEN  
INFO**

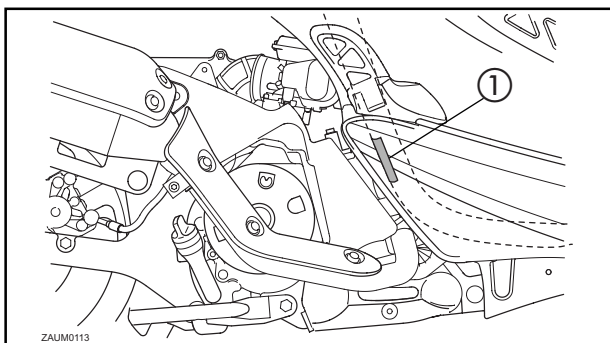
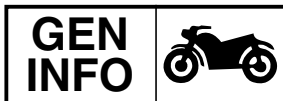
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## CHAPTER 1. GENERAL INFORMATION

<b>SCOOTER IDENTIFICATION</b> .....	1-1
VEHICLE IDENTIFICATION NUMBER .....	1-1
MODEL LABEL .....	1-1
 <b>FEATURES</b> .....	 1-2
OIL INDICATOR LIGHT .....	1-2
ODOMETER/TRIPMETER READING MODE .....	1-2
BATTERY VOLTAGE/FUEL GAUGE .....	1-2
THE CLOCK .....	1-3
AUTO-CHOKE SYSTEM .....	1-3
 <b>IMPORTANT INFORMATION</b> .....	 1-4
PREPARATION FOR REMOVAL AND DISASSEMBLY .....	1-4
REPLACEMENT PARTS .....	1-4
GASKETS, OIL SEALS AND O-RINGS .....	1-4
LOCK WASHERS/PLATES AND COTTER PINS .....	1-5
BEARINGS AND OIL SEALS .....	1-5
CIRCLIPS .....	1-5
 <b>CHECKING THE CONNECTIONS</b> .....	 1-6
 <b>SPECIAL TOOLS</b> .....	 1-7

# SCOOTER IDENTIFICATION



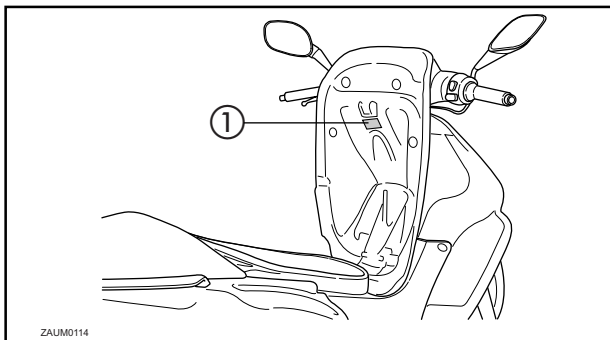
EAS00015

## GENERAL INFORMATION SCOOTER IDENTIFICATION

EASM0002

### VEHICLE IDENTIFICATION NUMBER

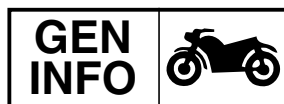
The vehicle identification number ① is stamped into the frame.



EASM0003

### MODEL LABEL

The model label ① is affixed under the seat. This information will be needed to order spare parts.



EASM0004

## FEATURES

### OIL INDICATOR LIGHT

#### • FUNCTION

Pulses (travel distance signals) from the speedometer are counted and cause the oil indicator light to come on at 500 km for the first time and thereafter every 3,000 km. In this way, the light indicates the time for oil change.

#### • RESETTING PROCEDURE

To reset the oil change indicator light

- 1) Press the "TRIP" button while turning the key to "ON".
- 2) Release the button and the oil change indicator light will go off.

#### NOTE:

To reset the oil change indicator light before the periodic oil change interval has been reached, follow the above procedure.

### ODOMETER/TRIPMETER READING MODE

The odometer and tripmeter can be set to count in either miles or kilometers according to the following procedure.

- 1) Turn the key to "ON".
- 2) Press the "TRIP" button until the current mode appears in the display:  
"CONT" (continental) for kilometer mode and "EnGL" (English) for the mile mode.
- 3) Press the "TRIP" button to switch mode.
- 4) Press the "TRIP" button for two seconds to confirm the setting.

#### NOTE:

- The odometer/tripmeter reading mode can be changed any number of times while the odometer reading is below 10, but it cannot be changed anymore after the reading has reached 10.
- Switching between the mile and the kilometer mode does not change or convert the current odometer/tripmeter reading.

### BATTERY VOLTAGE/FUEL GAUGE

When the key is turned to "OFF", the voltage/fuel gauge indicates the battery voltage.

#### NOTE:

If the battery voltage drops to 10V, refer to "CHECKING THE BATTERY" section in chapter 3.

When the key is turned to "ON", the voltage/fuel gauge indicates the amount of fuel in the fuel tank after indicating the battery voltage for two seconds.

**THE CLOCK**

- Setting the clock

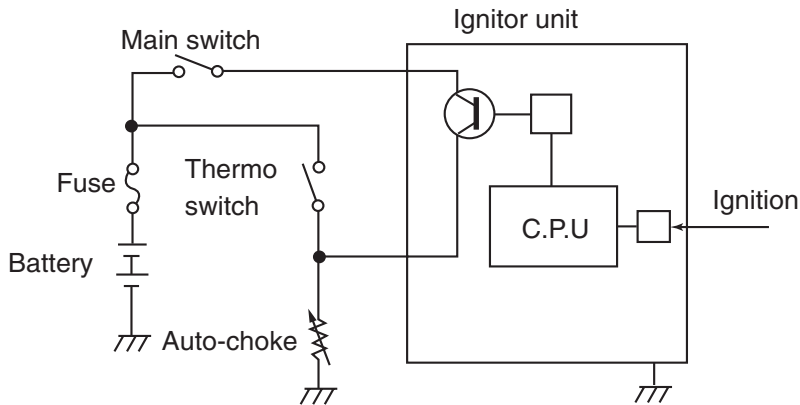
To set the clock:

- 1) Make sure that the key is turned to “OFF”.
- 2) Press the “TRIP” button for two seconds and the hour display will flash.
- 3) Press the “TRIP” button to set the hours.
- 4) Press the “TRIP” button for two seconds, and the first minute digit will flash.
- 5) Press the “TRIP” button to set the first minute digit.
- 6) Press the “TRIP” button for two more seconds, and the second minute digit will flash.
- 7) Press the “TRIP” button to set the second minute digit.
- 8) Press the “TRIP” button for two seconds to set the clock.

**AUTO-CHOKE SYSTEM**

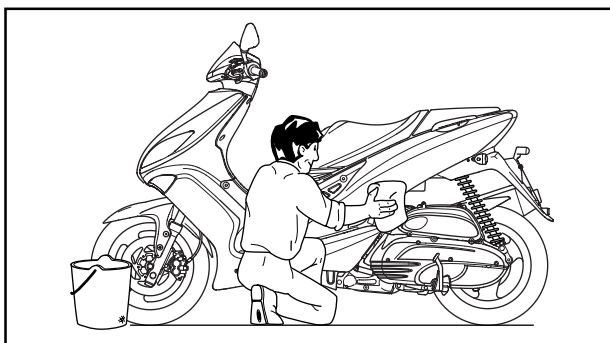
This system is the parallel connection of the ignitor unit circuit and the thermo switch as shown, detecting the engine temperature, and facilitates the restarting with the warm engine.

- **Circuit diagram**



- **Auto-choke operation**

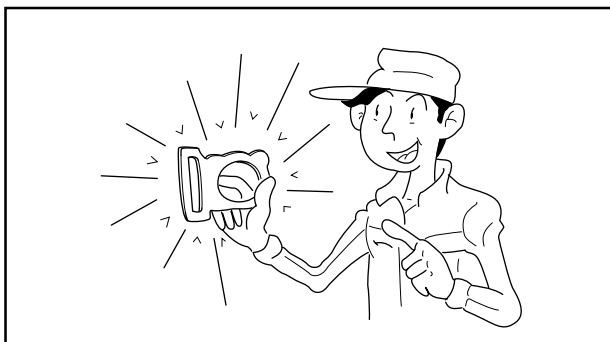
Engine condition	Start with the cold engine	Crank with the cold engine	Crank with the warm engine	Restart with the warm engine
Thermo switch	OFF	OFF	ON	ON
Ignitor unit circuit	OFF	ON	ON	OFF
Auto-choke	Activates	Activates	Not activate	Not activate



EAS00020

## IMPORTANT INFORMATION PREPARATION FOR REMOVAL AND DISASSEMBLY

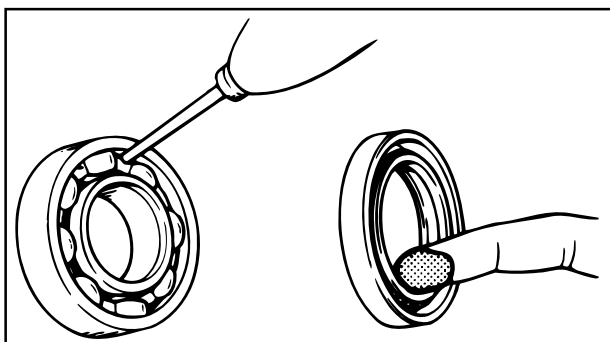
1. Before removal and disassembly, remove all dirt, mud, dust and foreign material.
2. Use only the proper tools and cleaning equipment.  
Refer to the "SPECIAL TOOLS".
3. When disassembling, always keep mated parts together. This includes gears, cylinders, pistons and other parts that have been "mated" through normal wear. Mated parts must always be reused or replaced as an assembly.
4. During disassembly, clean all of the parts and place them in trays in the order of disassembly. This will speed up assembly and allow for the correct installation of all parts.
5. Keep all parts away from any source of fire.



EAS00021

## REPLACEMENT PARTS

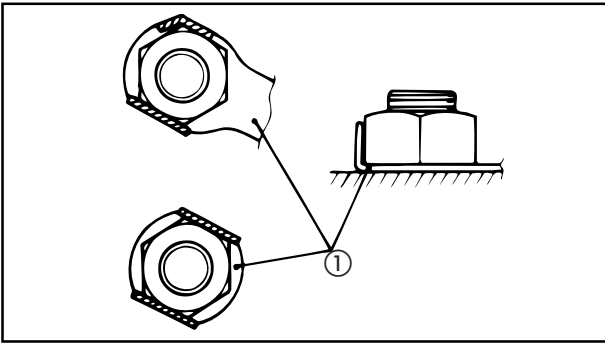
1. Use only genuine Yamaha and MBK parts for all replacements. Use oil and grease recommended by Yamaha or MBK for all lubrication jobs. Other brands may be similar in function and appearance, but inferior in quality.



EAS00022

## GASKETS, OIL SEALS AND O-RINGS

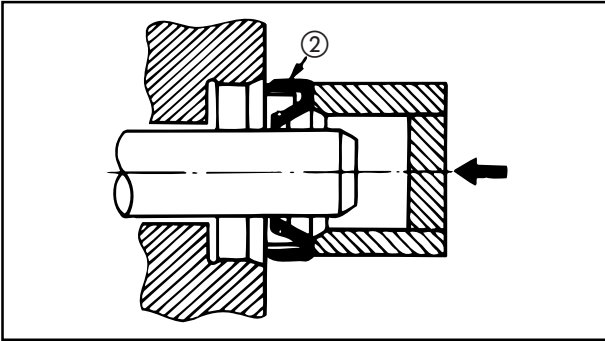
1. When overhauling the engine, replace all gaskets, seals and O-rings. All gasket surfaces, oil seal lips and O-rings must be cleaned.
2. During reassembly, properly oil all mating parts and bearings and lubricate the oil seal lips with grease.



EAS00023

**LOCK WASHERS / PLATES AND COTTER PINS**

1. After removal, replace all lock washers / plates ① and cotter pins. After the bolt or nut has been tightened to specification, bend the lock tabs along a flat of the bolt or nut.

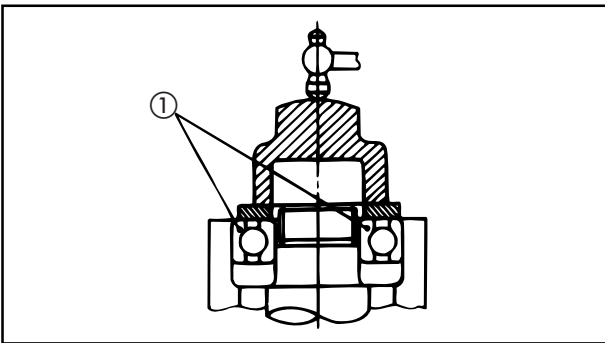


EAS00024

**BEARINGS AND OIL SEALS**

1. Install bearings and oil seals so that the manufacturer's marks or numbers are visible. When installing oil seals, lubricate the oil seal lips with a light coat of lithium soap base grease. Oil bearings liberally when installing, if appropriate.

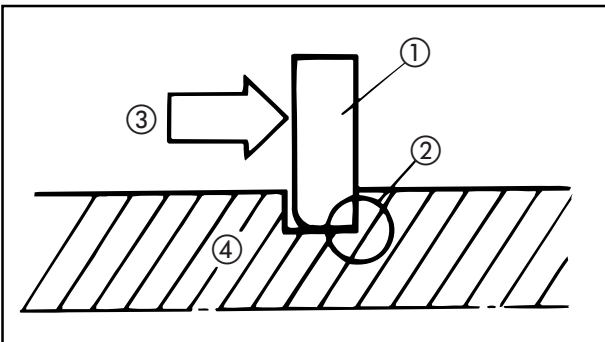
② Oil seal



**CAUTION:**

**Do not spin the bearing with compressed air because this will damage the bearing surfaces.**

① Bearing



EAS00025

**CIRCLIPS**

1. Before reassembly, check all circlips carefully and replace damaged or distorted circlips. Always replace piston pin clips after one use. When installing a circlip ①, make sure the sharp-edged corner ② is positioned opposite the thrust ③ that the circlip receives.

④ Shaft



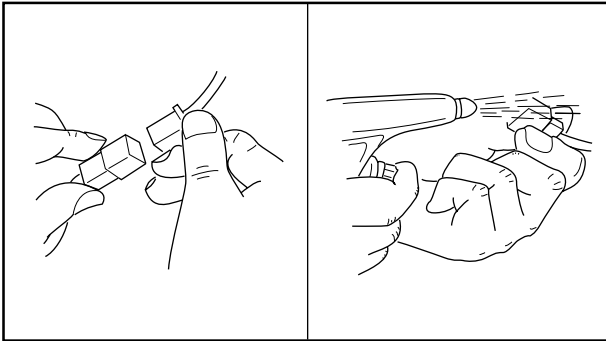
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## CHECKING THE CONNECTIONS

Check the leads, couplers, and connectors for stains, rust, moisture, etc.

### 1. Disconnect:

- lead
- coupler
- connector

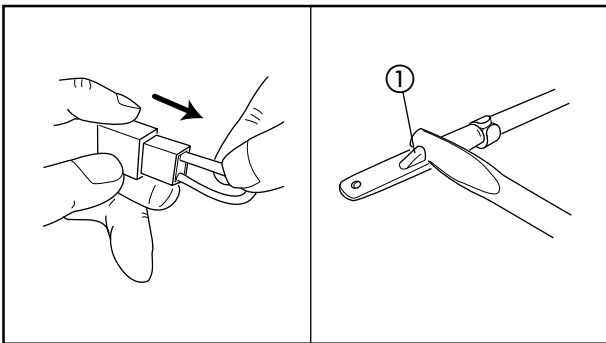


### 2. Check:

- lead
- coupler
- connector

Moisture → Dry with an air blower.

Rust/stains → Connect and disconnect several times.



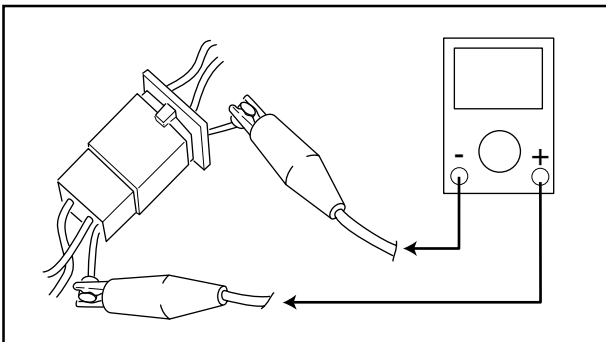
### 3. Check:

- all connections

Loose connection → Connect properly.

### NOTE:

If the pin ① on the terminal is flattened, bend it up.

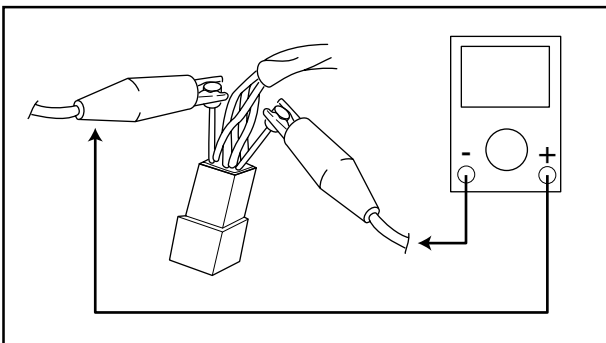


### 4. Connect:

- lead
- coupler
- connector


### NOTE:

Make sure all connections are tight.



### 5. Check:

- continuity  
(with the pocket tester)

	<b>Pocket tester 90890-03112</b>
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### NOTE:

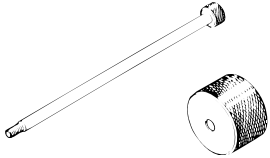
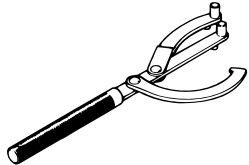
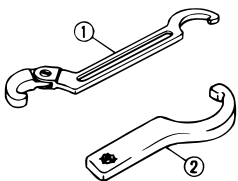
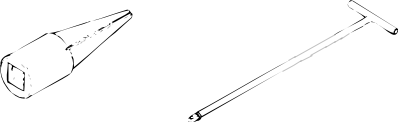
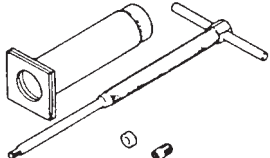

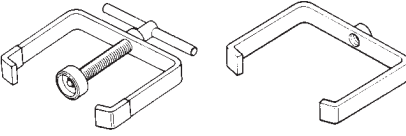
- If there is no continuity, clean the terminals.
- When checking the wire harness, perform steps 1 to 3.
- As a quick remedy, use a contact revitalizer available at most part stores.

EAS00027

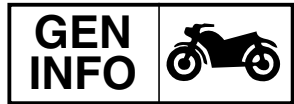
**SPECIAL TOOLS**

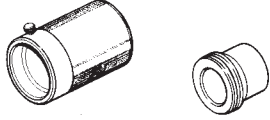
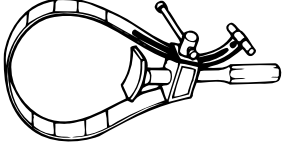
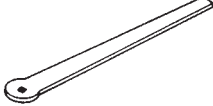

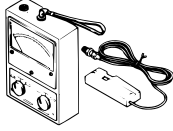
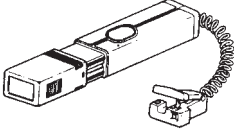
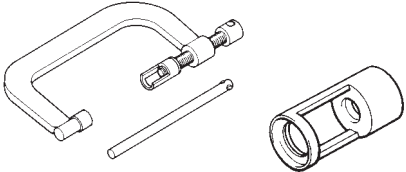

The following special tools are necessary for complete and accurate tune-up and assembly. Use only the appropriate special tools as this will help prevent damage caused by the use of inappropriate tools or improvised techniques. Special tools, part numbers or both may differ depending on the country.

When placing an order, refer to the list provided below to avoid any mistakes.

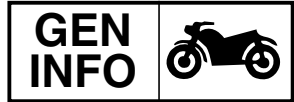
Tool No.	Tool name/usage	Illustration
90890-01083 90890-01084	Slide hammer bolt (M6) Weight  These tools are used to remove or installing the rocker arms shafts.	
90890-01235	Rotor holding tool  This tool is used to remove the flywheel magneto.	
90890-01268 90890-01403	Ring nut wrench ① Steering nut wrench ②  These tools are used to loosen and tighten the steering ring nuts.	
90890-01294 90890-01326	Damper rod holder T-handle  These tools are used for disassembling or assembling the front fork.	
90890-01304	Piston pin puller  This tool is used to remove the piston pins.	
90890-01312	Fuel level gauge  This tool is used to measure the fuel level in the float chamber.	
90890-01337 90890-01464	Clutch spring holder Clutch spring holder arm  These tools are used for removing the nut with holding the compression spring.	


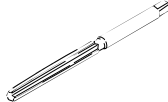
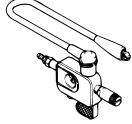
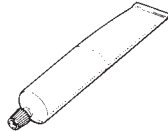
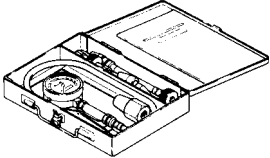
## SPECIAL TOOLS

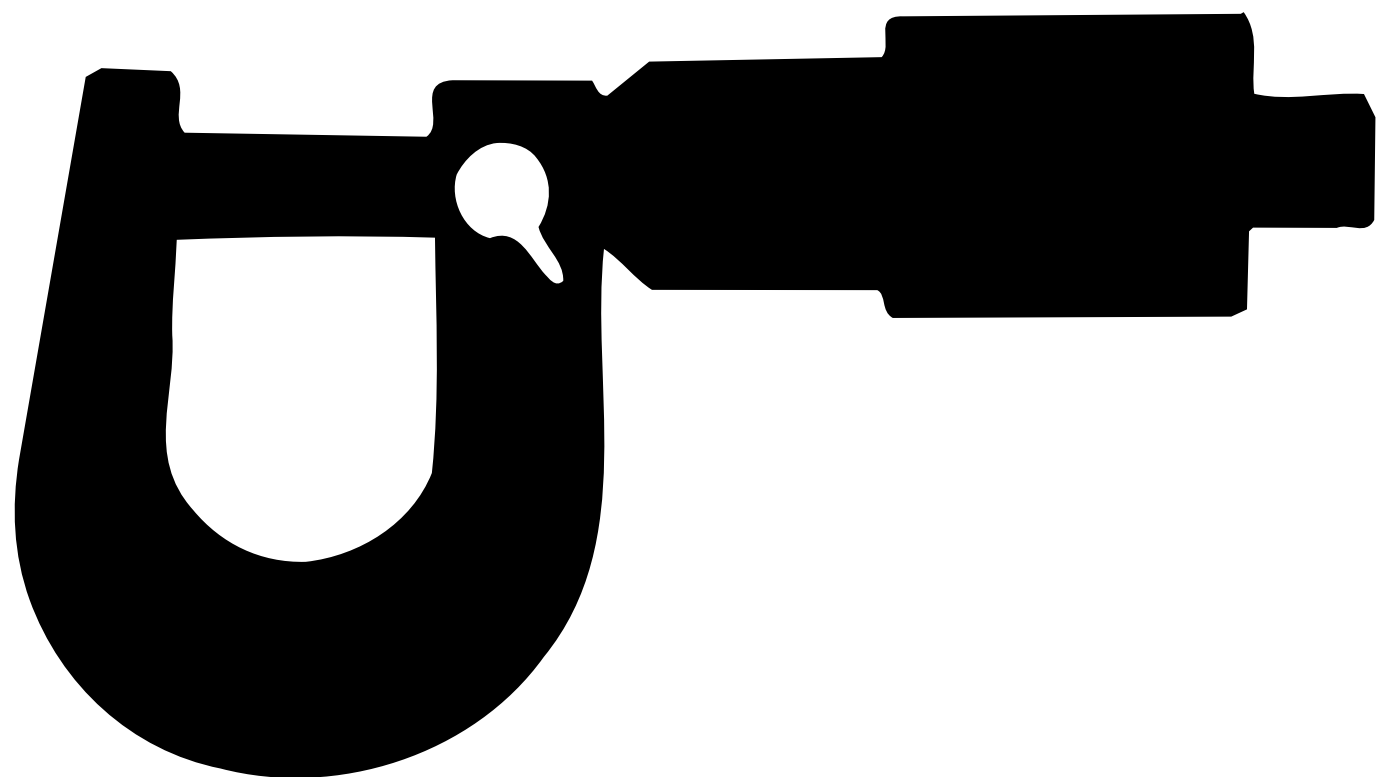


Tool No.	Tool name/usage	Illustration
90890-01367 90890-01368	Fork seal driver weight Fork seal driver attachment  These tools are used when installing the fork seal.	
90890-01701	Sheave holder  This tool is used to hold the secondary sheave when removing or installing the nut.	
90890-03111	Valve adjusting tool  This tool is necessary for adjusting valve clearance.	
90890-03112	Pocket Tester  This instrument is invaluable for checking the electrical system.	
90890-03113	Engine tachometer  This tool is needed for detecting the engine rpm.	
90890-03141	Timing light  This tool is needed for detecting ignition timing.	
90890-04019 90890-04108	Valve spring compressor Attachment  These tools are used when removing or installing the valve and the valve spring.	
90890-04116	Valve guide remover  This tool is used to remove the valve guide.	

## SPECIAL TOOLS



Tool No.	Tool name/usage	Illustration
90890-04117	Valve guide installer  This tool is needed to install the valve guide spring.	 A cylindrical metal tool with a flange on one end and a central hole.
90890-04118	Valve guide reamer  This tool is used to rebores the valve guide.	 A long, thin metal tool with a handle and a reaming edge.
90890-06754	Ignition checker  This instrument is necessary for checking the ignition system components.	 A mechanical device with a handle and a probe.
90890-85505	Yamaha bond No. 1215  This sealant (bond) is used for crankcase mating surface, etc.	 A tube of sealant with a nozzle.
90890-03081	Compression gauge  This gauge is used to measure the engine compression.	 A gauge in its carrying case.



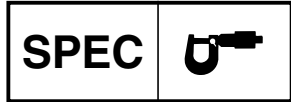
**SPEC**

**2**

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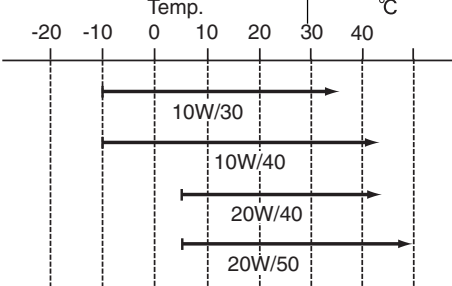
## **CHAPTER 2. SPECIFICATIONS**

<b>GENERAL SPECIFICATIONS .....</b>	<b>2-1</b>
<b>MAINTENANCE SPECIFICATIONS .....</b>	<b>2-4</b>
ENGINE .....	2-4
CHASSIS .....	2-8
ELECTRICAL .....	2-10
<b>CONVERSION TABLE .....</b>	<b>2-12</b>
<b>GENERAL TIGHTENING TORQUE SPECIFICATIONS .....</b>	<b>2-13</b>
<b>TIGHTENING TORQUES .....</b>	<b>2-14</b>
TIGHTENING TORQUES (ENGINE) .....	2-14
TIGHTENING TORQUES (CHASSIS) .....	2-16
<b>LUBRICATION POINTS AND LUBRICANT TYPES .....</b>	<b>2-17</b>
ENGINE .....	2-17
CHASSIS .....	2-18
<b>COOLING SYSTEM DIAGRAMS .....</b>	<b>2-19</b>
<b>LUBRICATION DIAGRAMS .....</b>	<b>2-21</b>
<b>CABLE ROUTING .....</b>	<b>2-23</b>



**SPECIFICATIONS**

**GENERAL SPECIFICATIONS**

Item	XQ125 [XQ150]
<b>Dimensions</b> Overall length Overall width Overall height Seat height Wheelbase Minimum ground clearance Minimum turning radius	1.920 mm 750 mm 1.180 mm 824 mm 1.400 mm 118 mm 2.050 mm
<b>Weight</b> Wet (with oil and a full fuel tank) Dry (without oil and fuel)	130 kg 124 kg
<b>Engine</b> Engine type Cylinder arrangement Displacement Bore x stroke Compression ratio Standard compression pressure (at sea level) Starting system type Lubrication system	Liquid cooled 4-stroke, SOHC Forward inclined single cylinder 124 cm <sup>3</sup> [152 cm <sup>3</sup> ] 53.7 x 54.8 mm [59.5 x 54.8 mm] 11: 1 1.400kPa/500r/min (14kgf/cm <sup>2</sup> /500r/min) Electric starter Wet sump
<b>Oil capacity</b> Engine oil      Periodic oil change Total amount Final gear case oil Total amount	 <p style="text-align: right;">API STANDARD: SE, SF, SG Type or higher grade</p> 1.2 L 1.4 L 0.15 L
<b>Coolant system</b> Radiator capacity (including all routes) Coolant reservoir capacity <from low to full level>	1.25 L 0.35 L <0.15 L>
<b>Air filter type</b>	Dry element
<b>Fuel</b> Recommended fuel Fuel tank capacity	Regular unleaded gasoline 7.5 L

## GENERAL SPECIFICATIONS

**SPEC**



Item	XQ125 [XQ150]
<b>Carburetor</b> Type/quantity Manufacturer	TK 5DS/1 [TK 5KD/1] TEIKEI
<b>Spark plug</b> Type Manufacturer Spark plug gap	CR8E NGK 0.5~0.7 mm
<b>Clutch type</b>	Dry, centrifugal automatic
<b>Transmission</b> Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Transmission type Operation	Helical gear 40/15 (2.666) Spur gear 44/12 (3.666) [42/14 (3)] V-belt automatic Centrifugal automatic type
<b>Chassis</b> Frame type Caster angle Trail	Steel tube backbone 25° 81.3 mm
<b>Tyre</b> Tyre type Size (front) Size (rear) Manufacturer (front) Manufacturer (rear) Type (front) Type (rear)	Tubeless 130/60-13 140/60-13 PIRELLI / CHENG SHIN PIRELLI / CHENG SHIN SL36 / MAXXIS SL36 / MAXXIS
<b>Tyre pressure (cold)</b> Maximum load*-except motorcycle Up to 90 kg load* Front Rear 90 kg load* ~ Maximum load* Front Rear * Load is total weight of cargo, rider, passenger and accessories except motorcycle	187 kg  190 kPa (1.90 kgf/cm <sup>2</sup> ) 200 kPa (2.00 kgf/cm <sup>2</sup> )  200 kPa (2.00 kgf/cm <sup>2</sup> ) 220 kPa (2.20 kgf/cm <sup>2</sup> )
<b>Front wheel</b> Wheel type Rim size	Cast wheel 13 x MT3.00
<b>Rear wheel</b> Wheel type Rim size	Cast wheel 13 x MT3.50



## GENERAL SPECIFICATIONS

**SPEC**



Item	XQ125 [XQ150]
<b>Brake</b> Front brake type Front brake operation Rear brake type Rear brake operation	Single disc brake Right hand operation Single disc brake Left hand operation
<b>Suspension</b> Front suspension Rear suspension	Telescopic fork Unit swing
<b>Shock absorber</b> Front fork type Rear shock absorber assembly type	Coil spring/oil damper Coil spring/oil damper
<b>Wheel travel</b> Front wheel travel Rear wheel travel	103 mm 95 mm
<b>Electrical</b> Ignition system type Charging system type Battery type Battery voltage/capacity	C.D.I Flywheel magneto CB7L-B2 or YB7L-B2 12V 8Ah
<b>Headlight type</b> Bulbs (voltage/wattage x quantity) Headlight Auxiliary light Brake/taillight Turn signal light Meter light High beam indicator light Turn indicator light Coolant temperature warning light	Bulb  12V 35W/35W x 2 12V 5W x 2 12V 21W/5W x 1 12V 10W x 4 12V 1.2W x 2 12V 1.2W x 1 12V 1.2W x 2 12V 1.2W x 1
<b>Amperage for fuses</b> Main fuse Radiator fan fuse	20 A 7.5 A

# MAINTENANCE SPECIFICATIONS

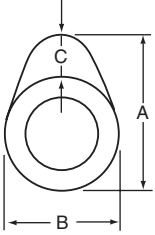
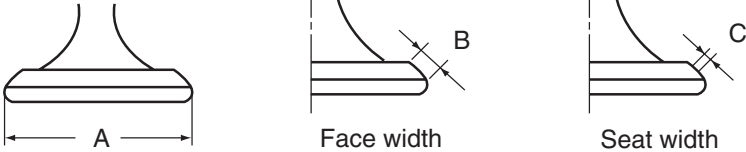
SPEC



## MAINTENANCE SPECIFICATIONS

### ENGINE

\* [XQ 150]

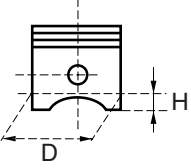


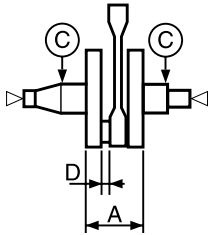
Item	Standard	Limit
<b>Cylinder head</b> Warp limit	•••	0.03 mm
<b>Cylinder</b> Bore size Out of round limit	53.700~53.705 mm [59.500~59.505 mm]* •••	••• 0.05 mm
<b>Camshaft</b> Drive system Cam dimensions Intake "A" "B" "C" Exhaust "A" "B" "C" Camshaft runout limit	 Chain drive (left)  30.811 ~ 30.911 mm 25.145 ~ 25.245 mm 5.666 m 30.811 ~ 30.911 mm 25.152 ~ 25.252 mm 5.659 m •••	•••  30.711 mm 25.045 mm ••• 30.711 mm 25.052 mm ••• 0.03 mm
<b>Cam chain</b> Cam chain type/No. of links	82 RH2005/94	•••
<b>Rocker arm/rocker armshaft</b> Rocker arm inside diameter Rocker shaft outside diameter	12.000 ~ 12.018 mm 11.981 ~ 11.991 mm	12.030mm 11.950 mm
<b>Valve, valve seat, valve guide</b> Valve clearance (cold)   IN EX  Valve dimensions  	0.10 ~ 0.14 mm 0.16 ~ 0.20 mm  Face width Seat width	••• •••   ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• •••
"A" head diameter           IN EX "B" face width            IN EX "C" seat width             IN EX Stem outside diameter    IN EX Guide inside diameter    IN EX Stem-to-guide clearance IN EX Stem runout limit Valve seat width           IN EX	26.9 ~ 27.1 mm 22.9 ~ 23.1 mm 2.687 ~ 3.252 mm 2.687 ~ 3.252 mm 0.9 ~ 1.1 mm 0.9 ~ 1.1 mm 4.475 ~ 4.490 mm 4.460 ~ 4.475 mm 4.500 ~ 4.512 mm 4.500 ~ 4.512 mm 0.01 ~ 0.037 mm 0.025 ~ 0.052 ••• 0.9 ~ 1.1 mm 0.9 ~ 1.1 mm	••• ••• ••• ••• ••• 1.6 mm 4.445 mm 4.430 mm 4.542 mm 4.542 mm 0.08 mm 0.10 mm 0.01 mm 1.6 mm 1.6 mm

# MAINTENANCE SPECIFICATIONS

**SPEC**



\* [XQ 150]

Item	Standard	Limit
<b>Valve spring</b>		
Free length IN/EX	41.94 mm	39.84 mm
Set length (valve closed) IN/EX	37.5 mm	...
Compressed pressure IN/EX	45.1 ~ 50.9 N	...
Tilt limit IN/EX	2.5° / 1.9 mm	...
<b>Piston</b>		
Piston to cylinder clearance 	0.025 ~ 0.035 mm	0.15 mm
Piston size "D" 	53.670~53.687 mm [59.470~59.487mm]*	...
Measuring point "H" 	4.5 mm	...
Piston pin bore inside diameter	15.002~15.013 mm	15.045 mm
Piston pin outside diameter	14.991~15.000 mm	14.975 mm
<b>Piston rings</b>		
Top ring:		
Type	Barrel	...
End gap (installed)	0.15 ~ 0.25 mm	0.50 mm
Side clearance (installed)	0.03 ~ 0.07 mm	0.12 mm
2 nd ring:		
Type	Taper	...
End gap (installed)	0.15 ~ 0.30 mm	0.65 mm
Side clearance (installed)	0.02 ~ 0.06 mm	0.12 mm
Oil ring:		
End gap (installed)	0.2 ~ 0.7 mm	...
<b>Crankshaft</b>		
		
Crank width "A"	47.950 ~ 48.000 mm	...
Runout limit "C"	...	0.03 mm
Big end side clearance "D"	0.15 ~ 0.45 mm	...
<b>Automatic centrifugal clutch</b>		
Clutch shoe thickness	2.0 mm	1.0 mm
Clutch housing inside diameter	120 mm [135 mm]*	120.5 [135.5]*
Weight outside diameter	20.0 mm	19.5 mm
Clutch-in revolution	3,550 ~ 4,050 rpm [3,250 ~ 3,750 rpm]*	...
Clutch-stall revolution	5,900 ~ 6900 rpm [5,600 ~ 6,400 rpm]*	...
<b>V-Belt</b>		
V-belt width	22 mm	19 mm

# MAINTENANCE SPECIFICATIONS

**SPEC**



\* [XQ 150]

Item	Standard	Limit
<b>Carburetor</b>		
Type	TK 5DS [TK 5KD]*	
I.D mark	•••	
Main jet (M.J)	#116 [#114]	•••
Main air jet (M.A.J)	ø1.0 [ø1.4]	•••
Jet needle (J.N)	4E31 (3/5) [4E32 (3/5)]*	•••
Pilot air jet (P.A.J.1)	ø1.30	•••
Needle jet (N.J)	2.590	•••
Pilot jet (P.J)	#38 [#36]	•••
Pilot screw (P.S)	2 1/4 ~ 2 3/4 [2 ~ 4]*	•••
Valve seat size (V.S)	ø2.00	•••
Starter jet 1 (G.S.1)	#45	•••
Float height (F.L)	5 ~ 6 mm	•••
Engine idle speed	1.600 ~ 1.800 rpm	•••
<b>Oil pump</b>		
Type	Trochoid	•••
Tip clearance	•••	0.15 mm
Side clearance	•••	0.15 mm
Housing and rotor clearance	•••	0.17 mm
<b>Radiator</b>		
Type	Cooling fin with electric fan	•••
Width/height thickness	170 / 282 / 23 mm	•••
Radiator cap opening pressure	100 ~ 120 kPa	•••
Reservoir tank capacity	0.35 L	•••
<b>Thermostatic valve</b>		
Manufacturer	ANGLI	•••
Valve opening temperature	82 °C	•••
Valve full open temperature	95 °C	•••