



**YAMAHA**

**MBK** 

**YN50** <sup>2002</sup>  
5RN-AE1

# **SERVICE MANUAL**

---

**YN50**  
**SERVICE MANUAL**  
**© 2002 Yamaha Motor España, S.A.**  
**First Edition, September 2002**  
**All rights reserved.**  
**The reprinting or use of this material without**  
**the written authorisation of Yamaha Motor**  
**España, S.A is forbidden.**  
**Printed in Spain.**

---

## WARNING

This Manual was written by Yamaha Motor España, S.A. principally for the use of Yamaha/MBK agents and qualified mechanics. As it is not possible to give full mechanical instructions in a manual, it is presumed that the persons using the book to carry out the maintenance and repair of Yamaha/MBK motorcycles have a basic knowledge of the concepts and procedures inherent in the technology of motorcycle repair. Without such knowledge any attempt to repair or service this model may cause problems in its use and/or safety.

Yamaha Motor España, S.A., is continually trying to improve all models which it manufactures. Authorised Yamaha/MBK agents will be notified of all significant modifications and changes in the specifications or procedures and these will appear where applicable in future editions of this manual.

## PARTICULARLY IMPORTANT INFORMATION

This material used the following notation.



A danger symbol means ATTENTION, BE CAREFUL, YOUR SAFETY IS IN DANGER!

### WARNING

Non-compliance with a WARNING *may cause the serious injury or death* of the driver, a bystander or the person inspecting of repairing the motorcycle.

### ATTENTION:

ATTENTION indicates the special precautions which should be taken in order to avoid damage to the motorcycle.

### NOTE:

NOTE provides key information to make the procedures easier and clearer.

# HOW TO USE THIS MANUAL

## FORMAT OF THIS MANUAL

This manual is composed of chapters on the main subject categories (See "Illustrated Symbols"). First heading ①: This is a chapter with a symbol at the top right-hand side of each page.

Second heading ②: This title appears at the top of each page to the left of the chapter symbol. (For the "Inspection and periodic adjustments" chapter the third heading appears)

Third heading ③: This is a final heading.

## MANUAL FORMAT

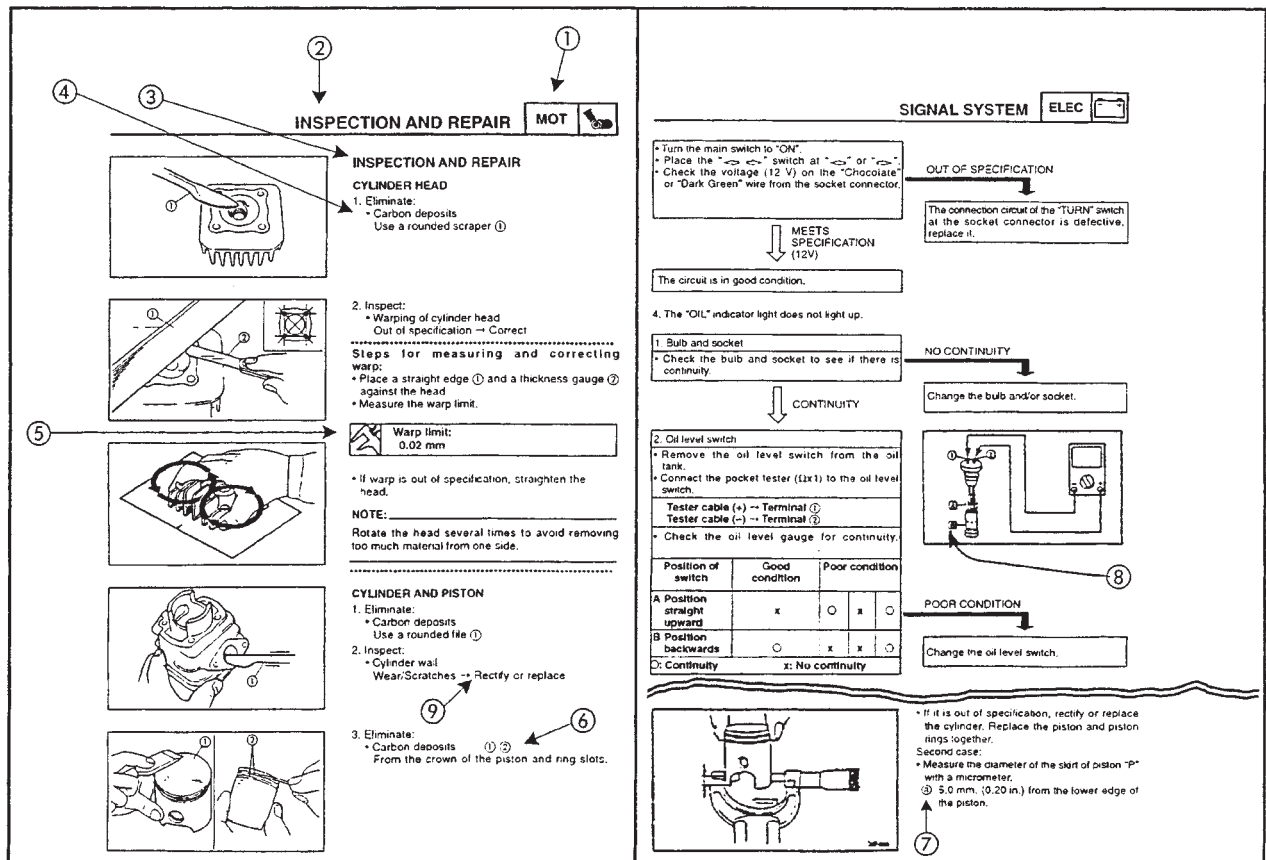
All procedures in this manual are organised sequentially, step by step. The information has been compiled to make reading easy for the mechanic and to provide useful reference material which contains ample explanations of all disassembly, repair, assembly and inspection procedures. A particularly important procedure ④ is placed between a lines of asterisks "\*" with each procedure preceded by "•".







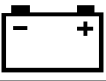






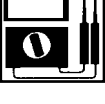







## IMPORTANT CHARACTERISTICS

- Data and special tools are put in a box preceded by a corresponding symbol ⑤.
- A number within a circle ⑥ indicates the number of a part, and an alphabetical letter within a circle indicates data or an alignment mark ⑦, everything else is indicated by a letter within a box ⑧.
- The conditions of defective components will precede an arrow symbol and the course of action to be followed will follow the symbol ⑨.

## DETAILED DIAGRAM

Each chapter provides detailed diagrams before each disassembly section, for the easy identification of disassembly/assembly procedures.



① GEN INFO 	② SPEC 	
③ INSP/ ADJ 	④ ENG 	
⑤ CARB 	⑥ CHAS 	
⑦ ELEC 	⑧ TRBL/ SHTG ?	
⑨ 	⑩ 	
⑪ 	⑫ 	
⑬ 	⑭ 	
⑮ 		
⑯ 	⑰ 	⑱ 
⑲ 	⑳ 	㉑ 
㉒ 	㉓ <b>NEW</b>	

## ILLUSTRATED SYMBOLS

### (See illustration)

Illustrated symbols ① to ⑧ are designed as tabs to be followed with the thumb to indicate the chapter number and the index.

- ① General information
- ② Specifications
- ③ Periodic inspection and adjustment
- ④ General overhaul of the engine
- ⑤ Carburation
- ⑥ Chassis
- ⑦ Electrical system
- ⑧ Troubleshooting

Illustrated symbols ⑨ to ⑮ will be used to identify the specifications which appear in the text.







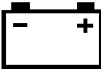

- ⑨ Refill with fluid
- ⑩ Lubricant
- ⑪ Special tool
- ⑫ Tightening
- ⑬ Wear limit, clearance
- ⑭ Engine speed
- ⑮ Ω V, A

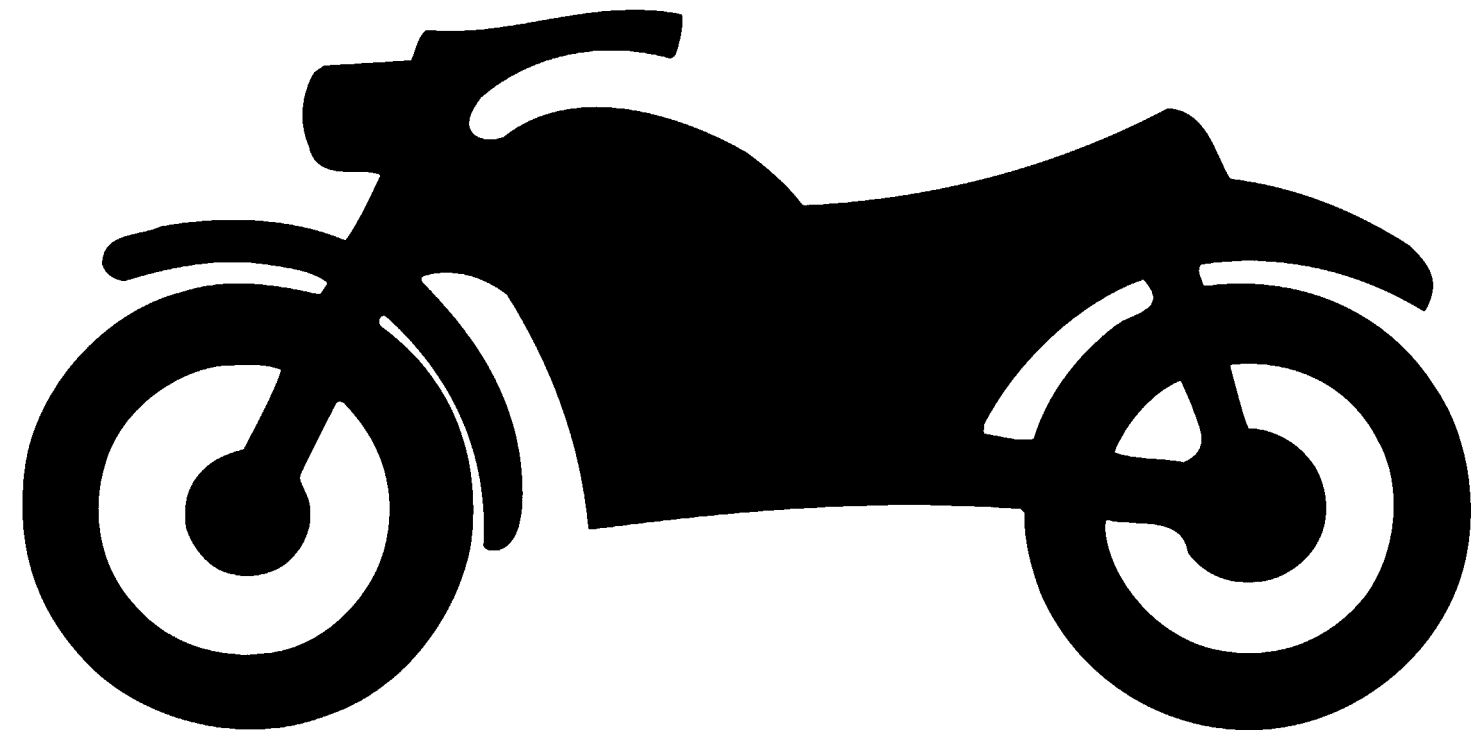
Illustrated symbols ⑯ to ㉓ of detailed diagrams, indicate the degree of lubricant and the location of the lubrication point.

- ⑯ Apply engine oil
- ⑰ Apply gear oil
- ⑱ Apply molybdenum disulphide oil
- ⑲ Apply grease to wheel bearings
- ⑳ Apply grease with lightweight lithium soap base
- ㉑ Apply molybdenum disulphide grease
- ㉒ Apply bonding agent (LOCTITE®)
- ㉓ Use a new part.

---

# INDEX

<b>GENERAL INFORMATION</b>	
	GEN/ INFO <b>1</b>
<b>SPECIFICATIONS</b>	
	SPEC <b>2</b>
<b>PERIODIC INSPECTION AND ADJUSTMENTS</b>	
	INSP ADJ <b>3</b>
<b>GENERAL OVERHAUL OF ENGINE</b>	
	ENG <b>4</b>
<b>CARBURATION</b>	
	CARB <b>5</b>
<b>CHASSIS</b>	
	CHAS <b>6</b>
<b>ELECTRICAL SYSTEM</b>	
	ELEC <b>7</b>
<b>TROUBLESHOOTING</b>	
	TRBL SHTG <b>8</b>



**GEN/  
INFO**

**1**

---

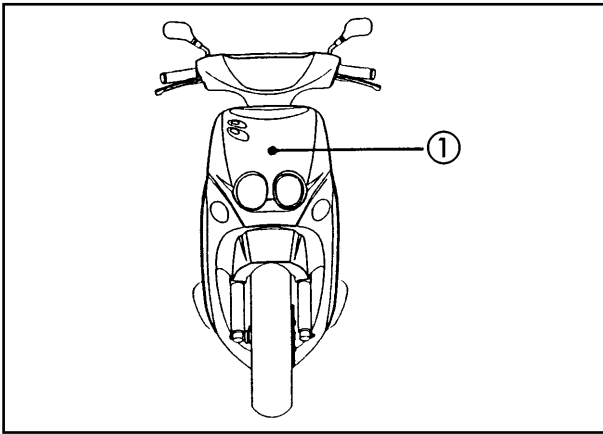
## CHAPTER 1 GENERAL INFORMATION

<b>IDENTIFICATION OF THE SCOOTER</b> .....	1-1
SERIAL NUMBER OF THE FRAME .....	1-1
ENGINE SERIAL NUMBER.....	1-1
<b>IMPORTANT INFORMATION</b> .....	1-2
CHANGE OF ALL PARTS .....	1-2
OIL SEALS AND O-RINGS .....	1-2
SEALING WASHERS/PLATE AND KEYS.....	1-2
BEARING AND OIL SEALS .....	1-2
CIRCLIPS .....	1-3
<b>SPECIAL TOOLS</b> .....	1-3
FOR SERVICING THE ENGINE .....	1-3
FOR SERVICING THE CHASSIS .....	1-5
FOR ELECTRICAL COMPONENTS .....	1-6



## IDENTIFICATION OF THE SCOOTER

GEN/  
INFO

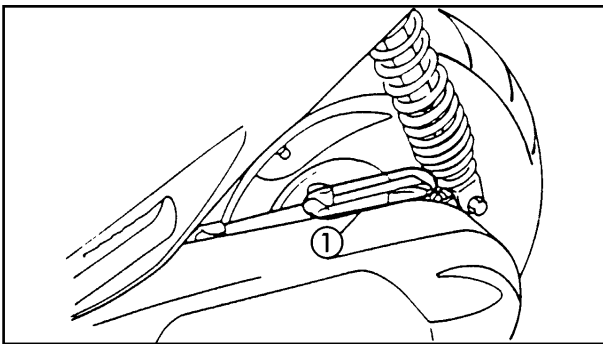


### GENERAL INFORMATION SCOOTER IDENTIFICATION

#### FRAME SERIAL NUMBER

The serial number of the frame ① is stamped on the steering head pipe.

Frame VTL5AD            according standard EU0  
Frame VTL5A15        according standard EU1  
Frame VTL5A19        according Mofa Version



#### ENGINE SERIAL NUMBER

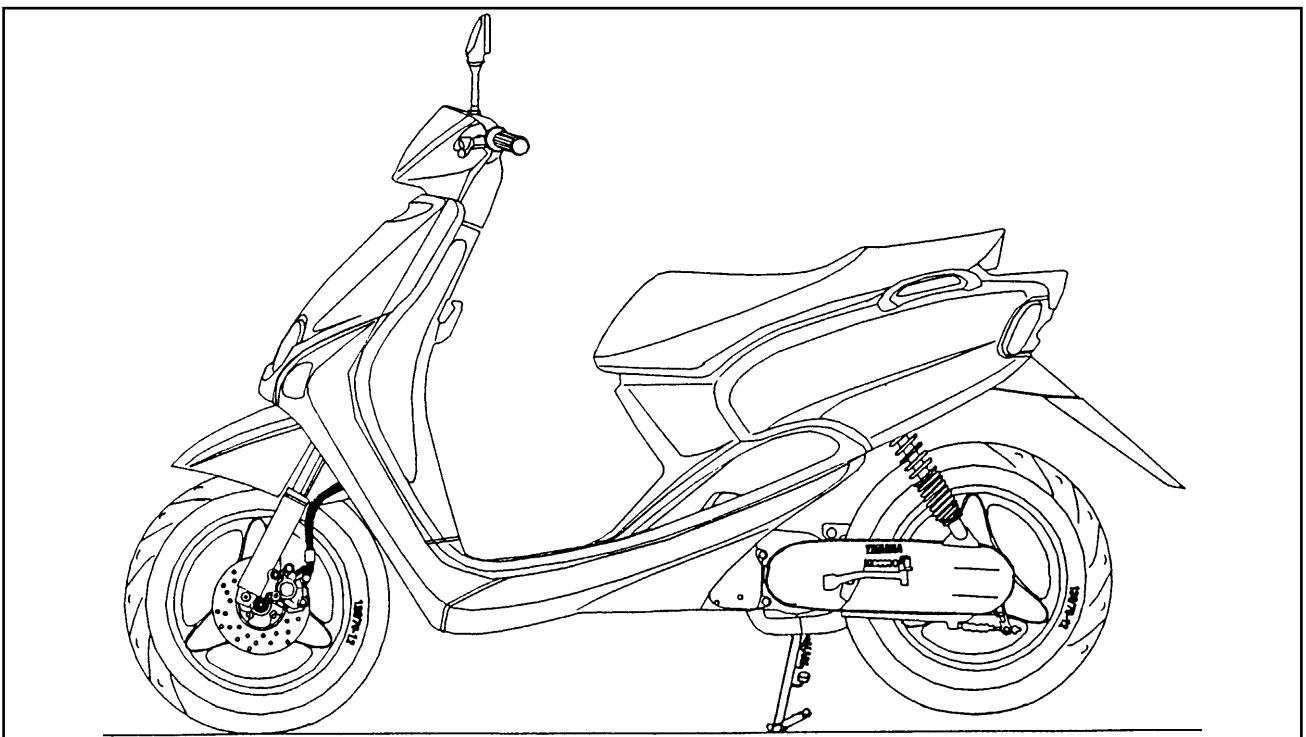
The engine serial number ① is stamped on the upper part of the rear left-hand section of the gear box.

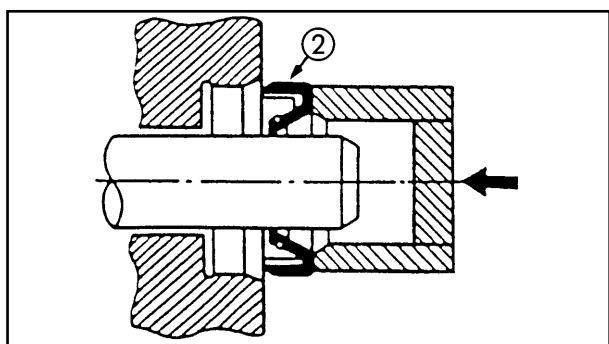
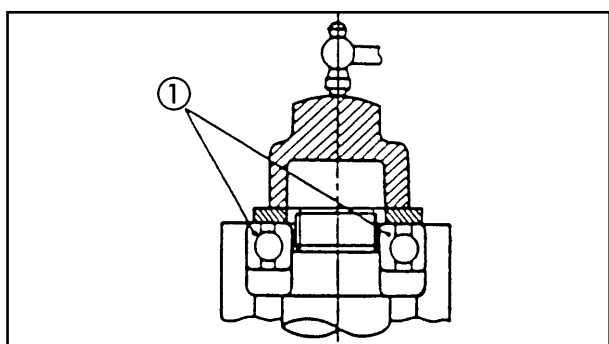
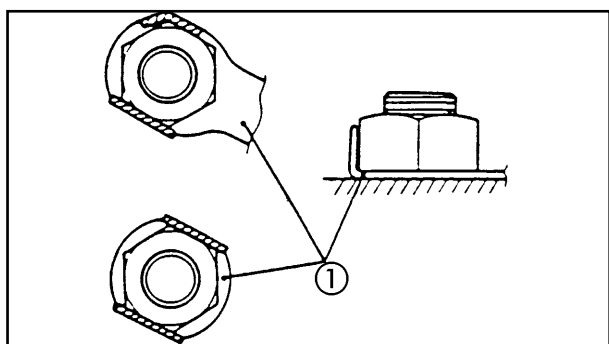
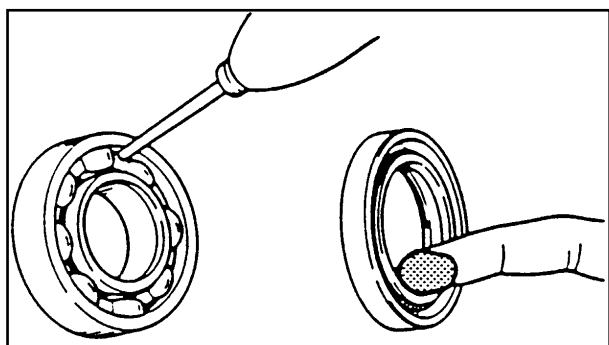
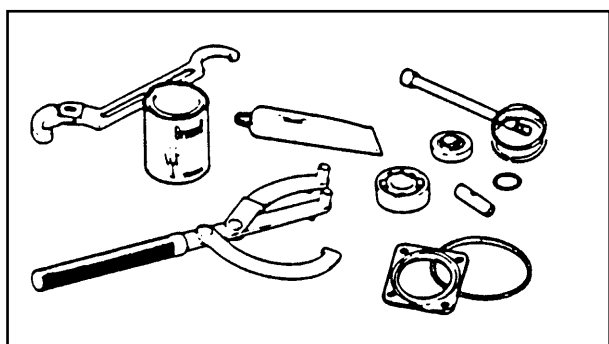
#### NOTE:

The first three digits of these numbers identify the model, the remaining digits are the manufacturing number of the unit.

#### NOTE:

The designs and specification are subject to change without prior notice.



**IMPORTANT INFORMATION****GEN/  
INFO****IMPORTANT INFORMATION****CHANGE OF ALL PARTS**

1. We recommend that original Yamaha parts are used as spare parts. Use the oil and/or grease recommended by Yamaha for assembly and adjustment.

**GASKETS, OIL SEALS AND O-RINGS**

1. All gaskets and o-rings should be replaced when the engine is overhauled and repaired. All gasket surfaces, the lips of seals and o-rings should be cleaned.
2. Lubricate with grease all corresponding parts and bearings during assembly. Apply grease on the lips of seals.

**SEALING WASHER/PLATES AND KEYS**

1. All washers/plates ① and keys should be replaced when they are removed. The locking tabs should be folded along the flat parts of the bolts or nuts after correctly tightening them.

**BEARINGS AND OIL SEALS**

1. Install the bearings ① and oil seals ② with their manufacturer's marks or numbers facing outwards (i.e. the printed letters should be on the side exposed to view). When the oil seals are installed, apply a thin layer of light lithium-based grease on the edges of the seal. Put oil on the bearings when they are installed.

**ATTENTION:**

**Do not turn the bearings in compressed air to dry them. This will damage the surface of the bearings.**