





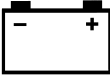
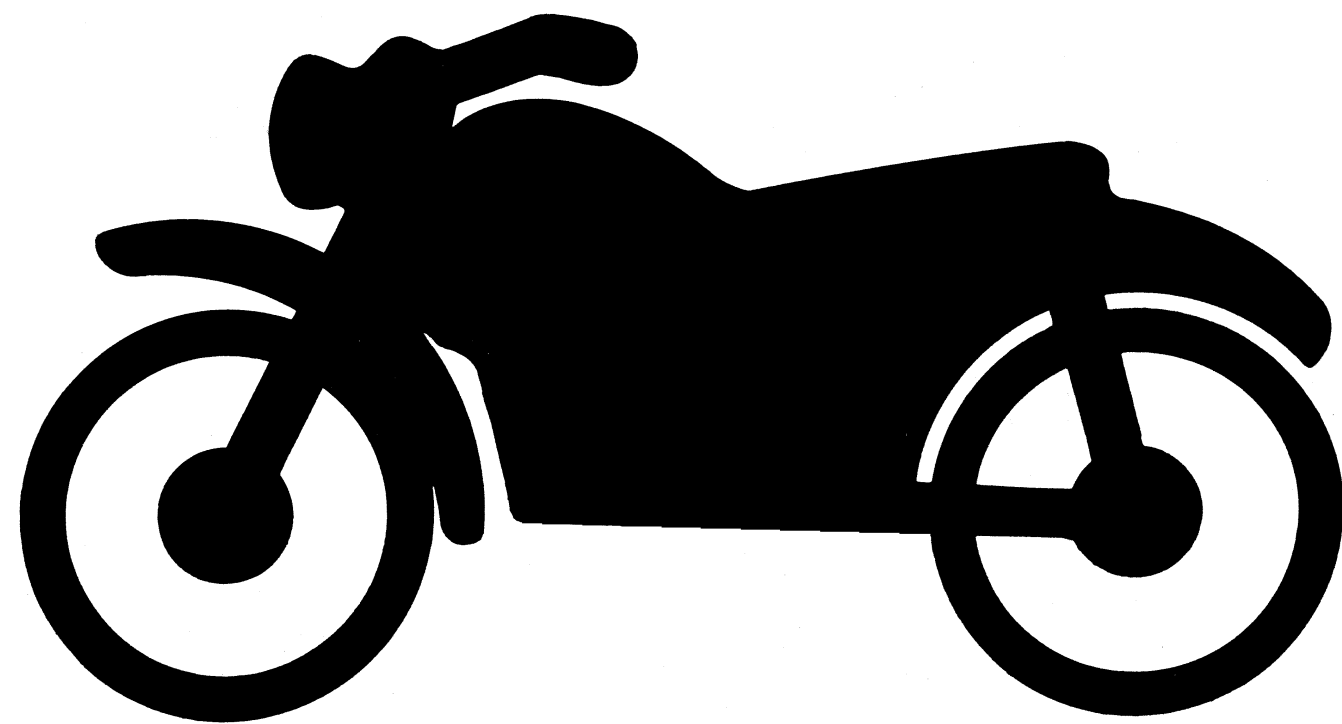


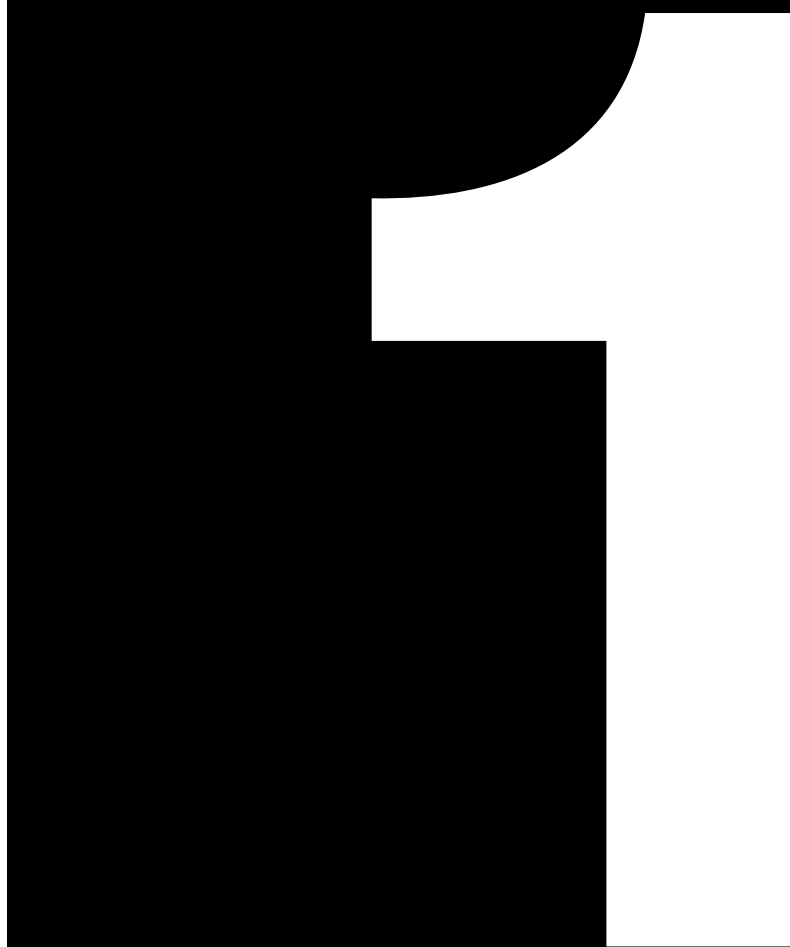
# TABLE OF CONTENTS

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





**GEN  
INFO**



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## **CHAPTER 1. GENERAL INFORMATION**

<b>MOTORCYCLE IDENTIFICATION</b> .....	1-1
VEHICLE IDENTIFICATION NUMBER.....	1-1
MODEL LABEL .....	1-1
 <b>IMPORTANT INFORMATION</b> .....	1-2
PREPARATION FOR REMOVAL PROCEDURES .....	1-2
REPLACEMENT PARTS .....	1-2
GASKETS, OIL SEALS AND O-RINGS .....	1-2
LOCK WASHERS/PLATES AND COTTER PINS .....	1-3
BEARINGS AND OIL SEALS .....	1-3
CIRCLIPS .....	1-3
 <b>CHECKING OF CONNECTIONS</b> .....	1-4
 <b>SPECIAL TOOLS</b> .....	1-5

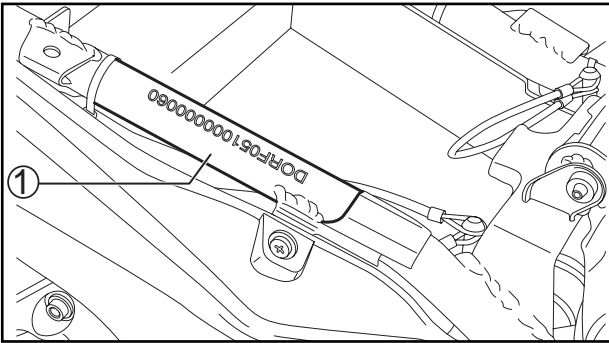


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## GENERAL INFORMATION

### MOTORCYCLE IDENTIFICATION VEHICLE IDENTIFICATION NUMBER

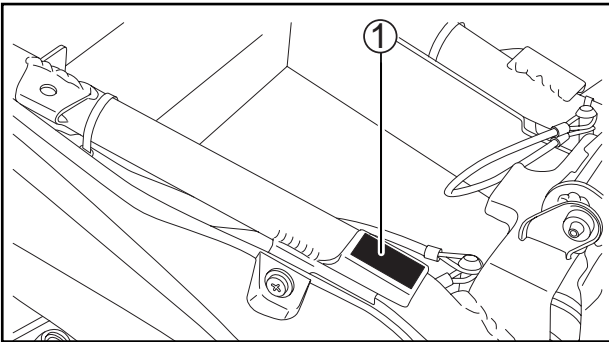
The vehicle identification number ① is stamped into the frame under the seat.

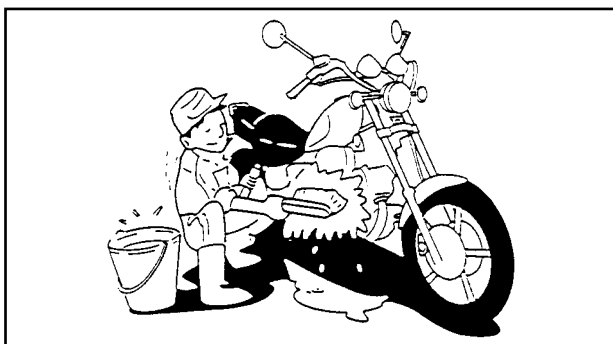


### MODEL LABEL

The model label ① is affixed to the frame under the seat.

This information will be needed to order spare parts.



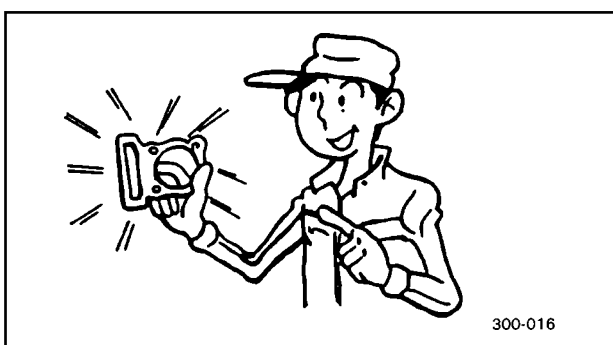


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**IMPORTANT INFORMATION**

**PREPARATION FOR REMOVAL PROCEDURES**

1. Remove all dirt, mud, dust and foreign material before removal and disassembly.
2. Use proper tools and cleaning equipment. Refer to the "SPECIAL TOOLS" section.
3. When disassembling the machine, 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 machine disassembly, clean all 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.



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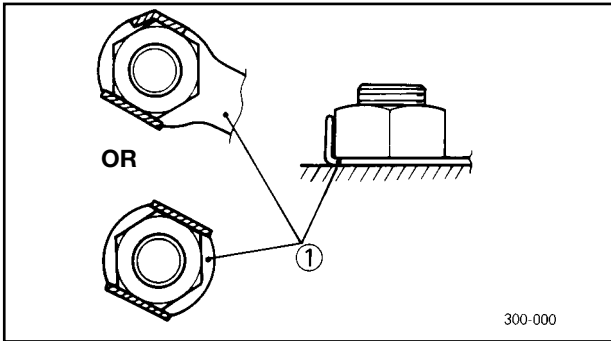
**REPLACEMENT PARTS**

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

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

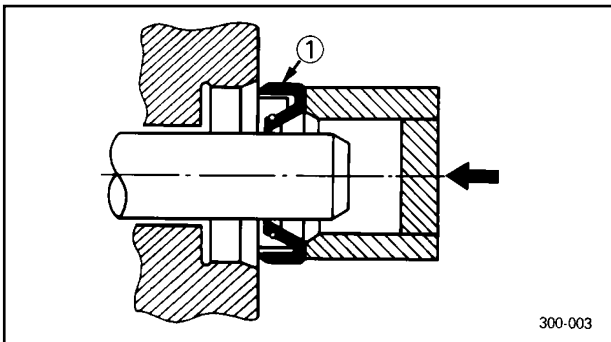
1. Replace all gaskets, seals and O-rings when overhauling the engine. All gasket surfaces, oil seal lips and O-rings must be cleaned.
2. Properly oil all mating parts and bearings during reassembly. Apply grease to the oil seal lips.



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**LOCK WASHERS/PLATES AND COTTER PINS**

1. Replace all lock washers/plates ① and cotter pins after removal. Bend lock tabs along the bolt or nut flats after the bolt or nut has been tightened to specification.



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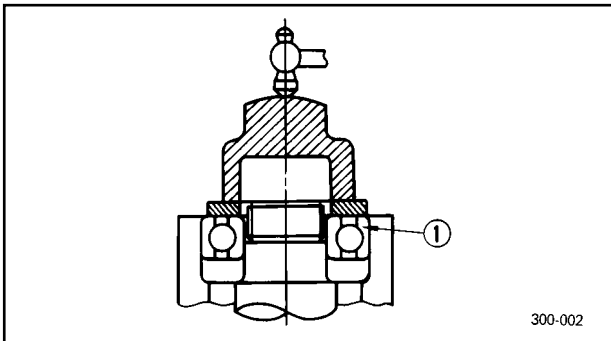
**BEARINGS AND OIL SEALS**

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

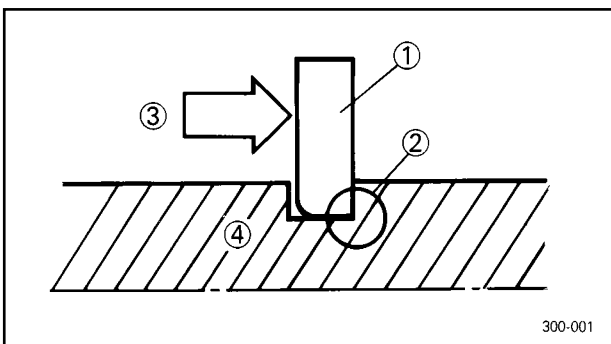
① Oil seal

**CAUTION:**

**Do not use compressed air to spin the bearings dry. This will damage the bearing surfaces.**



① Bearing



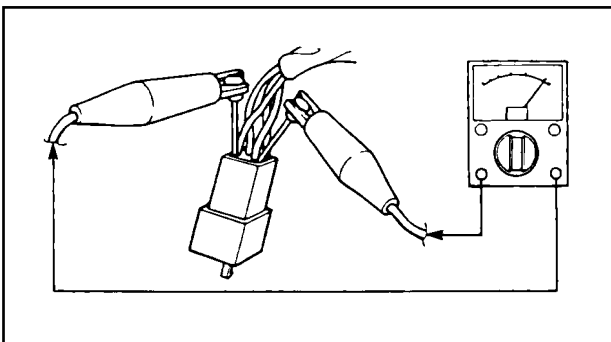
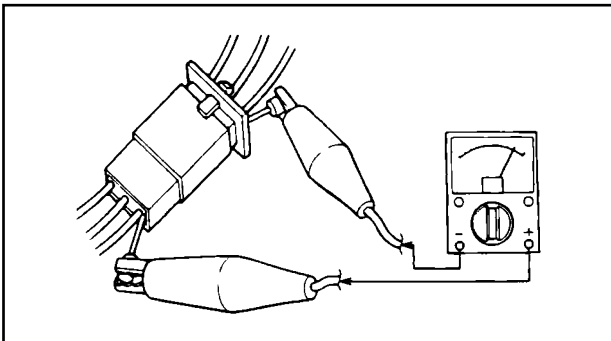
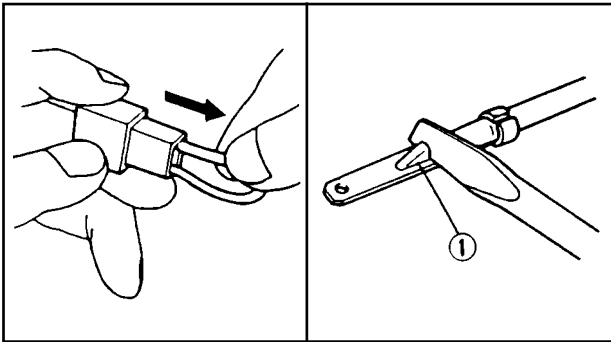
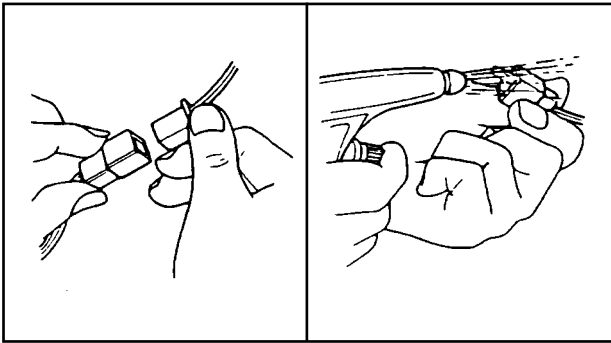
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**CIRCLIPS**

1. Check all circlips carefully before reassembly. Always replace piston pin clips after one use. Replace distorted circlips. When installing a circlip ①, make sure that the sharp-edged corner ② is positioned opposite the thrust ③ it receives. See sectional view.

④ Shaft





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**CHECKING OF CONNECTIONS**

Check the connectors for stains, rust, moisture, etc.

1. Disconnect:
  - connector
2. Check:
  - connector
  - Moisture → Dry each terminal with an air blower.
  - Stains/rust → Connect and disconnect the terminals several times.
3. Check:
  - connector leads
  - Looseness → Bend up the pin ① and connect the terminals.

4. Connect:
  - connector terminals

**NOTE:** \_\_\_\_\_  
The two terminals “click” together.  
\_\_\_\_\_

5. Check:
  - continuity (using a pocket tester)

**NOTE:** \_\_\_\_\_

- If there is no continuity, clean the terminals.
- When checking the wire harness be sure to perform steps 1 to 3.
- As a quick remedy, use a contact revitalizer available at most part stores.
- Check the connector with a pocket tester as shown.

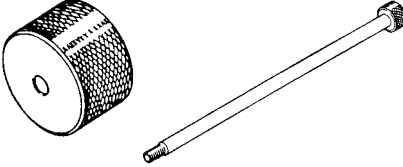
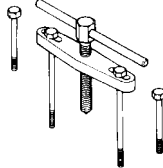
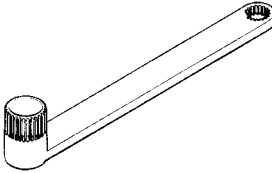
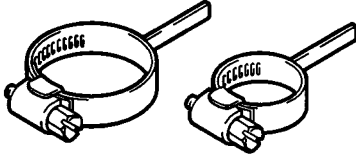
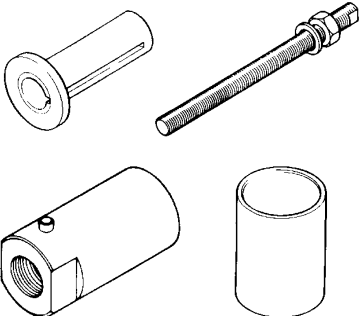
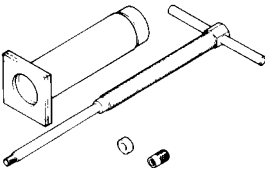

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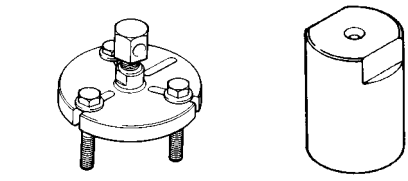
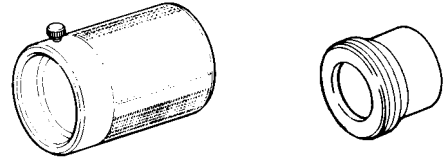
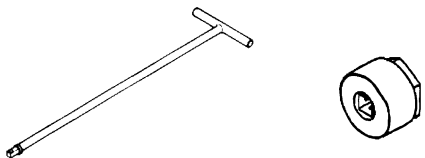
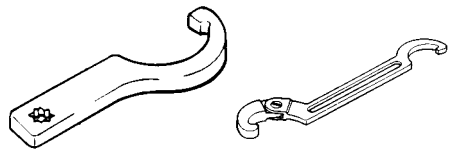
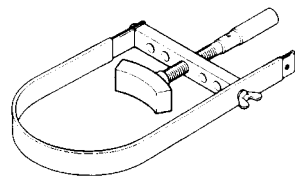
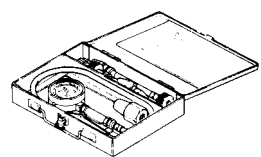
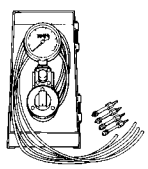
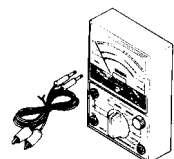
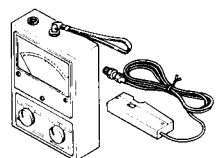
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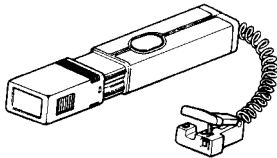
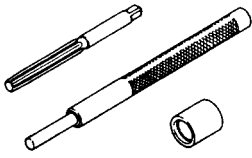
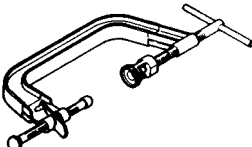
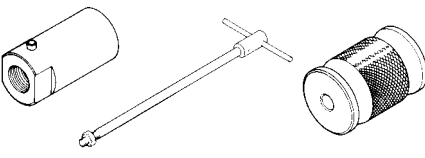
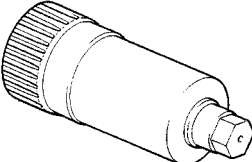

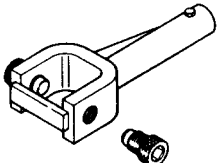
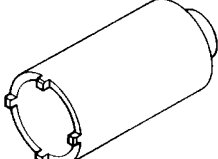
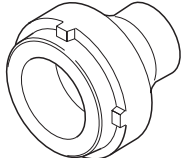
**SPECIAL TOOLS**

The following special tools are necessary for complete and accurate tune-up and assembly. Use only the appropriate special tools; this will help prevent damage caused by the use of inappropriate tools or improvised techniques. Special tools may differ by shape and part number from country to country. In such a case, two types are provided.

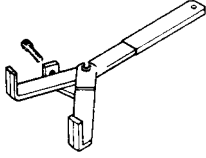
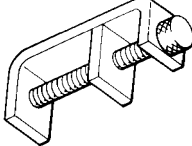
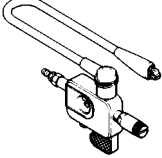
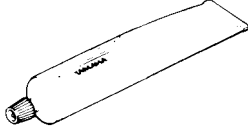
When placing an order, refer to the list provided below to avoid any mistakes.

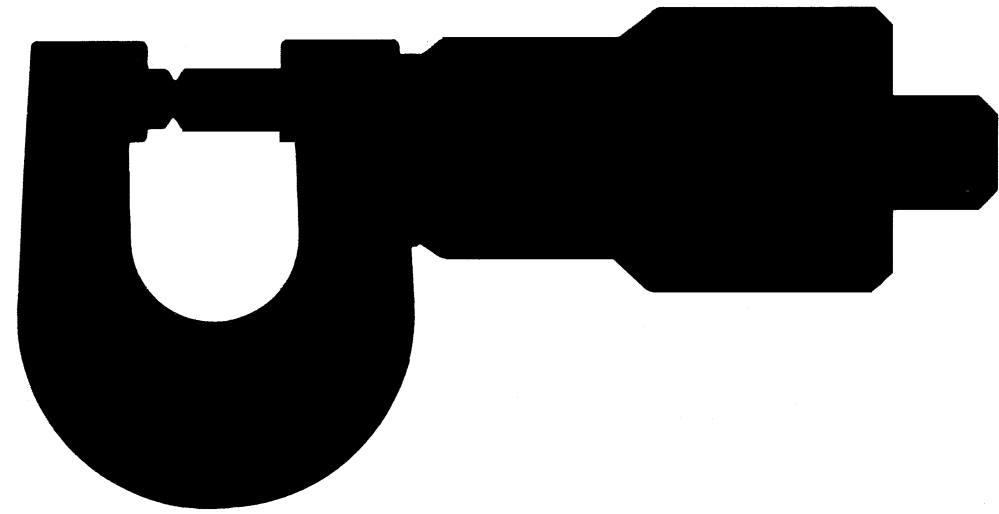
Tool No.	Tool name/How to use	Illustration
Weight 90890-01084 Bolt 90890-01085	Slide hammer bolt/weight  These tools are used to remove the rocker arm shaft.	
90890-01135	Crankcase separating tool  This tool is used to remove the crankshaft.	
90890-01229	Coupling gear/middle shaft tool  This tool is needed when removing or installing the final pinion shaft nut.	
Final gear backlash band 90890-01230 Middle gear backlash band 90890-01231	Final gear backlash band  This tool is needed when measuring final gear/middle gear backlash.	
Installer pot 90890-01274 Bolt 90890-01275 Adapter 90890-04130 Spacer 90890-04060	Crankshaft installer pot/bolt/adaptor/spacer  These tools are used to install the crankshaft.	
90890-01304	Piston pin puller  This tool is used to remove the piston pin.	
90890-01312	Fuel level gauge  This gauge is used to measure the fuel level in the float chamber.	

Tool No.	Tool name/How to use	Illustration
Puller 90890-01362 Adapter 90890-04131	Flywheel puller/adapter  These tools are needed to remove the rotor.	
Weight 90890-01367 Adapter 90890-01374	Fork seal driver weight/adapter (Ø 43 mm)  These tools are needed when installing the slide metal, oil seal and dust seal into the fork.	
T-handle 90890-01326 Holder 90890-01327	T-handle/front fork damper rod holder  These tools are needed to loosen and tighten the front fork damper rod holding bolt.	
Ring nut wrench 90890-01403 Exhaust nut wrench 90890-01268	Ring nut wrench/exhaust and steering nut wrench  This tool is needed to loosen and tighten the steering stem ring nut.	
90890-01701	Sheave holder  This tool is needed to hold the rotor when removing or installing the rotor bolt.	
90890-03081	Compression gauge set  These tools are needed to measure engine compression.	
90890-03094	Vacuum gauge  This gauge is needed for carburetor synchronization.	
90890-03112	Pocket tester  This instrument is needed for checking the electrical system.	
90890-03113	Engine tachometer  This tool is needed for observing engine r/min.	

Tool No.	Tool name/How to use	Illustration
90890-03141	Timing light  This tool is necessary for checking ignition timing.	
90890-04014	Valve guide remover & installer  This tool is needed to remove and install the valve guide.	
90890-04019	Valve spring compressor  This tool is needed to remove and install the valve assemblies.	
Adapter 90890-01277 Shock puller 90890-01290 Weight 90890-01291	Crankshaft installer bolt adapter/armature shock puller/weight  These tools are needed when removing the final pinion shaft.	
90890-04137	Bearing retainer wrench  This tool is needed when removing or installing the middle drive shaft assembly.	
Wrench 90890-04138 Holder 90890-04055	Middle drive shaft nut wrench/Middle drive shaft holder  These tools are needed when removing or installing the middle drive shaft bearing.	
90890-04062	Universal joint holder  This tool is needed when removing or installing the driven pinion gear nut.	
90890-04077	Bearing retainer wrench  This tool is needed when removing or installing the final drive pinion gear assembly.	
90890-04050	Bearing retainer wrench  This tool is needed when removing or installing the final shaft drive bearing retainer.	



Tool No.	Tool name/How to use	Illustration
90890-04086	Clutch holding tool This tool is needed to hold the clutch when removing or installing the clutch boss nut.	
90890-04090	Damper spring compressor This tool is needed when removing or installing the damper spring.	
90890-06754	Dynamic spark tester Ignition checker This instrument is necessary for checking the ignition system components.	
90890-85505	Yamaha bond No.1215 This sealant (bond) is used on crankcase mating surfaces, etc.	



**SPEC**

**2**

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## CHAPTER 2. SPECIFICATIONS

<b>GENERAL SPECIFICATIONS .....</b>	2-1
<b>MAINTENANCE SPECIFICATIONS .....</b>	2-4
ENGINE .....	2-4
CHASSIS .....	2-14
ELECTRICAL .....	2-18
<b>GENERAL TORQUE SPECIFICATIONS.....</b>	2-20
<b>CONVERSION TABLE.....</b>	2-20
<b>LUBRICATION POINTS AND LUBRICANT TYPES.....</b>	2-21
ENGINE .....	2-21
CHASSIS .....	2-22
<b>LUBRICATION DIAGRAMS .....</b>	2-23
<b>CABLE ROUTING .....</b>	2-26