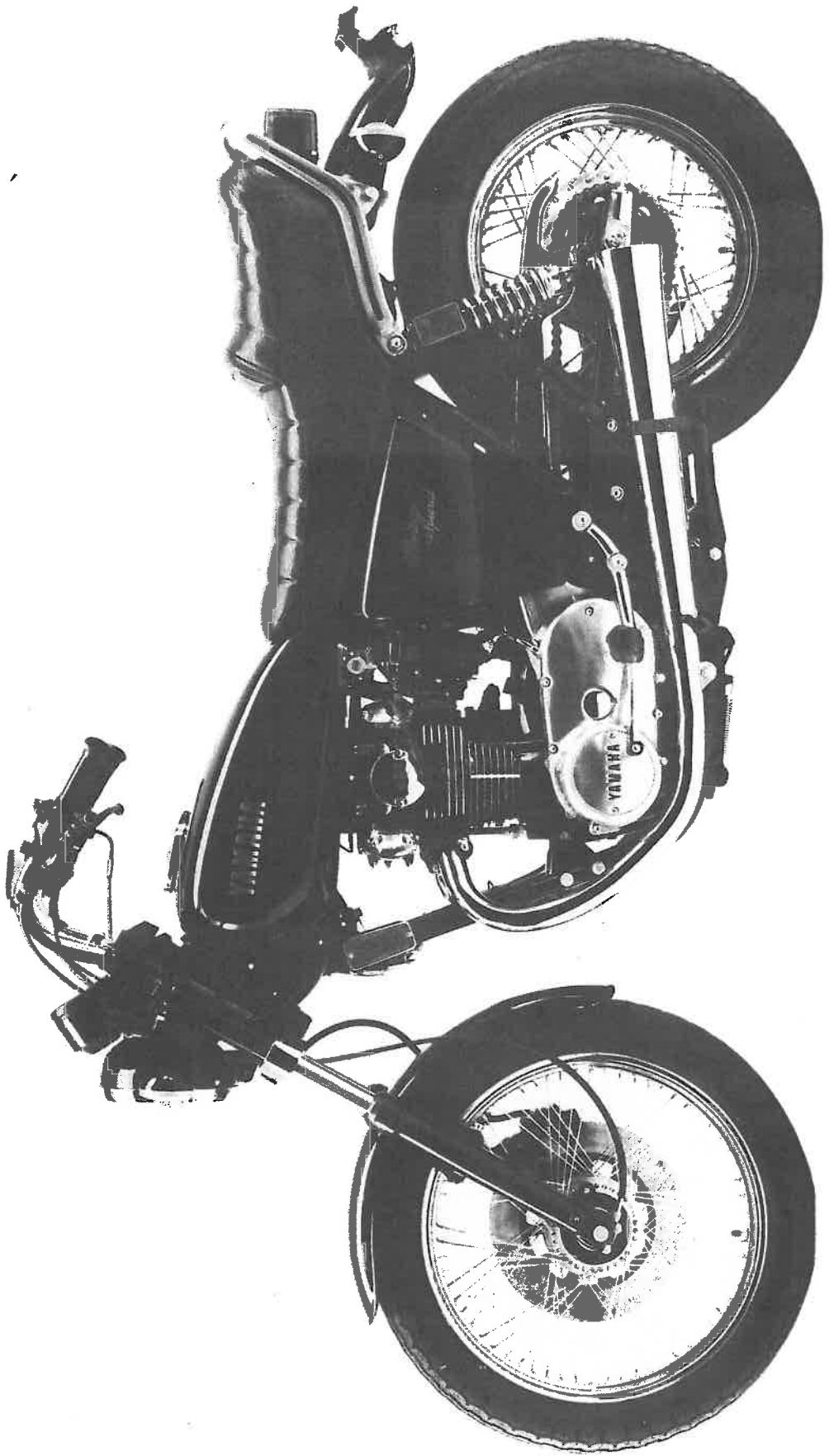




YAMAHA

XS650SJ

Service Manual



NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanic's education into one manual, so it is assumed that persons using this book to perform maintenance and repairs on Yamaha motorcycles have a basic understanding of the mechanical concepts and procedures inherent to motorcycle repair technology. Without such knowledge, attempted repairs or service to this model may render it unfit to use and/or unsafe.

This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools is necessary to ensure that the motorcycle will operate as designed. If there is any question about a service procedure, it is imperative that you contact a Yamaha dealer for any service information changes that apply to this model. This policy is intended to provide the customer with the most satisfaction from his motorcycle and to conform with federal environmental quality objectives.

Yamaha Motor Company, Ltd. is continually striving to improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all Authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

NOTE: _____

This Service Manual contains information regarding periodic maintenance to the emission control system for the XS650SJ. Please read this material carefully.

Particularly important information is distinguished in this manual by the following notations:

NOTE: A NOTE provides key information to make procedures easier or clearer.

CAUTION: A CAUTION indicates special procedures that must be followed to avoid damage to the motorcycle.

WARNING: A WARNING indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

SERVICE DEPT.
INTERNATIONAL DIVISION
YAMAHA MOTOR CO., LTD.

XS650SJ
SERVICE MANUAL
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CHAPTER 1. GENERAL INFORMATION

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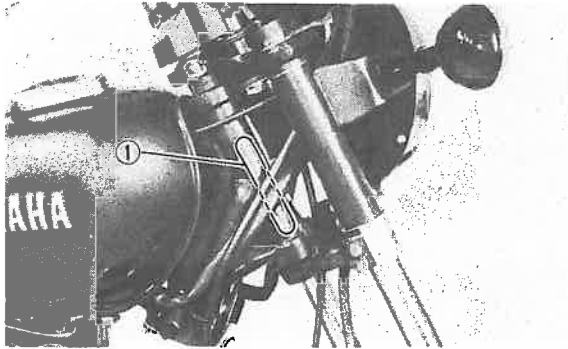


GENERAL INFORMATION

MOTORCYCLE IDENTIFICATION

A. Frame Serial Number

The frame serial number is stamped into the right-side of the steering head pipe.



1. Frame serial number

Starting Serial Number:

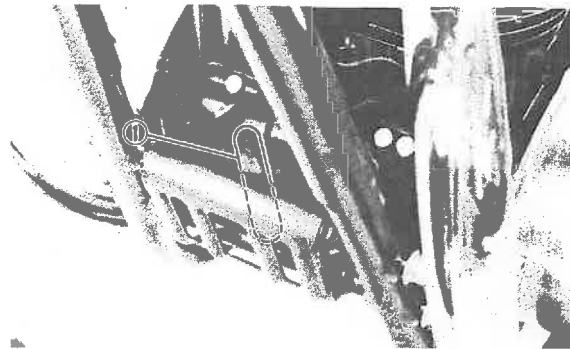
XS650SH 5V4-000101

B. Engine Serial Number

The engine serial number is stamped into the elevated part of the right rear section of the engine.

NOTE: _____

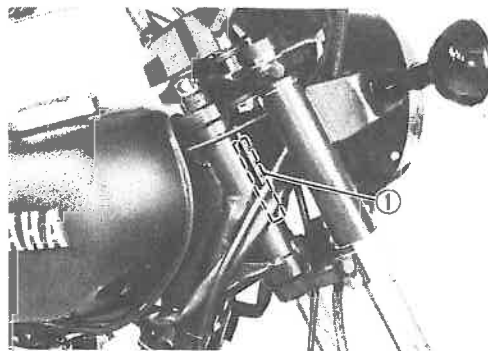
The first three digits of these numbers are for model identification; the remaining digits are the unit production number.



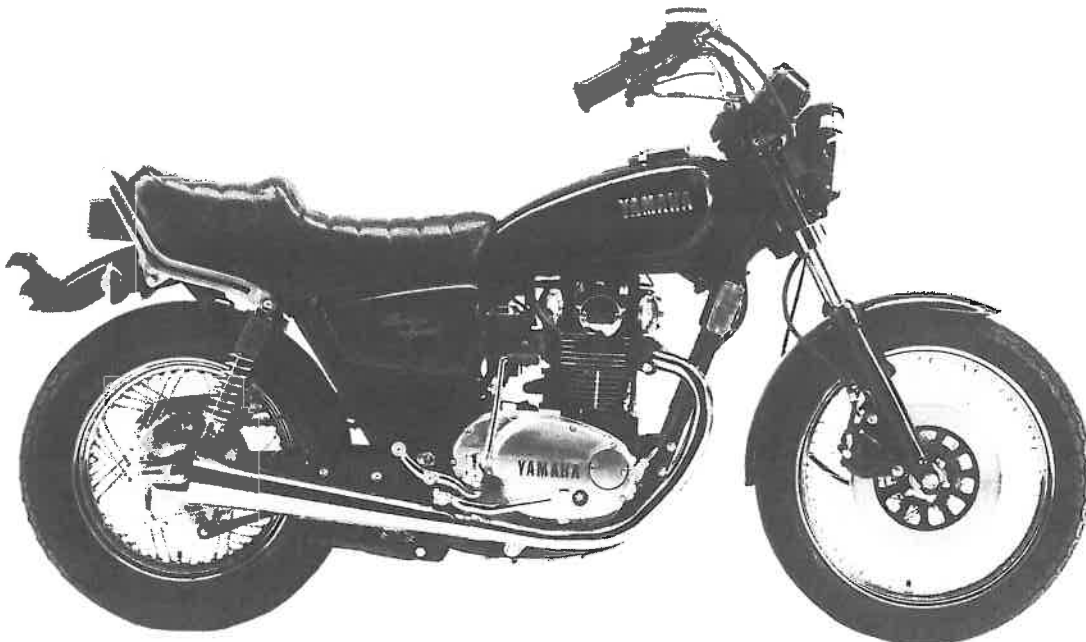
1. Engine serial number

C. Vehicle Identification Number

The vehicle identification number is on the left-side of the steering head pipe.



1. Vehicle identification number

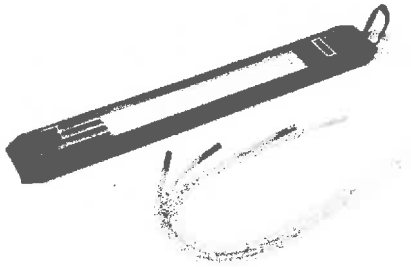


SPECIAL TOOLS

The proper special tools are necessary for complete and accurate tune-up and assembly. Using the correct special tool will help prevent damage caused by the use of improper tools or improvised techniques.

A. For Tune-up

1. Compression gauge
2. Timing light
3. Tachometer
4. Vacuum gauge
P/N TLU-11080-30-02



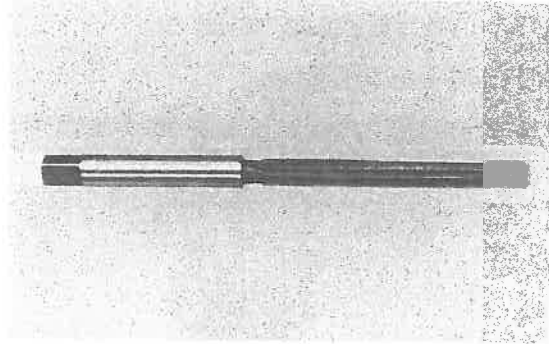
B. For Engine Service

1. Clutch hub holder
P/N TLM-90910-42-00



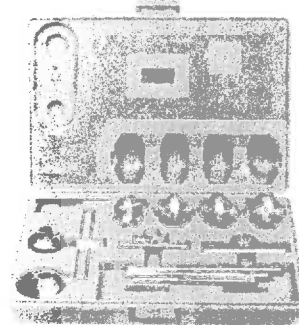
This tool is used to hold the clutch when removing or installing the clutch boss lock nut.

2. Valve guide reamer
P/N 90890-01211-00



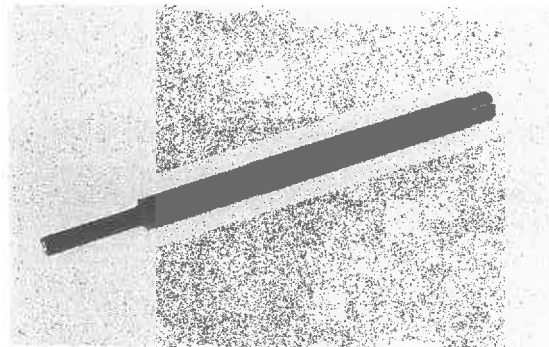
This must be used after installing a new valve guide

3. Valve seat cutter
P/N TLM-90910-43-20



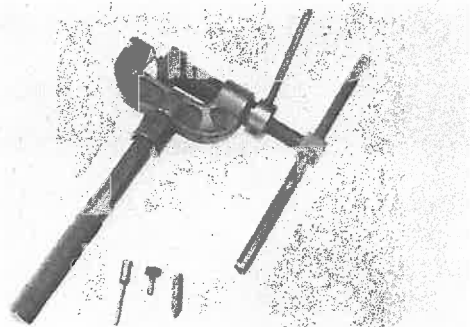
This tool is needed to resurface the valve seat

4. Valve guide remover
P/N 90890-01200-00
Valve guide installer
P/N 90890-01201-00



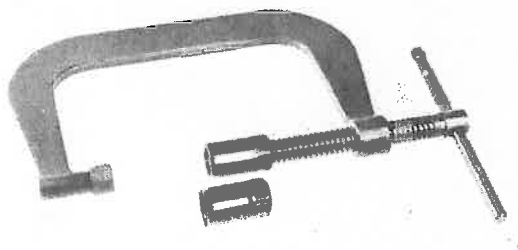
This must be used to remove or install the valve guides.

5. Cam chain tool
P/N 90890-01112



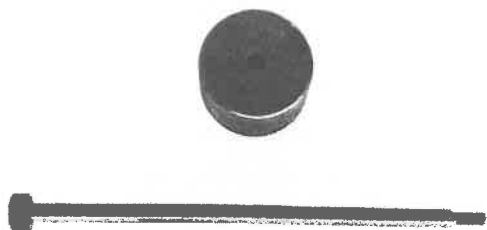
This tool is needed for proper installation of the valve guides.

6. Valve spring compressor
P/N 90890-01253-00



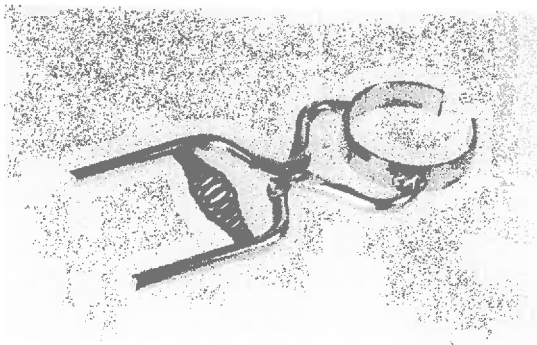
This tool must be used for removing and installing the valve assemblies.

7. Slide hammer
P/N 90890-01083-00 (Bolt)
90890-01084-00 (Weight)



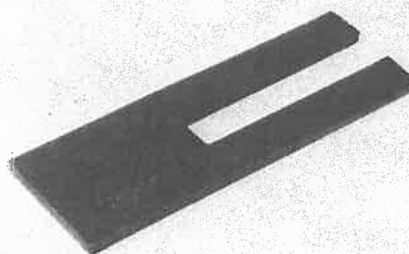
These tools are used when removing the rocker arm shaft.

8. Piston ring compressor
P/N 90890-01253-00



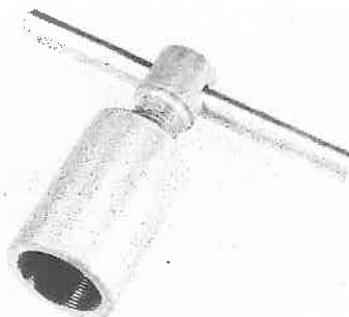
This tool is used to compress piston rings when installing the cylinder.

9. Piston support plate
P/N 90890-01067



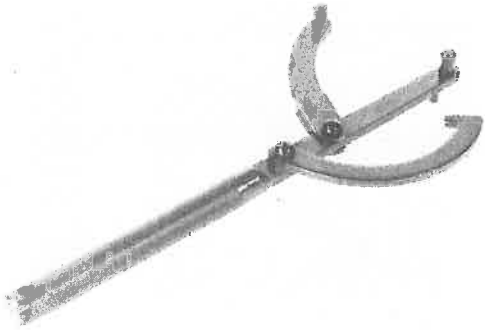
Use 2 of these to hold the pistons during cylinder installation.

10. Rotor puller
P/N 90890-01070-00



This tool is needed to remove the A.C. Generator rotor.

11. Rotor holding tool
P/N 90890-01235-00



This tool is used to hold the A.C. Generator rotor and remove it using the Rotor puller

12. Clip plier
P/N 90890-01233-00



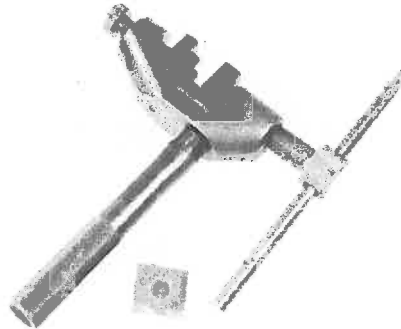
C. For Chassis Service

1. Front-fork-cylinder holder
P/N 90890-01300-00



This tool is used to loosen and tighten the front fork cylinder holding bolt.

2. Drive chain tool
P/N 90890-01081-00



This tool is used to cut or rivet the joint of drive chain.

3. Master cylinder seal installing tool

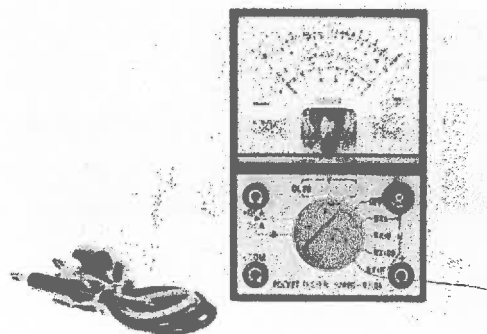


This tool is needed when installing the master cylinder seal.

D. For Electrical Components

The uses of these tools are described in Chapter 6.

1. Pocket tester
P/N 90890-03104-00



2. Electro tester
P/N 90890-03021-00

