# SERVICE MANUAL

1991 AND 1992 SOFTAIL MODELS





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## **SERVICE MANUAL**

The information in this manual applies to the 1991 and 1992 FX/FL Softail models.

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#### **FOREWORD**

This service and repair manual has been prepared with two purposes in mind. First, it will acquaint the reader with the construction of the Harley-Davidson motorcycle and assist him in performing basic maintenance and repair. Secondly, it will introduce to the professional Harley-Davidson technician the latest field-tested and factory-approved major repair methods. We sincerely believe that this manual will make your association with Harley-Davidson products more pleasant and profitable.

## HOW TO USE YOUR SERVICE MANUAL

Your Service Manual is arranged for quick, easy reference. This manual is divided into numbered sections. Sections are then divided into subjects. Use this manual as follows:

- Check the TABLE OF CONTENTS located in the front of each section to find subject desired.
- Page number is listed across from subject. Page number consists of section number and page number.
- 3. Information is presented in a definite order as follows:

Specifications
General
Troubleshooting
Adjustment/Testing
Removal
Installation
Disassembly
Cleaning, Inspection and/or Repair (minor)
Assembly
Repair (major)

In figure legends, the number following a name of a part indicates the quantity necessary for one complete assembly.

#### NOTE

All information for servicing a component should be read **before** repair work is started to avoid needless disassembly.

#### PREPARATION FOR SERVICE

Proper preparation is very important for efficient service work. A clean work area at the start of each job will allow you to perform the repair as easily and quickly as possible, and reduce the incidence of misplaced tools and parts. A motorcycle that is excessively dirty should be cleaned before work starts. Cleaning will occasionally uncover trouble sources. Tools, instruments and parts needed for the job should be gathered before work is started. Interrupting a job to locate tools or parts is a needless delay. Special tools required for a job are listed at the end of Section 1.

#### WARNING

Gasoline is extremely flammable and highly explosive under certain conditions. Always stop engine and do not smoke or allow open flame or sparks when refueling or servicing the fuel system.

#### SERVICE BULLETINS

In addition to the information given in this Service Manual, Service Bulletins are issued to Harley-Davidson Dealers from time to time, which cover interim engineering changes and supplementary information. Service Bulletins should be consulted for complete information on the models covered by this manual.

## USE GENUINE REPLACEMENT PARTS

#### WARNING

- When replacement parts are required, we recommend using only genuine Harley-Davidson parts. Other parts may appear to have equivalent characteristics including type, strength and material, but may be of inferior quality. Failure to use genuine Harley-Davidson parts may result in product malfunction and possible personal injury.
- The fasteners used in Harley-Davidson motorcycles have specific strength, finish and type requirements to perform properly in the assembly and its environment. Use only genuine Harley-Davidson replacement fasteners, tightened to the proper torque value. Substitution could cause fastener failure which may result in personal injury.

To ensure a satisfactory and lasting repair job, follow the manual instructions carefully and use only genuine Harley-Davidson replacement parts. Behind the emblem bearing the words GENUINE HARLEY-DAVIDSON is more than three quarters of a century of designing, research, manufacturing, testing and inspecting experience.

This is your insurance that the parts you are using will fit right, operate properly and last longer. When you use genuine Harley-Davidson parts, you use the best.

#### PRODUCT REFERENCES

When reference is made in this manual to a specific brand name product, tool or instrument, an equivalent product, tool or instrument may be used in place of the one mentioned.

All tools mentioned in this SERVICE MANUAL with HD or J preceding the part number must be ordered through:

Kent-Moore Tool Division

29784 Little Mack

Roseville, Michigan 48066-2239

#### Loctite® Products

The Loctite® products listed are designed to increase the reliability of fasteners and to aid in minor repairs.

If you have any further questions, please call Loctite Corp. at 1-203-246-1223.

#### WARNING

Follow the directions listed on all Loctite® products. Read all labels, warnings and cautions carefully before using.

#### CONTENTS

All photographs and illustrations may not necessarily depict the most current model or component, but are based on the latest production information available at the time of publication.

Since product improvement is our continual goal, Harley-Davidson Inc. reserves the right to change specifications, equipment, or designs at any time without notice and without incurring obligation.

#### WARNINGS AND CAUTIONS

Statements in this manual preceded by the words WARNING or CAUTION and printed in bold face are very important.

#### WARNING

Means there is the possibility of personal injury to yourself or others.

#### CAUTION

Means there is the possibility of damage to the vehicle.

We recommend you take special notice of these items.

#### WARNING

Proper service and repair is important for the safe, reliable operation of all mechanical products. The service procedures recommended and described in this Service Manual are effective methods for performing service operations. Some of these service operations require the use of tools specially designed for the purpose. These special tools should be used when and as recommended.

It is important to note that some warnings against the use of specific service methods which could damage the motorcycle or render it unsafe are stated in this Service Manual. However, please remember that these warnings are not all-inclusive. Since Harley-Davidson could not possibly know, evaluate and advise the service trade of all possible ways in which service might be done or of the possible hazardous consequences of each way, we have not undertaken any such broad evaluation. Accordingly, anyone who uses a service procedure or tool which is not recommended by Harley-Davidson must first thoroughly satisfy himself that neither his nor the operator's safety will be jeopardized by the service methods selected.

#### WARNING

Wear eye protection while using any of these tools: hammers, arbor or hydraulic presses, gear pullers, spring compressors, and slide hammers. Be especially cautious when using pulling, pressing or compressing equipment. The forces involved can cause parts to "flyout" with considerable force and cause bodily injury.

Harley-Davidson products are manufactured under one or more of the following patents: U.S. Patents 2986162, 2987934, 2998809, 3116089, 3144631, 3144860, 3226994, 3229792, 3434887, 3559773, 3673359, 3709317, Des. 225 626.

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