



# **2009 Buell XB Models Service Manual**

**99490-09Y**

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# ABOUT THIS MANUAL

## GENERAL

This Service Manual has been prepared with two purposes in mind. First, it will acquaint the user with the construction of the Buell product and assist in the performance of basic maintenance and repair. Secondly, it will introduce to the professional Buell Technician the latest field-tested and factory-approved major repair methods. We sincerely believe that this Service Manual will make your association with Buell products more pleasant and profitable.

## HOW TO USE YOUR SERVICE MANUAL

Refer to the table below for the content layout of this manual.

NO.	CHAPTER
1	Maintenance
2	Chassis
3	Engine
4	Fuel System
5	Drive/Transmission
6	Electrical
A	Appendix A Connector Repair
B	Appendix B Wiring
C	Appendix C Conversions
D	Appendix D Hose and Wire Routing
E	Appendix E Active Intake (Japanese Models)
F	Appendix F Glossary

Use the TABLE OF CONTENTS (which follows this FOREWORD) and the INDEX (at the back of this manual) to quickly locate subjects. Sections and topics in this manual are sequentially numbered for easy navigation.

For example, a cross-reference shown as **2.1 SPECIFICATIONS** refers to chapter 2 CHASSIS, heading 2.1 SPECIFICATIONS.

For quick and easy reference, all pages contain a section number followed by a page number. For example, **page 3-5** refers to page 5 in section 3.

A number of acronyms and abbreviations are used in this document. See the [F.1 GLOSSARY](#) for a list of acronyms, abbreviations and definitions.

## PREPARATION FOR SERVICE

### WARNING

**Stop the engine when refueling or servicing the fuel system. Do not smoke or allow open flame or sparks near gasoline. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00002a)**

Good 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 will reduce the incidence of misplaced tools and parts. A motorcycle that is excessively dirty should be cleaned before work starts. Cleaning will occasionally uncover sources of trouble. Tools, instruments and any parts needed for the job should be

gathered before work is started. Interrupting a job to locate tools or parts is a distraction and causes needless delay.

### NOTES

- *To avoid unnecessary disassembly, carefully read all relative service information before repair work is started.*
- *In figure legends, the number which follows the name of a part indicates the quantity necessary for one complete assembly.*

## SERVICE BULLETINS

In addition to the information presented in this manual, Buell Motor Company will periodically issue Service Bulletins to Buell dealers. Service Bulletins cover interim engineering changes and supplementary information. Consult the Service Bulletins to keep your product knowledge current and complete.

## USE GENUINE REPLACEMENT PARTS

### WARNING

**Do not use aftermarket parts and custom made front forks which can adversely affect performance and handling. Removing or altering factory installed parts can adversely affect performance and could result in death or serious injury. (00001a)**

To verify satisfactory and lasting repairs, carefully follow the manual instructions and use only genuine Buell replacement parts. This is your assurance that the parts you are using will fit right, operate properly and last longer.

## WARNINGS AND CAUTIONS

Statements in this manual preceded by the following words are of special significance.

### WARNING

**WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. (00119a)**

### CAUTION

**CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. (00139a)**

### CAUTION

**CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage. (00140a)**

### NOTE

*Refers to important information, and is placed in italic type. It is recommended that you take special notice of these items.*

Proper service and repair is important for the safe, reliable operation of all mechanical products. The service procedures recommended and described in this manual are effective methods for performing service operations.

## WARNING

**Always wear proper eye protection when using hammers, arbor or hydraulic presses, gear pullers, spring compressors, slide hammers and similar tools. Flying parts could result in death or serious injury. (00496b)**

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 manual. However, please remember that these warnings are not all-inclusive. Inadequate safety precautions could result in death or serious injury.

Since Buell Motorcycle Company could not possibly know, evaluate or advise the service trade of all possible ways in which service might be performed, or of the possible hazardous consequences of each method, we have not undertaken any such broad evaluation. Accordingly, anyone who uses a service procedure or tool which is not recommended by Buell Motorcycle Company must first thoroughly satisfy himself that neither his nor the operator's safety will be jeopardized as a result. Failure to do so could result in death or serious injury.

## PRODUCT REFERENCES

## WARNING

**Read and follow warnings and directions on all products. Failure to follow warnings and directions can result in death or serious injury. (00470b)**

When reference is made in this manual to a specific brand name product, tool or instrument, an equivalent product, tool or instrument may be substituted.

## Kent-Moore Products

All tools mentioned in this manual with an "HD", "J" or "B" preface must be ordered through SPX Kent-Moore. For ordering

information or product returns, warranty or otherwise, visit [www.spx.com](http://www.spx.com).

## Loctite Sealing and Threadlocking Products

Some procedures in this manual call for the use of Loctite products. If you have any questions regarding Loctite product usage or retailer/wholesaler locations, please contact Loctite Corp. at [www.loctite.com](http://www.loctite.com).

## PRODUCT REGISTERED MARKS

Alcantara S.p.A., Allen, Amp Multilock, Bluetooth, Brembo, Delphi, Deutsch, Dunlop, Dynojet, Fluke, G.E. Versilube, Gunk, Hydroseal, Hylomar, Kevlar, Lexan, Loctite, Lubriplate, Keps, K&N, Magnaflux, Marson Thread-Setter Tool Kit, MAXI fuse, Molex, MPZ, Multilock, Novus, Packard, Pirelli, Permatex, Philips, PJ1, Pozidriv, Robinair, S100, Sems, Snap-on, Teflon, Threadlocker, Torca, Torco, TORX, Tufoil, Tyco, Ultratorch, Velcro, X-Acto, and XM Satellite Radio are among the trademarks of their respective owners.

## H-D MICHIGAN, INC. TRADEMARK INFORMATION

1125CR, 1125R, Blast, Buell, Firebolt, Glaze, Gloss, Harley, Harley-Davidson, HD, H-D, Lightning, Sunwash, Tender, Triple Tail, Thunderstorm, Ulysses, Uniplanar, ZTL and ZTL-2 are among the trademarks of H-D Michigan, Inc.

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All photographs, illustrations and procedures in this manual 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, Buell Motorcycle Company reserves the right to change specifications, equipment or designs at any time without notice and without incurring obligation.

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