



# **2008 Dyna Models Service Manual**

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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 Harley-Davidson product and assist in the performance of 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 Service Manual will make your association with Harley-Davidson 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   | Starter                     |
| 6   | Drive                       |
| 7   | Transmission                |
| 8   | Electrical                  |
| A   | Appendix A Connector Repair |
| B   | Appendix B Wiring           |
| C   | Appendix C Conversions      |
| D   | Appendix D 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 [D.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.*
- When servicing a vehicle equipped with the Harley-Davidson Smart Security System (H-DSSS), you must first disarm the security system. Either keep the fob in close proximity to the vehicle, or use Digital Technician to disable the security system while the vehicle is being serviced and re-enable the system after service is completed.*

## SERVICE BULLETINS

In addition to the information presented in this Service Manual, Harley-Davidson Motor Company will periodically issue Service Bulletins to Harley-Davidson 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 ensure satisfactory and lasting repairs, carefully follow the Service Manual instructions and use only genuine Harley-Davidson replacement parts. Behind the emblem bearing the words GENUINE HARLEY-DAVIDSON stand more than 100 years of design, research, manufacturing, testing and inspecting experience. This is your assurance that the parts you are using will fit right, operate properly and last longer.

## WARNINGS AND CAUTIONS

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

Since Harley-Davidson 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 Harley-Davidson 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

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, Tufail, Tyco, Ultratorch, Velcro, X-Acto, and XM Satellite Radio are among the trademarks of their respective owners.

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## CONTENTS

All photographs, illustrations and procedures 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 reserves the right to change specifications, equipment or designs at any time without notice and without incurring obligation.

# MAINTENANCE

## 1.1 GENERAL

|  |     |
|--|-----|
| Servicing a New Motorcycle.....                      | 1-1 |
| Safe Operating Maintenance.....                      | 1-1 |
| Shop Practices.....                                  | 1-1 |
| Repair Notes.....                                    | 1-1 |
| Safety.....  | 1-1 |
| Removing Parts.....                                  | 1-1 |
| Cleaning.....  | 1-1 |
| Disassembly and Assembly.....                        | 1-2 |
| Checking Torques on Fasteners with Lock Patches..... | 1-2 |
| Magnetic Parts Trays.....                            | 1-2 |
| Repair and Replacement Procedures.....               | 1-2 |
| Hardware and Threaded Parts.....                     | 1-2 |
| Threadlocking Agents.....                            | 1-2 |
| Wiring, Hoses and Lines.....                         | 1-2 |
| Instruments and Gauges.....                          | 1-2 |
| Bearings.....  | 1-2 |
| Bushings.....  | 1-2 |
| Gaskets.....   | 1-2 |
| Lip Type Seals.....                                  | 1-2 |
| O-Rings (Preformed Packings).....                    | 1-3 |
| Gears.....   | 1-3 |
| Shafts.....  | 1-3 |
| Part Replacement.....                                | 1-3 |
| Exhaust System Leakage.....                          | 1-3 |
| Cleaning.....  | 1-3 |
| Part Protection.....                                 | 1-3 |
| Cleaning Process.....                                | 1-3 |
| Rust or Corrosion Removal.....                       | 1-3 |
| Bearings.....  | 1-3 |
| Tool Safety.....                                     | 1-3 |
| Air Tools.....                                       | 1-3 |
| Wrenches.....  | 1-3 |
| Pliers/Cutters/Pry bars.....                         | 1-3 |
| Hammers.....   | 1-4 |
| Punches/Chisels.....                                 | 1-4 |
| Screwdrivers.....                                    | 1-4 |
| Ratchets and Handles.....                            | 1-4 |
| Sockets.....   | 1-4 |
| Storage Units.....                                   | 1-4 |

## 1.2 MAINTENANCE SCHEDULE

|              |     |
|--------------|-----|
| General..... | 1-5 |
|--------------|-----|

## 1.3 FUEL AND OIL

|                         |     |
|-------------------------|-----|
| Fuel.....               | 1-8 |
| Gasoline Blends.....    | 1-8 |
| Engine Lubrication..... | 1-8 |
| Winter Lubrication..... | 1-9 |

## 1.4 ENGINE OIL AND FILTER

|                                |      |
|--------------------------------|------|
| Checking and Adding Oil.....   | 1-10 |
| Type of Oil.....               | 1-10 |
| Checking with Cold Engine..... | 1-10 |
| Checking with Warm Engine..... | 1-10 |
| Changing Oil and Filter.....   | 1-11 |

## 1.5 BULB REQUIREMENTS

|              |      |
|--------------|------|
| General..... | 1-12 |
|--------------|------|

## 1.6 BRAKES

|                        |      |
|------------------------|------|
| Fluid Inspection.....  | 1-13 |
| Rear Pedal Height..... | 1-13 |

## 1.7 AIR CLEANER AND EXHAUST SYSTEM

|                                |      |
|--------------------------------|------|
| Removal.....                   | 1-15 |
| Installation.....              | 1-15 |
| Exhaust System Leak Check..... | 1-16 |

## 1.8 TIRES AND WHEELS

|                       |      |
|-----------------------|------|
| Tires.....            | 1-17 |
| Tire Replacement..... | 1-17 |
| Wheel Bearings.....   | 1-18 |
| Wheel Spokes.....     | 1-18 |

## 1.9 PRIMARY CHAIN

|   |      |
|---|------|
| General.....                              | 1-19 |
| Changing Primary Chaincase Lubricant..... | 1-19 |

## 1.10 TRANSMISSION LUBRICANT

|                                      |      |
|--------------------------------------|------|
| Changing Transmission Lubricant..... | 1-21 |
|--------------------------------------|------|

## 1.11 CLUTCH

|                 |      |
|-----------------|------|
| Adjustment..... | 1-22 |
|-----------------|------|

## 1.12 REAR BELT AND SPROCKETS

|                 |      |
|-----------------|------|
| General.....    | 1-24 |
| Cleaning.....   | 1-24 |
| Inspection..... | 1-24 |
| Sprockets.....  | 1-24 |
| Rear Belt.....  | 1-24 |

## 1.13 REAR BELT DEFLECTION

|                 |      |
|-----------------|------|
| Inspection..... | 1-26 |
| Adjustment..... | 1-27 |

## 1.14 THROTTLE CABLES

|   |      |
|---|------|
| Cable Inspection, Lubrication and Adjustment..... | 1-28 |
| Inspection and Lubrication.....                   | 1-28 |
| Adjustment.....                                   | 1-28 |

## 1.15 BLEEDING BRAKES

|                |      |
|----------------|------|
| General.....   | 1-29 |
| Procedure..... | 1-29 |

## 1.16 BRAKE PADS AND DISCS

|  |      |
|--|------|
| Inspection.....                            | 1-30 |
| Brake Pads.....                            | 1-30 |
| Brake Disc Thickness.....                  | 1-30 |
| Brake Disc Lateral Runout and Warpage..... | 1-30 |
| Brake Pad Replacement.....                 | 1-30 |
| Rear Brake Caliper.....                    | 1-30 |
| Front Brake Caliper.....                   | 1-31 |

## 1.17 BATTERY MAINTENANCE

|                                  |      |
|----------------------------------|------|
| General.....                     | 1-33 |
| Cleaning and Inspection.....     | 1-34 |
| Voltmeter Test.....              | 1-34 |
| Voltmeter Test.....              | 1-34 |
| Charging Battery.....            | 1-34 |
| Safety Precautions.....          | 1-34 |
| Using a Battery Charger.....     | 1-34 |
| Disconnection and Removal.....   | 1-35 |
| Storage.....                     | 1-36 |
| Installation and Connection..... | 1-36 |

## 1.18 SUSPENSION ADJUSTMENTS

|                                    |      |
|------------------------------------|------|
| Rear Shock Preload Adjustment..... | 1-38 |
|------------------------------------|------|

# TABLE OF CONTENTS

---

## 1.19 SPARK PLUGS

|                                  |      |
|----------------------------------|------|
| Inspection.....                  | 1-39 |
| Spark Plug Cable Inspection..... | 1-39 |

## 1.20 STEERING HEAD BEARINGS

|                                     |      |
|-------------------------------------|------|
| Adjustment.....                     | 1-41 |
| Bearing Adjustment (Fall Away)..... | 1-41 |
| Lubrication.....                    | 1-41 |

## 1.21 FRONT FORK OIL

|                         |      |
|-------------------------|------|
| Replacing Fork Oil..... | 1-42 |
|-------------------------|------|

## 1.22 CABLE AND CHASSIS LUBRICATION

|                             |      |
|-----------------------------|------|
| General.....                | 1-43 |
| Cables and Hand Levers..... | 1-43 |
| Jiffy Stand.....            | 1-43 |

## 1.23 HEADLAMP ALIGNMENT

|                 |      |
|-----------------|------|
| Inspection..... | 1-44 |
| Adjustment..... | 1-44 |
| All Models..... | 1-44 |

## 1.24 CRITICAL FASTENERS

|                 |      |
|-----------------|------|
| Inspection..... | 1-46 |
|-----------------|------|

## 1.25 ENGINE MOUNTS

|                 |      |
|-----------------|------|
| Inspection..... | 1-47 |
|-----------------|------|

## 1.26 STORAGE

|                           |      |
|---------------------------|------|
| General.....              | 1-48 |
| Placing in Storage.....   | 1-48 |
| Removal from Storage..... | 1-48 |

## 1.27 TROUBLESHOOTING

|  |      |
|--|------|
| General.....   | 1-50 |
| Engine.....  | 1-50 |
| Starter Motor Does Not Operate or Does Not Turn Engine Over..... | 1-50 |
| Engine Turns Over But Does Not Start.....                        | 1-50 |
| Starts Hard.....   | 1-50 |
| Starts But Runs Irregularly or Misses.....                       | 1-50 |
| Spark Plug Fouls Repeatedly.....                                 | 1-50 |
| Pre-Ignition or Detonation (Knocks or Pings).....                | 1-50 |
| Overheating.....   | 1-51 |
| Valve Train Noise.....   | 1-51 |
| Excessive Vibration.....   | 1-51 |
| Check Engine Light Illuminates During Operation.....             | 1-51 |
| Lubrication System.....  | 1-51 |
| Oil Does Not Return To Oil Pan.....                              | 1-51 |
| Engine Uses Too Much Oil Or Smokes Excessively... ..             | 1-51 |
| Engine Leaks Oil From Cases, Push Rods, Hoses, Etc.....          | 1-51 |
| Low Oil Pressure.....  | 1-51 |
| High Oil Pressure.....   | 1-51 |
| Electrical System.....   | 1-51 |
| Alternator Does Not Charge.....                                  | 1-51 |
| Alternator Charge Rate Is Below Normal.....                      | 1-51 |
| Speedometer Operates Erratically.....                            | 1-52 |
| Transmission.....  | 1-52 |
| Shifts Hard.....   | 1-52 |

|                                       |      |
|---------------------------------------|------|
| Jumps Out Of Gear.....                | 1-52 |
| Clutch Slips.....                     | 1-52 |
| Clutch Drags Or Does Not Release..... | 1-52 |
| Clutch Chatters.....                  | 1-52 |
| Handling.....                         | 1-52 |
| Irregularities.....                   | 1-52 |
| Brakes.....                           | 1-52 |
| Brake Does Not Hold Normally.....     | 1-52 |

## CHASSIS

---

### 2.1 SPECIFICATIONS

|                     |     |
|---------------------|-----|
| Specifications..... | 2-1 |
| Tires.....          | 2-1 |

### 2.2 VEHICLE IDENTIFICATION NUMBER (V.I.N.)

|              |     |
|--------------|-----|
| General..... | 2-3 |
|--------------|-----|

### 2.3 FRONT WHEEL

|                              |     |
|------------------------------|-----|
| Removal.....                 | 2-5 |
| Disassembly.....             | 2-5 |
| Cast Wheel.....              | 2-5 |
| Cast Wheel, Dual Brakes..... | 2-5 |
| Laced Wheel.....             | 2-5 |
| Cleaning and Inspection..... | 2-8 |
| Assembly.....                | 2-8 |
| Cast Wheel.....              | 2-9 |
| Laced Wheel.....             | 2-9 |
| Installation.....            | 2-9 |

### 2.4 REAR WHEEL

|                              |      |
|------------------------------|------|
| Removal.....                 | 2-10 |
| Disassembly.....             | 2-10 |
| Cleaning and Inspection..... | 2-11 |
| Assembly.....                | 2-11 |
| Installation.....            | 2-12 |

### 2.5 SEALED WHEEL BEARINGS

|                   |      |
|-------------------|------|
| Inspection.....   | 2-13 |
| Removal.....      | 2-13 |
| Installation..... | 2-14 |

### 2.6 WHEEL LACING: 17 INCH RIM

|                                |      |
|--------------------------------|------|
| General.....                   | 2-16 |
| Procedure.....                 | 2-16 |
| Hub: Brake Disc Flange Up..... | 2-16 |
| Hub: Sprocket Side Up.....     | 2-17 |

### 2.7 WHEEL LACING: 19 INCH RIM

|                |      |
|----------------|------|
| Procedure..... | 2-19 |
|----------------|------|

### 2.8 WHEEL LACING: 21 INCH RIM

|                |      |
|----------------|------|
| General.....   | 2-23 |
| Procedure..... | 2-23 |

### 2.9 TRUING LACED WHEELS

|                     |      |
|---------------------|------|
| General.....        | 2-26 |
| Lateral Truing..... | 2-26 |
| Radial Truing.....  | 2-27 |

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