

# 2018 HARLEY-DAVIDSON® SERVICE MANUAL: TOURING MODELS

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  - Prepare
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  - Complete
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  - Install
  - Complete
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  - Assemble
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    - Complete
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- Install
- Complete
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  - Prepare
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  - Install
  - Complete
- Transmission
  - Prepare
  - Remove
  - Install
  - Complete
  - Disassemble
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  - Assemble
- MAIN DRIVE GEAR AND BEARING
  - Prepare
  - Remove
  - Clean and Inspect
  - Install
  - Replace Mainshaft Seal
  - Complete
  - Replace Needle Bearings
- TRANSMISSION CASE
  - Prepare
  - Remove
  - Install
  - Disassemble
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  - Assemble
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    - ECM
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    - Top Caddy
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## IGNITION COIL AND SPARK PLUG CABLES

- Removal
- Install
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- Inspect Spark Plug Cables
- STARTER
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- HEADLAMP
  - Headlamp: All But FLTR Models
  - Headlamp: FLTR Models
- Rear Lighting
  - Replace Tail Lamp Bulb
  - Tail Lamp Base
  - Rear Fascia Lamp
- FENDER TIP LAMPS
  - Front Fender Tip Lamp
  - Rear Fender Tip Lamp
- TOUR-PAK LIGHTS
  - Tour-Pak Side Lamps/Trim Strips
  - Tour-Pak Lights Harness
  - Wrap-Around Lamp (if equipped)
- Turn Signal Lamps
  - Turn Signal Bulb Replacement: Bullet Style
  - Turn Signal Bulb Replacement: Flat Lens Style
  - Front Turn Signal Lamp
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  - Rear Turn Signal Lamps Bracket
- Ignition Switch and Fork Lock
  - Fairing Models
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  - Nacelle Switches
- CRANKSHAFT POSITION SENSOR (CKP)
  - Remove
  - Installation
- KNOCK SENSOR (KS)
  - Prepare
  - Remove
  - Install
  - Complete
- ENGINE TEMPERATURE SENSOR (ET)
  - Prepare
  - Remove
  - Install
  - Complete
- ENGINE COOLANT TEMPERATURE SENSOR (ECT)
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- Automatic Compression Release (ACR)
  - Prepare
  - Remove
  - Install
  - Complete

- Vehicle Speed Sensor (VSS)
  - VSS
- WHEEL SPEED SENSORS
  - Front Wheel Speed Sensor (WSS)
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- NEUTRAL SWITCH
  - Removal
  - Installation
- Oil Pressure Switch
  - Removal
  - Install
- STOP LAMP SWITCHES
  - Front Stop Lamp Switch
  - Rear Stop Lamp Switch
- VOLTAGE REGULATOR
  - Prepare
  - Remove
  - Install
  - Complete
- ALTERNATOR
  - Prepare
  - Remove
  - Cleaning and Inspection
  - Install
  - Complete
- HORN
  - Removal
  - Installation
- FAIRING POWER OUTLET
  - Removal
  - Installation
- GAUGES AND INSTRUMENTS: FAIRING MODELS
  - Ambient Air Temperature Sensor
  - 2-Inch Diameter Gauges
  - Speedometer/Tachometer Instrument Cluster: Fork-Mounted Fairing
  - Speedometer/Tachometer Instrument Cluster: Frame Mounted Fairing
- GAUGES AND INSTRUMENTS: ROAD KING MODELS
  - Fuel Gauge
  - SPEEDOMETER
- INDICATOR LAMPS: ROAD KING MODELS
  - INDICATOR LAMPS
- Boom! Box Infotainment System
  - Radio Face Protective Film
  - Radio: Fork-Mounted Fairing
  - CB Module: Fork Mounted Fairing
  - GPS Antenna
  - Front Fairing Speakers: Fork Mounted Fairing
  - Radio: Frame Mounted Fairing
  - Front Fairing Speaker and Enclosure: Frame-Mounted Fairing
  - Rear Speaker Enclosures
  - Passenger Audio Controls
  - Rider Headset Connector
- ANTENNA CABLES
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## WIRE TROUGH

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- Install
- MAIN WIRING HARNESS
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  - Removal: Road King Models (Part 2)
  - Removal: Fork Mounted Fairing Models (Part 2)
  - Removal: Frame Mounted Fairing Models (Part 2)
  - Removal: All Models (Part 3)
  - Installation: All Models (Part 1)
  - Installation: Road King Models (Part 2)
  - Installation: Fork-Mounted Fairing Models (Part 2)
  - Installation: Frame-Mounted Fairing Models (Part 2)
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  - Removal
  - Install
  - Switch Pack Harness
  - Handlebar Switch Caps
- Security System Maintenance
  - Fob Battery
  - Smart Siren (If Equipped)
  - Security System Antenna
- SECURITY SYSTEM ACTUATION
  - Sidecar Configuration
  - Activation
  - Fob Assignment
- AUXILIARY/FOG LAMPS AND BRACKETS
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  - Auxiliary/Fog Lamp Housing
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  - Adjustment
- SECURITY SIREN
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- Personal Identification Number (PIN)
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  - FLUID CONVERSION
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## British Imperial System

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  - United States System
  - Metric System
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  - Backmatter
    - Backmatter
    - Backmatter

## Safety

Refer to the Safety section before performing any procedures on a vehicle.

## Sections

This service manual is organized into chapters, sections and topics. Sections in chapters 4, 6, 7, 8 are laid out as follows:

- Prepare
- Remove
- Install
- Disassemble (if applicable)
- Clean/Inspect (if applicable)
- Assemble (if applicable)
- Complete

## Topics

The purpose of the **Prepare** topics is to provide an outline of procedures required before beginning a specific task. Links to the necessary procedures are provided in the topic.

The **Remove** and **Install** topics allow the technician to only remove and install the component - which may be all that is required. If a component can be repaired, **Disassemble**, **Assemble** and **Clean/Inspect** topics are provided as appropriate.

**Complete** topics provide a list of procedures that need to be performed to return the vehicle to ride-ready condition. If additional removal procedures need to be performed, move to the next section without performing the Complete topics in the current section.

## Procedural Steps

Each topic contains steps to complete the procedure. These steps are laid out in numeric and alpha steps.

The purpose of the numeric steps is to provide the experienced technician with high-level information to complete the procedure.

The alpha steps provide a less-experienced technician with step-by-step instructions to perform the procedure.

## Cross-References and Page Numbers

A cross-reference shown as **2.2 SPECIFICATIONS** refers to chapter 2 CHASSIS, heading 2.2 SPECIFICATIONS.

All pages contain a chapter number followed by a page number. For example, **page 3-5** refers to page 5 in Chapter 3.

## Item References and Quantities

In figure legends and tables, the number in parentheses that follows the part name indicates the quantity of that part necessary for one complete assembly.

Example:

### **2. Rocker cover screw (4)**

In a procedure step or paragraph, the number in parentheses that follows a part name indicates the legend item of the part in the figure referenced by the text.

Example:

### **1. Remove rocker cover screws (2).**

## Acronyms and Abbreviations

Acronyms and abbreviations are used in this document. See the [Acronyms and Abbreviations](#) for a list of acronyms, abbreviations and definitions.

## Removing Parts

Always use blocking or proper stands to support the part that has been hoisted. If a part cannot be removed, verify that all bolts and attaching hardware have been removed. Verify that no parts are in the way of the part being removed.

Always tag hoses, wiring or tubes to verify proper installation.

## Cleaning

Thoroughly clean all parts to be reused before assembly. Clean parts promote better component operation and longer life. Seals, filters and covers used in this vehicle keep out extraneous dirt and dust. Keep these items in good condition to guarantee satisfactory operation. See [Cleaning](#).

## Checking Torques on Fasteners

Check torque using a torque wrench set to the minimum specification for that fastener. If the fastener does not rotate, the torque has been maintained. If the fastener rotates, remove it to determine if it has a threadlocking agent.

If it has a threadlocking agent, clean all material from the threaded hole. Replace the fastener with a **new** one or clean the original fastener threads and apply the appropriate threadlocking product. Install and tighten the fastener to specification.

If the fastener does not use a threadlocking agent, install and tighten it to specification.

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