



INSTRUCTIONS

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COMBINATION SPEEDOMETER/TACHOMETER GAUGE KIT

GENERAL

is03400 U.S. Department of Transportation National Highway Traffic Safety Administration Title 49, United States Code, Subtitle VI. Motor Vehicle and Driver Programs, Part C. Information, Standards, and Requirements, Chapter 327. Odometers Section 32703. Preventing tampering A person may not — (1) advertise for sale, sell, use, install, or have installed, a device that makes an odometer of a motor vehicle register a mileage different from the mileage the vehicle was driven, as registered by the odometer within the designed tolerance of the manufacturer of the odometer; (2) disconnect, reset, alter, or have disconnected, reset, or altered, an odometer of a motor vehicle intending to change the mileage registered by the odometer; (3) with intent to defraud, operate a motor vehicle on a street, road, or highway if the person knows that the odometer of the vehicle is disconnected or not operating; or (4) conspire to violate this section or section 32704 or 32705 of this title. Section 32704. Service, repair, and replacement (a) Adjusting mileage. A person may service, repair, or replace an odometer of a motor vehicle if the mileage registered by the odometer remains the same as before the service, repair, or replacement. If the mileage cannot remain the same — (1) the person shall adjust the odometer to read zero; and (2) the owner of the vehicle or agent of the owner shall attach a written notice to the left door frame of the vehicle specifying the mileage before the service, repair, or replacement and the date of the service, repair, or replacement.	(b) Removing or altering notice. A person may not with intent to defraud, remove or alter a notice attached to a motor vehicle as required by this section. Section 32705. Disclosure requirements on transfer of motor vehicles (a) (1) Disclosure requirements. Under regulations prescribed by the Secretary of Transportation that include the way in which information is disclosed and retained under this section, a person transferring ownership of a motor vehicle shall give the transferee the following written disclosure: (A) Disclosure of the cumulative mileage registered on the odometer. (B) Disclosure that the actual mileage is unknown if the transferor knows that the odometer reading is different from the number of miles the vehicle has actually traveled. (2) A person transferring ownership of a motor vehicle may not violate a regulation prescribed under this section or give a false statement to the transferee in making the disclosure required by such a regulation. (3) A person acquiring a motor vehicle for resale may not accept a written disclosure under this section unless it is complete. (4) (A) This subsection shall apply to all transfers of motor vehicles (unless otherwise exempted by the Secretary by regulation), except in the case of transfers of new motor vehicles from a vehicle manufacturer jointly to a dealer and a person engaged in the business of renting or leasing vehicles for a period of 30 days or less. (B) For purposes of subparagraph (A), the term "new motor vehicle" means any motor vehicle driven with no more than the limited use necessary in moving, transporting, or road testing such a vehicle prior to delivery from the vehicle manufacturer to a dealer, but in no event shall the odometer reading of such vehicle exceed 300 miles. (5) The Secretary may exempt such classes or categories of vehicles as the Secretary deems appropriate from these requirements. Until such time as the Secretary amends or modifies the regulations set forth in 49 CFR 580.6, such regulations shall have full force and effect.
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Figure 1. Title 49, United States Code

GENERAL (Continued)

Kit Number

Table 1. Models

Kits	Models
70900001	2011 and later Softail (except FXCW/C)
70900183	2012 and later FXDF, FXDC, and FLD.

Models

This kit is a direct replacement for the original equipment (OE) speedometer on the above-listed models.

Tools and Supplies Required

⚠ WARNING

Rider and passenger safety depend upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333b)

NOTE

This instruction sheet refers to service manual information. A service manual for this year/model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

If the vehicle is not equipped with ABS, the gauge must be updated to disable the ABS telltale using the Digital Technician service tool by a factory-trained technician at a Harley-Davidson dealer.

Removing the Old Speedometer

NOTE

For vehicles equipped with security siren: Verify that the Hands-Free Fob is present.

1. **For ALL vehicles:** Turn the ignition key switch to IGNITION and record the odometer reading.

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

2. Refer to the service manual and follow the instructions to remove the main fuse. Remove the seat. Retain all seat mounting hardware.

NOTE

Cover the fuel tank with an H-D Service Cover or clean shop towel to prevent scratching the finish.

3. Remove the instrument console acorn nut (and mounting screw with a flat washer on some models). Place an H-D Service Cover or clean shop towels on the fuel tank. Lift the console from the fuel tank, turn it upside down and lay it on the covering.

NOTE

If necessary, bend back the flexible metal clip to free the harness conduit from the underside of the console.

4. Unplug the 12-terminal connector [39B] from the back of the speedometer. Press the external latches, and use a rocking motion to separate the pin and socket halves.
5. Remove the back clamp. Gently pry the three latches upward to release the back clamp from the back of the speedometer.
6. Lift the console and remove the old speedometer from the console. Discard the old speedometer, but retain the rubber gasket and back clamp for use with the new gauge.

NOTE

Set the console securely on the protected top of the fuel tank, and take care that it does not fall off during the following operations.

7. Set the console securely on top of the fuel tank.

Installation and Final Check

NOTE

Apply window cleaning fluid or mild soapy water to the speedometer gasket as needed to aid installation.

1. Turn the console over, facing upward.
2. Place the speedometer gasket into position around the console speedometer bore.
3. Fix the new gauge into the bore so that it fits snugly against the rubber gasket. Rotate the gauge into approximate visual alignment. The back clamp will complete the alignment.
4. Turn the console over, face down.
5. See Figure 2. Install the back clamp (1). Place the back clamp over the back of the gauge, aligning the two slots (2) with the console bosses. Press the three latches (3) down until they lock into position.

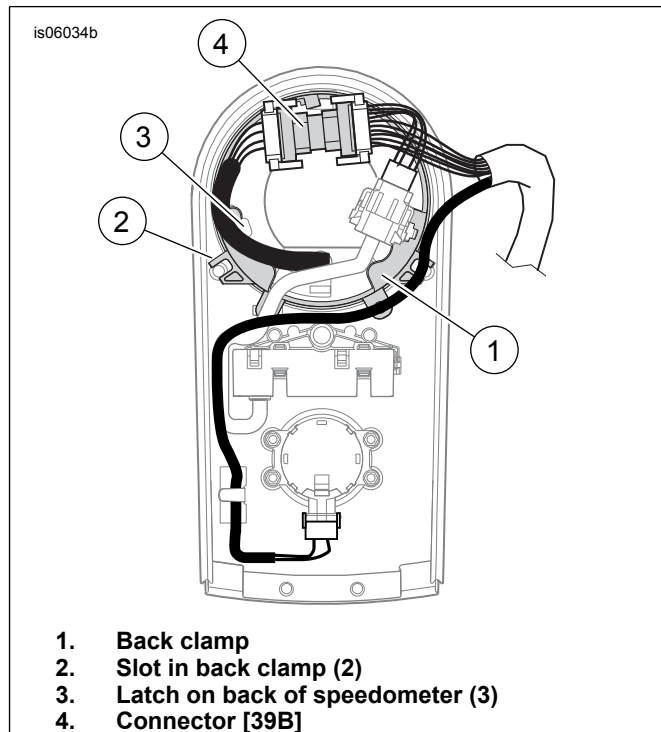


Figure 2. Speedometer/Tachometer Installation and Harness Routing

6. Route the harness from the gauge, and position the 12-terminal connector [39B] (4) as shown. Carefully insert the connector into the back of the speedometer. Secure the harness with cable straps from the kit.

7. Turn the console over, and center it on the fuel tank. Install the acorn nut and tighten to 9–11.3 N·m (80–100 **in-lbs**).

NOTE

*Verify that the ignition key switch is in the OFF position **before** installing the main fuse.*

8. Refer to the service manual and follow the instructions to install the main fuse.

⚠ WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

9. Refer to the service manual, and follow instructions to install the seat.

⚠ WARNING

Be sure headlamp, tail and stop lamp and turn signals are operating properly before riding. Poor visibility of rider to other motorists can result in death or serious injury. (00478b)

10. Turn the ignition/key switch to IGN, but do not start the motorcycle. Test for proper turn signal, brake light and tail light operation.
11. **If the vehicle is not equipped with ABS**, the gauge must be updated with the service tool to disable the ABS telltale.
12. Check the speedometer and tachometer for proper operation.

Gauge Initialization

NOTE

Replacing the speedometer/tachometer gauge will trigger a "mileage lock", where the "Trip B" display will conduct a countdown from 50 km (31.1 mi). Once the display reaches zero, the gauge is locked into the vehicle, and if installed on another vehicle the odometer will display "VIN error".

After the instrument is installed, the gauge will require about a half tank of fuel to properly initialize the fuel range (miles to empty) functionality. During consumption of the half tank of fuel, the gauge software will learn the rider's driving patterns, eventually tailoring the fuel range calculation to their unique riding characteristics.

Fuel Fill-Up and Top-Off: When adding fuel to the vehicle it is recommended that **at least** two gallons be added to properly update the fuel and range displays. If the fuel display does not update immediately after the vehicle is put in motion the fuel and range displays will slowly update over the next 30 miles.

NOTE

After filling the fuel tank, the range function will not update until the vehicle resumes normal speeds.

Press and hold the "Trip" reset switch to toggle between the "mile" and "kilo" displays.