



INSTRUCTIONS

-J02257

REV. 11-26-03

Kit Numbers: 74460-03A, 74461-03A, 74462-03A, 74469-03A, 74471-03A, 74473-03A, 74475-03A, 74477-03A and 74479-03A

SPEEDOMETER/ TACHOMETER COMBINATION GAUGE KIT

General

The following kits are designed for direct speedometer replacement on **1999 and later** FLHR/I, FXDWG and Softail models with the following calibrations:

Kit number	Year, Model and Calibration
.....	1999 and later FLHR/I,
74461-03A	Domestic (Miles)
74471-03A	HDI (Kilos)
.....	1999 and later FXDWG,
74462-03A	Domestic (Miles)
74477-03A	HDI (Kilos)
.....	1999 Softail,
74473-03A	Domestic (Miles)
74475-03A	HDI (Kilos)
.....	2000 and later Softail (except FXSTD),
74461-03A	Domestic (Miles)
74471-03A	HDI (Kilos)
.....	2000 and later FXSTD (Softail Deuce),
74460-03A	Domestic (Miles)
74469-03A	HDI (Kilos)

For speedometer replacement on **1995 through 1998** FLHR/I, FXDWG and Softail models, use the following kits along with Retrofit Kit 74468-03. Complete installation instructions will be found in the Retrofit Kit.

Kit number	Year, Model and Calibration
.....	1995-1998 FLHR,
74461-03A	Domestic (Miles)
74471-03A	HDI (Kilos)
.....	1995-FXDWG,
74479-03A	Domestic (Miles)
.....	1996-1998 FXDWG,
74462-03A	Domestic (Miles)
74477-03A	HDI (Kilos)
.....	1996-1998 Softail,
74473-03A	Domestic (Miles)
74475-03A	HDI (Kilos)

See the Service Parts lists on the last page of these instructions for kit contents.

CAUTION

This tachometer in this gauge is not compatible with the Tach Diagnostic and Test functions of the Scanalyzer Tool.

NOTE

It is a violation of Federal law to alter the odometer mileage reading of a motor vehicle without proper documentation of the change. Please read the following section before performing this installation.

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 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.

Removing the Old Speedometer

NOTE

This Instruction Sheet covers several different Harley-Davidson models and years. Make sure you locate and follow the procedures that apply to the motorcycle receiving the new gauge

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

⚠ WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

1. Remove the seat and disconnect the battery cables, negative cable first.

CAUTION

Cover the fuel tank with clean shop towels to prevent scratching. Damage to the finish could result.

2. Remove the instrument console acorn nut (and mounting screw with flat washer on some models). Lay clean shop towels on the fuel tank. Lift the console from the fuel tank, turn it upside down and lay it on the towels.

NOTE

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

3. Unplug the 12-terminal connector [39B] from the back of the speedometer. Depress the external latches and use a rocking motion to separate the pin and socket halves.
4. **For all except FXSTD:** Gently pry the three latches upward to release the back clamp from the back of the speedometer.

For FXSTD: Depress the three external legs of the lock ring, then gently pry the three latches upward to release the back clamp from the back of the speedometer.

5. Unscrew the trip-meter reset button and pull the harness from the clamp (remove the screw if necessary).
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.

CAUTION

Set the console securely on the towel-covered fuel tank, and take care that it doesn't fall off during the following operations.

7. Set the console securely on the fuel tank.

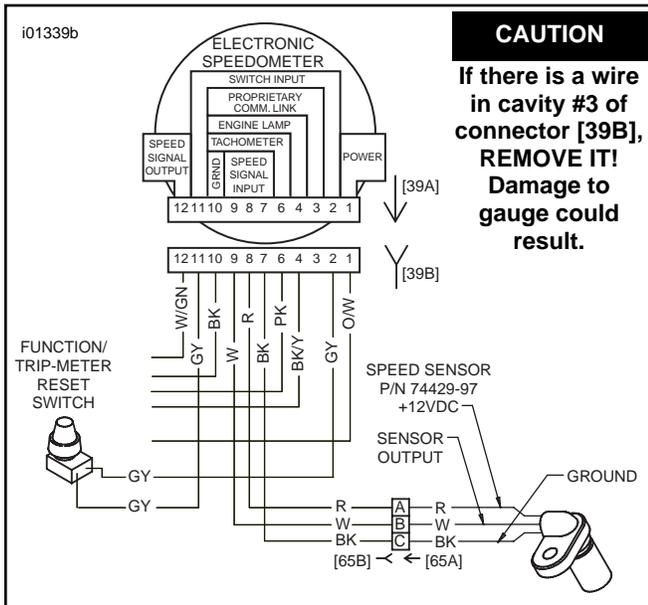


Figure 1. Wire Connections At New Speedometer.

Preparing the Tachometer Wiring

All Except 1999 Softail or 2002 and Later FLHR/I

NOTE

The Pink tachometer wire may not be indicated on the wiring schematic in the Service Manual.

1. Locate the Pink wire in the main harness at the speedometer connector [39B]. It will either be tie-wrapped to the outside of the conduit or tucked inside. If tucked inside, remove the cable strap at the base of connector [39B], and pull back the conduit.

- If there is a connector on the Pink wire, connect it to the 5 inch (12.7 cm) Pink wire from the new Speedometer/ Tachometer Kit.
- If there is no connector on the Pink wire, See Figure 2. Cut off the connector (NOT the bare socket terminal) on the 5 inch (12.7 cm) Obtain Pink wire from the new Speedometer/ Tachometer Kit and splice the Pink leads with the heat shrinkable butt splice from the kit.

2. Insert the socket terminal on the Pink wire from the kit into connector [39B], cavity #6.

CAUTION

If there is a wire in cavity #3 of connector [39B], REMOVE IT! If the wire is left in cavity #3, damage to gauge could result.

3. Check to make sure that there is no wire in connector [39B], cavity #3.
4. Proceed to **Installation and Final Check**.

CAUTION

If there is a wire in cavity #3 of connector [39B], REMOVE IT! Damage to gauge could result.

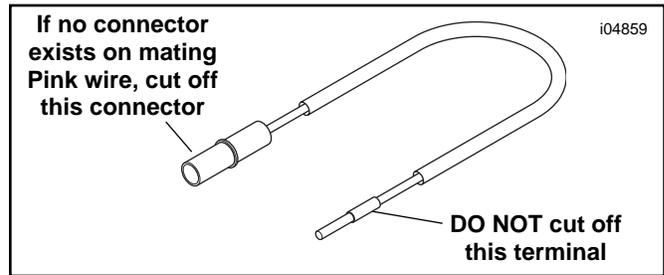


Figure 2. Pink Wire From the Kit.

Softail (1999 Models)

1. See Figure 2. Cut off the Connector (NOT the bare socket terminal) on the 42 inch (1.07M) Pink wire from the new Speedometer/ Tachometer Kit. Crimp the ring terminal from the kit onto the cut end of the wire. Route the wire down from the console to the ignition coil. Connect the ring terminal to the primary terminal stud on the ignition coil.
2. Insert the socket terminal on the Pink wire from the kit into connector [39B], cavity #6.
3. Proceed to **Installation and Final Check**.

FLHR/I (2002 and Later)

1. Locate the Pink wire under the headlamp nacelle.
2. Attach the connector on the 42 inch (1.07M) Pink wire from the new Speedometer/ Tachometer Kit to the connector on the Pink wire from under the nacelle.
3. Route the Pink wire from the kit through the wire clamp at the front right side of the motorcycle frame, then up under the console.
4. Insert the socket terminal on the Pink wire from the kit into connector [39B], cavity #6.

CAUTION

If there is a wire in cavity #3 of connector [39B], REMOVE IT! If the wire is left in cavity #3, damage to gauge could result.

5. Check to make sure that there is no wire in connector [39B], cavity #3.
6. Coil up any excess Pink wire and store inside the nacelle.

CAUTION

Check that there is sufficient slack in the tachometer leads so that handlebar movement is not restricted. Damage to wiring could result.

7. Proceed to **Installation and Final Check**.

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, face upward.
2. Place the speedometer gasket into position around the console speedometer bore.
3. Fit 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.

- Turn the console over, face down.

For all except FXSTD, place the back clamp over the back of the gauge aligning the two slots with the console bosses. Press the latches down until they lock into position.

For FXSTD, place the back clamp over the back of the gauge aligning the three legs with the console bosses. Press the latches down until they lock into position.

- Insert the trip-meter reset switch through the hole in the left side of the console, retain the harness in the clamp, if used, and screw on the rubber button.
- See Figure 1. Verify that new connector [39B] is wired as shown. Plug connector [39B] into the new speedometer/tachometer.
- Turn the console over and center it on the fuel tank.

For FLHR/I, install the acorn nut and torque to 50-90 in-lbs (5.7-10.2 Nm). Install the Phillips screw and flat washer, and tighten securely.

For FXDWG, install the acorn nut and torque to 80-100 in-lbs (9.0-11.3 Nm).

For all Softails except FXSTD, install the acorn nut and torque to 80-100 in-lbs (9.0-11.3 Nm).

For FXSTD, Loosely install two T25 TORX screws and washers into the rear console mounting holes. Loosely install a T27 TORX screw into the front console mounting hole.

Tighten both rear screws to 30-40 in-lbs (3.4-4.5 Nm). Tighten the front screw to 30-40 in-lbs (3.4-4.5 Nm).

WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

- Connect the battery cables, positive cable first, and check turn signals, stop and tail lamp for proper operation.
- Refer to the Service Manual, and follow instructions to install the seat.

WARNING

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

- Check speedometer and tach for proper operation.



Service Parts

Part No. see below

Date 11/03

Speedometer/ Tachometer

Gauge Kit 74460-03A (2000/ FXSTD, Miles)

Qty.	Description	Part Number
1	Calibrated speedometer	74463-03A
1	Tachometer signal wire, 5 inch	74484-03
6	Cable strap	10006
1	Connector, butt splice	70585-93

Gauge Kit 74461-03A (1999/ FLHR/I, Miles) (2000/ Softail Except FXSTD, Miles)

Qty.	Description	Part Number
1	Calibrated speedometer	74464-03A
1	Tachometer signal wire, 5 inch	74484-03
1	Tachometer signal wire, 42 inch	74486-03
6	Cable strap	10006
1	Connector, butt splice	70585-93

Gauge Kit 74462-03A (1999/ FXDWG, Miles)

Qty.	Description	Part Number
1	Calibrated speedometer	74465-03A
1	Tachometer signal wire, 5 inch	74484-03
6	Cable strap	10006
1	Connector, butt splice	70585-93

Gauge Kit 74469-03A (2000/ FXSTD, Kilos)

Qty.	Description	Part Number
1	Calibrated speedometer	74470-03A
1	Tachometer signal wire, 5 inch	74484-03
6	Cable strap	10006
1	Connector, butt splice	70585-93

Gauge Kit 74471-03A (1999/ FLHR/I, Kilos) (2000/ Softail Except FXSTD, Kilos)

Qty.	Description	Part Number
1	Calibrated speedometer	74472-03A
1	Tachometer signal wire, 5 inch	74484-03
1	Tachometer signal wire, 42 inch	74486-03
6	Cable strap	10006
1	Connector, butt splice	70585-93

Gauge Kit 74473-03A (1999 Softail, Miles)

Qty.	Description	Part Number
1	Calibrated speedometer	74474-03A
1	Tachometer signal wire, 5 inch	74484-03
1	Tachometer signal wire, 42 inch	74486-03
6	Cable strap	10006
1	Connector, butt splice	70585-93
1	Ring terminal	9857

Gauge Kit 74475-03A (1999 Softail, Kilos)

Qty.	Description	Part Number
1	Calibrated speedometer	74476-03A
1	Tachometer signal wire, 5 inch	74484-03
1	Tachometer signal wire, 42 inch	74486-03
6	Cable strap	10006
1	Connector, butt splice	70585-93
1	Ring terminal	9857

Gauge Kit 74477-03A (1999/ FXDWG, Kilos)

Qty.	Description	Part Number
1	Calibrated speedometer	74478-03A
1	Tachometer signal wire, 5 inch	74484-03
6	Cable strap	10006
1	Connector, butt splice	70585-93