

Premium Console Gauge® Installation Instructions 1999-2003 and 2004-2013

## Installation Instructions 2000-2003 and 2004-2013

These instructions are for the replacement of a factory 5" console gauge. If the stock gauge has already been replaced, the installation might vary. This gauge does not work on 2011-2013 Softtail or 2012-2013 Dyna models. Most of the assembly has been done at the factory in order to make the installation go as smoothly as possible.

Take precautions to protect your bike from accidental damage during installation. It is better to do the removal and installation of the gauge on a workbench rather than using the bike seat as a work bench.

\*The odometer can be programmed only within the first 100 miles after the gauge is installed on the bike.

The LCD will display a variety of information including odometers, tachometer, gear icon, cruise icon, low battery icon, and low fuel icon. Odometers displayed within the LCD include the Main Odometer, Trip A, Trip B, Service Odometer, and Fuel Odometer. Scroll through the odometers using the left gauge button. Reset Trip A, Trip B, and Fuel to zero by pressing and holding the right button on the gauge when that odometer choice is displayed. The Service Odometer can be reset to varying increments of service and counts down to the next desired service. Vehicle speed is displayed in units opposite of the odometer units previously selected. The Battery Icon appears in a low voltage condition. The Fuel telltale appears when set point odometer value is reached. The cruise telltale appears when cruise is turned on. When cruise is engaged, a small mark appears near the upper left side of the telltale. Gear position is displayed with the exception of Neutral.

## Step 1: Record Mileage

Record the current mileage on the bike so it can be entered into the new gauge after it has been installed.

## Step 2: Disconnect Battery

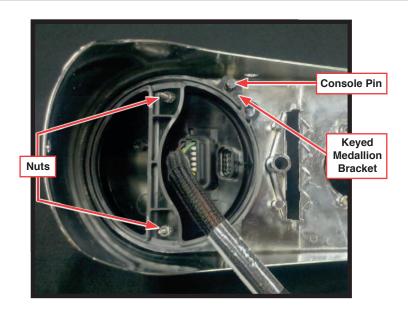
Disconnect the battery.

## Step 3: Remove Dash

Remove the two fasteners used to secure the gauge console to the tank and set them aside. There is normally a screw just below the gauge by the indicator lights, and another near the end of the seat, sometimes under it.

## Step 4: Disconnect Wiring

Tilt the console on edge to locate the connector on the back of the gauge and carefully release any connector locking tabs to allow the connector to be gently pulled from the back of the gauge. Free the console assembly from the bike by disconnecting the remaining wire harness to the console switch. On older bikes, a 3-pin connector might be under the dash or seat.



## Step 5: Remove Stock Gauge

Take the console to a workbench for this step. Remove the two nuts securing the gauge to the console. Remove the bracket and gauge from the console. It is optional to leave the rubber ring in place as the new gauge pod will rest upon it. Wipe any dirt from the top of the console where the gauge was mounted.

## Step 6: Install Medallion Gauge

Position the Medallion gauge assembly onto the console and align it to the console with the keyed Medallion bracket. The bracket will fit around the pins on the bottom of the console. Secure the gauge to the console with the two NYLOCK nuts provided, and cover the ends of the threaded studs with the red protective covers not shown.

## Step 7: Install Wire Harness

- 1. Connect the Medallion wire harness to the bike connector removed from the back of the factory speedometer. On '99-'03 models there may be a 3-pin connector. If so, connect the 3-pin connector from the Medallion harness to the 3-Pin connector on the bike. Otherwise, tie back and secure it.
- 2. On '99-'03 models only, verify that a PINK tachometer from bike harness is connected to the Medallion harness. If so, then no further action is required. If not, then the PINK wire on the bike must be spliced onto the pink wire in the Medallion harness. Look for the end of the PINK factory wire to be bundled to the outside of the harness conduit or tucked inside the harness conduit near the bike's connector. If the PINK factory wire cannot be found, splice the suppplied PINK wire to the Medallion harness and terminate the other end to the primary side of the ignition coil.

## Step 8: Secure Rubber Trim Onto Console

If the console's rubber edge trim has come loose, reposition it onto the console. A dab of Vaseline® can help keep the rubber attached to the console while the console is positioned over the tank on the bike.

## Step 9: Connect Wiring To Dash

Carefully hold the console assembly over the tank and connect the Medallion wire harness to the back of the Medallion gauge. Reconnect any other wiring.

## Step 10: Reinstall Dash

Place the console down onto the tank and reinstall the fasteners securing the console to the bike while making sure the wire harness is under the console and not pinched.

## **5tep 11: Verify Gauge Operation**

Reconnect the battery and key up the bike to verify that the gauge is working. The gauge will go through a boot up sequence that drives the pointer to zero, tests the lights, and displays the Medallion logo on the LCD.

## Setup & Programming Guide



#### **Current Gear Position Display**

It does not matter if you have a 5-speed or 6-speed. If the gear information is not displayed, the gauge can be trained quickly to learn which gear you are in using GEAR LEARNING MODE in the SETUP MENU.



#### Low Fuel Icon

The fuel icon appears when the resettable fuel odometer reaches the mileage set by the owner. The mileage trigger is adjustable in the Setup Menu using the SET FUEL TRIP option. This is not tied to the fuel sensor and is an estimate based on mileage driven.



## Low Battery Icon

The battery icon is displayed when the battery voltage is below 12.4 VDC.



Bike Odometer [See Set Odometer on next page.]



Trip A and B are resettable to zero. Press and hold the right button to reset the trip odometer that is displayed.



This can be set to any mileage. Default from the factory is 500 miles. Pressing and holding the right button allows adjustments.



KPH is displayed when English units are selected. MPH is displayed when Metric units are selected.



Displays distance traveled since last refueling. Configure this odometer in the SETUP MENU. Reset this odometer to zero by pressing and holding the right button while it is displayed.

## Setup Menu



#### Step 1:

Refer to the following pages of this guide for programming the odometer and other important settings.

The ODOMETER can only be set ONE TIME. All other functions can be changed later as needed.

## Step 2:

Key up the bike. Do not start it.

## Step 3:

Push and hold both buttons on the bottom of the gauge until the word SETUP appears. This will enter into a menu of options to prepare the gauge for your bike and set preferences. Use the buttons to navigate through the menu. The function of the left button is described in the lower left corner of the LCD and the function of the right button is described in the lower right corner of the LCD.

#### BIKE

Select the model year range of your bike by highlighting that menu line with the left button and changing the year selection with the right button. If the default value is correct, no action is required.

#### **UNITS**

Select the units for the odometer to be displayed in the LCD. The choices are English or Metric. The default is English. The speed displayed in the LCD will always be the opposite of the units selected. This means if English is selected, distance will be in miles and speed in the LCD will be in KPH.

## Setup Menu [continued]

#### **AUTO DIMMING**

This is a toggle option that allows the user to select whether they want gauge controlled auto-dimming enabled. If disabled, gauge will default to high backlight regardless of light sensor input value.

#### SHIFT ICON

Allows the user to choose from Steady, Flash, and Disabled options for the Shift Up icon. Steady causes the telltale to remain on while engine speed is above the set shift RPM. Flash causes the telltale to flash while engine speed is above the set shift RPM. Disabled option turns the Shift icon operation OFF.

#### SET SHIFT ICON RPM

This allows the user to increase or decrease the RPM at which the Shift Up telltale lights up in increments of 100 RPM. The default is 3500 RPM, Max 8000 RPM, MIN. 2200 RPM. Set the desired value and wait a few seconds for the screen to return to the main menu.

#### **GEAR SOURCE**

This allows the user to choose where the information for gear display comes from. Newer bikes broadcast all of the gear information from the ECU. Older bikes will require you to "Teach" the gauge the gears during a brief driving sequence. Selecting the GAUGE option requires the user to run the Start Gear Learn Mode function to store the appropriate ratios for gear calculation.

#### TACH SOURCE

This option toggles between the engine RPM information coming from ECU, or from a hard wired frequency input. All carburator and 1996-2003 bikes require the GAUGE option. All 2004 and newer EFI bikes require the ECU option. The selection might vary if the engine has been replaced.

#### **SPEED SOURCE**

This option toggles between the vehicle speed information coming from the ECU, or from a hard wired frequency input. All carburated and all 1996–2003 bikes require the GAUGE option. All 2004 and newer EFI bikes require the ECU option.

#### DEMO MODE

Demo Mode must be disabled for the gauge to operate correctly on the bike. Demo Mode is really an option for demonstration of the gauge functionality that artificially sweeps speedometer and tachometer while manipulating icons for visual display at the dealer, and only works when the gauge is not connected to the bike.

## Setup Menu [continued]

#### START GEAR LEARN MODE

This mode allows riders of 1999-2007 bikes to teach the gauge the gear positions so it can be displayed in the LCD. This process will guide the rider through the process of storing values as the bike is ridden on the road or setup on a dyno. The rider must ride with a constant engine speed (RPM) until the current gear position the ratio is automatically saved. At that time, the rider must shift to the next gear and hold a constant engine speed until the gear is saved. Repeat the process until all five or six gears have been learned. It will take approximately a mile of riding to complete the task. The gauge is set to learn a default of 6 gears. If you have a 5-speed transmission, press either button on the gauge after 5th gear has been learned to exit the learn mode.

#### Start Gear Learn Mode - INSTRUCTIONS



- 1. **START** Enter the setup menu and select "START GEAR LEARN MODE". Begin riding down the road at a steady speed in 1st gear (need to hold +/- 2 MPH).
- 2. **LEARNING** Once the gauge has learned the gear, it will display SAVED. You must then Shift to the next gear.
- 3. **LEARNING next gear** Continue riding down the road at a steady speed (need to hold +/- 2 MPH) until the SAVED appears. Continue through all of the bike gears. If you need to stop or exit this mode press either button.



#### **SET ODOMETER**

This function is used to program the mileage recorded in step 1 of the installation section. It becomes disabled once the odometer increments more than 100 miles. Do not save until the desired odometer value is displayed! To start over, simply key off the bike and begin the process again. The value will not be stored until you choose to save it. Save by pressing and holding both buttons. Riding for more than 100 miles without setting the odometer also DISABLES this function permanently.

## Setup Menu [continued]

#### ADJUST SPEEDOMETER

This option is used to calibrate the speedometer in the event it should not be accurate. Using a GPS, ride bike at a steady GPS reading of 30mph and select SAVE (Left Button). This will recalculate the gauge to reflect accurate speed.

#### SET FUEL TRIP

This allows the rider to enter a mileage that they wish to trigger the LOW FUEL telltale to appear. This is not related to fuel economy or riding conditions. It is only meant to be another reminder to get fuel and should be reset to zero after topping off the tank. Reset by pressing and holding the right button when the fuel odometer is displayed. The default setting is 140 miles and can be changed in 5 mile increments to a min of 50 or a max of 400 miles. The main menu will return if no buttons are pressed within a few seconds.

#### RESTORE DEFAULTS

This option resets gauge values to 2004-2010 model bike settings. This DOES NOT reset the LOW FUEL or SHIFT telltale values stored earlier. The defaults are set to the following values:

## The gauge is factory preset to the following configuration. (ECU is Engine Control Unit)

**Bike** =  $^{\circ}04 - > ^{\circ}10$ 

Units = English (Odo = Miles, LCD Speed = KPH)

Auto Dim = Enabled Shift Icon = Steady

Set Shift Icon = RPM 3500

Gear Source = ECU

Tach Source = ECU

Speed Source = ECU

**Demo Mode** = Disabled

Set Fuel Trip = 140 Miles

#### **SOFTWARE INFORMATION**

Displays software version number and date of creation.

#### FAULT CODES

Prompts the ECU for engine fault codes on 2004-2010 EFI only. If any exist they will be listed with fault number and source. Not available on carburated models.

#### **DIAGNOSTICS**

Launches diagnostics function that displays raw data values as seen by the gauge. On 2004-2010 models, page 3 should also display ECU status as either ENGINE DATA OK, or NO ENGINE DATA.

#### **EXIT**

The screen will display "WAIT..." and a complete gauge reset with the changes will follow.

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