

Dakota Digital

SIM-1 SPEED RECALIBRATION UNIT FOR HARLEY DAVIDSON ELECTRIC SPEEDOMETERS

Changing the gearing or tire size on a motorcycle will make the reading incorrect. The SIM-1 will allow you to adjust an electronic speedometer, with stock electric speed sensors, back to the correct reading.

The SIM-1 has an adjustable range of correction from x2.84 times (more than double) to x0.502 times (half). Calibration is set using the two push button switches. Press the UP button to increase the speed. Press the DOWN button to decrease the speed. The unit has an internal memory which stores the calibration when the bike is turned off, or if the unit is unplug for any work.

1996-2006 Harleys 3-pin triangular Deutsch connectors

Connection is as follows:

1. Locate the three pin, triangular connector between the speedometer and transmission speed sensor. (*image 1*)
2. Unplug the connector.
3. Plug the SIM-1 into the two mating connectors. The SIM-1 will now be in between the speedometer and transmission speed sensor. (*image 2*)
4. Calibrate the speedometer. (see steps below)
5. Secure the SIM-1 into the harness on the bike so it is not hanging loose. Wire ties work well for this. (*image 3*)



Image 1



Image 2



Image 3

Calibration is as follows:

1. Follow a vehicle going at a set speed or time yourself driving one mile so you know what your speed should be. A dyno or GPS are also great ways to reference speed.
2. Press and hold the UP or DOWN button while you are driving to change the speedometer reading until the speedometer is correct. *The bike must be moving in order to adjust the speedometer.*
3. After the SIM-1 has detected that no buttons have been pressed for a time, the new calibration is stored.

*2004 and newer Harley Davidson Motorcycles make use of a data bus to send speed information to the speedometer. Due to this fact, the SIM-1 needs to correct speed information before it goes into the ECM. In order to correct a speedometer on a 2004 or newer bike, the SIM-1 needs to be connected between the speed sensor and the ECM.

2007-current Harleys: Cut and splice the wires and solder the SIM-1 in before the ECM. This is required due to the different style of connector on the speed sensor.

Locate the speed sensor wires coming from the sensor. The speed sensor is below the battery at the back of the transmission almost directly centered in the bike. Once located, follow the wires up to the ECM. At an accessible point, cut the wires and solder in the SIM-1 as indicated in the picture on the next page. You must also make the cut prior to where the white/green wire is T-ed to the cruise control module on 2007 model bikes with cruise, this is usually about 3- 4" after the speed sensor plug at the sensor. (see wiring diagrams on next page)

