

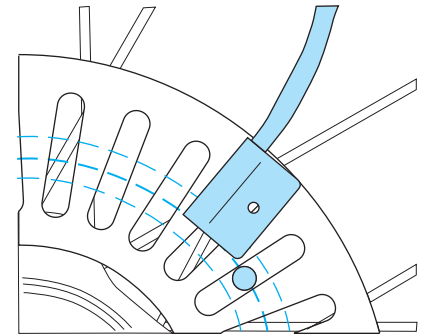
## WHEEL SENSOR HONDA RUCKUS

### WHEEL SENSOR TEST

Test for correct sensor/magnet placement before permanently mounting.

1. Set the vehicle on a stand so that the front (left) wheel spins easily.
2. Plug the wheel sensor cable into the computer.
3. Install the magnetic bolt.
4. Hold the sensor in place on the caliper mount by hand. While someone watches the computer, roll the wheel. If the computer does not register, move the magnet or sensor and try again. There should be 1/2" or less gap between the sensor and magnet.

**Do not mount so that the magnet passes the middle section of the sensor. Either the sensor will not register at all; or the sensor will register twice, causing a "double trigger" effect (computer displays twice the true speed.)** If a double-trigger is unavoidable, divide the wheel size setting in the computer by 2 to correct the problem.



Magnet Rotation Path

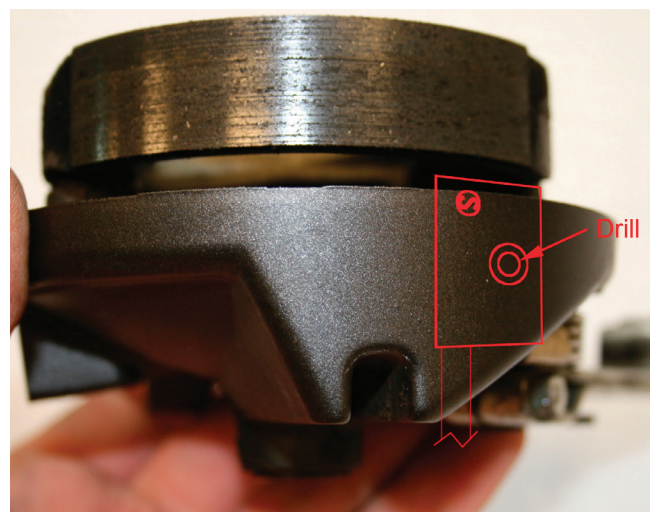
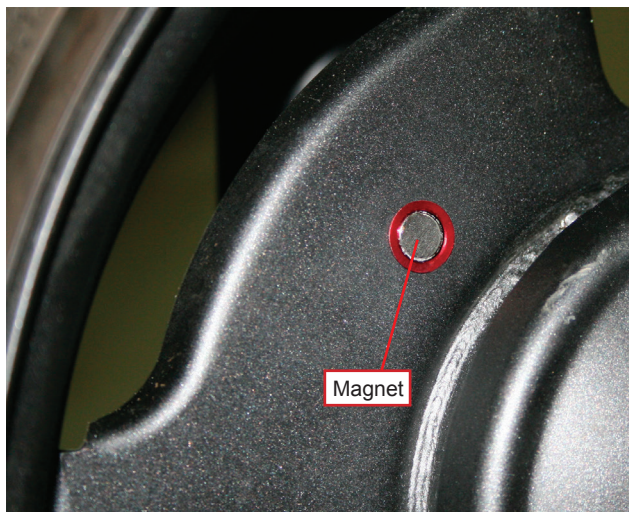
### MOUNT SENSOR AND MAGNET:

Begin by holding the wheel sensor against the hub in the indicated position. Determine the proper location to install the magnet so it will align with the sensor as shown in the diagram above. Drill through the wheel with a 3/8" diameter bit, and install the magnet and retainer clip. A step drill is recommended for best results. Epoxy may be used on the back side of the magnet to eliminate any movement after installation. If the retainer clip style magnet will not work, the kit includes a spare magnet that can be installed into one of the wheel's features. It is not recommended to epoxy the magnet to a flat surface where only the epoxy will hold the magnet during wheel rotation. Use an epoxy such as JB Weld.

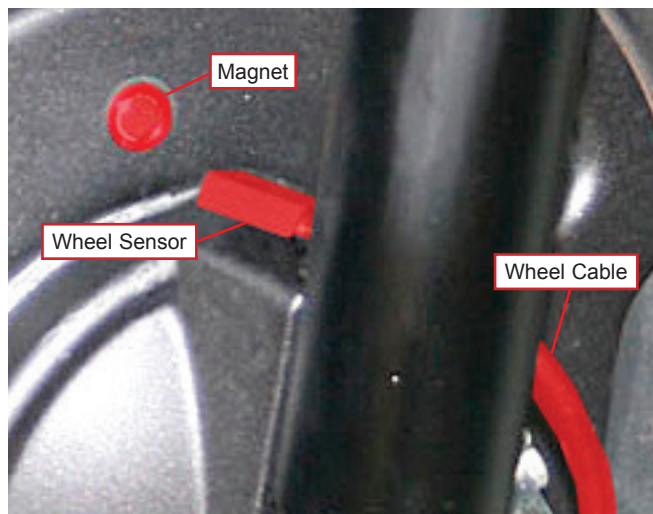
After installing the magnet, test the wheel sensor as shown above. Once the proper location of the wheel sensor is found, drill the hub for the mounting screw using a 1/8" drill bit. It is recommended to remove the wheel and hub before drilling, so no metal shavings are left trapped inside the brake. Be sure before drilling that the hole will not cause damage or interfere with any of the brake components.

Screw the wheel sensor in place using the included self-tapping phillips head screw. Re-install the hub and wheel, and route the wheel sensor cable.

**IMPORTANT:** Route the wheel sensor cable to the handlebars so that the cable will not be damaged when the forks compress.



## WHEEL SENSOR



### MEASURE WHEEL SIZE:

Knowing your exact wheel size is critical for the wheel sensor to calculate correct speed and distance data.

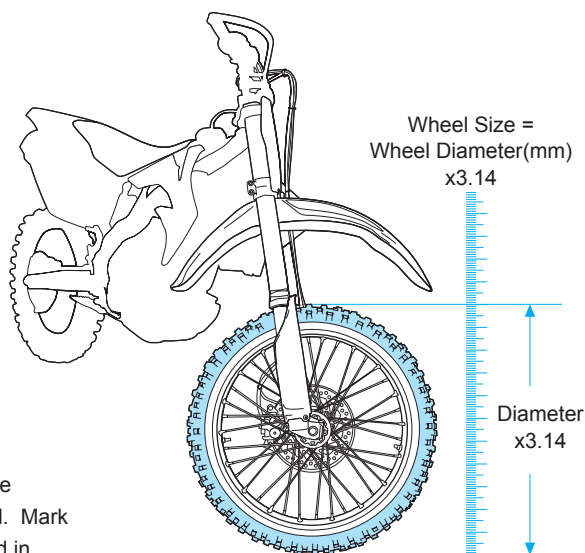
When comparing calibration to GPS data, use a long straight section of road. GPS has trouble with tight fast corners and small vertical movements (causing comparison inaccuracy.)

#### Method 1: Ruler

Find the circumference of front wheel by measuring its diameter in millimeters. Multiply the Wheel Diameter by 3.14. The result is your wheel size.

#### Method 2: Rolling

On a flat surface, mark the tire sidewall and the ground with a marking pen. Roll the wheel until the mark on the tire completes one revolution and is back on the ground. Mark the ground at this location. Measure the distance between the marks on the ground in millimeters (multiply inches by 25.4 to convert to mm). Use this number for your wheel size. For accuracy, the rider's weight should be on the bike when making the measurement.



#### Method 3: Distance Measurement

This is the most accurate method.

1. Set the wheel size to 2110mm (motorcycle) or 1675 (ATV).
2. Find a length of road where the distance is known.
3. Ride the distance, noting how far the computer reads (i.e. the road is known to be 5 miles and the computer shows 4.95 miles.)
4. Use the numbers to solve for X in the following equation:

$$(\text{new wheel size}) = \frac{(\text{actual miles}) \times (\text{current wheel size})}{(\text{current miles})}$$

$$X = \frac{5 \times 2110}{4.95} \Rightarrow X = \frac{10550}{4.95} \Rightarrow X = 2131$$

#### Generic/Average Sizes:

Motorcycle: 2110 mm  
ATV: 1675 mm

#### Wheel Size:

Enter the number you calculate from one of the above formulas into setup mode.

