## WHEEL SENSORS INSTALLS

## KTM WHEEL SENSOR

Trail Tech wheel sensors work with the KTM and Husqvarna OEM install location.

Screw the wheel sensor into the OEM caliper position. Insert the black magnet into the pre-drilled hole in the rotor and secure with the retainer clip.


## INVERTED FORK WHEEL SENSOR

If there are fork guards next to the brake rotor, then the fork guard wheel sensor can be installed as shown.

Try to have the tip of the sensor about $1 / 2$ inch away from the magnet in the rotor.

## CONVENTIONAL FORK SENSOR

If the fork is close to the brake rotor, then the VHB fork sensor can be used. Peel and stick the sensor to the fork.

Try to have the tip of the sensor about $1 / 2$ inch away from the magnet in the rotor.


## ROTOR SHIELD WHEEL SENSOR

For UTVs and quads with a rotor shield, position the sensor there.

Drill a $3 / 8^{\prime \prime}$ hole and use the jam nuts to secure the sensor to the rotor shield. Use loctite rather than over-tightening the jam nuts.


## C-BRACKET WHEEL SENSOR

Some kits include a metal C-bracket to help mount the sensor, as shown.

Use the jam nuts to secure the sensor to the C-bracket. Use loctite rather than over-tightening the jam nuts.


## MAGNET INSTALLATION:

Install a magnet on the brake rotor to trigger the speed sensor each wheel rotation.

Remove one of the stock rotor bolts and install the magnetic rotor bolt as shown, do not overtighten past $10 \mathrm{ft}-\mathrm{lb}$ of torque. If the magnetic bolt will not work, the kit includes a spare magnet that can be installed into one of the rotor spaces. Use the included retainer clip or epoxy such as JB Weld to secure.


Magnetic Rotor Bolt


Magnetic Retainer or Spare Magnet

## WHEEL SENSORS SETUP

## 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


Magnet Rotation Path twice the true speed.) If a double-trigger is unavoidable, divide the wheel size setting in the computer by 2 to correct the problem.

## MEASURE WHEEL SIZE:

Knowing your exact wheel size it 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 with no tight corners or small vertical movements.

## 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 2110 mm (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:

$$
\begin{aligned}
& \text { (new wheel size) }=\frac{\text { (actual miles) } \times \text { (current wheel size) }}{\text { (current miles) }} \\
& X=\frac{5 \times 2110}{4.95}
\end{aligned}
$$

## Generic/Average Sizes: <br> Motorcycle: 2110 mm <br> ATV: $\quad 1675 \mathrm{~mm}$

## Wheel Size:

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


