# PCS Speed Sensor Kit User Guide

## **Included Components**

- 1 Two Piece Collar with Two Magnets Installed
- 2 Stainless #8-32 x 1/2" with split lock washers
- 1 Sensor Bracket\*
- 1 Stainless 3/8"-24 Threaded Body Hall Effect Omni-Polar Speed Sensor with Internal Pull-up Resistor and two 3/8"-24 Nuts\*
- 1 Harness with 4-pin CPC Mate to Speed Sensor Connector, 10-Foot length, Unterminated End

If any of the above items are missing or replacement parts are needed, please contact Powertrain Control Solutions.

**NOTE:** Part Number SNS-5004 is designed for use with the Strange Engineering Ford 9" Ultra Case. It does not include a sensor bracket. It replaces the 3/8"-24 sensor with a 5/16"-24.

To accommodate different diameter pinion yokes, various collar diameters are available. These are listed below.

Kit Part Number	Collar Diameter		
SNS-5001	2.1875"		
SNS-5002	1.875"		
SNS-5003 & 04	1.8125"		

### Installation



## **Electrical Connection**

The mate to the speed sensor is a 4-way circular plastic connector. The connector and wires are included with the purchase of a sensor. Additional connection kits are available from PCS. The pinout of the speed sensor is shown below.

	4-Pin CPC Connector			
		Pin	Function	Wire Color
To Sensor Pin numbering shown	1	+5V Supply	Red	
	d e d	2	Sensor Output	White
	Pin numbering shown	3	Sensor Ground	Black
		4	Shield	Bare Metal
	on connector face			

**NOTE:** The speed sensor contains a 2200-ohm internal pull-up resistor between power supply (Pin1) and sensor output (Pin2).

**NOTE:**The sensor will trigger from either north or south pole magnets.



#### **Replacement Parts**

This kit includes everything to measure shaft rotation. If replacement magnets or sensors are needed, they can be ordered with the part numbers shown below.

- Magnet Kit Part # SNS-5010
- Stainless 3/8"-24 Threaded Body Hall-Effect Omni-Polar Speed Sensor with Internal Pull-up Resistor and two 3/8"-24Nuts - Part# SNS-5000

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