

## Passenger Side Front Wheel Speed Sensor Kit Instructions

### Hub Mount Brake Applications

### Spindle Mount Brake Applications

#### New 4 Piston Heavy Duty Front Brake kit

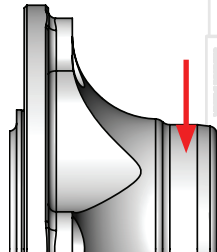
#### New Spindle mount Brake kit

- Popular brake kits are available with a wheel speed sensor
- Applies to brake kits purchased approximately 01/23 and later
- Request B4200-K4 speed sensor when ordering brake kit
- Request B4200-K3 speed sensor when ordering brake kit B4146 & B4152

- All spindle mount brake kits (carbon or steel brakes) are available with a wheel speed sensor
- Applies to brake kits purchased approximately 01/23 and later
- Request B4200-K1 speed sensor when ordering brake kit
- Request B4200-K3 & B4200G speed sensor when ordering C4700WC

#### Existing 4 Piston Heavy Duty Front Brake kit with Sensor provisions

- Popular brake kits can be retro fit with a wheel speed sensor
- Customer's caliper mount has 3/8-24 threaded hole for sensor
- Backside of customer's hub has a straight diameter for pressing on trigger wheel adapter
- Applies to brake kits purchased approximately 01/23 and later
- Order B4200-K4 which includes sensor, trigger wheel, and trigger wheel adapter
- Order B4200-K3 for B4146 & B4152 kits which includes sensor and trigger wheel

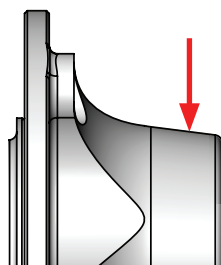


#### Existing Spindle mount Brake kit with Sensor provision

- Customer caliper mount has 3/8-24 threaded hole for sensor
- Applies to brake kits purchased approximately 01/23 and later
- Order B4200-K1 which includes sensor, trigger wheel, and trigger wheel rotor adapter
- Order B4200-K3 for Evolution brakes which includes sensor and trigger wheel
- For C4700WC Brake kits
  - Customer's caliper mount has two 3/8-24 holes for sensor
  - Backside of customer's hub has  $\varnothing 2.562$ " for pressing on trigger adapter
  - Applies to brake kits purchased 01/23 and later
  - Order B4200-K3 which includes sensor and trigger wheel and order B4200G trigger wheel adapter

#### Existing 4 Piston Heavy Duty Front Brake kit without Sensor provisions

- Popular brake kits can be retro fit with a wheel speed sensor
- Customer's caliper mount does not have 3/8-24 threaded hole for sensor
- Backside of Customer's hub is tapered with no straight diameter for pressing on trigger wheel adapter
- Applies to brake kits purchased approximately prior to 01/23
- Sensor kit with an "RS" suffix is required
- An example kit is B4145RS (shown on page 2) which includes sensor components, hub, and caliper mount



#### Existing Spindle mount Brake kit without Sensor provision

- Customer caliper mount does not have 3/8-24 threaded hole for sensor
- Applies to brake kits purchased approximately prior to 01/23
- Order B4200-K2 which includes sensor components and caliper mount
- Must specify caliper mount or brake kit part number For C4700WC Brake kits
- Customer's caliper mount does not have two 3/8-24 holes for sensor
- Backside of customer's hub does not have  $\varnothing 2.562$ " for pressing on trigger adapter
- Applies to brake kits purchased approximately prior to 01/23
- Order B4200-K3, B4200G, B4700A, B4600J, B4600E & B4600G

# Passenger Side Front Wheel Speed Sensor Kit Instructions

## Feature and Benefits

- High resolution 52 tooth trigger wheel
- High precision zero speed hall effect sensor
- Industry standard 3/8-24 Fully threaded sensor body
  - Stainless steel housing - more durable than aluminum bodies
  - Proven reliability in top fuel cars
    - Made in USA
- Passenger side sensor location provides the most accurate signal as left front tire has a greater tendency to lose contact due to engine torque reaction
  - Requires 4.5-26 VDC supply voltage
    - 0-15kHz operating frequency
  - Terminated with Deutsch DTM plug
- Includes mating Deutsch DTM receptacle & pins

Tire diameter	Tire Rollout per pulse (in)
25"	1.51"
26"	1.57"
27"	1.63"
28"	1.69"
29"	1.75"

## Installation Instructions

1. Install wheel studs (6) using blue loctite and washer (5) before pressing on the reluctor ring adapter (7).

**Note:** Ensure flange of the adapter (7) faces **outboard**. (Figure #2)

2. Press the trigger wheel (8) onto the adapter ring.
3. Refer to applicable brake kit instructions for hub and caliper bracket installation, using the passenger side caliper mount (9) provided in this kit.
4. Thread the hall effect sensor (12) into the passenger side bracket. Using feeler gauges, set the gap between sensor and trigger wheel to 0.030". (Figure# 3)
5. Secure the sensor with the jam nut. Tighten to 3 ft-lbs maximum torque. Then connect the sensor.
6. If you do not have a DTM Receptacle installed in your setup, instructions are on the next page or the YouTube link on our products web page will show how to assemble one.
7. To set up and program readings using Holley Efi, refer to the video on our products web page provided by Devin Vanderhoof.

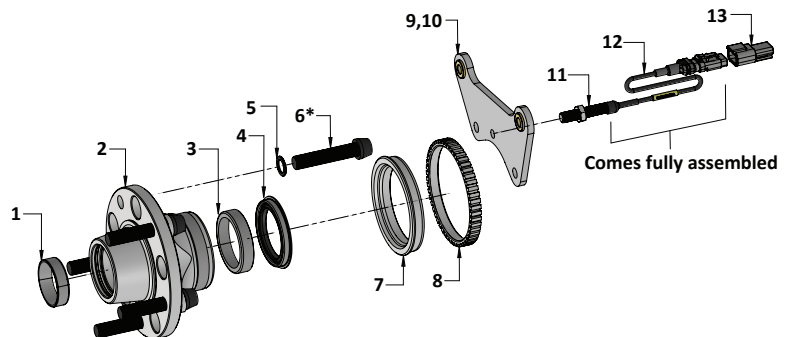
## Before you begin installation

- Be sure to check the applicable brake kit instructions for additional installation instructions.
- If after reading these instructions, you have any questions or comments, please do not hesitate to call us.

### B4145RS SPEED SENSOR EXAMPLE KIT CONTENTS

ITEM#	PART#	QTY	DESCRIPTION
1	B1330C	1	Timken LM12710
2	B4154SPM	1	Hub Front
3	B1330A	1	Timken L68110
4	B1330B	1	Wheel Seal CR/SKF 19221
5	A1028A	5	1/2" Stripper washer
6	A1028B	5	1/2-20 x 2.5" Taper head SHCS
7	B4200E	1	Trigger wheel adapter (not included in B4146 kits)
8	B4200D	1	Trigger wheel
9	B4144AR	1	Caliper mount
10	B1301E	2	3/8-24 Plug nut
11	-	1	3/8-24 Jam nut
12	B4200A	1	Speed sensor assembly -3/8-24 hall effect
13	B4200B	1	Speed sensor receptacle kit Deutch DTM

FIGURE # 1: B4145RS Exploded sensor assembly view



Item#	Torque spec (ft-lbs)
6*	65 (blue loctite)
11	3

FIGURE # 2: Ring Adapter orientation

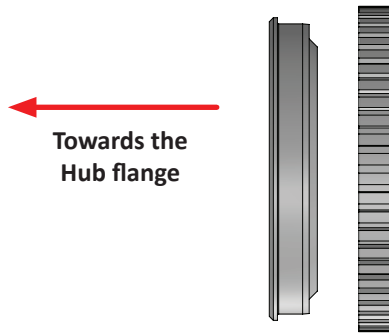
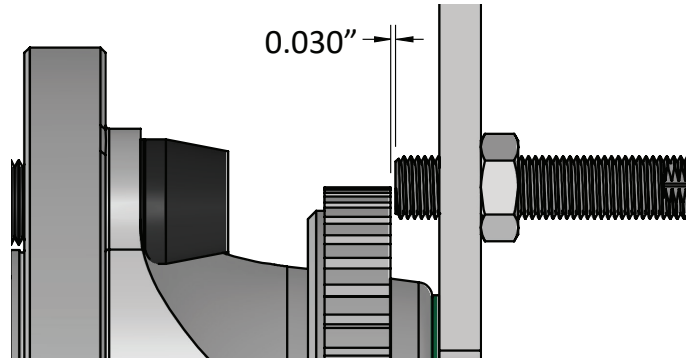
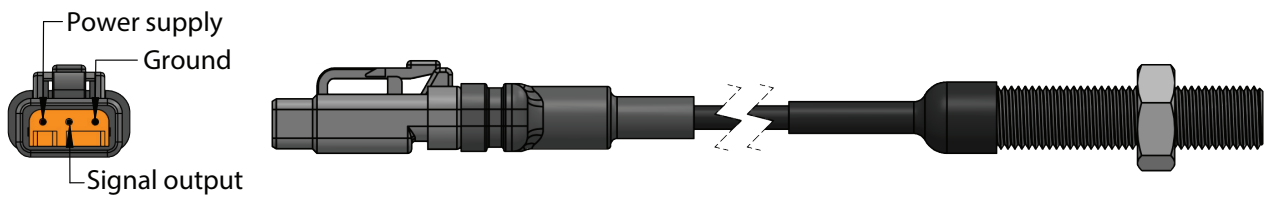


FIGURE # 3: Speed sensor spacing



## B4200A Sensor Connector Plug Pin Layout



## DTM Receptacle Assembly & Information

### B4200B DTM CONNECTOR KIT CONTENTS

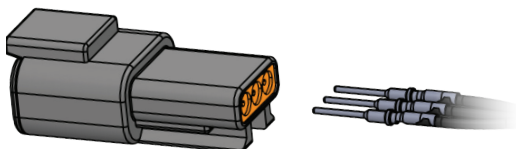
ITEM#	PART#	QTY	DESCRIPTION
-	DTM04-3P	1	3 position receptor
-	WM-3P	1	Receptacle wedge lock
-	1060-20-0222	3	Connector pin accepts 16-22 AWG wire

### STEP 1: Crimping Connectors



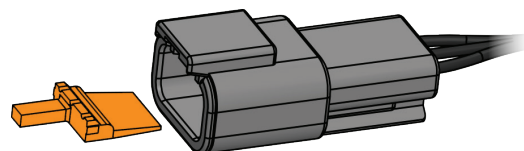
- Crimp the connector pins, using an open barrel crimper for an even press.

### STEP 2: Inserting connector pin



- Insert the crimped connectors through the grommet in the receptor and ensure that they snap into place. Lightly tugging the wires to confirm they are secure.

### STEP 3: Securing connectors with a wedge lock



- Place the wedge lock into the opposite side, securing the pins and wires into place.  
**Note:** Use needle nose pliers to remove the wedge.

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