

New Cascadia P4 abs wheel speed sensor...



[Kyle Siebert](#) 4,101 posts since Nov 14, 2014

New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6 Sep 27, 2019 7:51 PM

JT3985. Intermediate axle should be the middle axle right? The maintaince manual from meritor mm1917 or whatever says these pins are for the intermediate axle. Our drawing says those same pins are for the rear drive axle and the a66 drawing says it's for axle 3. Drive axle is supposed to be the rear rear axle according to meritor and it's supposed to be pins 19 and 20. Were using pins 19 and 20 for the front drive axle. According to tech support all new Cascadias are built the same so, did we mess up?

This all started cause I was trying to find wheel end C so I disconnected FDA left WSS and C went open. Meritor says thats wrong. I've got codes for wheel speed sensor gap erratic or wrong on wheel speed sensor C and wheel end 3. Why do they do this to us? Where is there a picture that says this is a b c d e and f. What was wrong with axle 1 2 and 3? If your gonna change then make some obvious notes. I'll get a response from freightliner engineering tomorrow. Just wondering if you guys seen this Yet.

Circuit numbers are all correct. Wires are too short to mix up.

Tags: abs, abs sensor, wss, p4 wheel speed, wheel speed sensor, speed sensor location, 520506, 794



[Kyle Siebert](#) 4,101 posts since Nov 14, 2014

Re: New Cascadia P4 wheel speed sensors wired incorrectly? 6x6 Sep 15, 2017 7:05 PM

Tom at the call center said the engineers Said it's correct the way it is. Tom agrees there needs to be a solution made for wheel speed sensor position location. This intermediate axle now being in the rear and calling out locations as C and even wheel 3 on the same truck, all of it makes no sense.



[Kyle Siebert](#) 4,101 posts since Nov 14, 2014

Re: New Cascadia P4 wheel speed sensors wired incorrectly? 6x6 Feb 27, 2019 4:17 AM

6S6M

RECEIVED	
 Brake Control Assignment		
Allocation ABS Valve A [1]		yes
Allocation ABS Valve A [2]		no
Allocation ABS Valve A [3]		no
Allocation ABS Valve A [4]		no
Allocation ABS Valve A [5]		no

Parameter	Part	Value	Units
Allocation ABS Valve F [14]		no	
Allocation ABS Valve F [15]		no	
Allocation ABS Valve F [16]		no	
Sensor A Allocation		Axle 1 / left	
Sensor B Allocation		Axle 1 / right	
Sensor C Allocation		Axle 2 / left	
Sensor D Allocation		Axle 2 / right	
Sensor E Allocation		Axle 3 / left	
Sensor F Allocation		Axle 3 / right	
3/2 Solenoid Valve A Allocation Pressure Output [1]		no	
3/2 Solenoid Valve A Allocation Pressure Output [2]		no	
3/2 Solenoid Valve A Allocation Pressure Output [3]		yes	

4S4M

s/n JX1159

Allocation ABS Valve F [16]		no	
Sensor A Allocation		Axle 1 / left	
Sensor B Allocation		Axle 1 / right	
Sensor C Allocation		Axle 3 / left	
Sensor D Allocation		Axle 3 / right	
Sensor E Allocation		Not installed	
Sensor F Allocation		Not installed	
3/2 Solenoid Valve A Allocation Pressure Output [1]		no	

New Cascadia P4 abs wheel speed sensor...

Updated the image to show Wheel Speed Sensor locations based on 6 sensors verses 4 sensors. **Notice how the sensor C location changes from intermediate axle to the very rear axle.**



[Collin Becker](#) 9 posts since Nov 29, 2014

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Feb 16, 2019 9:52 PM

THANKS FOR THE INFO. I DO AGREE THAT MERITOR/FTL NEED TO BE ON THE SAME PAGE. LETS GET THAT FIGURED OUT UPPER MANAGMENT.



[Kyle Siebert](#) 4,101 posts since Nov 14, 2014

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Feb 17, 2019 2:00 AM

[TechComm](#) .



[Kyle Siebert](#) 4,101 posts since Nov 14, 2014

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Jun 14, 2019 10:58 PM

We replaced a ABS ECU for this now. Tech diag with Wabco and they said replace the ABS ECU and that didn't fix it. That's when I saw the WSS rubbed thru on frame rail and realized the prior tech was probably diag for the intermediate axle. I called Wabco back WBA 0061357 and advised that they get with Kathryn Paul over there, the top dog of ABS, and get their call center more aware of this issue with a bulletin too. Their response was that they would advise the tech un plug it and I told them its not the solution because that leads to them to think its a issue with the ABS ECU mis-pinned. I offered my phone and email but they wouldnt take it. S/N KP1132. So now we have a test ABS ECU thanks to this issue.

The specified item was not found.



[Brandon Button](#) 52 posts since Feb 3, 2015

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Nov 11, 2019 10:58 PM

Hey all, I am late to this party for sure... I am not positive if I am understanding this discussion correctly. It would appear to me that if you have a 6 wheel system, then the locations are correct, but they are not in a 4 wheel system? Or BOTH are wrong?? I just pulled rear rear right wheel on a 6 sensor system to chase what meritor fault describes as wheel 6, and also in the T/S describes as axle 3 right. However, when I unplug this rear rear right sensor I get a fault for intermediate axle right... This sort of leaves me in a spot where I have no idea which wheel I should be chasing... EEEEEK!! what a mess they made here... But then when I unplug the fwd rear right, which the harness is labeled axle 2, I get a fault for "wheel position D". Why is one fault described as wheel 6, and axle 3, when the next is labeled wheel D and drive axle...

Basically in multiple different locations they are swapping the terminology.

wheel 1 vs wheel A

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3rd axle vs intermediate axle.

My question to help me understand, Is it indeed 1,2,3,4,5,6 (A,B,C,D,E,F) from left to right and front to rear accordingly?? Thanks all.



[Kyle Siebert](#) 4,101 posts since Nov 14, 2014

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Nov 11, 2019 11:05 PM

Ha, love it. Yes the rear axle is now the intermediate axle. Lovely isn't it. They should make a service solution document about this to clear things up! [Duane Carlsen TechComm](#) .

6S6M

1a 2b

3c 4d

5e 6f

4S4M

1a 2b

-- --

3c 4d



[Brandon Button](#) 52 posts since Feb 3, 2015

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Nov 12, 2019 12:52 PM

Thank you Kyle. Yes, to call it third axle 6 in a fault, then when disconnected throw intermediate axle F.. what a trip lol

On Monday, November 11, 2019, Kyle Siebert <



[Jeremy Blankenship](#) 5 posts since Jun 4, 2015

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6
Mar 9, 2020 10:53 PM

KYLE THANKS FOR THIS! You just saved me from chasing a 2nd axle wheel speed sensor issue. This is for sure going to lead guys down the wrong diagnostic path.



[Lee Wilder](#) 14 posts since Nov 13, 2014

New Cascadia P4 abs wheel speed sensor...

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6

Jun 26, 2020 3:19 PM

I had the exact same issue with a P4, contacted both Wabco and Freightliner about the incorrect pin location of the wheel speed sensors. Wabco told me the truck was wired wrong. If I remember the Freightliner diagram was correct to the truck. Basically I had to identify sensor location by rotating wheel ends, then verify by disconnecting the sensor and get an open circuit code. Mine had a bad tone ring that caused an intermittent fault for erratic wheel speed.



[Jaime Cortes](#) 2 posts since Oct 6, 2015

Re: New Cascadia P4 abs wheel speed sensor locations. wheel speed sensors wired incorrectly? 6x6

Dec 6, 2020 11:26 PM

Thank you for this informations its very usefull.