

SERVICE BULLETIN

GENERAL SERVICE GUIDELINES FOR ABS/EBS DTC'S, LANE DEPARTURE WARNING, STEERING ANGLE SENSOR LEARNING AND ABS/EBS MODULE PROGRAMMING

GROUP: 0-GENERAL TECH TIP NO: 24-001 DATE: 1/10/2024 **SUBJECT VEHICLES**: 2021- Current Model Year L and XL Series Trucks Equipped with Lane Departure and/or Stability Controls (ESC), assembled at the Mineral Wells, West Virginia, USA assembly plant.

Note: This technical service bulletin is provided as technical information and is not authorization for a warrantable repair.

OVERVIEW:

This TechTip was assembled with the most common service procedures to help technicians determine which diagnostic tool to use when performing general ABS/EBS diagnosis, Lane Departure Warning (LDW) diagnosis, Steering Zero Point Learning and ABS/EBS Module Programming.

- 1. ABS Module Diagnosis Wabco Toolbox
- 2. Steering Zero Point Learning DX3
- 3. Lane Departure Warning Learning (LDW) **Wabco Toolbox**
- 4. ABS/EBS Module Reprogramming DX3



General ABS/EBS/LDW Brake Diagnosis Use Wabco Toolbox

 Connect to the ABS/EBS or Onlane LDW module using Wabco Toolbox for diagnosis and reading Diagnostic Trouble Codes "DTC's"

IMPORTANT

It is recommended that the lasted version of Wabco Toolbox is always used. If parameters or data is missing, update Wabco Toolbox as needed.





Steering Wheel Zero-Point Learning Use DX3

1. Using DX3, connect to the truck and read out all modules.

2. From the DX3 Home page, select Special Working



3. Select **Steering Wheel Zero-Point Learning** and follow DX3 instructions.

Special working			_
Auto leveling constant writing	Meter compensation	Steering wheel zero-point learning	
Download repro file	INF file creation/registration	CAN 250K diagnosis	Event log replay
List of timeline data	Past work information list		
			ОК

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4. Once learning has completed, confirm no DTC's returned. It will be necessary to use Wabco Toolbox to check and clear brake related DTC's.

Lane Departure Warning (LDW) Relearn Use Wabco Toobox

1. Using Wabco TOOLBOX[™] select OnLane Lane Departure Warning (LDW).

IMPORTANT

Make sure the latest version of Toolbox software is being used.





2. Select Perform Service Alignment in the Options menu.

OnLaneALERT		×
System Display Speakers Optio	ns Help Save Parameters to File	
	Perform Service Alignment	
Unlar	IEALEKI	
Lane Depa	arture vvarning	
•	C C	
Production Information		
WABCO Part Number :	4008735300	
Customer Part Number :	yyyyyyyyyyyyy	
ECU Serial Number :	027873000185	
ECU Manufacturing Date :	06/01/2018	
Vehicle Identification Number:	HINMT*A09C US1000 *ÿ*ÿ	
Software Number :	2460700302	
Software Version :	C9.2	
		Close

3. Select Yes.

OnLaneALERT System Display Speakers	Options Help
OnLa	Service Alignment – – X
Lane Der	Start Service Alignment?
Production Information	Yes No
WABCO Part Numb Customer Part Numb	
ECU Serial Numb	
ECU Manufacturing Date	
Vehicle Identification Number	
Software Numb	
Software Versio	Close
	Close



2. Select Perform Service Alignment in the Options menu.

OnLaneALERT		×
System Display Speakers Optio	ns Help Save Parameters to File	
	Perform Service Alignment	
Unlar	IEALEKI	
Lane Depa	arture vvarning	
•	C C	
Production Information		
WABCO Part Number :	4008735300	
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Vehicle Identification Number:	HINMT*A09C US1000 *ÿ*ÿ	
Software Number :	2460700302	
Software Version :	C9.2	
		Close

3. Select Yes.

OnLaneALERT System Display Speakers	Options Help
OnLa	Service Alignment – – X
Lane Der	Start Service Alignment?
Production Information	Yes No
WABCO Part Numb Customer Part Numb	
ECU Serial Numb	
ECU Manufacturing Date	
Vehicle Identification Number	
Software Numb	
Software Versio	Close
	Close



Wabco ABS/EBS Module Programming Use DX3

1. Using DX3, select the Brake module, the click Reprogramming in the lower left of DX3



2. Select Contents of Work



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3. Select Download file

			100.50	
System	Brake (WABCO ABS-E8)	System name	ABS-E8	
Software No.	S8923E0N6	PIN	USA831010003	
Date and time	2023/12/12 10:32:51			
Contents of W ECU replacement	T			
	[R1001]			
VIN				
sim	Download re	pro file		
Program				
			•	
Facility Ma				
Engine INO.				
		Is being downloaded. Please wait for a	while.	
Software No.				
58923E0N6				
INF file				
sim inf				
C			Cancel	
Caution				

4. Verify software is correct then click the Next arrow in the upper right

System	Brake (WABCO ABS-E8)	System name	ABS-E8	
Software No.	58923E0N6	PIN	USA831010003	
Date and time	2023/12/12 10:32:51			
Contents of W ECU replaceme	nt			
VIN				
sim				<u> </u>
Program				
Engine No.				
Software No.				
S8923E0N6				
INF file				
sim.inf				
Caution				
				-
			HII	

5. Verify programming is No Problem, and click Write to ECU, follow DX3 screens to complete programming

System	Brake	(WABCO ABS-E8)	System name	ABS-E8	
Software No.	S892	BEON6	PIN	USA831010003	
Date and time	2023,	12/12 10:34:04			
Content	s o ECU replaceme	nt			
		ror file set value	Set value from E	cu Ju	udament
VIN		sim	sim		
Engine N	lo.				
Software	No.	S8923E0N6	S8923E0N6		
Battery o	heck	PC battery	Vehicle batte	ery -	
Verify re	sult	No problem. Is rep	orogrammable.		
					•
			Write to ECU		

