Q-299R2





SVE BULLETIN

SPECIAL VEHICLE ENGINEERING - BODY BUILDERS ADVISORY SERVICE

E-Mail via Website: www.FordBBAS.com (click "Contact Us")

Toll-free: (877) 840-4338

QVM Bulletin: Q-299R2 Date: 16, January 2020

Revised 16 Mar 2020

Guidelines for Modifying Ford Truck Wheelbases Equipped With Electronic Stability Control (ESC)

Revision	Update	Revision Date
Q-299R1	Clarification of ESC Equipped Vehicle with respect to Ford Truck Wheelbase Modifications	17 January, 2020
Q-299R2	Added Option Summary Clarity, ESC Calibration Support Details, and Log File Generation.	16MAR2020

Models Affected:

2017+MY F-Series Super Duty, 2021+MY E-Series, 2021+MY Medium Duty Truck and 2020+MY F-53 Motorhome / F-59 Commercial Stripped Chassis

Description:

The 2017+MY F-Series Super Duty and 2021+MY E-Series have ESC (Electronic Stability Control) as standard feature content. The 2021+MY F-650/750 Medium Duty Truck and 2020+MY F-53 Motorhome / F-59 Commercial Stripped Chassis have ESC as optional feature content. Modification of the wheelbase can affect vehicle performance which could result in ABS or Stability Control faults/lights. The ESC system may also have a changed response from the production wheelbase configuration, but still provides acceptable driver assistance. It is the responsibility of the alterer or final stage manufacturer to evaluate modified vehicle configurations to ensure that vehicle performance is acceptable to their customer base.

Option Summary:

Models Affected	ESC Standard Feature Content	ESC Optional Feature Content
2017+MY F-Series Super Duty	2017+MY F-Series Super Duty	2021+MY Medium Duty Truck
2021+MY E-Series	2021+MY E-Series	2020+MY F-53 Motorhome / F-59 Commercial Stripped Chassis
2021+MY Medium Duty Truck		
2020+MY F-53 Motorhome / F-59 Commercial Stripped Chassis		

Special Notes:

The chassis wheelbase shall not be modified shorter than the shortest for each model (GVWR offered).

For vehicles under 10K GVWR, FMVSS 126 does apply for ESC function and will need to be tested the by alterer or final stage manufacturer - refer to the Incomplete Vehicle Manual for specific FMVSS/CMVSS information.

ESC Calibration Support:

Originator: BBAS

Date Issued: 01/17/2020 Document: SVE Bulletin No. Q-299R2 Page 1 of 1 Date revised 03/16/2020 The Electronic Stability Control (ESC) feature will be supported when modifying F-Super Duty Basic (Stripped) Chassis, Super Duty, and E-Series Wheelbases (WB) as part of the intermediate or final stage upfit.

Wheelbase modifications within the noted ranges below may necessitate a reflash of the ABS/ESC module to a new calibration. Any wheelbase outside of the noted ranges below will not be supported with calibrations.

F53 – Motorhome (Recreation Vehicle):

- 16K 18K GVWR wheelbases between 158" and 238"
- 20.5K 22K GVWR with 19.5" tires wheelbases between 168" and 184" and between 196" and 252"
- 22K 26K GVWR with 22.5" tires wheelbases between 196" and 260"

Note: ESC shall not be ordered for wheel base reductions or stretches planned post assembly plant build outside the preceding GVWR ranges on F-Super Duty Basic (Stripped) Chassis

F59 - Step Van (Commercial Vehicle):

- 16K 18K GVWR wheelbases between 158" and 184"
- 19.5k GVWR Hydroboost wheelbases between 158" and 216"
- 19.5k GVWR HydroMax wheelbase between 168" and 178"
- 20.5k 22K GVWR wheelbases between 168" and 178" and between 197" and 208"

Note: ESC shall not be ordered for wheel base reductions or stretches planned post assembly plant build outside the preceding GVWR ranges on F-Super Duty Basic (Stripped) Chassis

Super Duty:

F-450, F-550, and F-600 wheelbases between 145" and 267"

E-Series:

- E-350 10,050 11.5K GVWR wheelbases between 138" and 170"
- E-350 12.5K GVWR wheelbases between 152" and 232"
- E-450 wheelbases between 158" and 232"

Log File Generation

Once the ABS/ESC module reflesh has been completed, a Log File must be created by Intermediate/Final Stage Manufacturer using the Recommended Spreadsheet* format shown here:

Recommended Spreadsheet Format

Source	VIN	Node ID	DID	Value
Some Builder USA	1FDXE4FN6MDC00207	760	F10A	LC24-14C602-BFD
Some Builder USA	1FDXE4FN6MDC00207	760	DE01	3300200100000000
Some Builder USA	1FDXE4FN7MDC00208	760	F10A	LC24-14C602-BFD
Some Builder USA	1FDXE4FN7MDC00208	760	DE01	2400200200000000

- **Source:** is Intermediate/Final Stage Manufacturer location making the change.
- VIN (Vehicle Identification Number): should be 17 characters with no spaces between characters
- Node ID: should always be 760 (for ABS module).
- **DID:** identifies the values that are changing on the module. (4-Character Hex)
- There will be two unique **DID** entries (F10A & DE01) per each unique VIN.

Bulletin Q-18 R5 can still be referenced for details on disassembly and preparation for modifying Ford Light Truck Wheelbases Page 2, **III. CHASSIS DISASSEMBLY AND PREPARATION**.

Refer to the Body Builder Layout Book for additional guidelines and recommendations. If you have any questions, please contact the <u>Ford Body Builders Advisory Service</u> as shown in the header of this bulletin.

Originator: BBAS
Document: SVE Bulletin No. Q-299R2
Page 1 of 1
Date Issued: 01/17/2020
Date revised 03/16/2020

^{*} Spreadsheet is to be developed in Microsoft Excel