

Subject: MeritorWABCO ECAS ECU Replacement

Models Affected: Specific Freightliner Cascadia vehicles manufactured December 11, 2012, through July 15, 2013, and equipped with a MeritorWABCO Electronically Controlled Air Suspension (ECAS) system.

General Information

IMPORTANT: If this vehicle is in Recall campaign FL656, the recall repair must be performed first.

IMPORTANT: This repair will require MeritorWABCO's Toolbox 11.2 software. Earlier versions of Toolbox 11 must be upgraded to 11.2. If the computer does not have Toolbox, or has Toolbox 10 or earlier, Toolbox 11.2 can be purchased through the MeritorWABCO website at www.meritorwabco.com.

Daimler Trucks North America LLC, on behalf of its Freightliner Truck Division, is initiating Field Service Campaign SF495A to modify the vehicles mentioned above.

On specific vehicles, the ECAS ECU has had parameter changes designed to improve the performance of the system. The load transfer timer has been disabled to prevent load transfer at a standstill and optimize the duration of the load transfer during an Automatic Traction Control event, and the stand by mode has been enabled to allow the system to maintain a level chassis while loading and unloading a trailer.

The current ECAS ECU will be replaced with the upgraded ECAS ECU.

IMPORTANT: Advance arrangements are required to ensure parts are available at the dealership for when the vehicle arrives.

There are approximately 290 vehicles involved.

Additional Repairs

Dealers must complete all outstanding field service campaigns prior to the sale or delivery of a vehicle. A Dealer will be liable for any progressive damage that results from its failure to complete campaigns before sale or delivery of a vehicle.

Owners may be liable for any progressive damage that results from failure to complete campaigns within a reasonable time after receiving notification.

Please contact Warranty Campaigns for consideration of additional charges prior to performing the repair.

Work Instructions

Please refer to the attached work instructions. Prior to performing the campaign, check the vehicle for a completion sticker (Form WAR261).

Replacement Parts

Replacement parts are now available and can be obtained by following the ordering instructions below.

If our records show your dealership has ordered any vehicle(s) involved in campaign SF495A, a list of the customers and vehicle identification numbers will be available on AccessFreightliner.com. Please refer to this list when ordering parts for this campaign.

Field Service Campaign

Daimler Trucks
North America LLC

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Parts Ordering Instructions:

ECAS ECU: Order directly from MeritorWABCO.

- Email customer.service@meritorwabco.com, and send as High Importance
- In the email subject line put "Campaign SF495 ECAS ECU Order"
- In the email body provide the following information:
 - Dealer name and code
 - Dealer ship to address
 - Contact name, number, and email address of person at dealership receiving the part(s)
 - VIN for each part requested
 - Repair Order or DTNA Claim Number

Velcro: Purchase locally.

- Brand: Velcro, Heavy Duty
- Quantity: Two 3.5" x 1" strips per vehicle
- Available at Lowe's and Home Depot. A small package will complete two vehicles. The 10' roll will complete up to 17 vehicles.

Table 1 - Replacement Parts for SF495A. See ordering instructions above.

Campaign Number	Part Description	Part Number	Qty.
SF495A	ECAS ECU	25-SF495-000	1 ea
	Velcro; 3.5" x 1" strip	NA	2 ea

Table 1

Removed Parts

U. S. and Canadian Dealers, please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts. Export distributors, please destroy removed parts unless otherwise advised.

Labor Allowance

Table 2 - Labor Allowance

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Damage Code
SF495A	Replace and calibrate ECU	1.2	996-0927A	000-Modifiedx

Table 2

IMPORTANT: When the campaign has been completed, locate the base completion label in the appropriate location on the vehicle, and attach the gray completion sticker provided in the field service kit (Form WAR261). If the vehicle does not have a base completion label, clean a spot on the appropriate location of the vehicle and first attach the base completion label (Form WAR259). If a field service kit is not required or there is no completion sticker in the kit, write the campaign number on a blank sticker and attach it to the base completion label.

Claims for Credit

You will be reimbursed for your parts, labor, and handling (landed cost for Export Distributors) by submitting your claim through the Warranty system within 30 days of completing this campaign. Please reference the following information in QuickClaim or OWL:

- Claim type is **Field Service**.
- In the FTL Authorization field, enter the campaign number and appropriate condition code (**SF495A**).
- In the Primary Failed Part Number field, enter **25-SF495-000**.
- In the Parts field:
 - A parts handling allowance of \$110 for the ECU may be claimed.
 - A parts allowance of \$2.00 for the Velcro may be claimed.
- In the Labor field, first enter the appropriate SRT from the Labor Allowance Table. For administrative time, enter SRT 939-0010A for 0.3 hours.
- For OWL, the VMRS Component Code is 016-008-058 and the Cause Code is A1 - Campaign.

This Field Service Campaign will **terminate on March 31, 2015**. Dealers will be notified of any changes to the termination date via Important Campaign Information Letter posted on AccessFreightliner.com.

IMPORTANT: ServicePro or OWL must be viewed prior to beginning work to ensure the vehicle is involved and the campaign has not previously been completed. Also, check for a completion sticker before beginning work.

All claims must be submitted within 30 days of the repair and within 30 days of the termination date of the campaign. U.S. and Canadian Dealers: All excess inventory to be returned to the PDC following the conclusion of the campaign must be returned in resaleable condition to the Memphis PDC within 90 days from the termination date. Please submit a PAR to request return to the Memphis PDC. (Canadian dealers should return the kits to their facing PDC.) Export Distributors: Excess inventory is not returnable.

U.S. and Canadian dealers, contact the Warranty Campaigns Department from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, via Web inquiry at AccessFreightliner.com / Support / My Tickets and Submit an Inquiry, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information. Export distributors submit a Web inquiry or contact your International Service Manager.

Field Service Campaign

Daimler Trucks
North America LLC

March 2014
SF495A

Copy of Notice to Owners

Subject: MeritorWABCO ECAS ECU Replacement

Daimler Trucks North America LLC, on behalf of Freightliner Trucks Division, is initiating Field Service Campaign SF495A to modify specific Freightliner Cascadia vehicles manufactured December 11, 2012, through July 15, 2013, and equipped with a MeritorWABCO Electronically Controlled Air Suspension (ECAS) system.

On specific vehicles, the ECAS ECU has had parameter changes designed to improve the performance of the system. The load transfer timer has been disabled to prevent load transfer at a standstill and optimize the duration of the load transfer during an Automatic Traction Control event, and the stand by mode has been enabled to allow the system to maintain a level chassis while loading and unloading a trailer.

The current ECAS ECU will be replaced with the upgraded ECAS ECU.

Please contact an authorized Daimler Trucks North America dealer to arrange to have the campaign performed. **IMPORTANT: Advance arrangements are required to ensure parts are available for your vehicle when you arrive.** To locate an authorized dealer, search online at www.Daimler-TrucksNorthAmerica.com. The campaign will take approximately an hour and a half and will be performed at no charge to you.

This Field Service Campaign will **terminate on March 31, 2015**. Please make sure the campaign is completed prior to this date. Work completed after this date will be done at the customer's expense.

As stated in the terms of your express limited warranty, Daimler Trucks North America LLC will not pay for any damage caused by failure to properly maintain your vehicle. Daimler Trucks North America LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

Contact the Warranty Campaigns Department at (800) 547-0712, from 7:00 a.m. to 4:00 p.m. Pacific Time, Monday through Friday, e-mail address DTNA.Warranty.Campaigns@Daimler.com, or the Customer Assistance Center at (800) 385-4357, after normal business hours, if you have any questions or need additional information.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: MeritorWABCO ECAS ECU Replacement

Models Affected: Specific Freightliner Cascadia vehicles manufactured December 11, 2012, through July 15, 2013, and equipped with a MeritorWABCO Electronically Controlled Air Suspension (ECAS) system.

IMPORTANT: If this vehicle is in Recall campaign FL656, the recall repair must be performed first.

IMPORTANT: This repair will require MeritorWABCO's Toolbox 11.2 software. Earlier versions of Toolbox 11 must be upgraded to 11.2. If the computer does not have Toolbox, or has Toolbox 10 or earlier, Toolbox 11.2 can be purchased through the MeritorWABCO website at www.meritorwabco.com.

ECAS ECU Replacement and Calibration

1. Check the base label (Form WAR259) for a completion sticker for SF495 (Form WAR260), indicating this work has been completed. The base label is usually located on the passenger-side door, about 12 inches (30 cm) below the door latch. If a completion sticker is present, no work is needed. If a completion sticker is not present, proceed to the next step.
2. Park the vehicle on a level surface, shut down the engine, and set the parking brake. Chock the tires.
3. Disconnect the batteries.
4. Remove the six fasteners that secure the dash lower cover. See **Fig. 1**.
5. The ECU should be secured with velcro strips on the back. Remove the ECU and disconnect all three connectors.

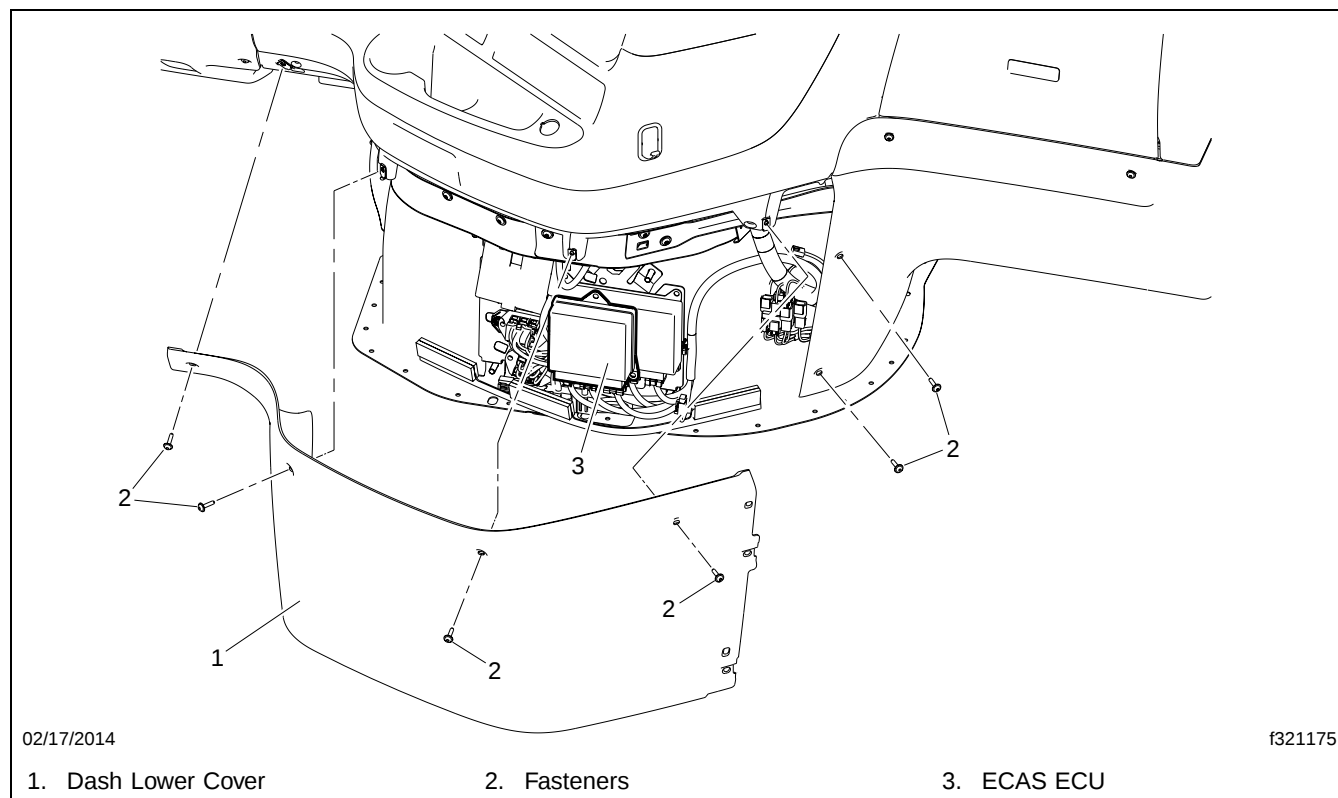


Fig. 1, Accessing the ECU

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NOTE: The ECU for campaign SF495 can be distinguished from the previous ECU by the 25-SF495-000 number on the ECU label. See **Fig. 2**.



Fig. 2, SF495 ECUs Have "25-SF495-000" on the Label

6. Attach two 3.5-inch x 1-inch strips of hook and loop (Velcro™) to the back of the new ECU. Make sure the hook strip or loop strip is the same type of strip as the original ECU, and the same orientation as the previous ECU, so it will attach properly.

7. Connect all three connectors to the new ECU and install the new ECU in the same location as the old one.

NOTE: Two ride height blocks made of hardwood or aluminum and 2 5/8 inch (6.67 cm) tall are needed for the calibration.

NOTE: Toolbox contains a number of popup warning notes for user safety. These work instructions expect the user to heed the warning note and click "Ok" in each instance.

NOTE: A new ECU will create a "checksum" fault because it has no calibration data. Calibration will solve this fault.

8. Run Toolbox 11.2. Click the ECAS CAN 2 (Truck and Bus) icon.

Click the "Calibration" button to go to the Calibration window. Use this window to calibrate the vehicle as follows (see **Fig. 3** for these substeps):

- 8.1 Activate both rear drive and tag axles by clicking both "Middle" buttons. The buttons will show blue when active.
- 8.2 Click the "START HEIGHT CALIBRATION" button.
- 8.3 Use the "Charge" button (up arrow icon) to inflate the suspension air bags just enough to fit a height block between the axle stop and the u-bolt clamp group on both sides of the truck. Insert a height block on each side.
- 8.4 Lower the chassis using the "Vent" button (down arrow icon) until the axle stops rest on the height blocks.
- 8.5 The vehicle is now at the correct ride height. Click the "SAVE NORMAL LEVEL" button in the lower left of the screen.
- 8.6 Using the "Charge" button, raise the frame until the frame stops against the limits of the shock absorbers, then lower the frame 1/4 inch (6 mm) with the "Vent" button.
- 8.7 The vehicle is now at the upper level. Click the "SAVE UPPER LEVEL" button in the lower left.

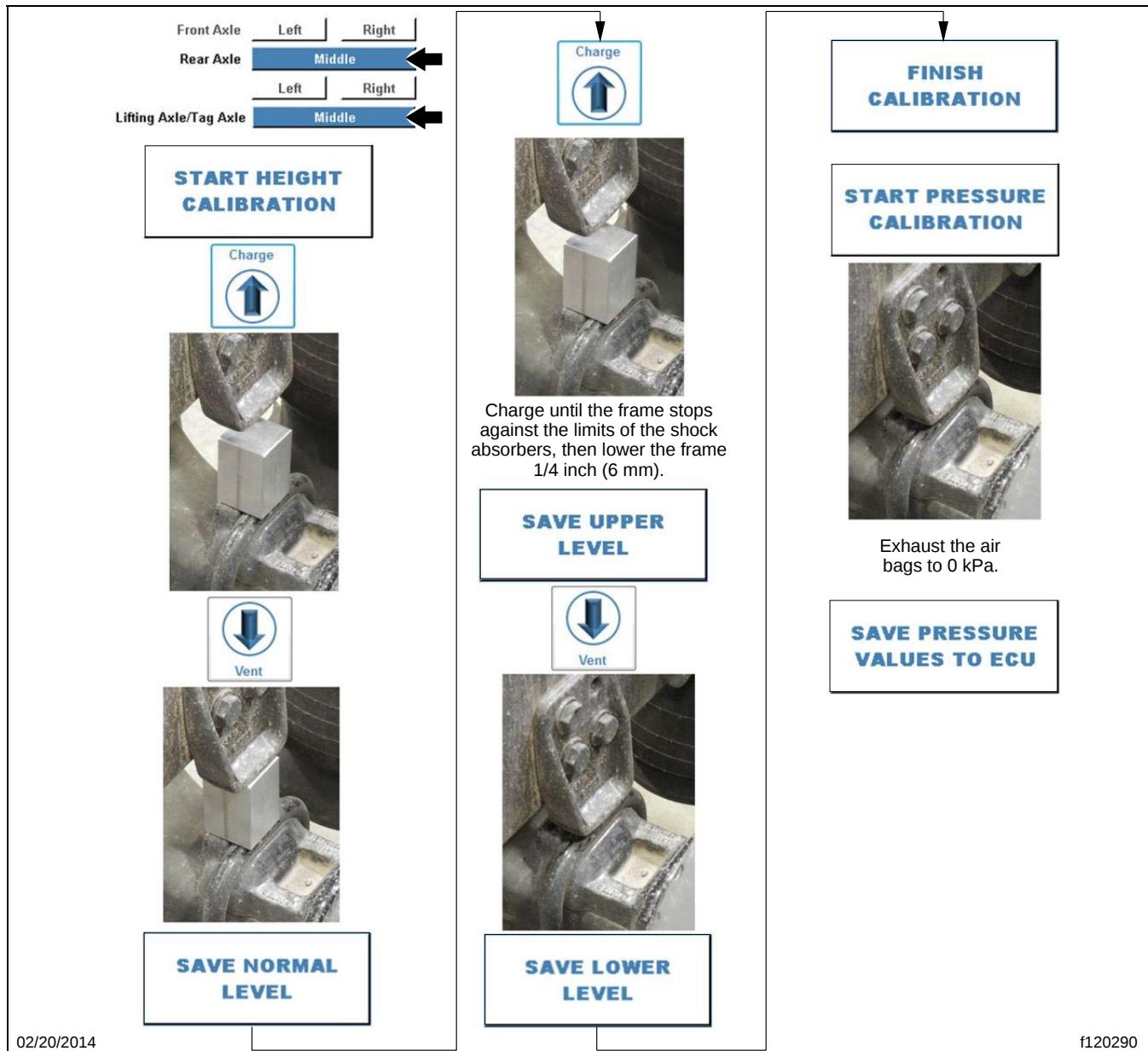


Fig. 3, Height and Pressure Calibration Procedure for ECAS using Toolbox 11.2

- 8.8 Remove the height blocks from the suspension.
- 8.9 Using the "Vent" button, lower the frame as low as possible.
- 8.10 The frame is now at the lowest level. Click the "SAVE LOWER LEVEL" button in the lower left.
- 8.11 Click the "FINISH CALIBRATION" button in the lower left.
- 8.12 Click the "START PRESSURE CALIBRATION" button.
- 8.13 If for some reason the frame is not now resting on the axle stops, using the "Vent" button, lower the vehicle frame to rest on the axle stops.
- 8.14 Click the button marked "SAVE PRESSURE VALUES TO ECU".

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9. Installing the ECU creates a "checksum" fault that is solved by calibration. To clear this fault:
 - 9.1 Exit the Calibration window and launch the ECAS CAN2 and "Diagnostics" option.
 - 9.2 Click the icon of a magnifying glass over a red light. This is the "Display diagnostic memory content" button.
 - 9.3 The "checksum" fault should be the only fault, and should have a blue icon indicating it's an inactive fault. Clear the fault history using the "Clear diagnostic memory" button on the right side of the screen.
10. Exit Toolbox, then turn on the the cab ECAS Remote Control using the top-middle button, and press the green button to return the vehicle to normal ride height. The ride height at the axle stop may vary up to 1/2 inch (1.25 cm) from the height block immediately after using the remote.
11. Clean a spot on the base label (Form WAR259). Write the campaign number, SF495, on a blank gray completion sticker (Form WAR260) to indicate the work has been completed and attach it to the base label.