December 2023



# **Wegmans Air Suspension Adjustment**

**Service Category** Service

**Section** Function Group 728

**Technician Skill Level** A

**Market** North America

### **Applicability**

### **VOLVO**

Years	Models
2021-2024	VN

### Introduction

Certain Wegman Volvo trucks could have an issue with the Rear Air Suspension not being set correctly from the factory. The incorrectly adjusted suspension could cause incorrect working angles in the drive line. Follow the instructions below to inspect the drive line angles and adjust as needed.

## **Production Change Information**

This bulletin applies to vehicles built within the specified production changes below.

Brand	Engine	<b>Emission Level</b>	Starting Build Date	<b>Ending Build Date</b>
Volvo	CU12	EM-USA17, EM-USA21	17-February-2020	16-October-2023

## **Warranty Information**

This repair is covered by an authorized Service Program. Reimbursement is obtained through the normal claim handling process.				
Claim Type (used only when uploading from the Dealer Bus. Sys.)  B				
Main Labor Code	<b>Description</b> Hours			
1720-16-09-01	Campaign, General (0.1 X 10)	1.0		
Causal Part	20510104			
SCC Authorization Code	S3787			
<b>Expiration Date</b>	December 31, 2024			



## **Wegmans Air Suspension Adjustment**

#### **Parts Information**

None

## **Required Tools & Equipment**

Angle Calculator: (Reach out to Steve Pearson (1-567-240-2427) or <a href="mailto:steven.pearson@volvo.com">steven.pearson@volvo.com</a> for a copy of the calculator tool.

#### **Calibration Information**

None

# **Repair Procedure**

- 1. Slowly drive the vehicle onto a flat surface while maintaining a straight path.
- 2. Braking should be kept to a minimum (just enough to stop the vehicle).
- 3. Do not apply the parking brake at this time.
- 4. Install wheel chocks loosely on the steer axle to allow movement when raising and lowering the suspension.
- 5. Lower the rear suspension using the switch in the dash.
- 6. Drain the air system to 60-70 PSI by repeatedly pushing the brake pedal.
- 7. Return the rear suspension switch to the up position.
- 8. Refill the air system to full capacity (compressor unload).

### Note!

Do not rev the engine more than 1000 RPM's when airing up the system.

- 9. Shut off the engine and leave the key in the on position.
- 10. Open the Angle Calculator (Provided by Steve Pearson).
- 11. In the calculator.
  - 1. Assign vehicle test condition as "As Found."
  - 2. Fill in date, vehicle ID, and VIN.
- 12. Measure Front-Rear Axle pinion angle, Interaxle Shaft angle, and Rear-Rear Axle pinion angle.

#### Note!

For more information on how to check ride height and pinion angle follow the **Ride Height and Pinion Angle Specifications** document found in Impact under function group 72.

Impact Ride Height and Pinion Angle Spec.

- 13. Fill in the appropriate field in the calculator using the measurement results.
- 14. Measure the ride height and enter the measurement in the calculator.



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- 15. Click on the green (Calculate) button.
  - 1. If the calculator result is **OK**, no adjustment is needed. Continue to step 21.
  - 2. If the calculator result is **NOK**, proceed to step 16.
- 16. Verify the truck has the correct axle seats installed.
  - 1. If the axle seats are incorrect, replace the axle seats with correct axle seats. (Use Impact to order the correct part)
  - 2. If the correct axle seats are installed go to step 17.
- 17. Move the leveling rod to the lower of the three holes on the air bag crossmember.
- 18. Remeasure the angles following steps 5-15.
  - 1. If the calculator result is **OK**, no adjustment is needed. Continue to step 21.
  - 2. If the calculator result is **NOK**, proceed to step 19.

#### Note!

After each system adjustment, start the engine and repeat steps 5-15.

19. Make adjustments to the leveling valve as necessary to achieve the correct u-joint angles (Determined by the Calculator). This may take several attempts.

### Note!

After each system adjustment, start the engine and repeat steps 5-15.

- 20. Remove the wheel chocks.
- 21. Release the truck.