

**** SOLUTION ****

Title	Mack Chassis - Equipped With A Turbo-Compound Engine ONLY - Engine Stumble At Idle/Low NOx Idle - US17+OBD18 And Newer Emissions
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Mack Models

Mack Model	AN - Anthem , CXU - Pinnacle, Axle front , PI - Pinnacle
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Emission Standard

Emission Standard	US17+OBD18 , US17+OBD19
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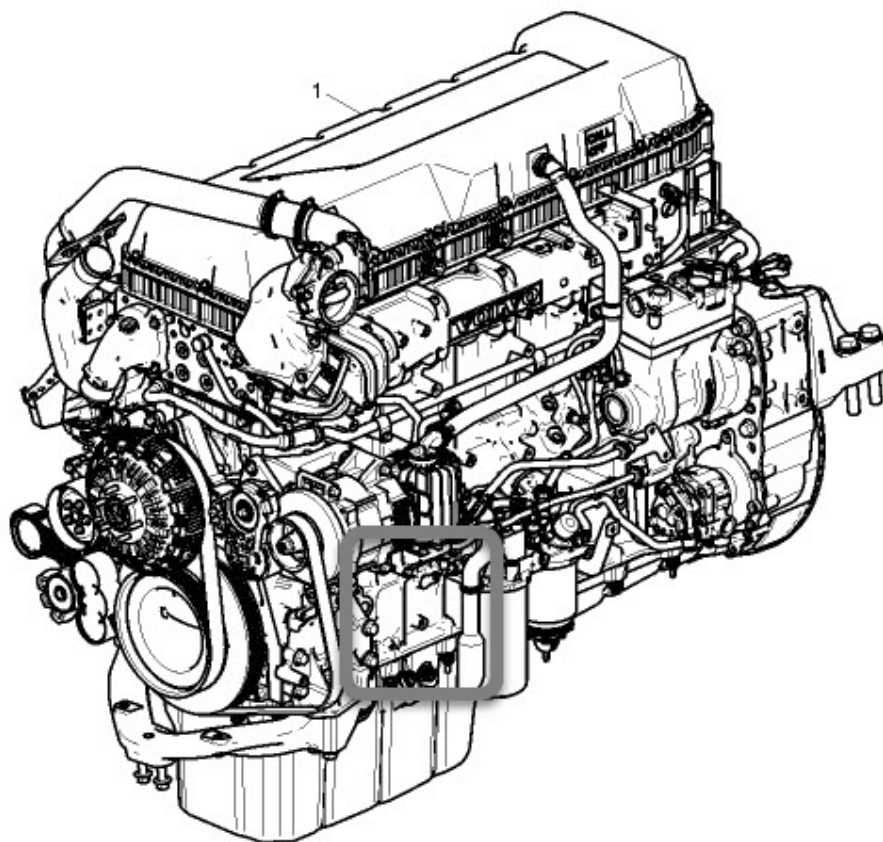
Engine family

Engine family	MP8
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**** SOLUTION ****

Cause	Certain Mack chassis equipped with a turbo-compound engine may experience an engine stumble or hiccup when sitting at idle or low-NOx idle.
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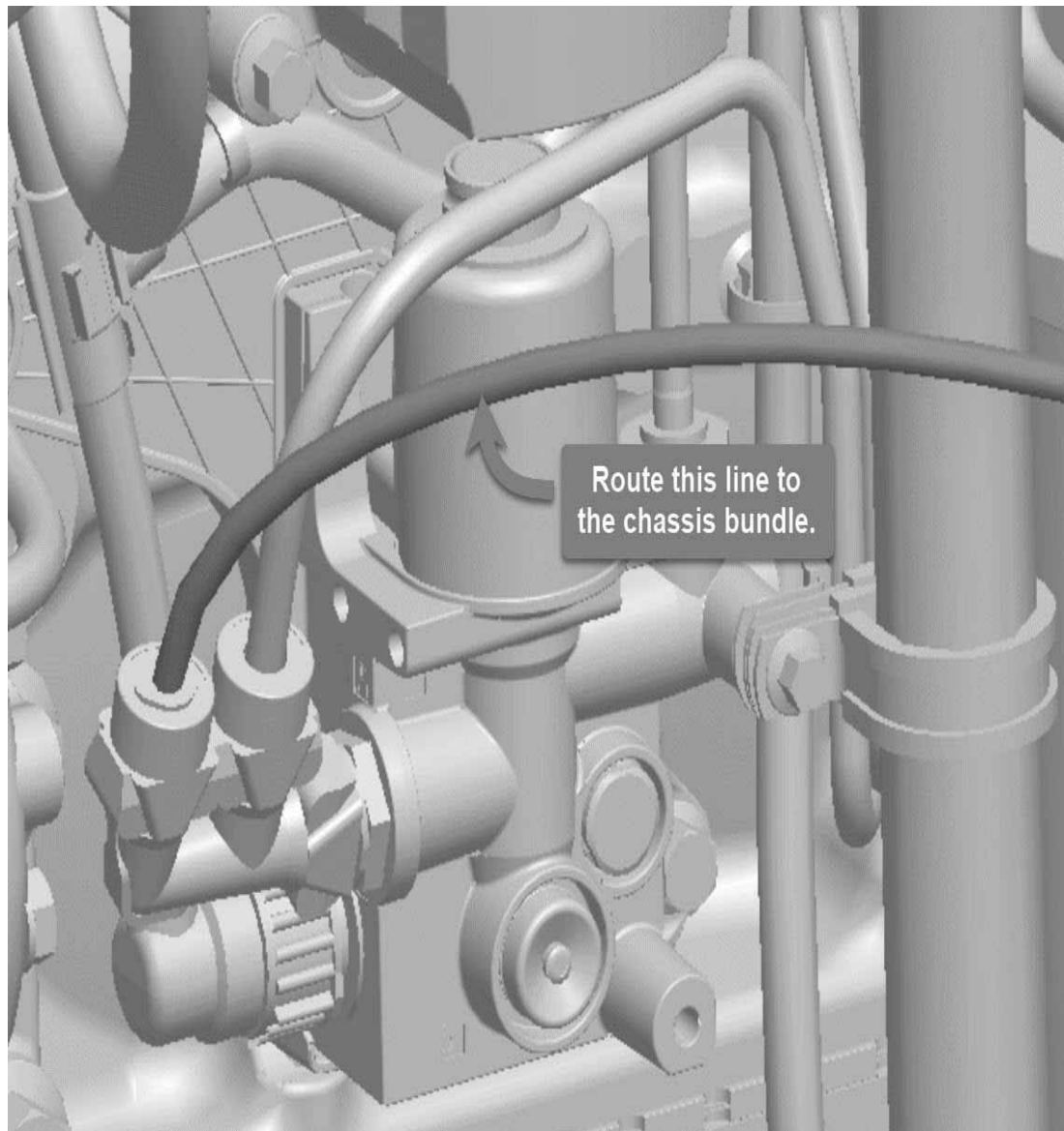
It has been determined that this condition may be caused by loss of air pressure to the Buffer Valve/Air Valve Units (BVU/AVU) due to incorrect plumbing of the air supply. The air supply to the Air Valve Unit (AVU) was found to come directly from the "wet" or supply tank Instead of the Tractor Protection Valve as shown in purple below:



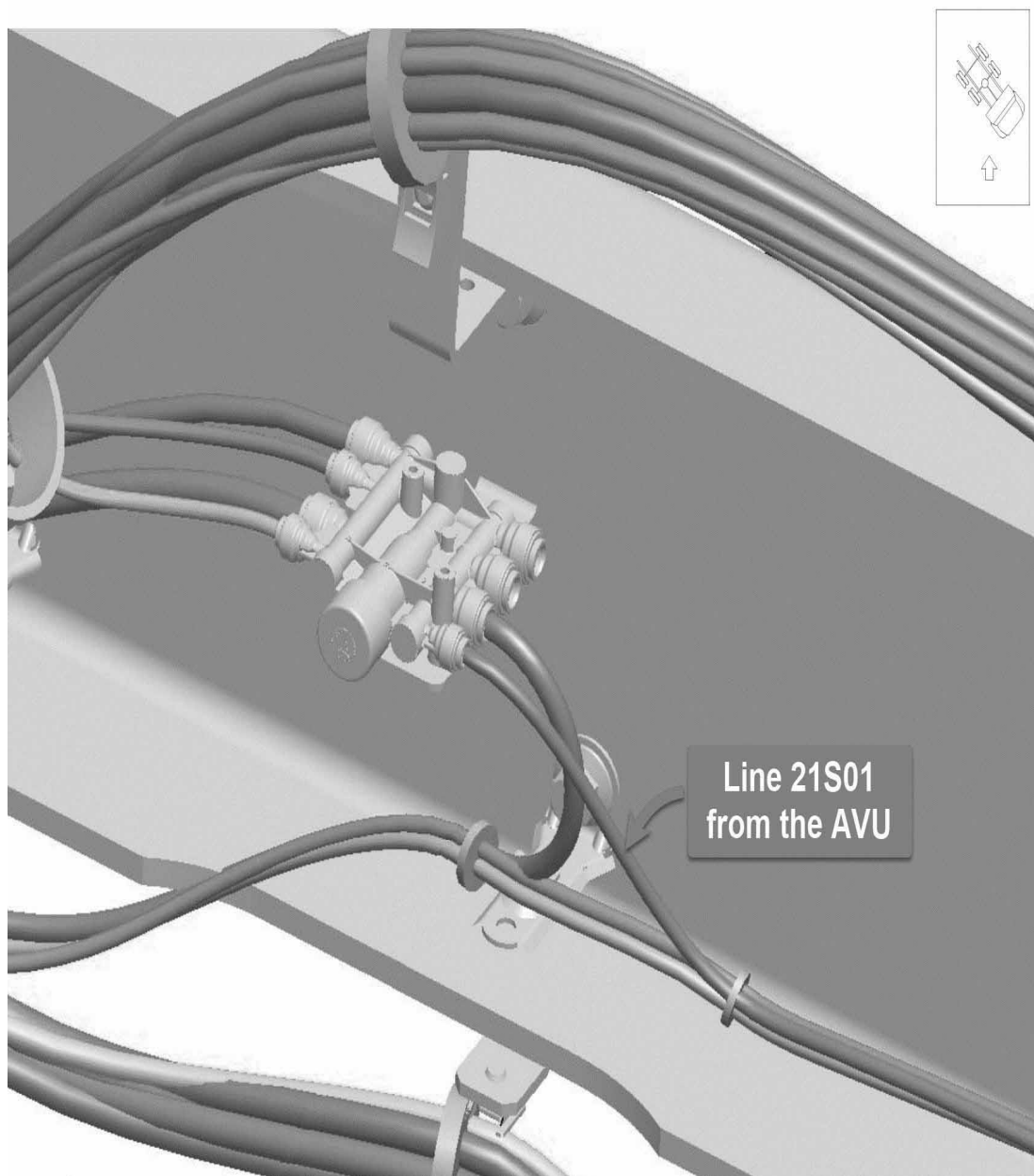
1. Depressurize (drain) the Wet Tank completely.

2. Verify that the air supply is plumbed correctly:

1.1. Disconnect the AVU air line indicated in the picture below:



1.2. Disconnect the air line to the Pressure Protection Valve shown below:

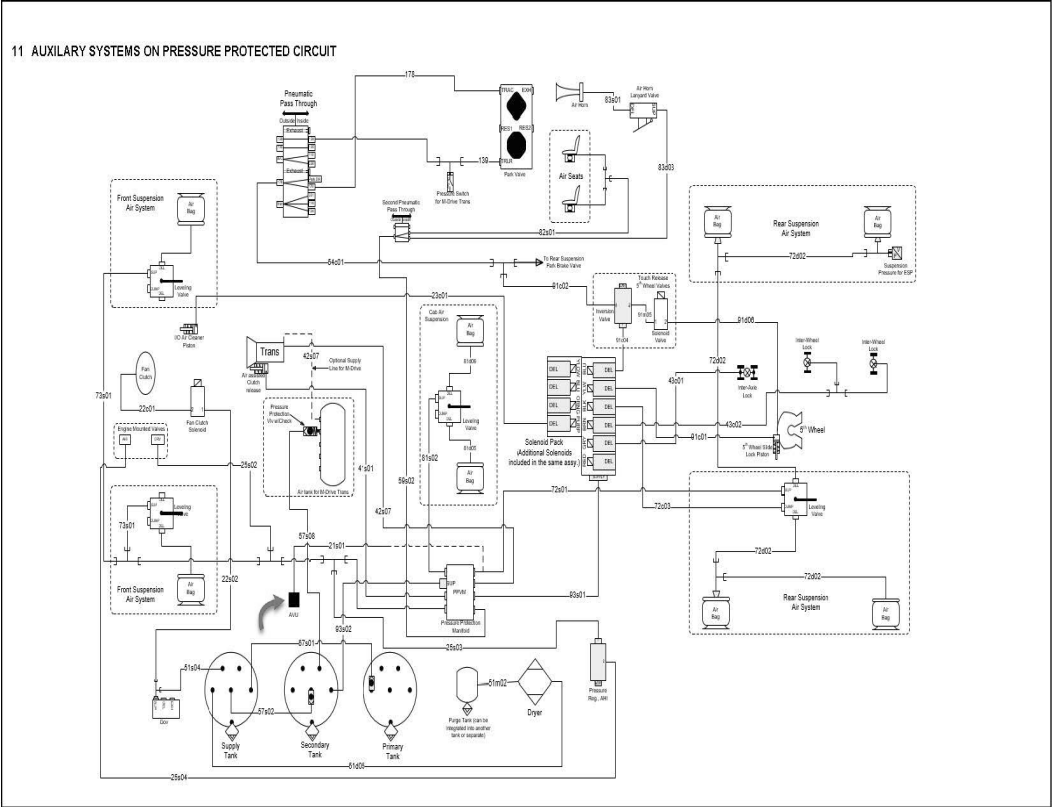


1.3. Blow air into the end of the line that was connected to the AVU.

2. Evaluate the results

- **If no air comes out of the PPV end when blown into the AVU end of the line,** air line routing and plumbing should be corrected. Proceed to Step 3.
- **If the air passes straight through from AVU end to PPV end,** the line has been plumbed correctly.

3. Replumb the air supply to the AVU/BVU as indicated in the pictures above. A complete schematic of the pressure protected circuit can be found below. Click on the picture for a full-size image:



Internal comments (FO) /kaidara-fieldservice/File/TECHLINE/K42820008/21849920%20Installation_Req_AVU.pdf

NA_Sister solutions [K84487323](#)

Function(s)/component(s) affected

Function affected Air Manifold , Air Tank , Secondary

Function Group

Function Group 255 turbocharger , 50 general

Customer effect

Main customer effect stumble

Conditions

Vehicle operating mode when stationary

Administration

Author A241298

Dealer ID A241298

Last modified by A241298

Creation date 17-01-2020 20:01

Date of last update 23-04-2020 19:04

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**** SOLUTION ****

Title	Volvo Chassis - Equipped With A Turbo-Compound Engine ONLY - Engine Stumble At Idle/Low NOx Idle - US17+OBD18 And Newer Emissions
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Volvo Models

Volvo Model	VN , VNL
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Emission Standard

Emission Standard	US17+OBD18 , US17+OBD19
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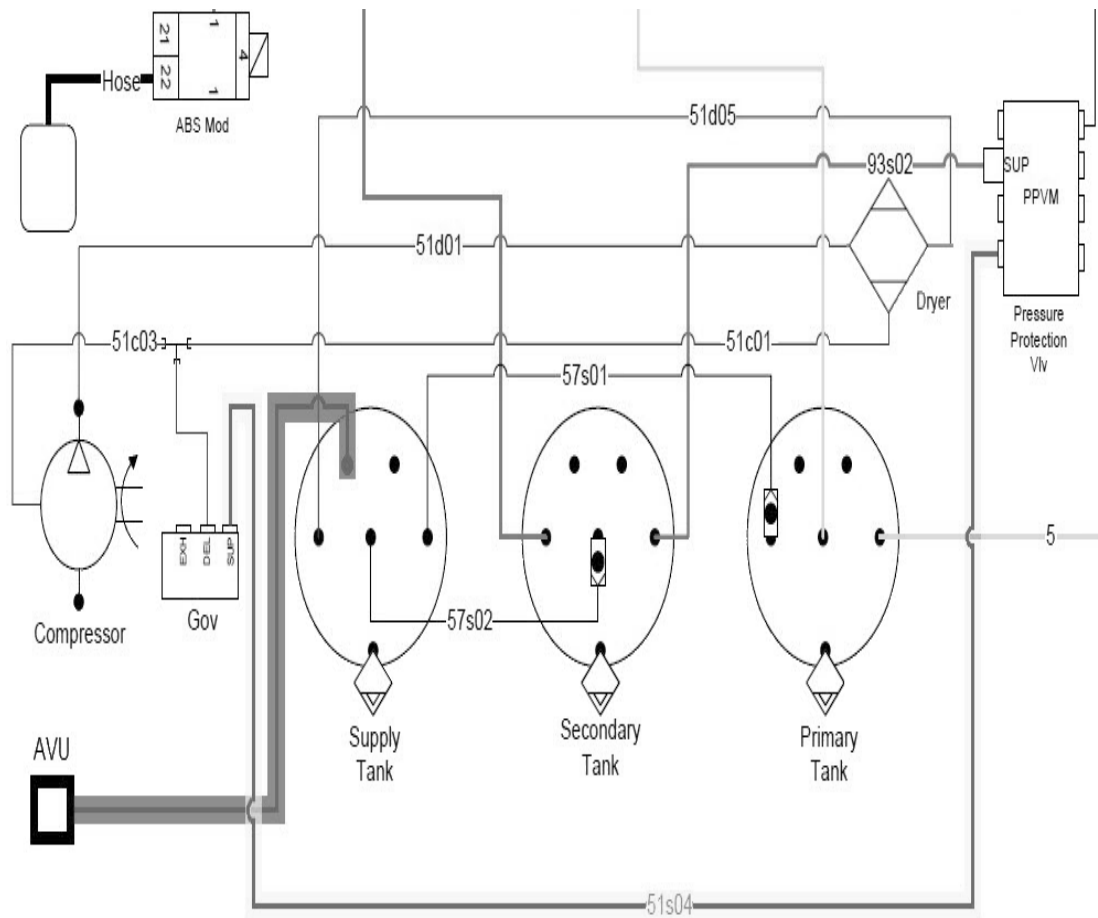
Engine family

Engine family	13L Engine
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**** SOLUTION ****

Cause	Certain Volvo chassis equipped with a turbo-compound engine may experience an engine stumble or hiccup when sitting at idle or low-NOx idle.
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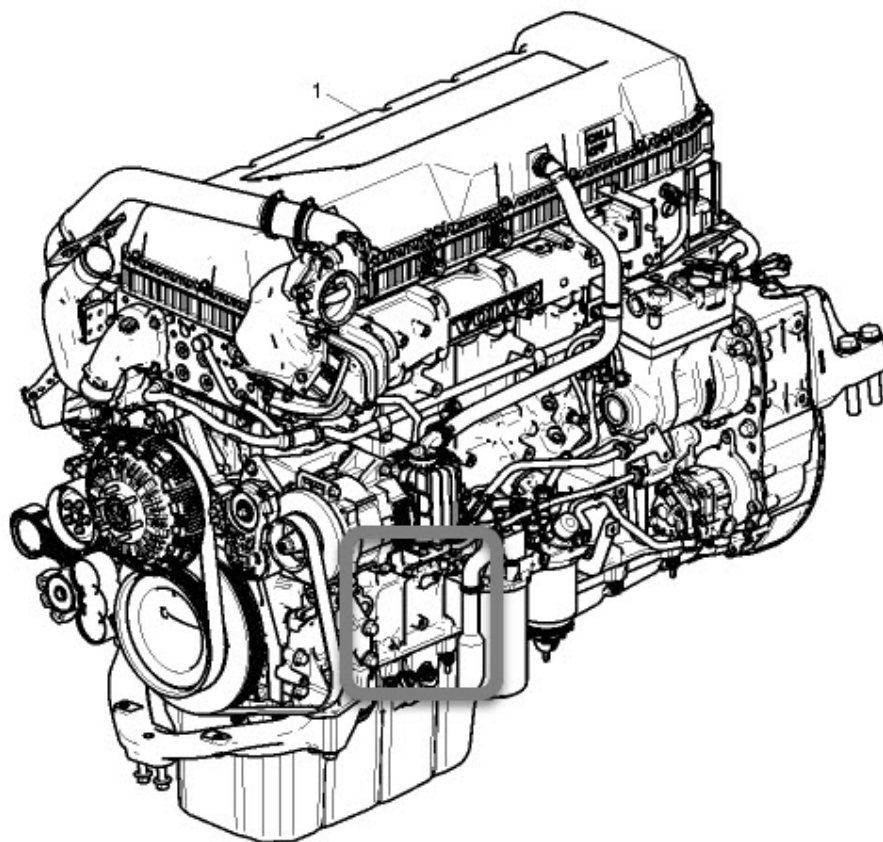
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If a vehicle of applicable configuration presents with the symptoms described above:

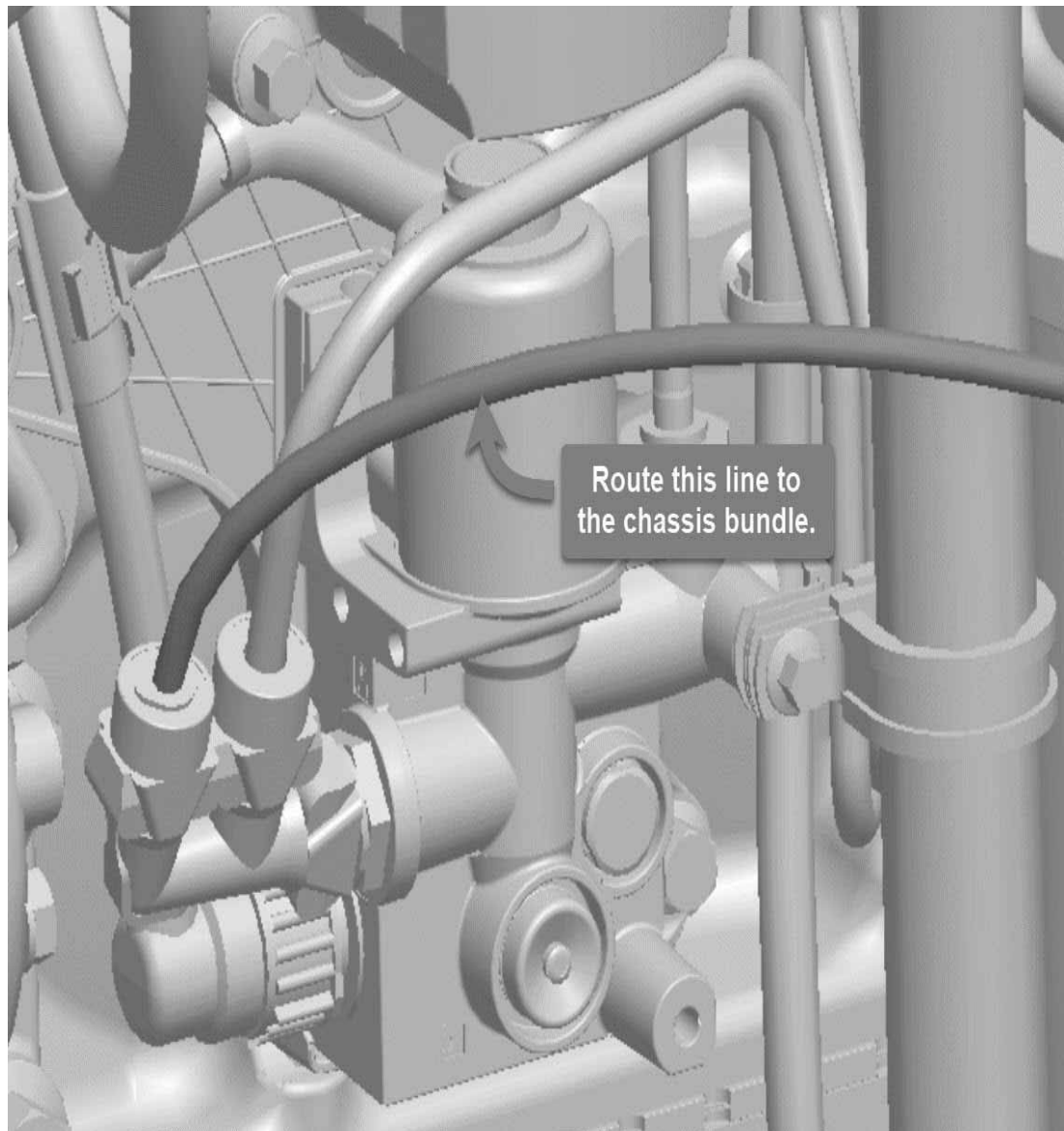
The AVU is located in front of the fuel filter housing as shown in the picture below:



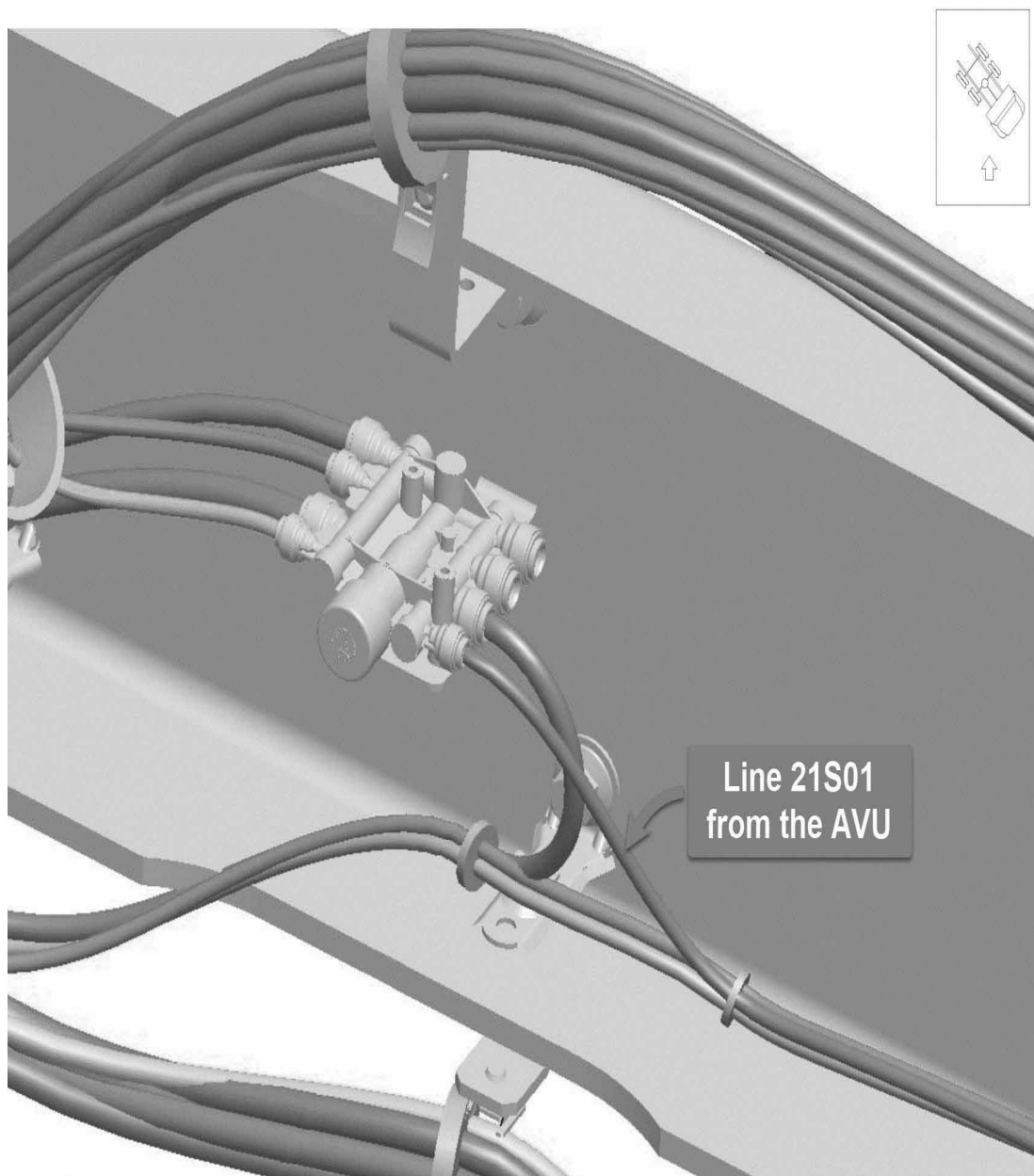
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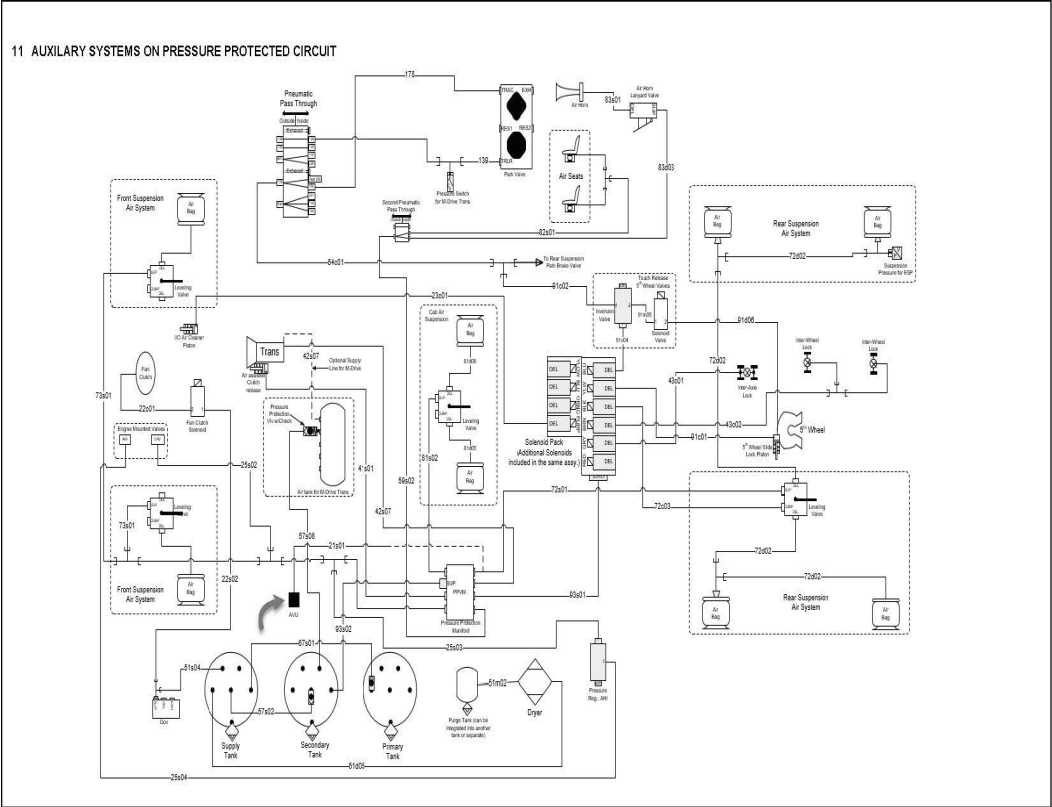


1.3. Blow air into the end of the line that was connected to the AVU.

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3. Replumb the air supply to the AVU/BVU as indicated in the pictures above. A complete schematic of the pressure protected circuit can be found below. Click on the picture for a full-size image:



NA_Sister solutions

[K42820008](#)

Solution visibility

[Dealer distribution](#)

Function(s)/component(s) affected

Function affected

Air Manifold , Air Tank , Secondary , Turbo Compound

Function Group

Function Group

255 turbocharger , 50 general

Customer effect

Main customer effect

stumble

Conditions

Vehicle operating mode

when stationary

Administration

Author

UT9246H

Dealer ID

UT9246H

Last modified by

RU4469V

Creation date

25-11-2019 21:11

Date of last update

01-04-2020 16:04

Status

Published

**** SOLUTION ****

Title	Volvo Chassis - Equipped With A Turbo-Compound Engine ONLY - Engine Stumble At Idle/Low NOx Idle - US17+OBD18 And Newer Emissions
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Volvo Models

Volvo Model	VN , VNL
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Emission Standard

Emission Standard	US17+OBD18 , US17+OBD19
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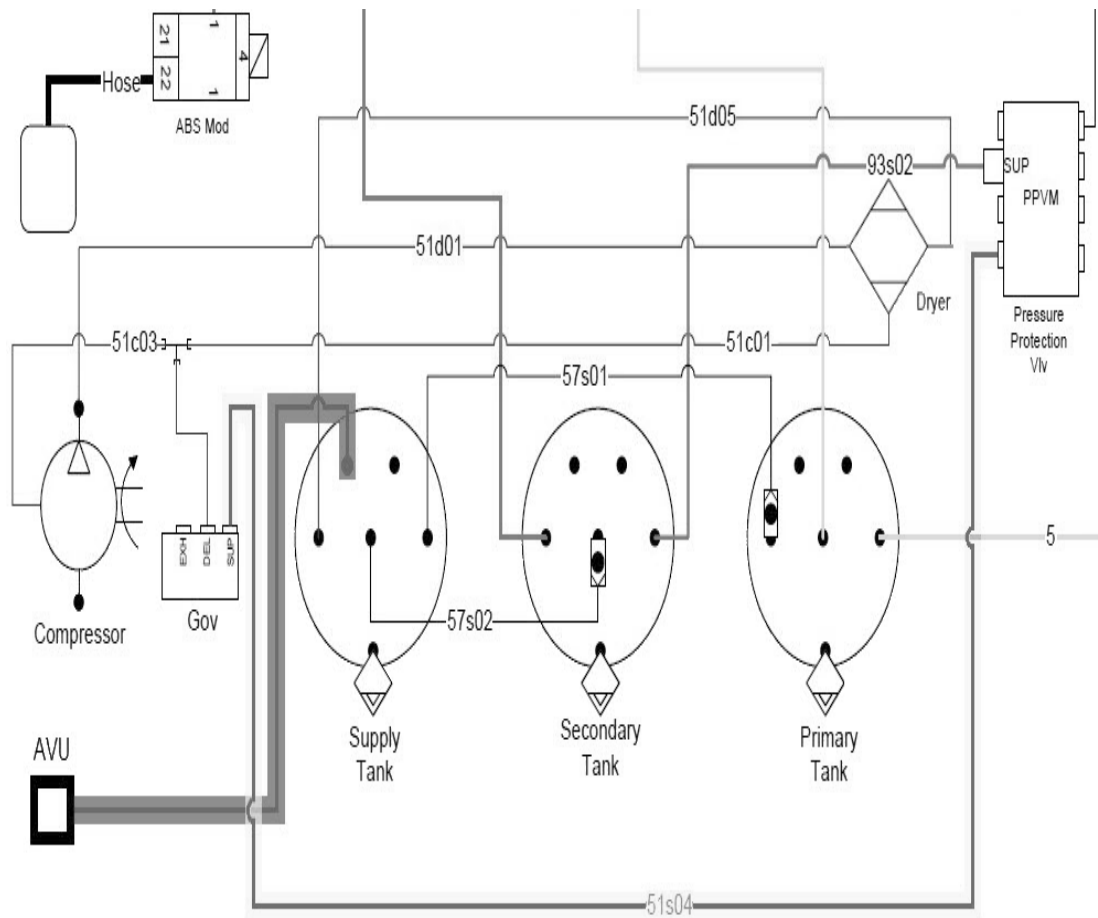
Engine family

Engine family	13L Engine
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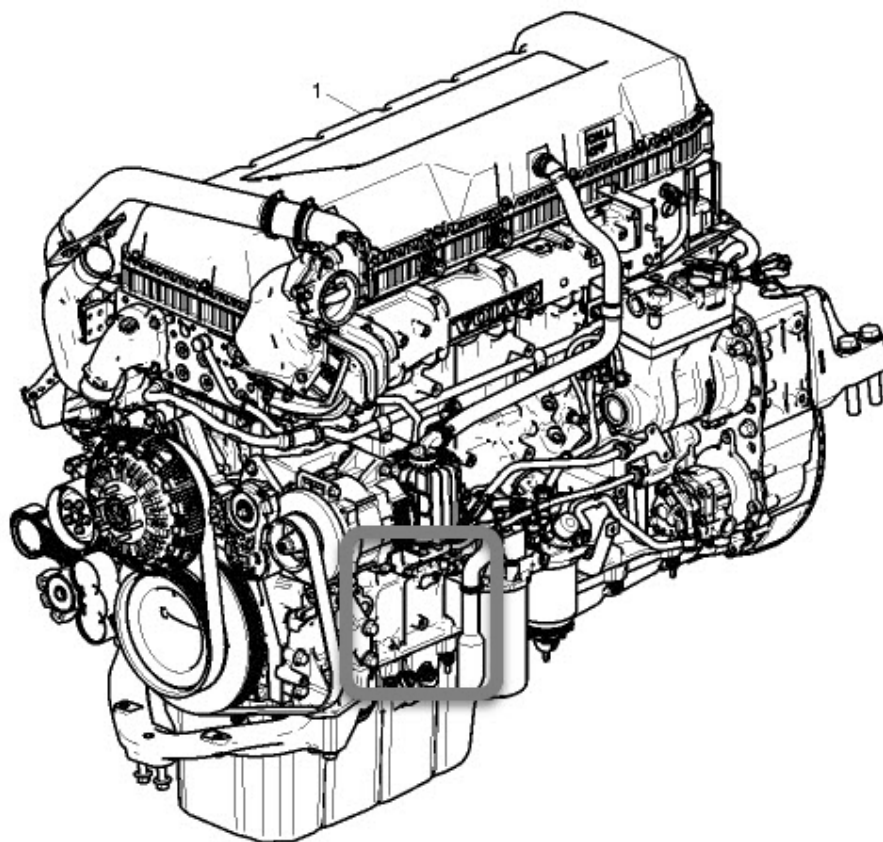
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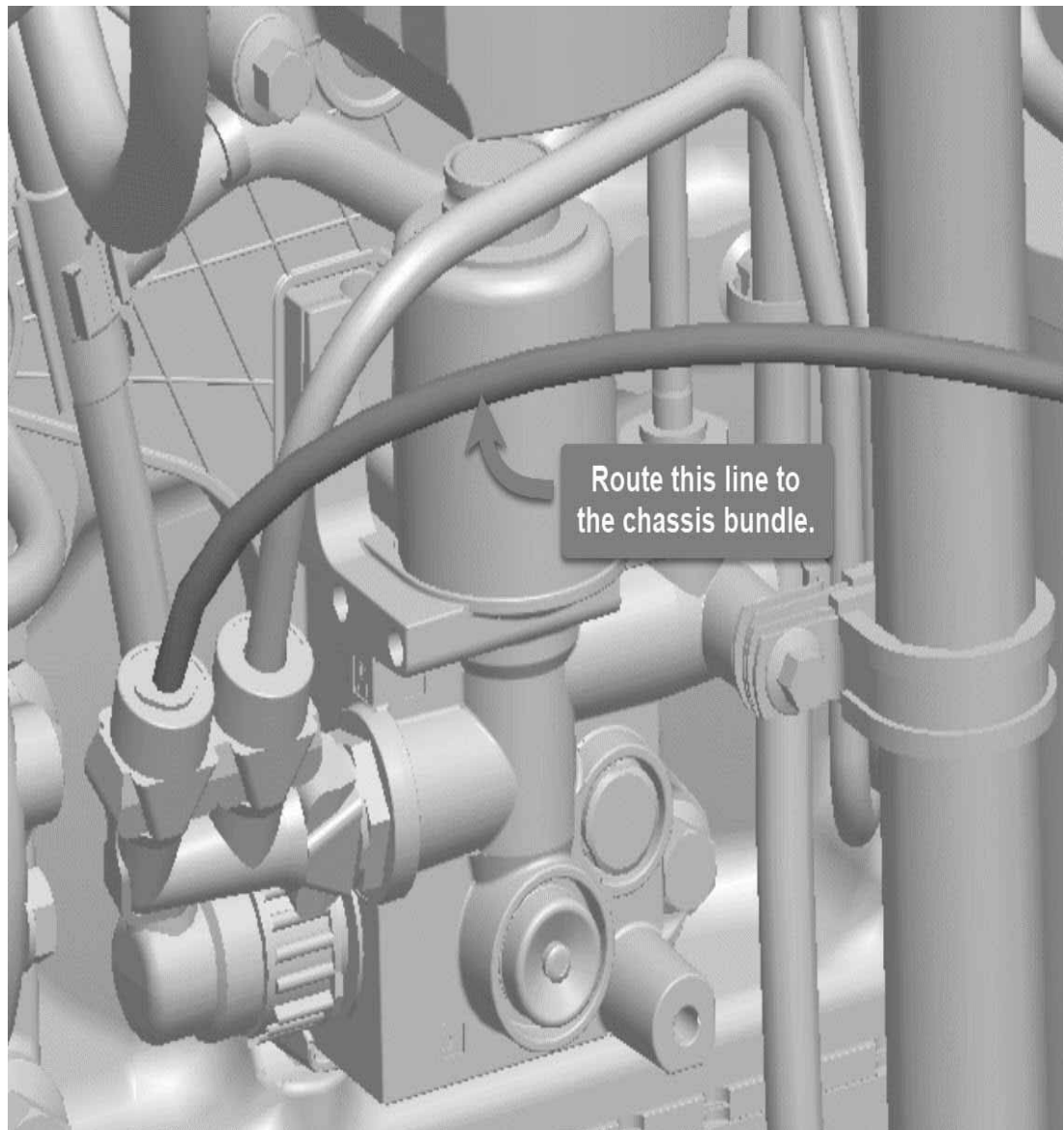
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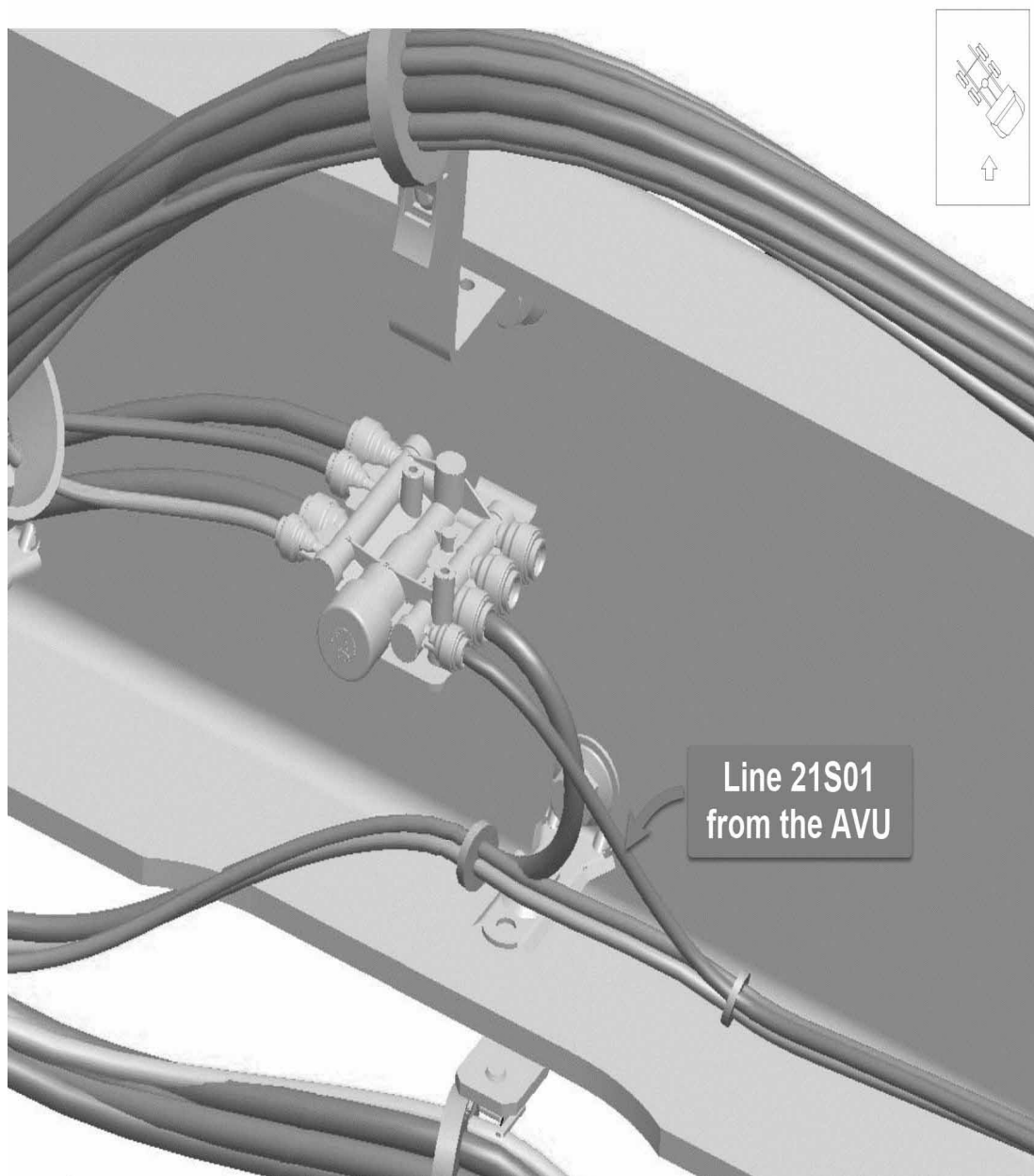
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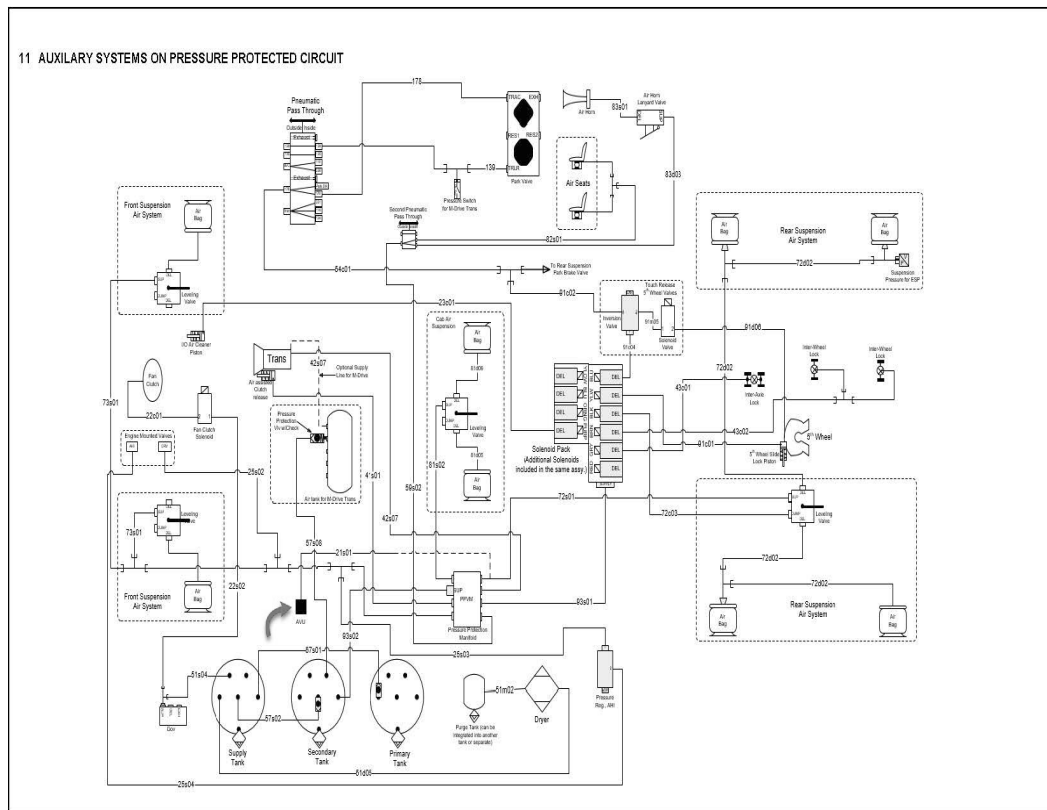


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NA_Sister solutions	K42820008
Solution visibility	Dealer distribution
Function(s)/component(s) affected	
Function affected	Air Manifold , Air Tank , Secondary , Turbo Compound
Function Group	
Function Group	255 turbocharger , 50 general
Customer effect	
Main customer effect	stumble
Conditions	
Vehicle operating mode	when stationary
Administration	
Author	UT9246H
Dealer ID	UT9246H
Last modified by	RU4469V
Creation date	25-11-2019 21:11
Date of last update	01-04-2020 16:04
Status	Published

Solution visibility Dealer distribution

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Function(s)/component(s) affected

Function affected	Air Manifold , Air Tank , Secondary , Turbo Compound
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Function Group

Function Group	255 turbocharger , 50 general
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Customer effect

Main customer effect	stumble
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Conditions

Vehicle operating mode

when stationary

Administration

Author	UT9246H
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Dealer ID	U79246H
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Last modified by: **DU4460V**

Creation date 25-11-2019 21:11

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Date of last update: 01-04-2020 16:04

