



## Volvo Models

**Volvo Model** VNR , VNX , VNL , VNM , VHD , VAH

## Engine family

Engine family 11L Engine , 13L Engine , 16L Engine

## Emission Standard

Emission Standard 2018 , OBD2017 , US17 , US17+OBD16 , US17+OBD18 , US16 , US15 , US13 OBD , US14

## \*\* SOLUTION \*\*

**Title** Volvo Chassis - Equipped With An Automated Manual Transmission [Model D or F \( AMT-D, AMT-F, I-Shift \)](#) Missing X1 Value In VDA And Default Settings Guidelines, Parameter P1AOB; Fault Code P1052-54, Error 40, Or Error 18 Encountered During Clutch Or Transmission Calibration ( R1AAE ) - [US10+OBD13 Emissions And Newer, Model Year 2014 And Newer](#)

### Cause

It has been found in some AMT equipped chassis that the X1 parameter value (P1AOB) has not been registered to Vehicle Data Administration ( VDA ), or is set to a value of "0". This will result in immediate failure of the calibration operation and a message advising that error code 18 or error code 40 has been generated.

This issue is discovered only when a transmission or clutch calibration is attempted after repairs such as clutch replacement, the Transmission Electronic Control Unit (TECU) software is updated, or after an Over The Air (OTA) programming event.

### Solution

**If transmission or clutch calibration fails immediately after the operation is started following a clutch replacement or programming operation:**

1. Disconnect the TECU from the chassis wiring harness.
2. Connect directly to the transmission with PTT using the appropriate adapter.
3. Perform operation [4000-07-04-01 Transmission Calibration \(Transmission Removed\)](#), located under the Calibrate tab.
4. After successful calibration, reconnect the chassis harness to the TECU.
5. Run Operation [4320-07-03-01 Transmission, Clutch Engagement Point Calibration](#). Select Option B.

**If the calibration is successful:** The existing invalid X1 value has been overwritten and the remainder of the repairs (if any) can be completed.

**If the calibration fails again with the same error code for R1AAE routine:** An eService case is required for additional assistance.

• **The eService case MUST include:**

- **This Solution Number**
- A description of the original customer complaint.
- A **thorough** description of all work performed up to the point of the case's creation.
- A DTC Readout if codes are present, active OR inactive.
- Any screenshots or photos that are relevant to this situation.

Internal comments (BO)

**If an eService case is submitted for this issue:**

**1. Check that parameter P1AOB Clutch X1 Default Value is loaded to the vehicle in VDA or Configurator.**

**If P1AOB is missing, set to 0 or set to an invalid value** it must be added and/or updated with the correct value below:

- **AMT-D:** 25.0 mm
- **AMT-F:** 20.0 mm

**If P1AOB is present and set correctly:** The gear selector should be checked to verify that it is reporting Neutral to the TECU.

NA\_Sister solutions

[K59025056](#)

Solution visibility

**Dealer distribution**

**Function(s)/component(s) affected**

Function affected                      automatic transmission

**Function Group**

Function Group                      431 gearbox, manual

**Customer effect**

Main customer effect                      calibration/programming/pairing/missing operation , fault code/display

**Fault code(s)**

OBD 2013 Diagnostic  
Trouble Codes                      P1052 , Error 43

**Conditions**

Other conditions                      after a workshop procedure on the vehicle

**Administration**

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