



Technical Bulletin 250 04.2025

Contents

Item	Subject	Model Affected
250.1	Triumph Diagnostic Tool Update - Smart Scan VIN Query and VIN Data Page	All
250.2	Triumph Diagnostic Tool - Engine ECM Diagnostics - Write VIN Function	All
250.3	Electronic Control Modules (ECMs) Must Not Be Swapped Between Motorcycles	

Item: 250.1

Description: Triumph Diagnostic Tool Update - Smart Scan VIN Query and VIN Data Page

Model Affected: All

We would like to inform dealers of the addition of a new VIN Query function in the Triumph Diagnostic Tool (TDT) Smart Scan and Download features.

The new function will be available from TDT version 2025-06 onwards.

The VIN Query function will:

- Improve model identification for Smart Scan and Download features by adding VIN based filtering to the motorcycle Model and Market Variant matches detected by the ECM based scan.
- Allow data related to the detected motorcycle VIN to be displayed in the Smart Scan area.

Smart Scan Initial Scan and Model Confirmation

NOTICE

The Smart Scan VIN Query function requires an internet connection to operate correctly. Always ensure that a internet connection is available when using the diagnostic tool.

1. During the motorcycle scan, Smart Scan will detect the VIN stored on the Engine ECM and perform an automatic online VIN Query. Data from the VIN Query allows Smart Scan to apply additional filtering to ensure the correct motorcycle Model and Market variant is identified.
2. This optimises model identification, and reduces need for manual Model/Market Variant selection when the ECM based scan detects more than one model.
3. The motorcycle Model and Market Variant displayed by Smart Scan on the Model confirmation screen is based on a match with the data returned by the VIN query.
4. Visually, the Motorcycle Scan, Model Confirmation and Model Selection workflow screens remain unchanged, noting the following:
 - For 'Road' motorcycles, the **Select** button will remain available on the Model Confirmation screen to allow selection of an alternative Market Variant option if required.

NOTICE

The Market Variant option selection feature provided for 'Road' motorcycles is intended to allow dealers to support customer requests to export a motorcycle to a new region. This allows programming of ECM market variant calibrations required to meet regional regulations.

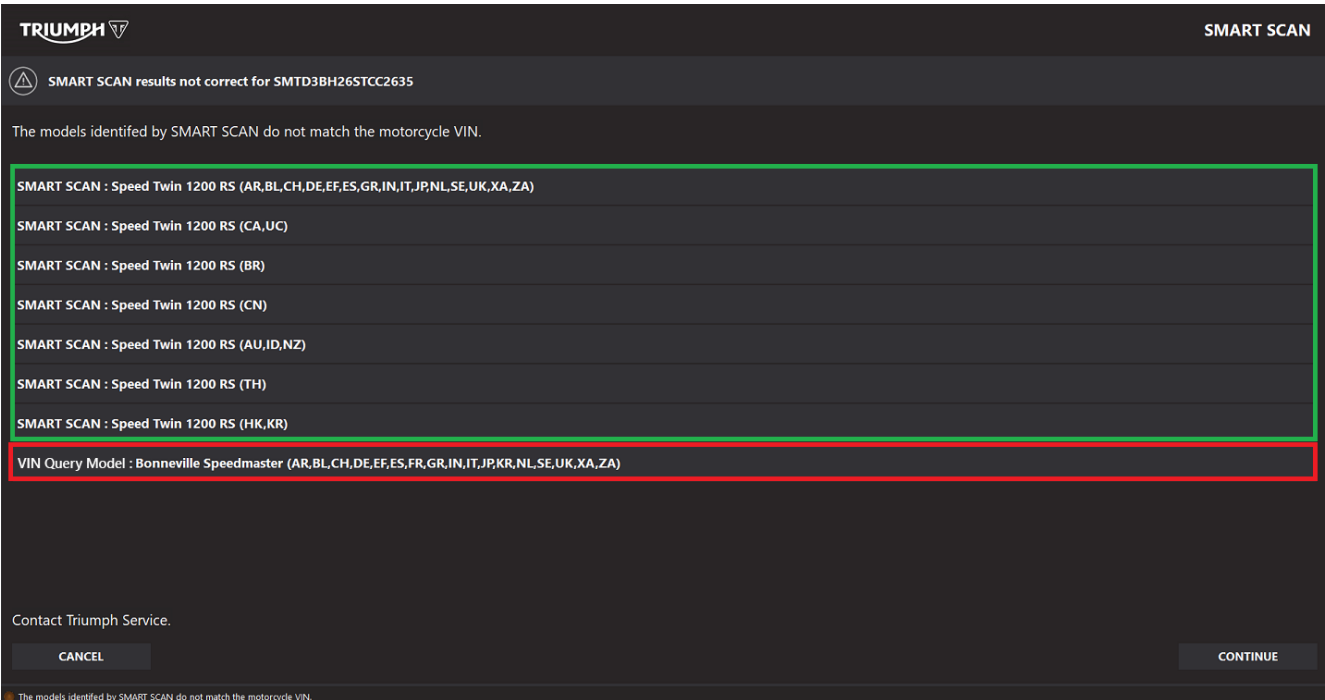
- For 'Off Road' motorcycles (TF model ranges), the **Select** button will not be available. Model and Market Variant identification will be primarily driven by the VIN Query.

If Smart Scan is not able to fully identify the connected motorcycle, one of the following screens will be displayed:

Smart Scan Results not correct for VIN

The following screen is displayed if Smart Scan detects a mismatch between the model(s) identified by the ECM based scan, and the model identified by the VIN Query.

- Model options detected by the ECM based scan are listed with the prefix SMART SCAN.
- The model identified by the VIN Query is shown at the bottom of the list.



The most likely causes for this screen to be displayed are:

1. **The VIN written in the Engine ECM is incorrect for the motorcycle.**
2. **The motorcycle has incorrect ECM hardware or calibrations installed.**

When this screen is displayed, the VIN Query results will be discarded and Smart Scan will allow you continue with one of the SMART SCAN Model and Market Variant options. In this scenario, no details will be displayed on the Smart Scan VIN Data page.

If further investigation is required:

1. **Click Continue and select the most appropriate Smart Scan detected Model and Market Variant option in the Model Selection and Confirmation screens.**
2. **Once in Smart Scan, go to the Autoscan page and perform a Technical Report (Engine not running - Cold Data).**
3. **Review the report and check the VIN shown under Engine ECM data.**
4. **Also check the report for differences between current and expected calibrations numbers.**
5. **Contact Triumph Service if further support is required. Provide details of the VIN engaged on the motorcycle frame along with a PDF copy of the Technical Report.**

Smart Scan was unable to identify the motorcycle model - No VIN in the Engine ECM

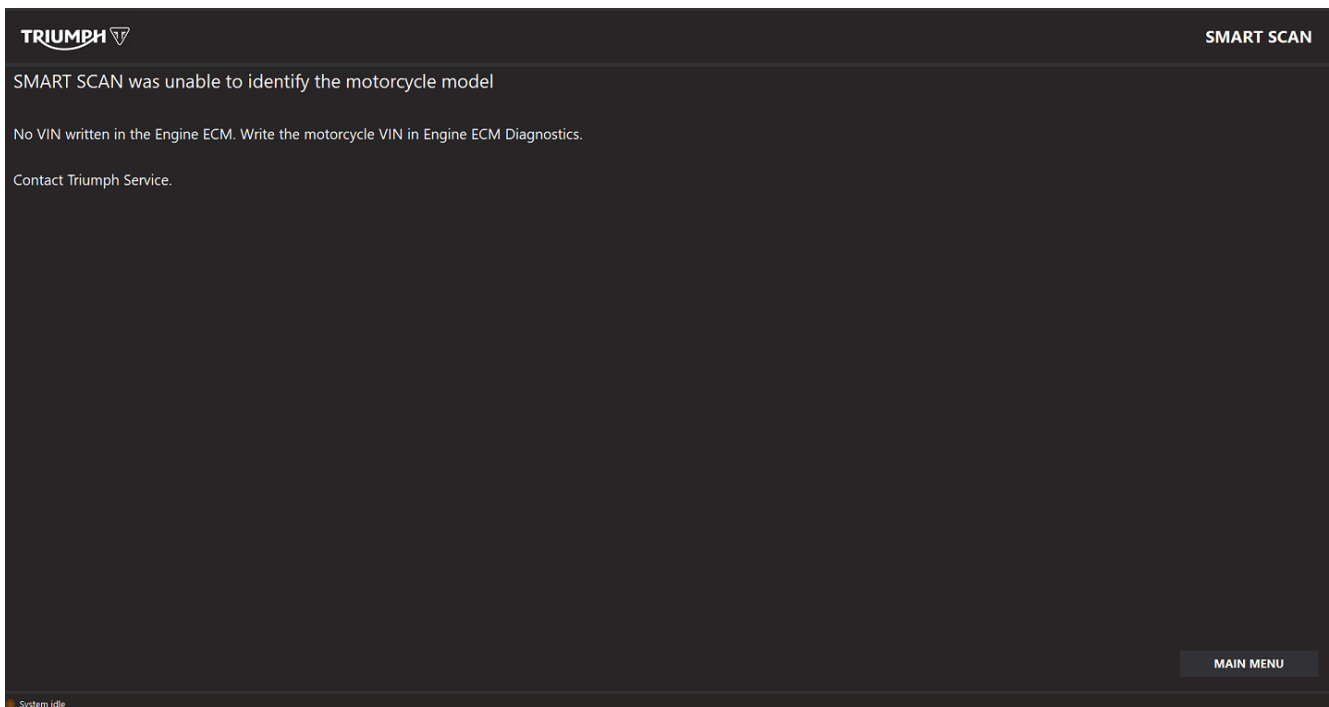
NOTICE

The Smart Scan VIN Query function requires motorcycles to have the correct VIN written in the Engine ECM.

New Triumph motorcycles are delivered with the VIN written to the Engine ECM. However, motorcycles which have had the Engine ECM replaced in service may not have a VIN written.

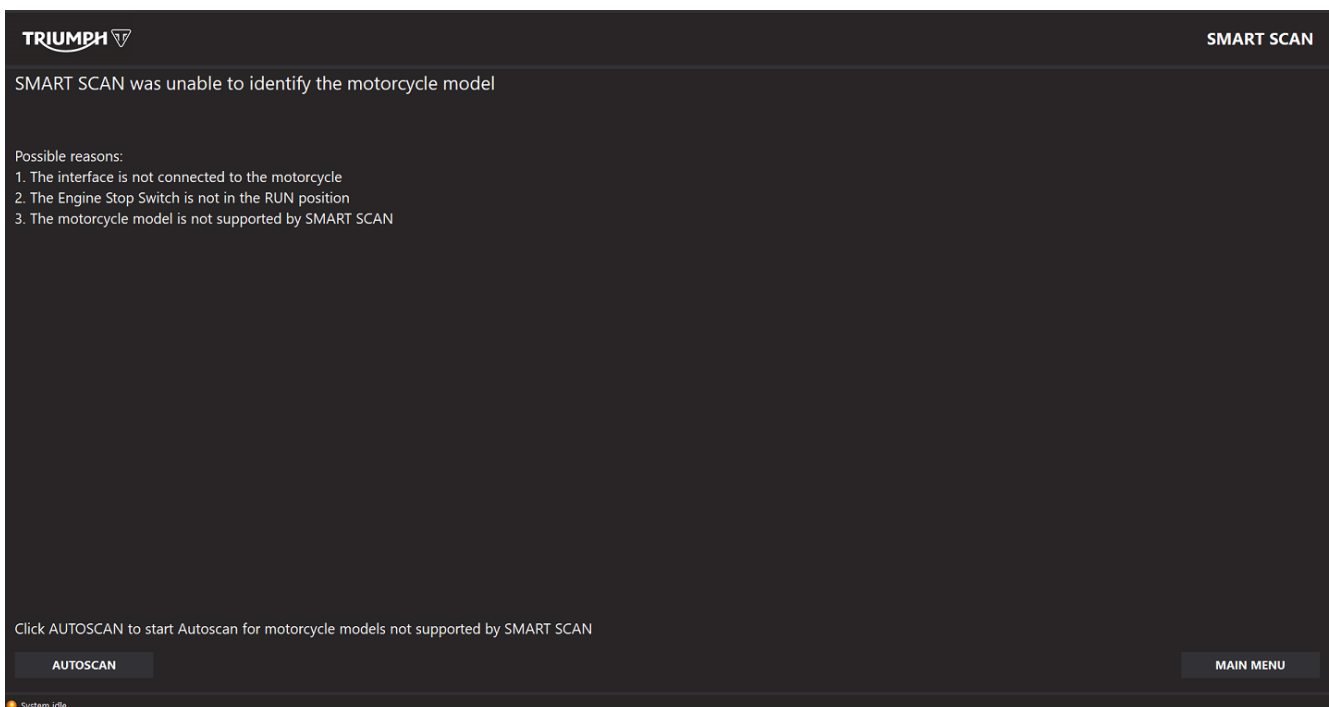
If the Engine ECM on your motorcycle does not have a VIN written, Smart Scan will display the screen below instructing you to write the VIN to the Engine ECM.

To support this, a 'Write VIN' function is now provided in the Engine Diagnostics area for Smart Scan supported Engine ECM types (See Technical Bulletin TB250, Item 2).



Smart Scan was unable to identify the motorcycle model - General

If Smart Scan is unable to detect or identify a motorcycle, the following screen is displayed.



Possible causes for this are:

- 1. The interface is not connected to the motorcycle.**
- 2. The Engine Stop Switch is not in the RUN position.**
- 3. The motorcycle model connected is not supported by Smart Scan.**

Smart Scan - VIN Data Page

The VIN Data Page displays information associated with the motorcycle VIN stored in the Engine ECM.

TRIUMPH SMART SCAN

SUMMARY DOWNLOAD DTCS AUTOSCAN **VIN DATA** MAIN MENU

Speed Twin 1200 RS
 MARKET VARIANT: AR,BL,CH,DE,EF,ES,GR,IN,IT,JP,NL,SE,UK,XA,ZA
 VIN: SMTDD0H21STCE0168
 ODOMETER: 0 Km / 0 Miles

MODEL AND SERVICE INFORMATION

MODEL DETAILS	
DESCRIPTION	VALUE
Model Name	Speed Twin 1200 RS
Production Market Variant	UK
Model Year	2025
VIN	SMTDD0H21STCE0168
Engine Capacity (cc)	1200 cc
Colour	Baja Orange / Sapphire Black
PDI Complete	Y
Warranty End Date	14/01/2027
NEXT SERVICE EVENTS	
Annual Service Year 1	
10,000M / 16,000Km Service	
SERVICE HISTORY	
600M / 1,000Km Service : 10/04/2025	
Odometer	783 Miles
Dealership Name	Triumph Motorcycles Ltd
Dealership Location	Harrowbrook Road

System idle

The information provided includes:

- Motorcycle Details
- Next Service Events
- Service History
- Outstanding Service Bulletins.

Offline Mode

When using the diagnostic tool in offline mode, the Smart Scan feature will function as follows:

- For current 'Road' motorcycles, Smart Scan will continue to function as per the existing implementation without VIN query.
- For 'Off Road' motorcycles (TF model ranges), Smart Scan will not allow access until an internet connection is available and Online model has been reactivated.

NOTICE

It is expected that Smart Scan will only function when using TDT in Online mode for all future 'Road' and 'Off Road' new motorcycle model releases.

Item: 250.2

Description: Triumph Diagnostic Tool - Engine ECM Diagnostics - Write VIN Function

Model Affected: All

We would like to inform dealers that a 'Write VIN' function will be available in the Engine Diagnostics area from TDT version 2025-06 onwards.

The Write VIN function is provided to allow the motorcycle VIN to be written to spares replacement Engine ECMs as part of the ECM installation and setup process.

The feature will support the following Engine ECM types:

- Keihin ECM with three connectors - fitted to two and three cylinder models from 2019 onwards.
- Bosch ECMs - fitted to single cylinder 400cc models.
- Athena ECMs - fitted to TF Series Motocross and Enduro models.

NOTICE

Triumph Diagnostic Tool features such as Smart Scan and Download will require the Engine ECM to have the correct VIN written to operate from TDT version 2025-06 onwards.

To Write a VIN:

WARNING

Writing an incorrect VIN to the Engine ECM can lead to incorrect motorcycle identification in the Triumph Diagnostic Tool's Smart Scan and Download features. Incorrect model or market variant identification could lead to incorrect ECM calibrations being downloaded to the motorcycle.

Operating a motorcycle with incorrect calibrations installed could cause a dangerous riding condition, which could in turn lead to an accident resulting in injury or death.

Operating a motorcycle with incorrect market variant calibrations may cause motorcycle electrical or electronic systems to function incorrectly for your region.

When writing the motorcycle VIN to the Engine ECM, always make sure that the VIN entered exactly matches the VIN engraved on the motorcycle frame.

NOTICE

The Write VIN function is designed to support writing the motorcycle VIN to spares replacement Engine ECMs only, and will not be available to use on ECMs that already have a VIN programmed.

Writing the VIN to the Engine ECM is a one time only function. Once a VIN has been written to the Engine ECM, it is not possible to write the VIN again.

Care must be taken to enter the VIN details correctly when writing the VIN. If the VIN is written incorrectly, another replacement Engine ECM will have to be installed.

The VIN being written to the Engine ECM must exactly match the 17 letters and numbers of the VIN engraved on the motorcycle frame.

1. Connect the Triumph Diagnostic Tool to the motorcycle and turn the ignition ON.
2. Make sure the engine stop switch is in the RUN position.
3. Navigate to **Diagnostics** -> **Engine ECM** -> **Adjust**.
4. Select **Write VIN** from the menu and click **Start**.

Note:

- **If the Write VIN function is not visible in the Adjust menu, this indicates the ECM already has a VIN written.**
5. Enter the 17 digit VIN into the Enter VIN field.
 6. Re-Enter the 17 digit VIN in the Confirm VIN field.
 7. Make sure the VIN is correctly entered into both fields, exactly as it appears on the motorcycle frame.
 8. Click the **Write** button to write the VIN to the ECM.
 9. Click **Finish** when VIN writing is complete.

TRIUMPH ENGINE DIAGNOSTICS

Build Data Read DTCs Live Data Function Test Adjust Main Menu

ADJUST

Adjust

- Reset Engine Adaptions
- Reset Gear Position/Neutral Position Adaption
- Reset Shift Force Sensor Adaption
- Balance Throttles
- Crankshaft Position Adaption
- Enable/Disable Cruise Control
- Write VIN

Write VIN

Please enter the 17 digit VIN in UPPER CASE
VIN : 000000000000000000

Enter VIN
Invalid VIN entered

Confirm VIN
Invalid VIN entered

Finish Write

VIN data for writing is not correct, check both VIN inputs are valid and match

Adjusting parameter: Write VIN

Item: 250.3

Description: **Electronic Control Modules (ECMs) Must Not Be Swapped Between Motorcycles**

Model Affected:

We would like to remind dealers that Electronic Control Modules (ECMs) must not be swapped between motorcycles.

Most ECMs contain data specific to the motorcycle to which they were originally fitted (such as the VIN and IUPR data). This data cannot be overwritten.

 **WARNING**

Replacing a motorcycle ECM with one taken from different motorcycle can lead to installation of an incorrect ECM calibration.

This can also cause incorrect motorcycle model identification in the Triumph Diagnostic Tool's Smart Scan and Download features. Incorrect model identification could result in incorrect ECM calibrations being downloaded to multiple ECMs on the motorcycle.

Operating a motorcycle with incorrect software and calibrations could cause a dangerous riding condition, which in turn could lead to an accident resulting in serious injury or death.

If a motorcycle requires a replacement ECM for any reason, always order the correct replacement part from the Electronic Parts Catalogue and never install an ECM taken from another motorcycle.