



Technical Bulletin TB229 02.2023

Contents

Item	Subject	Model Affected
TB229. 1	Triumph Diagnostic Tool (TDT) 2023-01 Update	All Models

Item: TB229.1
Description: Triumph Diagnostic Tool (TDT) 2023-01 Update
Model Affected: All Models

We would like to inform dealers of some new features and changes to the diagnostic tool that will be introduced in the TDT 2023-01 Update. The TDT 2023-01 update is scheduled for release on 20th February 2023.

The Triumph Diagnostic Tool User Guide will be updated to include more detailed information on the new features. A brief summary of the changes is provided below.

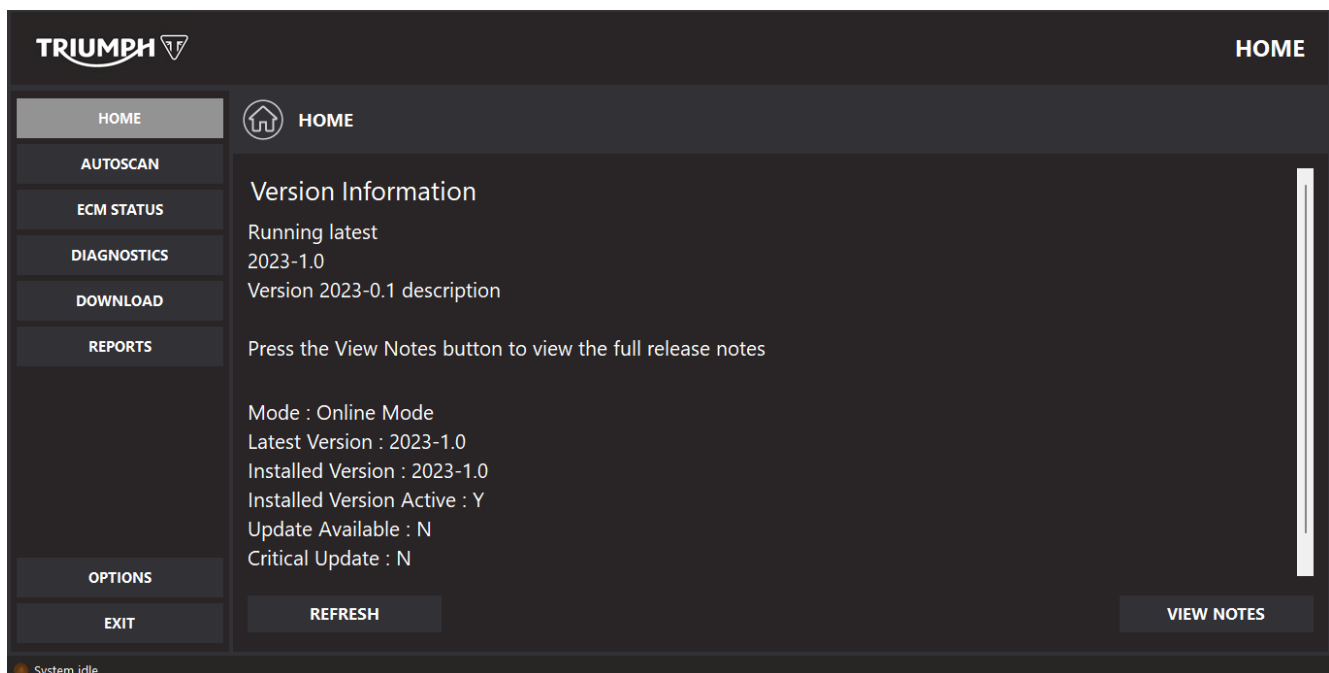
Version Control System

A new version control system will be introduced with the 2023-01 update.

NOTICE

This feature will implement a requirement to connect to the internet on first launch of the software after installation, then at least every 7 days.

This is to ensure that the latest version of the diagnostic tool is being used, and that the latest calibrations are downloaded to customer motorcycles.



Key points are as follows:

Software Activation

From TDT 2023-01 onwards, an internet connection will be required when launching the software for the first time after installation. The internet connection is required to allow the version control system to check and activate the diagnostic software.

NOTICE

If the software is launched without an internet connection, access to the tool's features will be restricted until an internet connection is made available and the software is activated.

Online Mode

It is recommended to keep your computer connected to the internet while using the diagnostic tool. This allows the version control system to regularly check that the latest software version is being used and ensures that customers are benefitting from the latest motorcycle software and calibration downloads.

NOTICE

The version control system will regularly check that the latest diagnostic software version is being used. If the version control system identifies that an obsolete/inactive version of the diagnostic software is installed, access to the tools features will be restricted until the latest software version is installed and activated.

When future TDT updates are released, the previous version will remain active for a short period to allow installation of the update to be planned and completed. After this period has expired, the software will restrict access to the diagnostic tool features until the latest version is installed.

Offline Mode

An Offline Mode is provided which will allow use of the tool offline for a 7-day period. The tool will automatically switch to offline mode when there is no internet connection available. All of the tool's features will remain available during this time, except for features which require an internet connection (such as ABS download for Tiger 1200 models).

NOTICE

The software must be activated before the Offline Mode will become available.

The Home screen will display the offline working time remaining before an internet connection will be required.

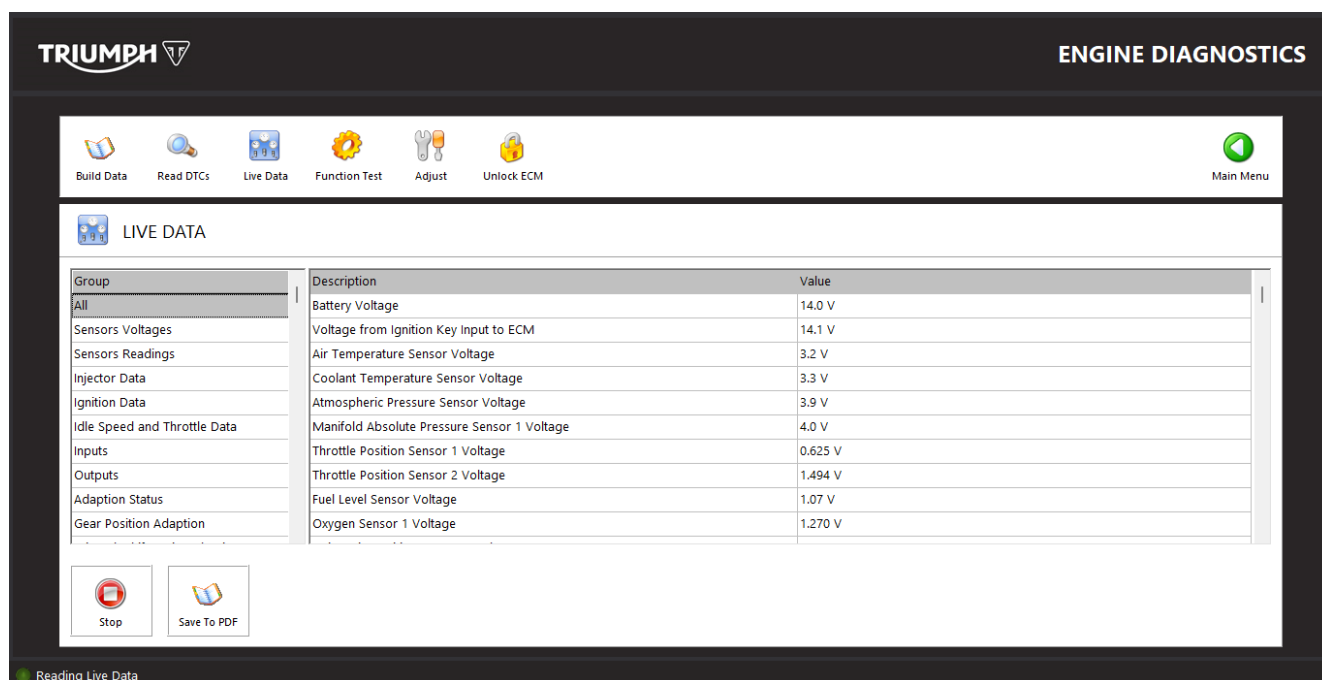
After the offline working time has expired, access to the tool's features will be restricted until an internet connection is made available and a software version check is completed.

Release Notes Button

The Release Notes button will open your internet browser and display the release notes for the latest diagnostic software release when clicked.

Engine ECM Diagnostics Area Update (Models fitted with KTKS/KTKS-UDS (Euro5) Engine ECM onwards)

An updated Engine ECM diagnostics area is provided for models fitted with KTKS/KTKS-UDS (Euro5) Engine ECM onwards.



The screenshot displays the Triumph Engine Diagnostics software interface. At the top, the Triumph logo is on the left and 'ENGINE DIAGNOSTICS' is on the right. Below the logo is a menu bar with icons for 'Build Data', 'Read DTCs', 'Live Data', 'Function Test', 'Adjust', and 'Unlock ECM'. A 'Main Menu' button is located in the top right corner. The main area is titled 'LIVE DATA' and contains a table with three columns: 'Group', 'Description', and 'Value'. The table lists various sensor readings and their current values. At the bottom left of the interface, there are two buttons: 'Stop' and 'Save To PDF'. A status bar at the very bottom indicates 'Reading Live Data'.

Group	Description	Value
All	Battery Voltage	14.0 V
Sensors Voltages	Voltage from Ignition Key Input to ECM	14.1 V
Sensors Readings	Air Temperature Sensor Voltage	3.2 V
Injector Data	Coolant Temperature Sensor Voltage	3.3 V
Ignition Data	Atmospheric Pressure Sensor Voltage	3.9 V
Idle Speed and Throttle Data	Manifold Absolute Pressure Sensor 1 Voltage	4.0 V
Inputs	Throttle Position Sensor 1 Voltage	0.625 V
Outputs	Throttle Position Sensor 2 Voltage	1.494 V
Adaption Status	Fuel Level Sensor Voltage	1.07 V
Gear Position Adaption	Oxygen Sensor 1 Voltage	1.270 V

Key points are as follows:

Build Data

The Build Data screen is maintained, however the model name and calibration description are no longer displayed here.

Unlock ECM

The Unlock ECM button has moved to the top menu bar and is now only visible when the Engine ECM is locked.

The unlock ECM calibration check process now utilises the ECM Status Report scan and detect process. The tool will continue to only allow entry of the unlock code when the motorcycle is fully up to date.

Read DTCs

In addition to the DTC code and Description, the Read DTCs screen will now show DTC failure type and Status information for Euro V models onwards. Snapshot data (previously Freeze Frame Data) will continue to be available to view for the first (or most significant) DTC to be stored.

Live Data (previously Sensor Data)

The Live Data area will display all available live data items for the motorcycle connected. The previous "Sensor Data" groups have been maintained.

Current Data has moved to become a group within the Live Data section.

Live Data - Save to PDF Button

A button has been included to allow a snapshot of the available Live Data to be saved to a printable PDF document.

The live data snapshot is collected at the point that the Save to PDF button is clicked. This allows flexibility to collect live data snapshots under any condition (e.g., Engine not running/cold, or Engine running and coolant temperature at 90°C).

The current Build Data is also captured and saved to the PDF when using this feature.

Function Test and Adjust Menus

The Function Test and Adjust Menus are maintained.

Engine Management Report Form (EMRF)

The engine management report form is undergoing an overhaul during 2023 and will not be available for models fitted with KTKS and KTKS-UDS Engine ECMs (Euro5 ECM) until further notice.

The Live Data Save to PDF Button has been implemented as a temporary method to capture engine management system data until the EMRF overhaul is complete.

Engine ECM Download Process Update (Models fitted with KTKS/KTKS-UDS (Euro5) Engine ECM onwards)

An updated Engine ECM download process is provided for models fitted with KTKS/KTKS-UDS (Euro5) Engine ECM onwards.

TRIUMPH **ENGINE DOWNLOAD**

HOME Street Triple R
AUTOSCAN MARKET VARIANT: EU, UK
ECM STATUS VIN: ++PROTOTHG8011P20

DIAGNOSTICS **ECM STATUS SUMMARY:** **UPDATE NOT REQUIRED**

ENGINE ECM				
Description	Current Value	Expected Value	Action	
Calibration Number	031272	031272	No Action Required	<input checked="" type="checkbox"/>
Build Number	A00009	A00009	No Action Required	<input checked="" type="checkbox"/>
Number Of DTCs	0	0	No Action Required	<input checked="" type="checkbox"/>
ECM Calibration Lock Status	Unlocked	Unlocked	No Action Required	<input checked="" type="checkbox"/>

The engine calibration is up to date. Press Cancel to Exit, or press Start to reprogram the engine calibration.

OPTIONS **EXIT** **CANCEL** **START**

System idle

NOTICE

The existing Engine ECM download process is maintained for models prior to the introduction of the KTKS Engine ECM.

Key points are as follows:

- Automatic and Manual model selection buttons are no longer provided.
- Instead, the pre-download model detection process will use the same scan and detect process and the ECM Status Report.
- The scan will identify the motorcycle model and market variant (where possible).
- The user will be able to select a model/market variant in the event the scan is unable to identify the motorcycle.
- The user will also be able to select an alternative model/market variant if required.
- A pre-download summary screen will display the current calibration version and expected calibration version for the model/market detected/selected.
- The screen will also indicate if the calibration is up to date, or if an update is available.
- Calibration descriptions will no longer be used.

Circulation

Initial and date when read and return to central file holder

Service Manager	Parts Manager	Sales Manager	Workshop Supervisor	Technician 1	Technician 2