



Technical Bulletin 230

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Item: 230.1
Description: Electronic Systems Commissioning and Motorcycle Unlocking
Model Affected: Street Triple R from VIN BF1297, Street Triple RS from VIN BF1324, Street Triple Moto2™ from VIN BH6667

WARNING

Make sure the motorcycle is stabilised and adequately supported.
A correctly supported motorcycle will help prevent it from falling.
An unstable motorcycle may fall, causing injury to the operator or damage to the motorcycle.

WARNING

Always use Automatic Model Selection when downloading calibrations.
Manual model selection must only be used when attempting to restart an interrupted or failed download, or if an incorrect model is detected by Automatic Model Selection.
Always ensure that the correct model is detected or selected before selecting a calibration for download and never attempt to download calibrations listed for an incorrect model.
Downloading calibrations for an incorrect model will cause a dangerous riding condition which may lead to loss of motorcycle control and an accident.

CAUTION

Do not interrupt or cancel calibration downloads before they have completed.
If a calibration download is cancelled or interrupted before it has completed, the Electronic Control Module (ECM) will not operate in the normal way. This is because the operating system has been erased from ECM memory and has not yet been fully replaced. Under these circumstances, it will not be possible to use Automatic Model Detection when restarting the calibration download.
Turn the motorcycle ignition off for at least 60 seconds to allow the electronic systems to power down, then restart the calibration download using Manual Model Selection.
If a calibration download fails to restart, it may be necessary to follow a specific recovery process.

NOTICE

The current password for all downloads can be found at www.triumphonline.net.
It is normal for DTCs to be stored after a download has completed. This is due to the download process interrupting CAN communications between the ECMs.
After a download has completed, you will be prompted to check all ECMs for stored DTCs and erase them as necessary. This must be completed after all downloads are finished.

Description

The Engine ECM and Instruments are delivered in a locked condition on the above motorcycle(s). In this condition, the engine will not start. When performing a Pre-Delivery Inspection on the above models, the motorcycle's electronic systems must be commissioned and the motorcycle unlocked before the engine can be started.

Dealers are requested to commission the electronic systems and unlock the motorcycle by performing the following operations:

1. **Download the latest TFT Instrument calibration.**
2. **Download the latest Engine ECM calibration.**
3. **Unlock the engine ECM.**
4. **Set the date, time and first service interval on the instruments.**
5. **Adapt the crankshaft position (if required).**
6. **Erase DTCs from all motorcycle ECMs.**

Preparation

Download and install the latest version of the Triumph Diagnostic Tool to your computer as described in the Triumph Diagnostic Tool Installation Guide. Triumph Diagnostic Tool Version 2023-01 or later is required to complete this procedure.

Note:

- **It can take up to 40 minutes to complete the system downloads necessary to commission the above motorcycle.**
 - **Please take the following precautions to avoid accidental disruption of the calibration downloads performed during this process.**
1. If using a laptop computer to run the diagnostic software, make sure the laptop battery is fully charged. Connect a charger to avoid draining the laptop battery.
 2. Disable any sleep and screen saver settings. The PC/laptop must remain turned on and awake for the duration of the process.
 3. Make sure all other PC/laptop applications (including Internet browsers) are closed down.
 4. Make sure the motorcycle battery is fully charged (battery voltage of at least 12.8 Volts). Connect an approved battery charger (suitable for use with maintenance free batteries) to maintain the battery charge during this process.
 5. During calibration download, DO NOT do the following unless instructed to do so by the diagnostic tool:
 - Turn the ignition OFF.
 - Switch the engine stop switch to a different position.
 - Disconnect the diagnostic interface.

Initial Steps

1. Unpack the motorcycle as described in the Motorcycle Unpacking Guide.
2. Assemble the motorcycle as described in the Motorcycle Assembly Guide.
3. Ensure that the motorcycle battery is fully charged and installed as described in the service manual.
4. Remove the rider's seat.
5. Connect the Triumph Diagnostic Tool to the motorcycle as described in the Triumph Diagnostic Tool User Guide and turn the ignition switch ON.

Calibration Downloads

Note:

- **Use the Automatic Model Detection option when performing the calibration downloads detailed below.**
 - **Make sure that the correct model is detected and that the correct calibration for your region is selected for each download.**
 - **Follow all on-screen instructions during each download.**
 - **Multiple files are transferred during each calibration download. The progress bar displayed on the diagnostic tool may repeatedly rise from 0% to 100% as each file is downloaded.**
 - **Always wait for the Verifying Download screen to appear to confirm that each download has successfully completed.**
 - **If a calibration download is accidentally disrupted or does not complete for any reason, turn the ignition off for at least 120 seconds then restart the download using Manual Model Selection.**
1. Download the latest Instrument calibration.
 2. Download the latest Engine ECM calibration.

Unlock the Engine ECM

1. Unlock the engine ECM as described in the Triumph Diagnostic Tool User Guide.

Note:

- **There is a small delay while the motorcycle is scanned for up-to-date calibrations.**
- **The software will report if any calibrations are out of date and will prevent unlocking until the correct calibrations are installed.**
- **The unlock code can be found at www.triumphonline.net.**

Set the Date, Time and First Service Interval on the Instruments

1. Navigate to **Diagnostics** -> **Instruments** -> **Service**.
2. Set the instruments to display the correct time and date.
3. Set the first service interval to:
 - 600 miles/1,000 km
 - 6 months/183 days.

Adapt the Crankshaft Position (if required) - Euro 5 Markets Only

Motorcycles are typically delivered from the factory with the crankshaft position adapted. However, a small number of models may need to have the crankshaft position adapted at PDI.

Check the engine ECM for stored DTCs. If the crankshaft position is not adapted, DTC P0315 will be stored and the Malfunction Indicator Light (MIL) will be illuminated. DTC P0315 cannot be erased by using the Erase DTCs function. To clear the DTC the crankshaft position must be adapted as described in the adaption process below.

If DTC P0315 is not present at PDI, it is not necessary to adapt the crankshaft position.

Crankshaft Position Adaption Process

WARNING

Exhaust fumes are poisonous, always operate a motorcycle in the open-air or in an area with adequate ventilation.

Do not operate a motorcycle in an enclosed area without adequate ventilation.

Operating a motorcycle in an enclosed area without adequate ventilation can cause loss of consciousness and death within a short period of time.

1. Turn the motorcycle ignition Off for at least 60 seconds.
2. Turn the motorcycle ignition ON. Make sure the engine Stop switch is in the RUN position.
3. Make sure the transmission is in neutral.
4. Navigate to ENGINE DIAGNOSTICS - Function Tests.
5. Select Crankshaft Position Adaption and click **Start**.
6. Follow the on screen instructions.
7. When the adaption has completed, click **Finish** and turn the motorcycle ignition Off for at least 60 seconds.

Note:

- **DTC P0315 will not clear until the motorcycle's electronic system has fully powered down.**
8. Turn the motorcycle ignition ON. Make sure that DTC P0315 and the MIL have cleared.

Refer to the Service Manual for more details on the crankshaft position adaption process.

Erase DTCs from All ECMs

1. Check the following motorcycle ECMs for stored DTCs. Erase any stored DTCs as necessary:
 - Engine ECM
 - ABS ECM
 - Instruments (Street Triple R models only)
 - Immobiliser/Keyless ECM

Final Steps

- Disconnect the Triumph Diagnostic Tool.
- Refit the rider's seat.
- Check that the motorcycle can be powered ON and started using each key.

Item: 230.2

Description: Introduction of New Instrument Hardware

Model Affected: Trident 660, Tiger 660 Sport, Street Triple R from VIN BF1297

A new version of instrument hardware has been introduced for the above models. The new instrument hardware version has dedicated calibrations that are not compatible with previous versions of the instrument hardware.

From version 2023-01.1, part number based instrument calibrations are released as detailed below. Dealers are requested to download the correct instrument calibration for the instrument hardware version fitted.

Trident 660

Instrument Part Numbers	Vin Range	Calibrations	Calibration description	Application Software Version Used
2508410, 2508418, 2508427	AC6898 to BL1764	INST00161_US_CA_CM	Use with instrument base part numbers 2508410, 2508418 and 2508427. North America and Canada markets only. Connectivity Module ready.	2570042 Issue 030000
		INST00162_ROW_CM	Use with instrument base part numbers 2508410, 2508418 and 2508427. All markets unless a market specific calibration exists. Connectivity Module ready.	
		INST00165_AU-NZ_CM	Use with instrument base part numbers 2508410, 2508418 and 2508427. Australia and New Zealand markets. Connectivity Module ready.	
2508476	BL1765 onwards	INST00253_US_CA_CM	Use with instrument base part number 2508476. North America and Canada markets only. Connectivity Module ready.	2570042 Issue 040000
		INST00254_ROW_CM	Use with instrument base part number 2508476. All markets unless a market specific	

Instrument Part Numbers	Vin Range	Calibrations	Calibration description	Application Software Version Used
			calibration exists. Connectivity Module ready.	
		INST00255_AU-NZ_CM	Use with instrument base part number 2508476. Australia and New Zealand markets. Connectivity Module ready.	

Tiger 660 Sport

Instrument Part Number	Vin Range	Calibrations	Calibration description	Application Software Version Used
2508430	AU7774 onwards	INST00209_ROW_CM	Use with instrument base part number 2508430_TII. All markets unless a market specific calibration exists. Connectivity Module ready.	2570042 Issue 030000
		INST00210_US-CA_CM	Use with instrument base part number 2508430_TII. North America and Canada markets only. Connectivity Module ready.	
		INST00211_AU-NZ_CM	Use with instrument base part number 2508430_TII. Australia and New Zealand markets. Connectivity Module ready.	
2508428		INST00212_ROW_CM	Use with instrument base part number 2508428. All markets unless a market specific calibration exists. Connectivity Module ready.	
		INST00213_US_CA_CM	Use with instrument base part number	

Instrument Part Number	Vin Range	Calibrations	Calibration description	Application Software Version Used
			2508428. North America and Canada markets only. Connectivity Module ready.	
		INST00214_AU-NZ_CM	Use with instrument base part number 2508428. Australia and New Zealand markets. Connectivity Module ready.	
2508477		INST00256_ROW_CM	Use with instrument base part number 2508477. All markets unless a market specific calibration exists. Connectivity Module ready.	2570042 Issue 040000
		INST00257_US_CA_CM	Use with instrument base part number 2508477. North America and Canada markets only. Connectivity Module ready.	
		INST00258_AU-NZ_CM	Use with instrument base part number 2508477. Australia and New Zealand markets. Connectivity Module ready.	

Street Triple R from VIN BF1297

Instrument Part Number	Vin Range	Calibrations	Calibration description	Application Software Version Used
2508440, 2508447	BF1297 to BL2896	INST00245_ROW	All markets unless a market specific calibration exists. Use with instrument base part numbers 2508440 and 2508447. Connectivity Module ready.	2570042 Issue 030000

Instrument Part Number	Vin Range	Calibrations	Calibration description	Application Software Version Used
		INST00246_US_CA_CN	North America, Canada and China markets only. Use with instrument base part numbers 2508440 and 2508447. Connectivity Module ready.	
2508478	BL1765 onwards	INST00251_ROW	All markets unless a market specific calibration exists. Use with instrument base part number 2508478. Connectivity Module ready.	2570042 Issue 040000
		INST00252_US_CA_CN	North America, Canada and China markets only. Use with instrument base part number 2508478. Connectivity Module ready.	

Manual/Visual Identification of the Instrument Hardware Version

The instrument part number can be read from the instruments as follows:

1. From the Instrument Build Data screen provided in the Instrument Diagnostics area of the diagnostic tool.



BUILD DATA

Build Data	Value
VIN	SMTLGL10U3MAC7281
Serial Number	000005000Z
Triumph Base Part Number	02508427
Calibration Locked Status	Unlocked
Application Software Part Number	02570043
Application Software Issue Level	010000
Application Data Software Part Number	02570641
Application Data Software Issue Level	010000

2. On a bar code label located on the back of the instrument unit. The instruments must be removed from the motorcycle to access this. The Triumph Base Part Number is provided in the first 7 numerical digits provided below the bar code.



Item: 230.3

Description: Triumph Diagnostic Tool 2023-02 Update - Calibrations Removed From Service

Model Affected: Rocket 3 GT, Rocket 3 GT Triple Black, Rocket 3 R, Rocket 3 R Black, Rocket 3 TFC

Following a review of Instrument calibration downloads contained in the Triumph Diagnostic Tool, we have identified that the following "accessory scrolling indicator" instrument calibrations are no longer required for the above models. The affected calibrations will be removed from the diagnostic tool from the 2023-02 update onwards.

Instruments

The accessory instrument calibrations that will be removed are detailed below, along with details of the standard calibrations which should now be used instead.

Model	VIN Range	Accessory Calibration Removed	Calibration Description	Use Standard Calibration
Rocket 3 GT/ Rocket 3 GT Triple Black	All VINs	INST00086_CM_A CC	Use with accessory scrolling indicators. All markets unless a market specific calibration exists. Connectivity Module ready.	INST00086_CM
		INST00087_CM_AC C	Use with accessory scrolling indicators. North America, Canada, Japan and China markets only. Connectivity Module ready.	INST00087_CM
Rocket 3 R/Rocket 3 R Black		INST00088_CM_A CC	Use with accessory scrolling indicators. All markets unless a market specific calibration exists. Connectivity Module ready.	INST00088_CM
		INST00089_CM_A CC	Use with accessory scrolling indicators. North America, Canada, Japan and China markets only. Connectivity Module ready.	INST00089_CM
Rocket 3 TFC		INST00090_CM_A CC	Use with accessory scrolling indicators. All markets unless a market specific calibration exists. Connectivity Module ready.	INST00090_CM

Model	VIN Range	Accessory Calibration Removed	Calibration Description	Use Standard Calibration
		INST00091_CM_AC C	Use with accessory scrolling indicators. North America, Canada and Japanese markets only.	INST00091_CM

Item: 230.4
Description: Encapsulated Fixings
Model Affected: All Models

When carrying out any maintenance or repairs, unless a specified repair procedure states otherwise, encapsulated or patch locked fixings if disturbed or removed must be discarded and replaced with new. Encapsulated fixings can be identified on the Electronic Parts Catalogue (EPC) by the text 'Enc' in the part description.

Patch locked fixings can be identified on the Electronic Parts Catalogue (EPC) by the text 'Pat' in the part description.

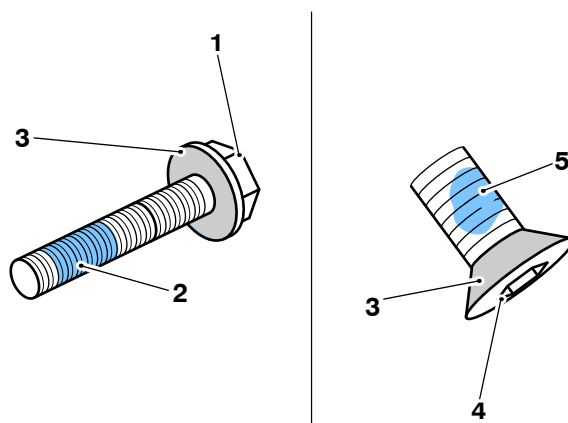
Example

Fixing	Type	Dimension	Colour	Type of Locking (if applicable)
Bolt	RHHF (reduced hex head flanged)	M6 x 32	BLK (black)	Enc (encapsulated)
Screw	SKT, CSK (Socket, countersunk)	M8 X10	SLV (silver)	Pat (patch locked)

Identification

Note:

- The motorcycles Service Manual will indicate where encapsulated fixings are used and the recommended torque tightening procedure.
- Thread locking compound must not be used except where stated in the appropriate service instructions.
- An encapsulated fixing can be identified when the diameter of threads is encompassed by the locking agent.
- A patch locked fixing can be identified by a section of thread which is treated with a coloured locking agent.



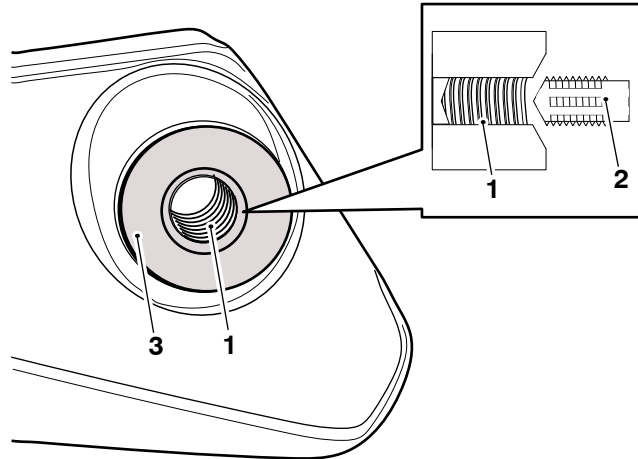
1. Fixing (reduced hex head flanged)
2. Encapsulation
3. Mating surface
4. Fixing (countersunk)
5. Patch locking agent

⚠ WARNING

Make sure the motorcycle is stabilised and adequately supported.
 Do not support the motorcycle on any ancillary component, the exhaust system or any other non structural parts of the motorcycle frame.
 A correctly supported motorcycle will help prevent it from falling.
 An unstable motorcycle may fall, causing injury to the operator or damage to the motorcycle.

New Fixing Installation Procedure

1. Inspect and if necessary, clean off any old locking agent and remove any burrs or sharp edges.
2. Using a proprietary cleaning agent, clean and dry the thread and its mating faces.



1. Thread
2. Suitable thread cleaning tool
3. Mating face

Note:

- When fitting new encapsulated or patch locked fixings make sure the threaded holes are cleaned, dried and free from old locking agent, grease and/or fluids.
3. Fit the new fixing and tighten to the required torque.

Please mark your copy of the Service Manual with this information. For electronic service manuals, store this information in a readily accessible place and refer to it when working on the relevant Triumph motorcycle. This information will be included in the next service manual update.

Circulation

Initial and date when read and return to central file holder

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