



Technical Bulletin 196
04.2019

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196.1	PDI Procedure to Free Seized Fuel Injectors	Tiger 1200 XR, Tiger 1200 XRX, Tiger 1200 XRX-LRH, Tiger 1200 XRT, Tiger 1200 XCX, Tiger 1200 XCA

Item: 196.1
Description: PDI Procedure to Free Seized Fuel Injectors
Model Affected: Tiger 1200 XR, Tiger 1200 XRX, Tiger 1200 XRX-LRH, Tiger 1200 XRT, Tiger 1200 XCX, Tiger 1200 XCA

Triumph have noted reports that fuel injectors on the above models can become stuck during the period of storage, prior to pre-delivery inspection. Symptoms of this condition are that the engine cranks, but fails to start following motorcycle assembly and pre-delivery inspection.

Triumph have identified the cause as a build up of residue on the injector needle valve from fluids used during the assembly process.

Triumph can confirm that:

- Only fuel injectors fitted to the motorcycles listed above are affected by this condition.
- No other Triumph motorcycles are affected.
- This condition only affects motorcycles at pre-delivery inspection.
- Motorcycles already in service are not affected.

A special engine ECM calibration has been developed to enable dealers to release stuck fuel injectors on affected motorcycles. The calibration disables the ignition system but allows the engine to be cranked. During cranking, the fuel injectors are operated for extended periods to allow the injector needle valves to release.

Instructions on when and how to use the special engine ECM calibration are detailed below.

Pre-Delivery Inspection Procedure to Release Stuck Fuel Injectors

Warning

Observe the warning advice given in the General Information section on the safe handling of fuel and fuel containers.

A fire, causing personal injury and damage to property could result from spilled fuel or fuel not handled or stored correctly.

Caution

The following instruction must be followed precisely.

The fuel tank **MUST** be removed prior to using the special engine calibration 030274. The fuel tank must be completely removed from the motorcycle and the electrical connectors and fuel hose must be disconnected.

Failure to remove the fuel tank prior to using this calibration will result in the engine becoming flooded with fuel, resulting in instantaneous severe engine damage.

Triumph will not accept any warranty claims for engine damage caused by the misuse of this calibration, or the failure to follow this procedure precisely.

Note:

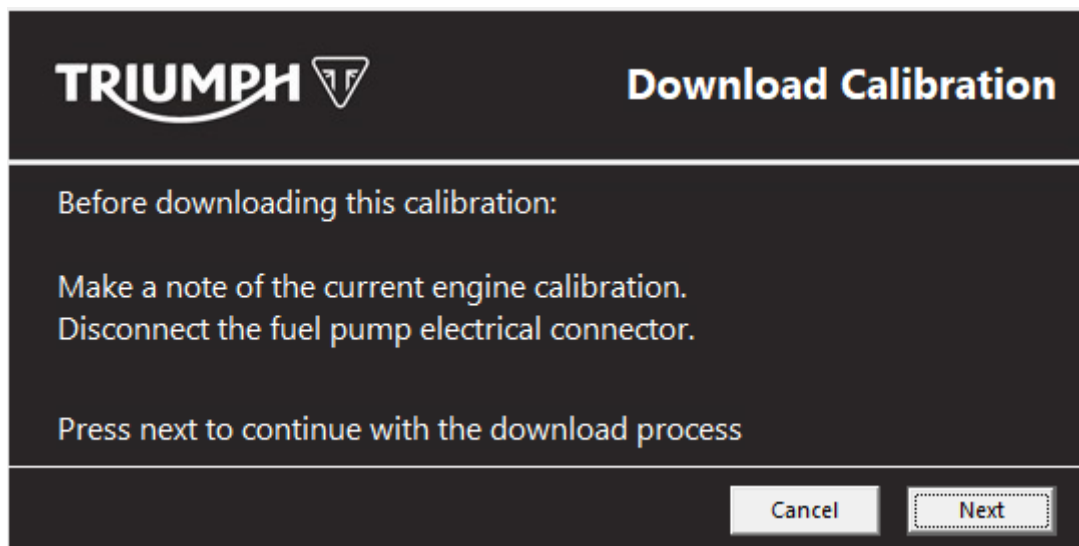
- **Triumph diagnostic tool version 2019-03 or later is required to complete this procedure.**
1. Install the latest version of the Triumph diagnostic tool.
 2. Unpack and assemble the motorcycle as described in the motorcycle preparation guide.
 3. Perform the pre-delivery inspection as described in the motorcycle preparation guide.
 4. Start the engine.
 - If the engine starts normally, no further action is required. Complete the pre-delivery inspection as normal.
 - If the engine fails to start after 10 seconds of continuous cranking, continue from step 5.
 5. Turn the ignition OFF and wait one minute to allow the motorcycle to fully power down.
 6. Remove the fuel tank as described in the Service Manual. The fuel tank must be completely removed from the motorcycle and the electrical connectors and fuel hose must be disconnected.
 7. Connect the Triumph diagnostic tool and turn the ignition ON.
 8. Make sure the engine stop switch is in the RUN position.
 9. Navigate to ENGINE DIAGNOSTICS.
 10. Make a note of the Calibration Number displayed in the Build Data screen. The correct calibration will need to be reinstalled later in this procedure.
 11. Navigate to CHASSIS DIAGNOSTICS - CHASSIS ECM DIAGNOSTICS and click **Read DTCs**.
 12. Make sure that DTC C1072 (Fuel pump undercurrent) is present. Do not erase the DTCs. The special calibration will not install unless DTC C1072 is stored.
 13. Navigate to DOWNLOAD - ENGINE ECM DOWNLOAD.

Note:

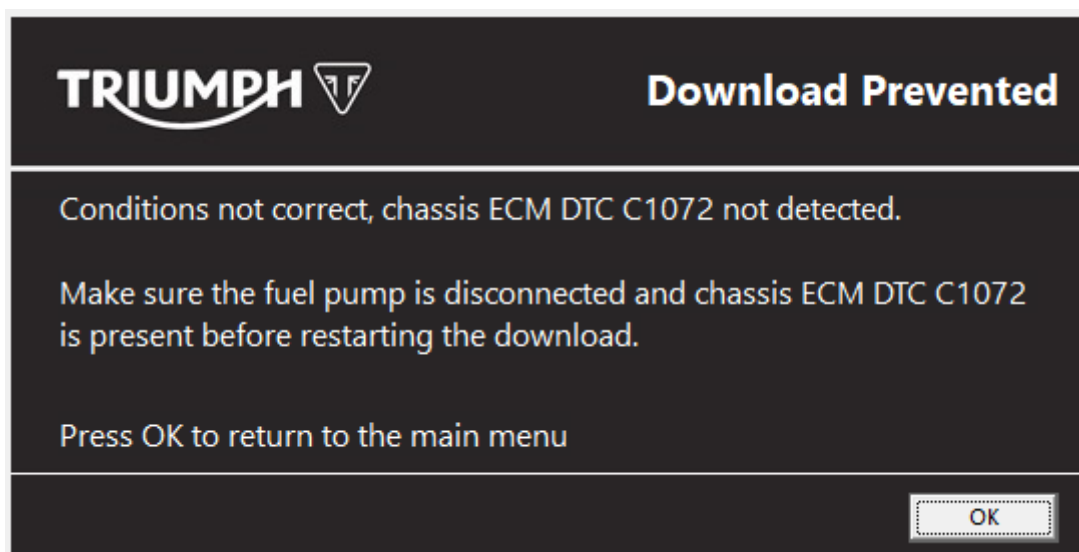
- **The password for accessing the special engine calibration is Injector1 (case sensitive).**
14. Enter the password.
 15. Using manual model selection, select the correct Tiger 1200 model from the list.
 16. Select calibration 030274 (Non running calibration. Use to free sticking fuel injectors.) for download and click **Confirm**.

Note:

- Prior to downloading the special calibration, the diagnostic tool will prompt you to note the current engine calibration and disconnect the fuel pump electrical connector.
- Upon clicking Next, the diagnostic tool will then check that chassis ECM DTC C1072 is present.
- If DTC C1072 is not detected, the download will be prohibited and the message 'Conditions not correct, chassis ECM DTC C1072 not detected' will be displayed.



Pre-download instructions



Conditions not correct message

17. If the required conditions are met, allow the calibration download to complete. Click **Finish** when completed.
18. Make sure the transmission is in neutral. Make sure the fuel tank is still removed from the motorcycle.
19. Pull the clutch lever fully into the handlebar.

 **Caution**

Operating the engine start button for periods longer than 10 seconds can cause starter motor damage. Do not operate the engine start button for longer than 10 seconds. The 10 second engine cranking process must only be performed once. Do not repeat the cranking process.

Note:

- **During cranking, the fuel injectors are operated for extended periods to allow the injector needle valves to release.**

20. Press and hold the engine start button.
21. Allow the engine to crank for 10 seconds, then release the engine start button. Do not repeat this process.

 **Caution**

The fuel tank **MUST NOT** be refitted while the special engine calibration 030274 is installed. In this condition, any attempts to start the engine will cause the engine to become flooded with fuel, resulting in instantaneous severe engine damage. The original engine ECM calibration (as noted during step 10 above) **MUST** be reinstalled prior to refitting the fuel tank. Triumph will not accept any warranty claims for engine damage caused by the use of calibration 030274 with the fuel tank fitted.

22. After completing the engine cranking cycle:
 - Download the original calibration as noted in step 10, using the current download password available on www.triumphonline.net.
 - Refit the fuel tank as described in the Service Manual.
 - Check all ECMs for stored DTCs and erase as necessary.
23. Check that the engine starts normally.

Note:

- **If the engine still fails to start within 10 seconds of cranking, contact Triumph service.**

Circulation

Initial and date when read and return to central file holder

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