



Technical Bulletin 211 10.2020

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211.1	Triumph Diagnostic Tool Compatibility with Windows Operating Systems	Not Applicable
211.2	Rear Suspension DTC Codes	Tiger 900 GT Pro

Item: 211.1

Description: Triumph Diagnostic Tool Compatibility with Windows Operating Systems

Model Affected: Not Applicable

From February 2021 the Triumph Diagnostic Tool software will no longer operate on computers running Microsoft Windows 7®.

Triumph Diagnostic Tool users still using Microsoft Windows 7® should upgrade their operating system, and if necessary their hardware, before this date.

Details of the minimum equipment required to run the Triumph Diagnostic Tool are listed below:

- A desktop or laptop Personal Computer (PC) running 32 bit or 64 bit versions of Microsoft Windows 8®, Windows 8.1® or Windows 10®.
- Microsoft .net framework version 4.8 or later.
- A 1 GHz processor or equivalent, 10 GB of free hard disk space and a minimum of 512 to 1024 MB of memory (RAM).
- A 1024 x 768 standard XGA monitor or a 1200 x 800 widescreen monitor.
- A broadband internet connection.
- The PC must have a free USB (Universal Serial Bus) port.

Item:	211.2
Description:	Rear Suspension DTC Codes
Model Affected:	Tiger 900 GT Pro

Provided below is additional information and advice for the following Diagnostic Trouble Codes (DTCs) on Tiger 900 GT Pro:

- C1176 - Preload adjustment system - user request input signal invalid
- C1177 - Damping adjustment system - user request input signal invalid
- C1173 - Rebound Stepper Motor Under-Current

DTCs C1176 (Preload adjustment system - user request input signal invalid) and C1177 (Damping adjustment system - user request input signal invalid)

The DTCs C1176 and C1177 will occur in the following two conditions:

Condition 1: Ignition Switched OFF then ON Again

Turning the ignition OFF then ON again will cause the DTCs C1176 and C1177 to be stored as the instruments stop communicating on CAN before the suspension control unit.

If the operation of the suspension is normal, the suspension warning light is OFF but DTCs C1176 and C1177 are present, clear the DTCs. No further action required (Triumph are working on a solution for this).

Condition 2: Instruments or Battery Have Been Disconnected and Reconnected

If the instruments or battery have been disconnected and reconnected, incorrect defaults are reloaded to the instruments because power to the instruments has been interrupted.

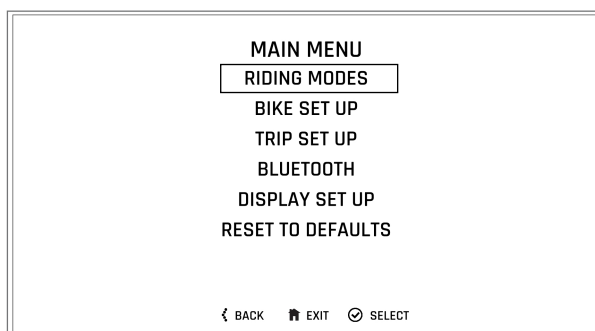
If the customer has reported issues with suspension performance or suspension warning light, verify the problem by following the procedure described below.

Note:

- **Before following the procedure below, make sure a second key is available so the seat can be removed when the engine is running.**
1. Check and clear DTCs C1176 and C1177 in the suspension ECM.

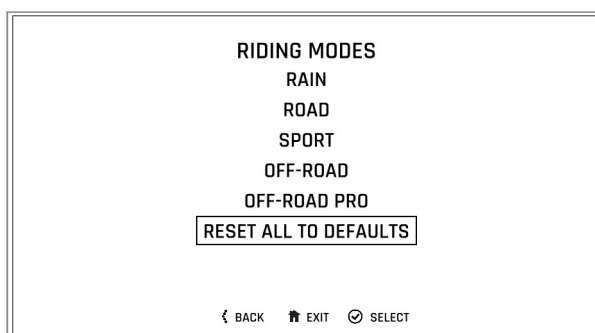
Note:

- **If the DTCs C1176 and C1177 return after being cleared, continue from step 2.**
 - **If the DTCs clear, continue from step 10.**
2. Check that the instruments software and configurations are up to date using the Triumph diagnostic tool.
 3. Press the MODE button and follow the process to select RAIN mode.
 4. With the engine OFF and ignition ON, press the HOME button on the right handlebar switch housing.
 5. Scroll the main menu by pushing the joystick down/up to select RIDING MODES and then press the joystick centre to confirm.



Main Menu Screen

6. Scroll down/up using the joystick to select the RESET ALL TO DEFAULTS. Press the joystick centre to confirm. This will reset all modes except for the rain mode (because rain is the current mode).



Riding Modes Screen

7. Press the HOME button to exit the RIDING MODES menu.
8. Press the MODE button and follow the process to select ROAD mode.
9. Press the HOME button on the right handlebar switch housing.
10. Scroll the main menu by pushing the joystick down/up to select RIDING MODES and then press the joystick centre to confirm.
11. Scroll down/up using the joystick to select the RESET ALL TO DEFAULTS. Press the joystick centre to confirm. This will reset all modes except for the road mode. All riding modes are now reset.
12. Press the HOME button to exit the RIDING MODES menu.
13. Clear DTCs C1176 and C1177 in the suspension ECM.
14. Carry out a road test without switching the ignition OFF at any time.
15. Without switching the engine OFF, use the second key to remove the seat, connect the Triumph diagnostic tool and check for DTCs C1176 and C1177 in the suspension ECM.
 - If DTCs C1176 and C1177 are present, this confirms an issue has occurred during the road test, contact Triumph support.
 - If these DTCs are not present, then no issue has occurred during the road test.
16. Disconnect the Triumph diagnostic tool, switch the ignition OFF; 30 seconds later switch the ignition ON and connect the Triumph diagnostic tool.
17. Check for DTCs, it is expected that DTCs C1176 and C1177 will be raised due to condition 1 - 'Ignition OFF then ON Again' above.

DTC C1173 (Rebound Stepper Motor Undercurrent)

If DTC C1173 is reported by the suspension ECM, rectify the fault by following the procedure described below:

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.

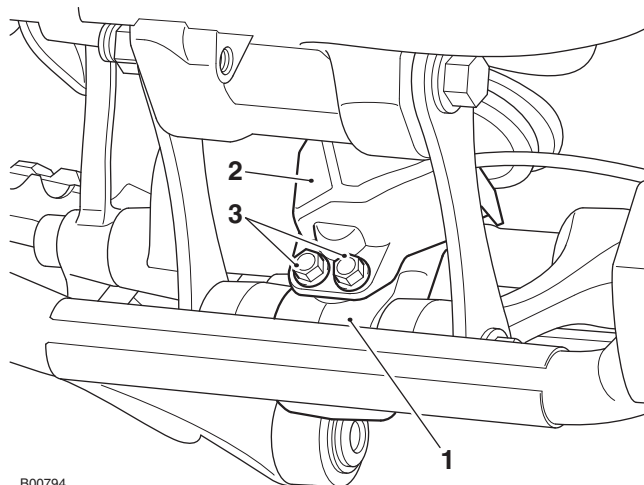
Warning

If the engine has recently been running, the exhaust components may be hot to the touch. Contact with the hot components may cause damage to exposed skin. To avoid skin damage, always allow the hot parts to cool before working on the exhaust system.

1. Connect the Triumph diagnostic tool and clear the DTC.
2. Switch the ignition OFF.
3. Remove the rider's seat as described in the Service Manual.
4. Disconnect the battery as described in the Service Manual.

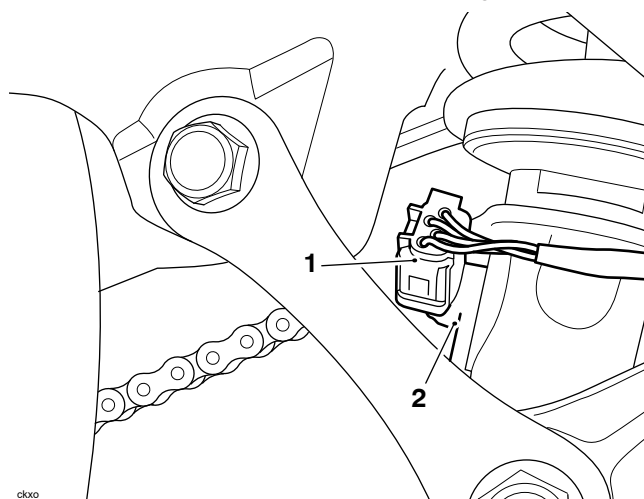
Note:

- **Note the position of the electrical harnesses for installation.**
5. Remove the two fixings and release the connector cover from the bottom of the rear suspension unit.



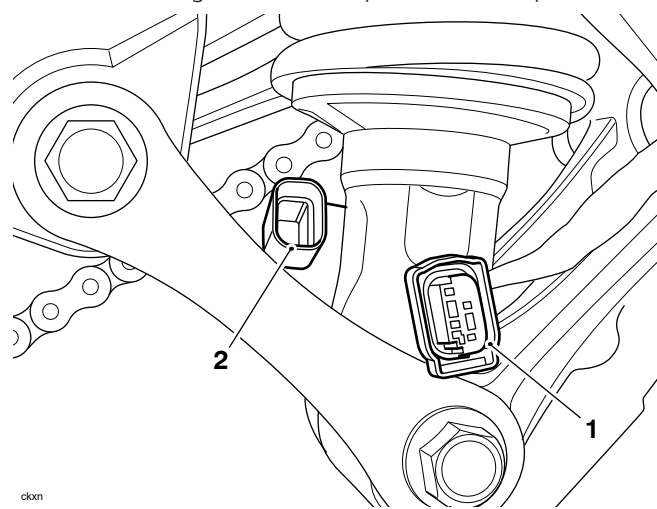
1. **Rear suspension unit**
2. **Connector cover**
3. **Fixings**

6. Disconnect the electrical connector from the rebound damping stepper motor.



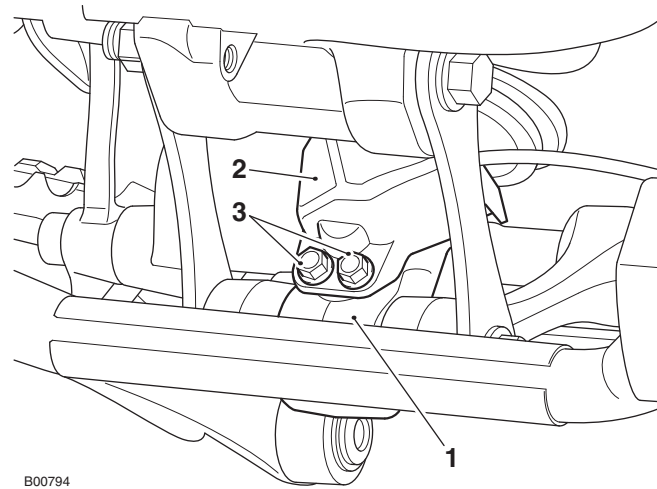
1. **Connector**
2. **Stepper motor**

7. Check the condition of the connector and stepper motor pins for corrosion, damage and connector housing damage. If corrosion or damage is found, replace the component.



- 1. Connector**
2. Stepper motor

8. Connect the electrical connector to the stepper motor.
9. Reconnect the battery as described in the Service Manual.
10. Turn the ignition switch ON and check for DTCs.
11. If the DTC is still present, perform the relevant pin point test as described in the Service Manual.
12. Fit the connector cover to the bottom of the rear suspension unit and tighten the fixings to 5 Nm.



- 1. Rear suspension unit**
2. Connector cover
3. Fixings

Circulation

Initial and date when read and return to central file holder

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