



Technical Bulletin 201 12.2019

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Item: 201.1
Description: Steering Lock and Keys
Model Affected: Scrambler 1200 XC, Scrambler 1200 XE

Please note the following points of information, as stated in the Owner's Handbook for the above motorcycles.

Steering Lock

⚠ Caution

The motorcycle must not be ridden with the key in the steering lock or seat lock.
Always lock the seat and remove the key before riding the motorcycle.

In addition to the above Owner's Handbook caution, riding the motorcycle with the smart key in the steering lock may result in an instrument warning message stating that the key fob is out of range. This is a known occurrence, and does not signify any faults on the motorcycle.

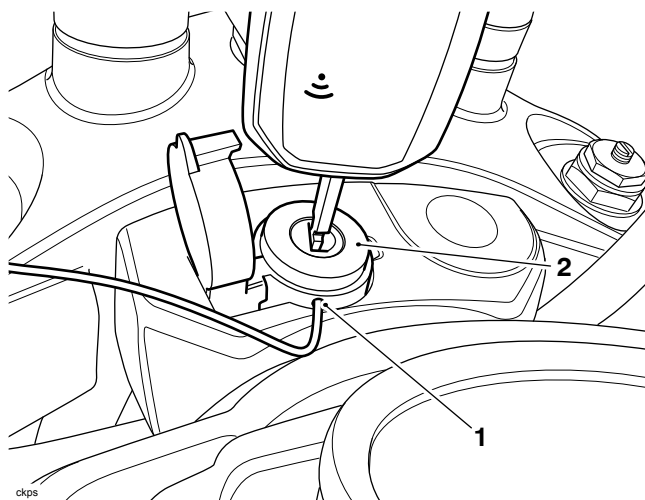
Key Removal from the Steering Lock

To remove the key from the steering lock:

- Rotate the key clockwise slightly to disengage the retaining mechanism before it can be removed from the lock.

Removing an Incorrect Key from the Steering Lock

- Locate the key release hole at the front of the steering lock.
- Push a suitable tool approximately 1.5 mm diameter into the key release hole.
- Rotate the key slightly left and right to release the key from the lock.



1. Key release hole
2. Steering lock

Item: 201.2

Description: Neutral Position Adaption

Model Affected: Street Twin from VIN 914793, Street Scrambler from VIN 914448, Thruxton TFC, Speed Twin, Scrambler 1200 XC, Scrambler 1200 XE, Street Triple S 660 cc from VIN 967907, Street Triple RS from VIN 966534, Daytona Moto2™ 765

The following information needs updating for the Service Manual for the above models.

Neutral Position Adaption

The neutral position adaption is required to allow for manufacturing tolerances of the gearbox and gear position sensor. The motorcycle is delivered from the factory with the neutral position fully adapted.

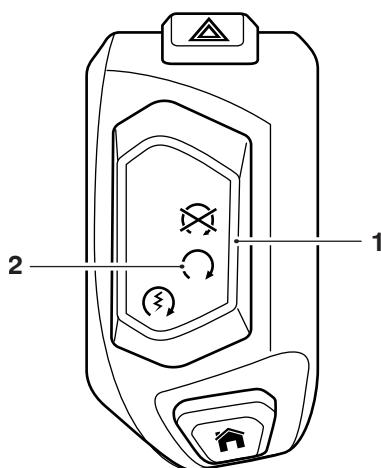
The neutral position adaption must be reset and re-adapted under the following conditions:

- If a gear position sensor malfunction occurs (DTC P0914, P0915 where applicable, and P0917), see the relevant Gear Position Sensor pinpoint test below.
- The gear position sensor has been removed or disconnected.

Adaption Reset

To reset the neutral position adaption:

1. Connect the Triumph diagnostic tool and turn the ignition ON.
2. Make sure the engine stop switch is in the RUN (ON) position.



1. Engine stop switch

2. RUN (ON) position

3. Select ENGINE DIAGNOSTICS.
4. Check and erase any stored DTCs.
5. Select ADJUST TUNE then select Gear Position/Neutral Position Adaption Reset.
6. Click Start.
7. The software will confirm that the adaption has been successfully reset.

Re-Adaption

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.

To re-adapt the neutral position:

1. Ensure the transmission is in neutral.
2. Start the engine.

Note:

- **For successful and accurate adaption, The engine must be at normal idle speed and the gear change pedal must be in its normal rested position.**
 - **During adaption, do not raise the engine speed and do not touch or move the gear change pedal.**
3. The neutral position will adapt shortly after engine start provided the above conditions are met.
 4. The adaption status can be confirmed by selecting GEAR POSITION ADAPTATION STATUS on the Triumph diagnostic tool.

Gear Position Sensor Pinpoint Test - Street Twin from VIN 914793, Street Scrambler from VIN 914448, Speed Twin, Thruxton TFC

Fault Code	Possible cause	Action
P0914	Gear position sensor short circuit to ground or open circuit	View and note 'freeze-frame' data if available.
P0917	Gear position sensor short circuit to 5 Volt sensor supply	View and note 'sensor' data. Ensure sensor connector is secure. Disconnect the engine ECM and proceed to pinpoint test 1:

Pinpoint Tests

Note:

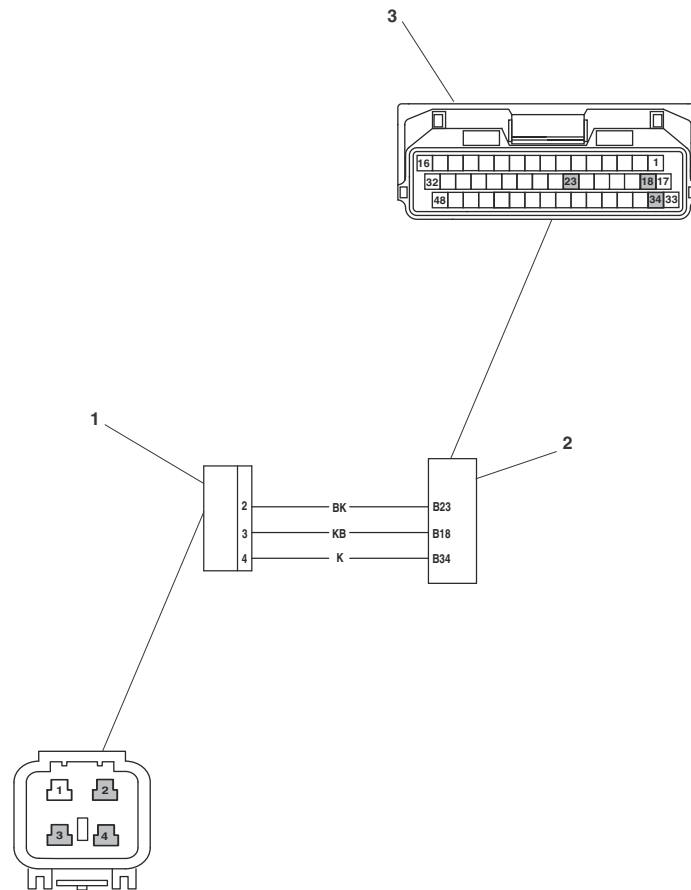
- **Wiring harness terminal one (black/white wire) is not used when a three wire gear position sensor is fitted.**

Test	Result	Action
1 Reset the neutral position adaption (see Neutral Position Adaption), clear fault code and run engine.	Fault cleared	Action complete - quit test
	Fault still present	Proceed to test 2
2 Check cable and terminal integrity: - Engine ECM pin B18 - Engine ECM pin B23 - Engine ECM pin B34	OK	Disconnect sensor and proceed to test 3
	Faulty	Rectify fault, proceed to test 6
3 Check cable for short circuit: - Engine ECM pin B23 to ground - Engine ECM pin B34 to ground	OK	Proceed to test 4
	Short circuit	Locate and rectify wiring fault, proceed to test 6
4 Check cable continuity: - Engine ECM pin B23 to sensor pin 2 - Engine ECM pin B18 to sensor pin 3 - Engine ECM pin B34 to sensor pin 4	OK	Proceed to test 5
	Open circuit	Locate and rectify wiring fault, proceed to test 6
5 Check cable for short circuit: - Engine ECM pin B23 to ECM pin B34 - Engine ECM pin B23 to ECM pin B18	OK	Renew gear position sensor and contact pin and proceed to test 6
	Short circuit	Locate and rectify wiring fault, proceed to test 6
6 Reconnect harness, clear fault code and run engine.	OK	Action complete - quit test
	Fault still present	Contact Triumph service

Note:

- **When the pin point tests have been completed, reset the neutral position sensor adaption (see Neutral Position Adaption).**

Circuit Diagram



1. Gear Position Sensor
2. Engine Electronic Control Module
3. Engine Electronic Control Module - Connector B

Gear Position Sensor Pinpoint Test - Scrambler 1200 XC and Scrambler 1200 XE

Fault Code	Possible cause	Action
P0914	Gear position sensor short circuit to ground or open circuit	View and note 'freeze-frame' data if available.
P0917	Gear position sensor short circuit to 5 Volt sensor supply	View and note 'sensor' data. Ensure sensor connector is secure. Disconnect the engine ECM and proceed to pinpoint test 1:

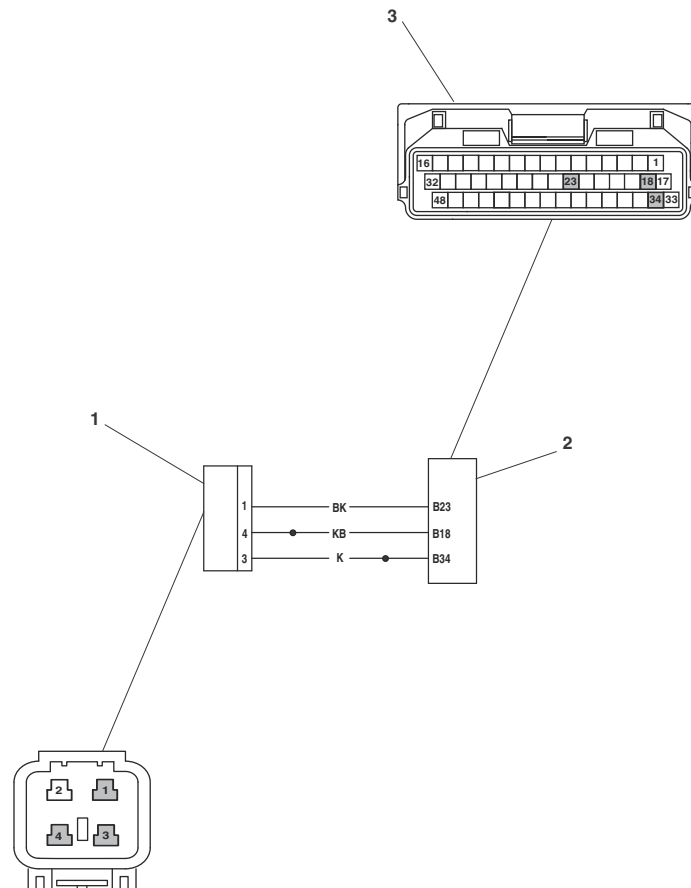
Pinpoint Tests

Test	Result	Action
1 Reset the neutral position adaption (see Neutral Position Adaption), clear fault code and run engine.	Fault cleared	Action complete - quit test
	Fault still present	Proceed to test 2
2 Check cable and terminal integrity: - Engine ECM pin B23 - Sensor pins 1, 3, 4	OK	Disconnect sensor and proceed to test 3
	Faulty	Rectify fault, proceed to test 6
3 Check cable for short circuit: - Engine ECM pin B23 to ground - Engine ECM pin B34 to ground	OK	Proceed to test 4
	Short circuit	Locate and rectify wiring fault, proceed to test 6
4 Check cable continuity: - Engine ECM pin B23 to sensor pin 1 - Engine ECM pin B18 to sensor pin 4 - Engine ECM pin B34 to sensor pin 3	OK	Proceed to test 5
	Open circuit	Locate and rectify wiring fault, proceed to test 6
5 Check cable for short circuit: - Engine ECM pin B23 to ECM pin B34	OK	Renew gear position sensor and contact pin and proceed to test 6
	Short circuit	Locate and rectify wiring fault, proceed to test 6
6 Reconnect harness, clear fault code and run engine.	OK	Action complete - quit test
	Fault still present	Contact Triumph service

Note:

- When the pin point tests have been completed, reset the neutral position sensor adaption (see Neutral Position Adaption).

Circuit Diagram



1. Gear Position Sensor
2. Engine Electronic Control Module
3. Engine Electronic Control Module - Connector B

Gear Position Sensor Pinpoint Test - Street Triple RS and Street Triple S 660 cc

Fault Code	Possible cause	Action
P0914	Gear position sensor short circuit to ground or open circuit	View and note 'freeze-frame' data if available.
P0915	Gear position sensor signal error - correlation error with vehicle speed	View and note 'sensor' data. Ensure sensor connector is secure.
P0917	Gear position sensor short circuit to 5 Volt sensor supply	Disconnect the engine ECM and proceed to pinpoint test 1:

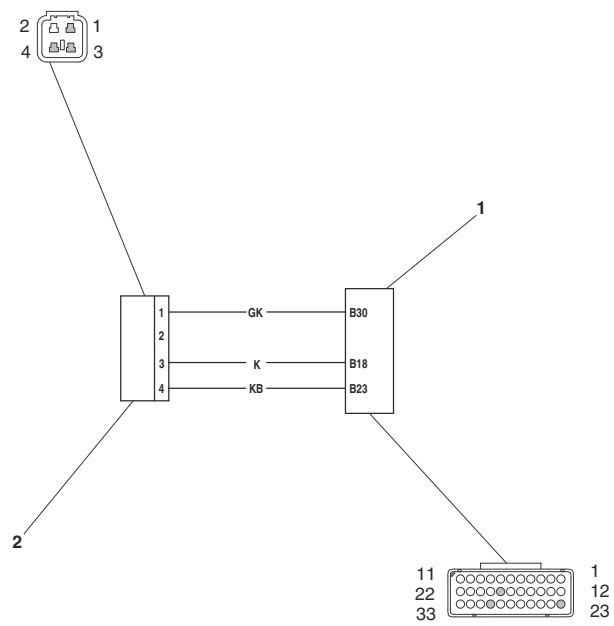
Pinpoint Tests

Test	Result	Action	
1	Reset the neutral position adaption (see Neutral Position Adaption), clear fault code and run engine.	Fault cleared	Action complete - quit test
		Fault still present	Proceed to test 2
2	Check cable and terminal integrity: - Engine ECM pin B30	OK	Disconnect sensor and proceed to test 3
		Faulty	Rectify fault, proceed to test 6
3	Check cable for short circuit: - Engine ECM pin B18 to ground - Engine ECM pin B30 to ground	OK	Proceed to test 4
		Short circuit	Locate and rectify wiring fault, proceed to test 6
4	Check cable continuity: - Engine ECM pin B18 to sensor pin 3 - Engine ECM pin B23 to sensor pin 4 - Engine ECM pin B30 to sensor pin 1	OK	Proceed to test 5
		Open circuit	Locate and rectify wiring fault, proceed to test 6
5	Check cable for short circuit: - Engine ECM pin B30 to Engine ECM pin B18 - Engine ECM pin B30 to Engine ECM pin B23 - Engine ECM pin B30 to Engine ECM pin A08 - Engine ECM pin B30 to Engine ECM pin A21	OK	Renew gear position sensor and contact pin and proceed to test 6
		Short circuit	Locate and rectify wiring fault, proceed to test 6
6	Reconnect harness, clear fault code and run engine.	OK	Action complete - quit test
		Fault still present	Contact Triumph service

Note:

- **When the pin point tests have been completed, reset the neutral position sensor adaption (see Neutral Position Adaption).**

Circuit Diagram



- 1. Engine ECM Connector B
- 2. Gear Position Sensor

Gear Position Sensor Pinpoint Test - Daytona Moto2™ 765

Fault Code	Possible cause	Action
P0914	Gear position sensor short circuit to ground or open circuit	View and note 'freeze-frame' data if available.
P0917	Gear position sensor short circuit to 5 Volt sensor supply	View and note 'sensor' data. Ensure sensor connector is secure. Disconnect the engine ECM and proceed to pinpoint test 1:

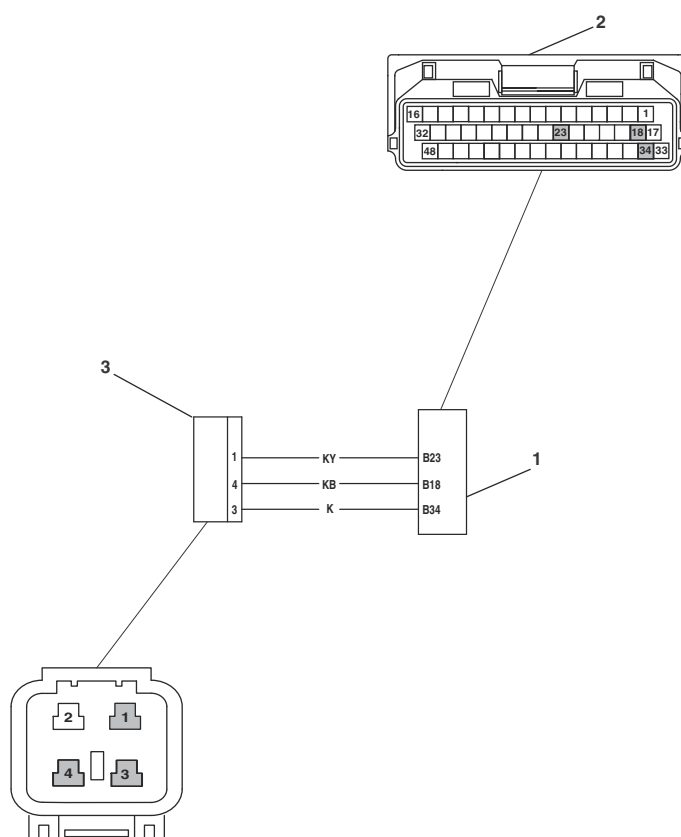
Pinpoint Tests

Test	Result	Action
1 Reset the neutral position adaption (see Neutral Position Adaption), clear fault code and run engine.	Fault cleared	Action complete - quit test
	Fault still present	Proceed to test 2
2 Check cable and terminal integrity: - ECM pin B23 Gear position sensor pin 1 Gear position sensor pin 3 Gear position sensor pin 4	OK	Disconnect sensor and proceed to test 3
	Faulty	Rectify fault, proceed to test 6
3 Check cable for short circuit: - ECM pin B23 to ground - ECM pin B34 to ground	OK	Proceed to test 4
	Short circuit	Locate and rectify wiring fault, proceed to test 6
4 Check cable continuity: - ECM pin B23 to sensor pin 1 - ECM pin B34 to sensor pin 3 - ECM pin B18 to sensor pin 4	OK	Proceed to test 5
	Open circuit	Locate and rectify wiring fault, proceed to test 6
5 Check cable for short circuit: - ECM pin B23 to ECM pin B44	OK	Renew gear position sensor and contact pin and proceed to test 6
	Short circuit	Locate and rectify wiring fault, proceed to test 6
6 Reconnect harness, clear fault code and run engine.	OK	Action complete - quit test
	Fault still present	Contact Triumph service

Note:

- When the pin point tests have been completed, reset the neutral position sensor adaption (see Neutral Position Adaption).

Circuit Diagram



1. Engine Electronic control module
2. Engine Electronic control module - Connector B
3. Gear position sensor

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.

Item: 201.3

Description: Triumph Diagnostic Tool - End of Support for Microsoft Windows 7®

Model Affected:

We would like to inform dealers that the Triumph Diagnostic Tool will not continue to support computers running Microsoft Windows 7® from 14th January 2020 onwards. From this date the software may still work with Microsoft Windows 7®, but no technical support will be offered by Triumph.

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

- A desktop or laptop Personal Computer (PC) running Microsoft Windows 8®, Windows 8.1® or Windows 10®.
- 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.
- 32 bit/64 bit versions of Windows 8, 8.1 and 10.

Item: 201.4

Description: Triumph Diagnostic Tool - Internet Connection and Minimum Equipment Requirement

Model Affected:

From July 2019, Triumph are required by regulation to collect emissions control system performance data from motorcycles in service. This data will be automatically collected from motorcycles when they are connected to the Triumph Diagnostic Tool.

From 1st March 2020, the Triumph Diagnostic Tool will require a broadband internet connection to allow collected motorcycle data to be retrieved and stored in a Triumph database.

The data collection and retrieval processes will be handled automatically by the diagnostic tool and will be invisible to end users. No personal data will be collected as part of this process.

Dealers are requested to make sure that desktop or Laptop computers running the diagnostic software have a broadband internet connection in place by 1st March 2020, as defined in the Triumph Diagnostic Tool minimum equipment requirements.

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

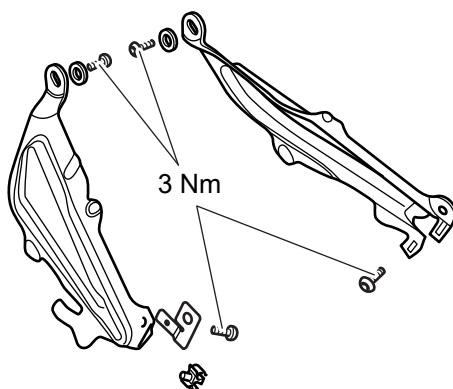
- A desktop or laptop Personal Computer (PC) running Microsoft Windows 8®, Windows 8.1® or Windows 10®.
- A 1 GHz processor or equivalent, 10 GB of free hard disk space and a minimum of 512 to 1024 MB of memory (RAM).
- A 1024 x 768 standard XGA monitor or a 1200 x 800 widescreen monitor.
- A broadband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

Item: 201.5
Description: Torque Change
Model Affected: Speed Triple S and Speed Triple RS

The torque figure has changed. If loosened or removed for any reason the fixing(s) must be torqued as required.

Frame and Bodywork

Application	Torque (Nm)	Notes
Side infill panels	3 Nm	



When ordering replacement parts, refer to the EPC.

• **Models already in service need not be re-tightened unless the fixings have been loosened or removed. 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.**

Item: 201.6

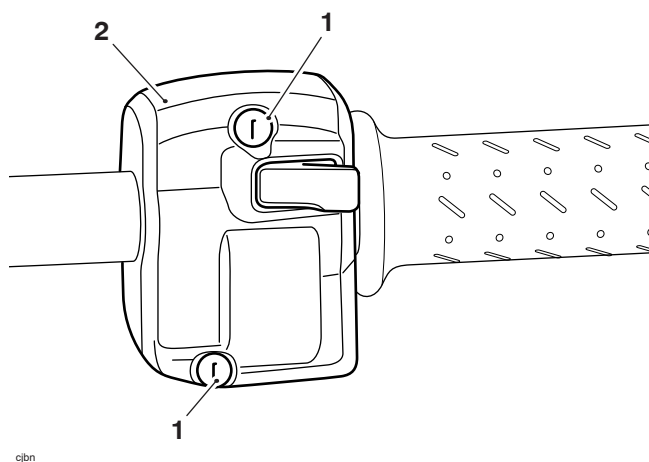
Description: Torque Change

Model Affected: Street Scrambler, Street Twin, Speed Twin, Thruxton 1200 R, Street Cup, Street Triple S up to VIN 960694, Street Triple S A2 Restricted Licence Version up to VIN 968958, Street Triple S 660cc from VIN 967907

The torque figure has changed. If loosened or removed for any reason the fixing(s) must be torqued as required.

Frame and Bodywork

Application	Torque (Nm)	Notes
Left hand switch housing	2 Nm	



1. Fixings

2. Left hand switch housing

When ordering replacement parts, refer to the EPC.

• **Models already in service need not be re-tightened unless the fixings have been loosened or removed. 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.**

Item: 201.7

Description: Clutch Cable

Model Affected: Thunderbird - All Models Except Thunderbird Commander and Thunderbird LT

This Technical News item has been released to coincide with Technical News 158 item 11 and Technical News 161 item 1.

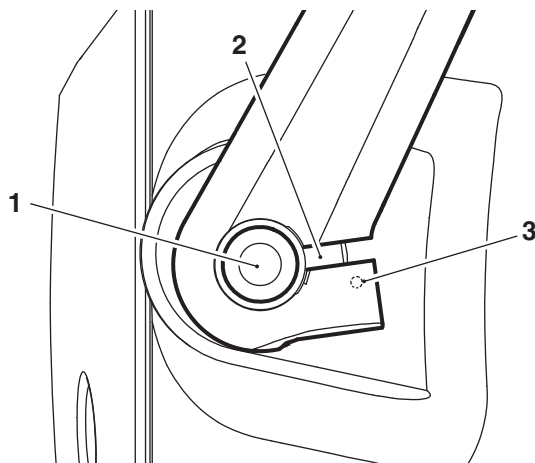
A new clutch cable was introduced to the above models from VIN 693388 and is retrofittable. Triumph parts department no longer support the original clutch cable. The difference between the original and new condition clutch cable is that the inner cable's free length at the clutch actuation lever is 18 mm longer than the original. The additional length is to allow the repositioning of the clutch actuation lever.

Two conditions of clutch cover exist for this motorcycle as described in Technical News 158, a clutch cover with a single dot alignment mark, and a clutch cover with single and double dot alignment marks.

The new clutch cable should be fitted as described in the Service Manual, noting the following:

Motorcycles with a Single Dot Alignment Mark

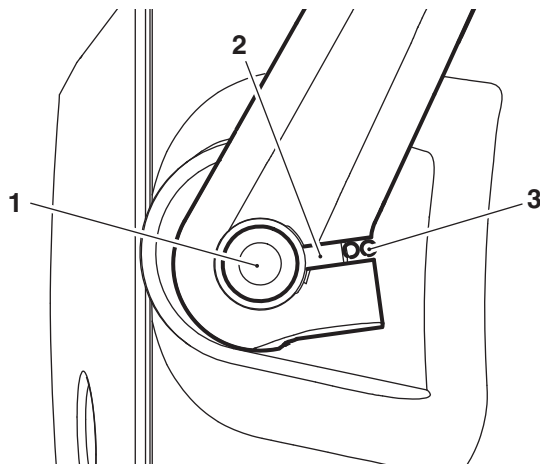
1. Rotate the clutch shaft clockwise until the shaft makes contact with the clutch pressure plate bearing.
2. Align the split in the clutch actuation lever to the single dot alignment mark on the clutch cover.
3. While holding the clutch shaft in position, rotate the actuation lever two splines anticlockwise then fit the arm to the shaft.



1. Clutch shaft
2. Clutch actuation lever split line
3. Single dot alignment mark

Motorcycles with Single Dot and Double Dot Alignment Marks

1. Rotate the clutch shaft clockwise until the shaft makes contact with the clutch pressure plate bearing.
2. Align the split in the clutch actuation lever to the double dot alignment mark on the clutch cover then fit the arm to the shaft.



1. Clutch shaft
2. Clutch actuation lever split line
3. Double dot alignment mark

When ordering replacement parts, refer to the EPC.

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.

Item: 201.8

Description: Camshaft Frame Installation

Model Affected: Street Cup, Street Twin, Bonneville T100 models from VIN 759204, Street Scrambler, Thruxton 1200, Thruxton 1200R, Bonneville T120 models, Bonneville Bobber, Bonneville Speedmaster from VIN 739143, Bonneville Bobber Black, Scrambler 1200 XC, Scrambler 1200 XE

New camshaft frame bolts have been introduced to the above models from Engine Number 944903 (all markets except Brazil) and from Engine Number 960154 (Brazil only) and these have a new torque tightening value of 12 Nm.

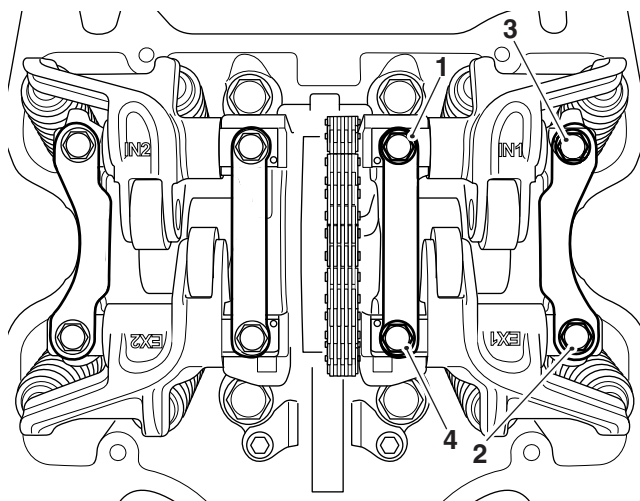
Models prior to these engine numbers will remain at 10 Nm.

During camshaft ladder installation dealers are required to follow the procedure below.

Caution

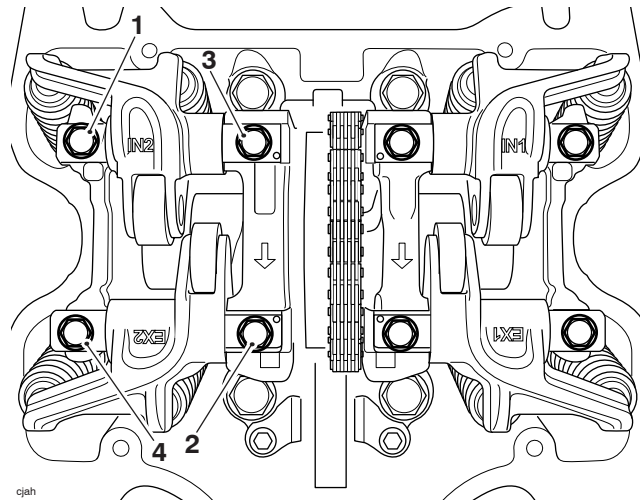
To avoid damage to the camshaft frame, always ensure as many camshaft lobes as possible are facing away from the rocker shaft. This will reduce stress on the camshaft frame during assembly. Damage to the camshaft frame will result in replacement of the cylinder head.

1. In the sequence shown below,
 - Tighten cylinder one camshaft frame fixings, until the camshaft frames are in full contact with the cylinder head. Tighten the fixings in the sequence shown below to 5 Nm.



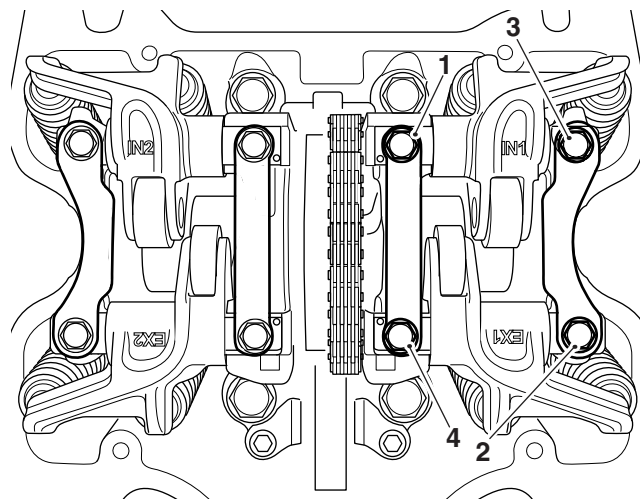
Cylinder One Camshaft Frame Tightening Sequence

- Tighten cylinder two camshaft frame fixings, until the camshaft frames are in full contact with the cylinder head. Tighten the fixings in the sequence shown below to 5 Nm.



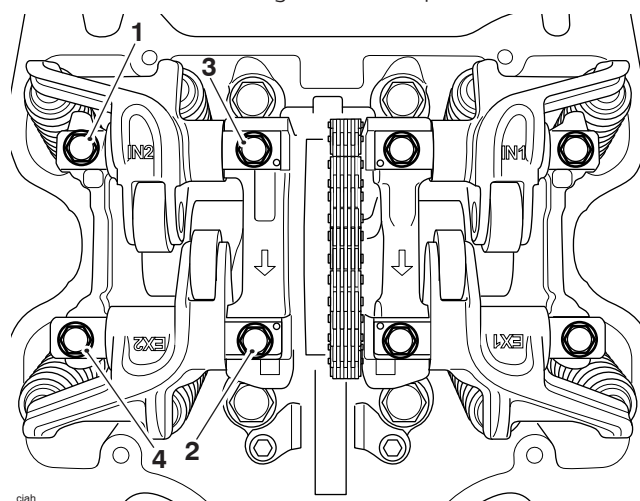
Cylinder Two Camshaft Frame Tightening Sequence

- Tighten cylinder one camshaft frame fixings in the sequence shown below to 12 Nm.



Cylinder One Camshaft Frame Tightening Sequence

- Tighten cylinder two camshaft frame fixings in the sequence shown below to 12 Nm.



Cylinder Two Camshaft Frame Tightening Sequence

 **Caution**

If any components have been renewed, the valve clearances must be checked and adjusted. Running with incorrectly adjusted valve clearances may cause excess engine noise, rough running and engine damage.

When ordering replacement parts, refer to the EPC.

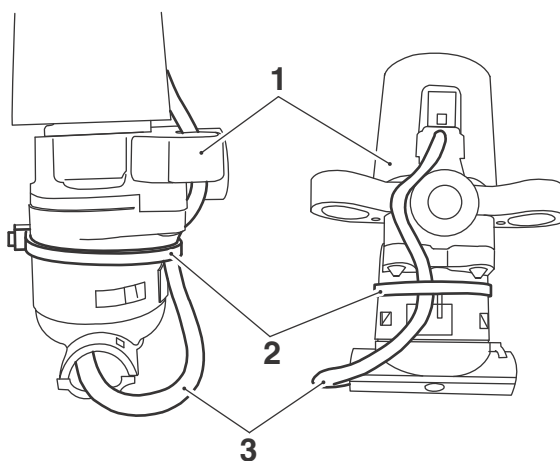
Please mark your copy of the Service Manual with this information. For electronic service manuals, store this information in a readily accessible place and refer to it when working on the relevant Triumph motorcycle. This information will be included in the next service manual update.

Item: 201.9
 Description: Immobiliser Antenna Wire Routing
 Model Affected: Street Triple RS from VIN 800262, Street Triple S from VIN 803572, Street Triple R from VIN 806646, Street Triple R - LRH from VIN 822626 and Street Triple S 660 cc from VIN 800262

Note:

- This item is released as an update to Technical Bulletin 190, Item 3.

A cable tie was added to the ignition switch on the above models from VIN 888086 (all markets except Brazil and India) and from VIN 887670 (Brazil and India only) to secure the immobiliser antenna wire. If removing or replacing the ignition switch, ensure the cable tie is fitted as illustrated.



1. Ignition switch assembly
2. Cable tie
3. Immobiliser antenna wire

Note:

- **Street Triple R models and Street Triple RS:** From VIN 932416 (all markets except Brazil and India) and from VIN 933535 (Brazil and India only), the ignition switch assembly has an integral cable clip and the immobiliser antenna wire is correctly routed. Replacement spare parts will be the same.
- **Street Triple S Models:** From VIN 940087 (all markets except Brazil and India) and from VIN 960409 (Brazil and India only), the ignition switch assembly has an integral cable clip and the immobiliser antenna wire is correctly routed. Replacement spare parts will be the same.

When ordering replacement parts, refer to the EPC.

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