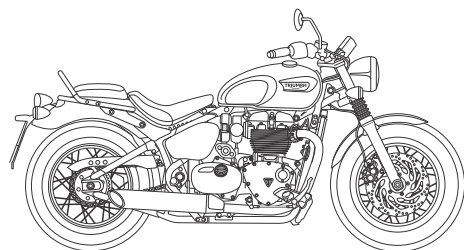
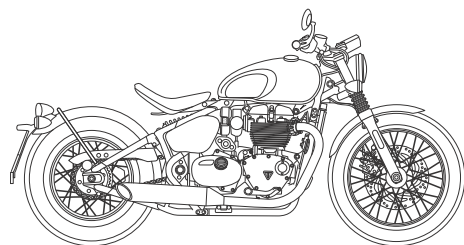




## Owner's Handbook

### Bonneville Bobber, Bonneville Bobber Black and Bonneville Speedmaster



This handbook contains information on the Triumph Bonneville Bobber, Bonneville Bobber Black and Bonneville Speedmaster motorcycles. Always store this Owner's Handbook with the motorcycle and refer to it for information whenever necessary.

The information contained in this publication is based on the latest information available at the time of printing. Triumph reserves the right to make changes at any time without prior notice, or obligation.

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Publication part number 3855569-US issue 1

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This handbook contains a number of different sections. The table of contents below will help you find the beginning of each section where, in the case of the major sections, a further table of contents will help you find the specific subject required.

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## FOREWORD

### Warnings, Cautions and Notes

Throughout this Owner's Handbook particularly important information is presented in the following form:

#### **Warning**

This warning symbol identifies special instructions or procedures, which if not correctly followed could result in personal injury, or loss of life.

#### **Caution**

This caution symbol identifies special instructions or procedures, which, if not strictly observed, could result in damage to, or destruction of, equipment.

#### Note:

- **This note symbol indicates points of particular interest for more efficient and convenient operation.**

### Warning Labels



At certain areas of the motorcycle, the symbol (above) can be seen. The symbol means 'CAUTION: REFER TO THE HANDBOOK' and will be followed by a pictorial representation of the subject concerned.

Never attempt to ride the motorcycle or make any adjustments without reference to the relevant instructions contained in this handbook.

See page **12** for the location of all labels bearing this symbol. Where necessary, this symbol will also appear on the pages containing the relevant information.

### Maintenance

To ensure a long, safe and trouble free life for your motorcycle, maintenance should only be carried out by an authorized Triumph dealer.

Only an authorized Triumph dealer will have the necessary knowledge, equipment and skills to maintain your Triumph motorcycle correctly.

To locate your nearest Triumph dealer, visit the Triumph website at [www.triumph.co.uk](http://www.triumph.co.uk) or telephone Triumph Motorcycles America Limited on (678) 854 2010.

# Foreword

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## Noise Control System

Tampering with the noise control system is prohibited.

Owners are warned that the law may prohibit:

1. The removal or rendering inoperative by any person other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use and,
2. the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

## Immobilizer and Tire Pressure Monitoring System

This device complies with part 15 of the Federal Communications Commission (FCC) Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to the device could void the user's authority to operate the equipment.

## Tires

With reference to the Pneumatic Tires and Tubes for Automotive Vehicles (Quality Control) Order, 2009, Cl. No. 3 (c), it is declared by M/s. Triumph Motorcycles Ltd. that the tires mounted on this motorcycle meet the requirements of IS 15627: 2005 and comply with the requirements under Central Motor Vehicle Rules (CMVR), 1989.

## Owner's Handbook

### **Warning**

This Owner's Handbook, and all other instructions that are supplied with your motorcycle, should be considered a permanent part of your motorcycle and should remain with it even if your motorcycle is subsequently sold.

All riders must read this Owner's Handbook and all other instructions which are supplied with your motorcycle, before riding, in order to become thoroughly familiar with the correct operation of your motorcycle's controls, its features, capabilities and limitations. Do not lend your motorcycle to others as riding when not familiar with your motorcycle's controls, features, capabilities and limitations can lead to an accident.

Thank you for choosing a Triumph motorcycle. This motorcycle is the product of Triumph's use of proven engineering, exhaustive testing, and continuous striving for superior reliability, safety and performance.

Please read this Owner's Handbook before riding in order to become thoroughly familiar with the correct operation of your motorcycle's controls, its features, capabilities and limitations.

This handbook includes safe riding tips, but does not contain all the techniques and skills necessary to ride a motorcycle safely.

Triumph strongly recommends that all riders undertake a safety course approved by the Motorcycle Safety Foundation to ensure safe operation of this motorcycle. Information about the nearest Motorcycle Safety Foundation course to you can be obtained by calling the following nationwide toll free number: 800-447-4700, or by writing to the Motorcycle Safety Foundation at: 2, Jenner Street, Irvine, California 92718. To ensure a long and trouble free life for your motorcycle, maintenance should be carried out as described in this manual by an authorized Triumph dealer.

This handbook is available from your local dealer in:

- English
- US English
- French
- German
- Italian
- Dutch
- Spanish
- Portuguese
- Swedish
- Japanese
- Thai.

## Talk to Triumph

Our relationship with you does not end with the purchase of your Triumph. Your feedback on the buying and ownership experience is very important in helping us develop our products and services for you.

Please help us by ensuring your authorized Triumph dealership has your email address and registers this with us. You will then receive an online customer satisfaction survey invitation to your email address where you can give us this feedback.

Your Triumph Team.

## SAFETY FIRST

### The Motorcycle

#### **Warning**

This motorcycle is designed for on-road use only. It is not suitable for off-road use.

Off-road operation could lead to loss of control of the motorcycle resulting in an accident causing injury or loss of life.

#### **Warning**

This motorcycle is not designed to tow a trailer or be equipped with a sidecar. Installing a sidecar and/or a trailer may result in loss of control and an accident.

#### **Warning**

Bonneville Bobber Black and Bonneville Bobber

This motorcycle is designed for use as a two-wheeled vehicle capable of carrying a rider on their own.

Operation of this motorcycle with a passenger is dangerous and could lead to loss of control and an accident.

The total weight of the rider, accessories and luggage must not exceed the maximum load limit of 275 lb (125 kg).

#### **Warning**

Bonneville Speedmaster

This motorcycle is designed for use as a two-wheeled vehicle capable of carrying a rider on their own, or a rider and one passenger (subject to a passenger seat, passenger handhold and footrests being installed).

The total weight of the rider, accessories, luggage and passenger must not exceed the maximum load limit of 463 lb (210 kg).

### Fuel and Exhaust Fumes

#### **Warning**

**GASOLINE IS HIGHLY FLAMMABLE:**

Always turn off the engine when refueling.

Do not refuel or open the fuel filler cap while smoking or in the vicinity of any open (naked) flame.

Take care not to spill any gasoline on the engine, exhaust pipes or mufflers when refueling.

If gasoline is swallowed, inhaled or allowed to get into the eyes, seek immediate medical attention.

Spillage on the skin should be immediately washed off with soap and water and clothing contaminated with gasoline should immediately be removed.

Burns and other serious skin conditions may result from contact with gasoline.

## Warning

Never start your engine or let it run for any length of time in a closed area.

The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time.

Always operate your motorcycle in the open-air or in an area with adequate ventilation.

## Warning

A helmet is one of the most important pieces of riding gear as it offers protection against head injuries. You and your passenger's helmet should be carefully chosen and should fit you or your passenger's head comfortably and securely. A brightly colored helmet will increase a rider's (or passenger's) visibility to other operators of road vehicles.

An open face helmet offers some protection in an accident though a full face helmet will offer more.

Always wear a visor or approved goggles to help vision and to protect your eyes.



## Helmet and Clothing

### Warning

When riding the motorcycle, both rider and passenger must always wear a motorcycle helmet, eye protection, gloves, boots, trousers (close fitting around the knee and ankle) and a brightly colored jacket. Brightly colored clothing will considerably increase a rider's (or passenger's) visibility to other operators of road vehicles. Although full protection is not possible, wearing correct protective clothing can reduce the risk of injury when riding.

When choosing a helmet, always look for a DOT (Department of Transport) sticker indicating that the helmet has DOT approval. Do not buy a helmet without DOT approval.

# Safety First

---

## Parking

### **Warning**

Always switch off the engine and remove the ignition key before leaving the motorcycle unattended. By removing the key, the risk of use of the motorcycle by unauthorized or untrained persons is reduced.

When parking the motorcycle, always remember the following:

- Engage first gear to help prevent the motorcycle from rolling off the stand.
- The engine and exhaust system will be hot after riding. DO NOT park where pedestrians, animals and/or children are likely to touch the motorcycle.
- Do not park on soft ground or on a steeply inclined surface. Parking under these conditions may cause the motorcycle to fall over.

For further details, please refer to the 'How to Ride the Motorcycle' section of this Owner's Handbook.

## Parts and Accessories

### **Warning**

Owners should be aware that the only approved parts, accessories and conversions for any Triumph motorcycle are those which carry official Triumph approval and are installed to the motorcycle by an authorized dealer.

In particular, it is extremely hazardous to install or replace parts or accessories whose installation requires the dismantling of, or addition to, either the electrical or fuel systems and any such modification could cause a safety hazard.

The installation of any non-approved parts, accessories or conversions may adversely affect the handling, stability or other aspect of the motorcycle operation that may result in an accident causing injury or death.

Triumph does not accept any liability whatsoever for defects caused by the installation of non-approved parts, accessories or conversions or the installation of any approved parts, accessories or conversions by non-approved personnel.



## Maintenance/Equipment

### **Warning**

Consult your authorized Triumph dealer whenever there is doubt as to the correct or safe operation of this Triumph motorcycle.

Remember that continued operation of an incorrectly performing motorcycle may aggravate a fault and may also compromise safety.

### **Warning**

Ensure all equipment that is required by law is installed and functioning correctly. The removal or alteration of the motorcycle's lights, mufflers, emission or noise control systems can violate the law. Incorrect or improper modification may adversely affect the handling, stability or other aspect of the motorcycle operation, which may result in an accident causing injury or death.

### **Warning**

If the motorcycle is involved in an accident, collision or fall, it must be taken to an authorized Triumph dealer for inspection and repair. Any accident can cause damage to the motorcycle that, if not correctly repaired, may cause a second accident that may result in injury or death.

## Riding

### **Warning**

Never ride the motorcycle when fatigued or under the influence of alcohol or other drugs.

Riding when under the influence of alcohol or other drugs is illegal.

Riding when fatigued or under the influence of alcohol or other drugs reduces the rider's ability to maintain control of the motorcycle and may lead to loss of control and an accident.

### **Warning**

All riders must be licensed to operate the motorcycle. Operation of the motorcycle without a license is illegal and could lead to prosecution.

Operation of the motorcycle without formal training in the correct riding techniques that are necessary to become licensed is dangerous and may lead to loss of motorcycle control and an accident.

### **Warning**

Always ride defensively and wear the protective equipment mentioned elsewhere in this foreword. Remember, in an accident, a motorcycle does not give the same impact protection as a car.

# Safety First

## Warning

This Triumph motorcycle should be operated within the legal speed limits for the particular road traveled. Operating a motorcycle at high speeds can be potentially dangerous since the time available to react to given traffic situations is greatly reduced as road speed increases. Always reduce speed in potentially hazardous driving conditions such as bad weather or heavy traffic.

## Warning

Continually observe and react to changes in road surface, traffic and wind conditions. All two-wheeled vehicles are subject to external forces which may cause an accident. These forces include but are not limited to:

Wind draft from passing vehicles

Potholes, uneven or damaged road surfaces

Bad weather

Rider error.

Always operate the motorcycle at moderate speed and away from heavy traffic until you have become thoroughly familiar with its handling and operating characteristics. Never exceed the legal speed limit.

## Warning

Ensure that you know and respect the rules of the road. Read and observe publications such as 'MOTORCYCLE SAFETY', 'YOU AND YOUR MOTORCYCLE, RIDING TIPS' and also read and become familiar with the contents of the MOTORCYCLE HANDBOOK for your state.

## Caution

This Triumph motorcycle is not equipped with spark arresters. Operation in forests, brush or grass areas may violate state and local laws and regulations.

## Wobble/Weave

A weave is a relatively slow oscillation of the rear of the motorcycle, while a wobble is a rapid, possibly strong shaking of the handlebar. These are related but distinct stability problems usually caused by excessive weight in the wrong place, or by a mechanical problem such as worn or loose bearings or under-inflated or unevenly worn tires.

Your solution to both situations is the same. Keep a firm hold on the handlebars without locking arms or fighting the steering. Smoothly ease off the throttle to slow gradually. Do not apply the brakes, and do not accelerate to try to stop the wobble or weave. In some cases, it helps to shift your body weight forward by leaning over the tank.

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## Handlebars and Footrests

### ! Warning

The rider must maintain control of the vehicle by keeping hands on the handlebars at all times.

The handling and stability of a motorcycle will be adversely affected if the rider removes their hands from the handlebars, resulting in loss of motorcycle control and an accident.

### ! Warning

The rider (and Bonneville Speedmaster passenger) must always use the footrests provided, during operation of the vehicle.

By using the footrests, the rider will reduce the risk of inadvertent contact with any motorcycle components and will also reduce the risk of injury from entrapment of clothing.

### ! Warning

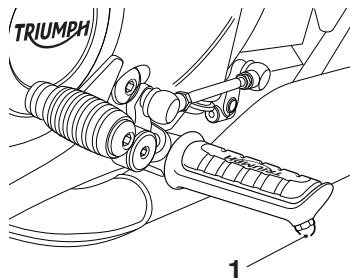
Use of a motorcycle with bank angle indicators worn beyond the maximum limit will allow the motorcycle to be banked to an unsafe angle. Therefore, always replace the bank angle indicator pegs before they are worn to their maximum limit. Banking to an unsafe angle may cause instability, loss of motorcycle control and an accident. Details of the bank angle wear limits can be found in the Maintenance and Adjustment section on page **103**.

### ! Warning

The bank angle indicators must not be used as a guide to how far the motorcycle may be safely banked. This depends on many various conditions including, but not limited to, road surface, tire condition and weather. Banking to an unsafe angle may cause instability, loss of motorcycle control and an accident.

### ! Warning

When banking and the bank angle indicator, attached to the rider's footrest, makes contact with the ground, the motorcycle is nearing its bank angle limit. A further increase of the banking angle is unsafe. Banking to an unsafe angle may cause instability, loss of motorcycle control and an accident.



1. Bank angle indicator

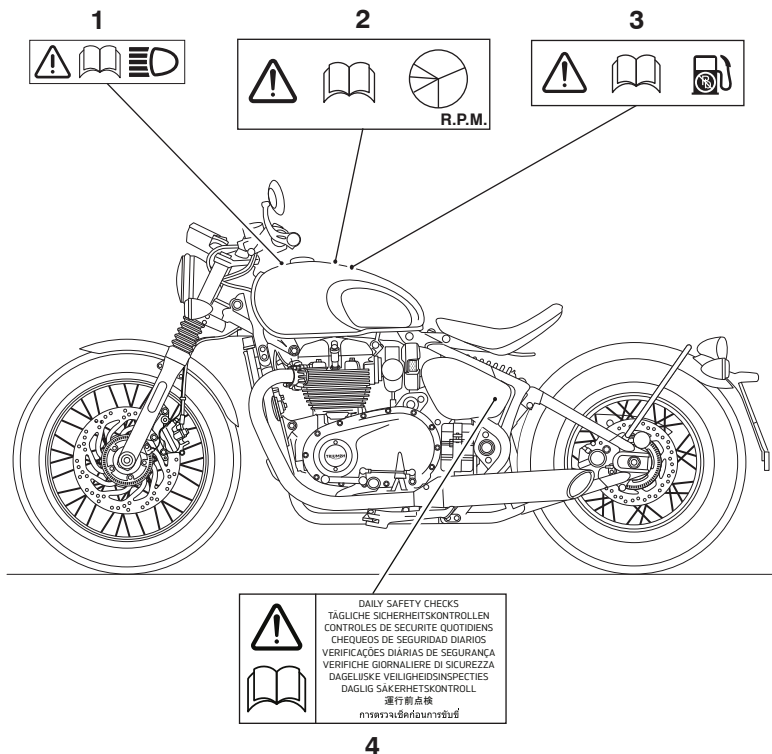
# Warning Labels

## WARNING LABELS

The labels detailed on this and the following pages draw your attention to important safety information in this handbook. Before riding, make sure that all riders have understood and complied with all the information to which these labels relate.

For illustration purposes, the Bonneville Bobber motorcycle is shown.

### Warning Label Locations



- 1. Headlight (page 114)
- 2. Breaking-In (page 56)

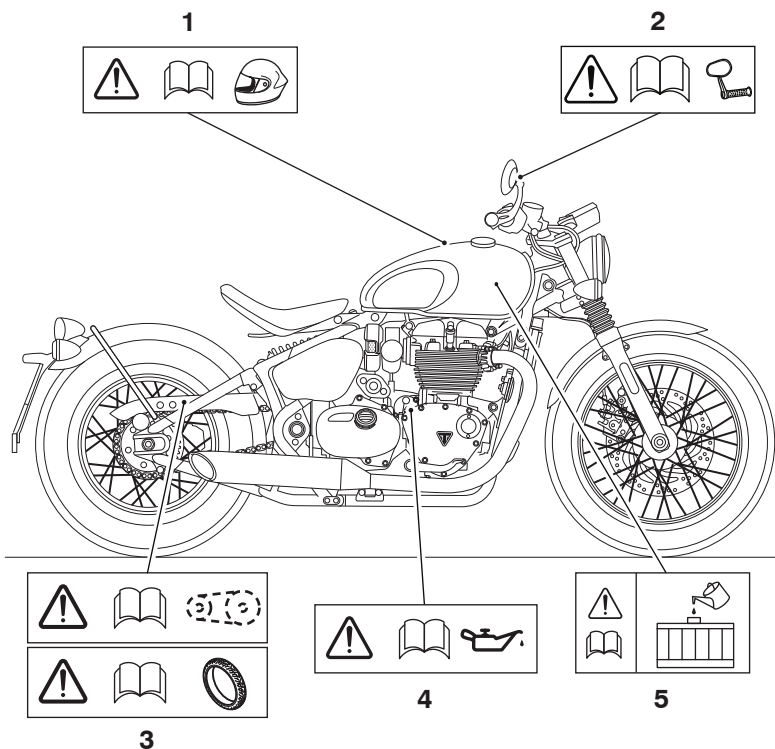
- 3. Unleaded Fuel (page 47)
- 4. Daily Safety Checks (page 57)

## Warning Label Locations - Continued

### ! Caution

All warning labels and decals, with the exception of the Breaking-in label, are mounted on the motorcycle using a strong adhesive. In some cases, labels are installed prior to an application of paint lacquer.

Do not attempt to remove the warning labels as this will cause damage to the paintwork or body work.



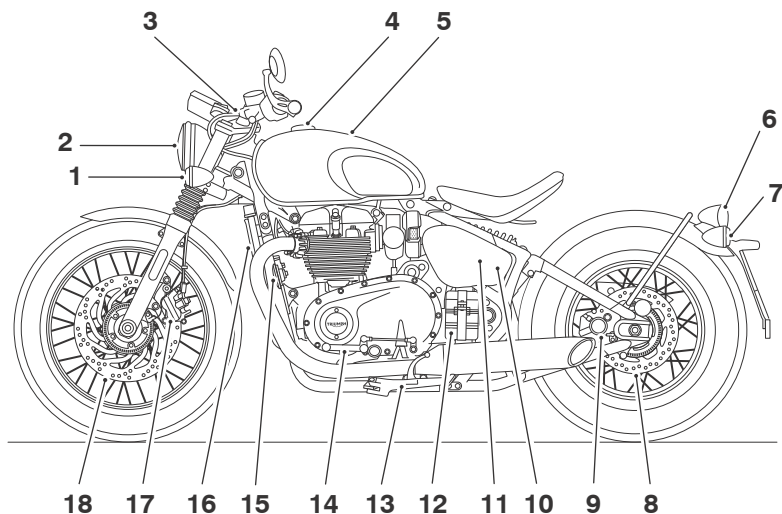
1. Helmet (page 7)
2. Mirrors (page 97)
3. Drive Chain (page 89) and Tires (page 103)

4. Engine Oil (page 80)
5. Coolant (page 84)

# Parts Identification

## PARTS IDENTIFICATION

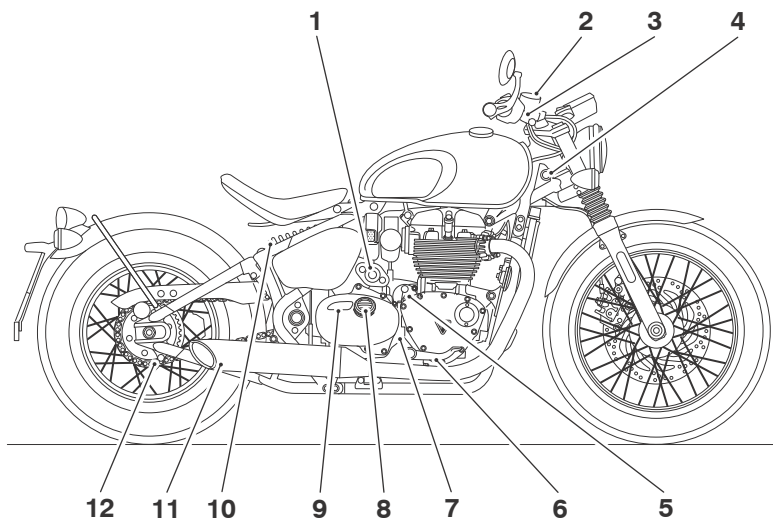
Bonneville Bobber Shown



- |                                  |   |
|----------------------------------|---|
| 1. Front turn signal             | 11. Adjustment tool and inspection cap tool (behind side panel) |
| 2. Headlight                     | 12. Battery (behind cover panel)                                |
| 3. Clutch lever                  | 13. Side stand  |
| 4. Fuel tank filler cap          | 14. Gear shift pedal  |
| 5. Fuel tank                     | 15. Horn  |
| 6. Brake/tail light              | 16. Radiator  |
| 7. Rear turn signal              | 17. Front brake caliper   |
| 8. Rear brake disc               | 18. Front brake disc  |
| 9. Rear brake caliper            |   |
| 10. Fuse box (behind side panel) |   |

## Parts Identification - Continued

### Bonneville Bobber Shown

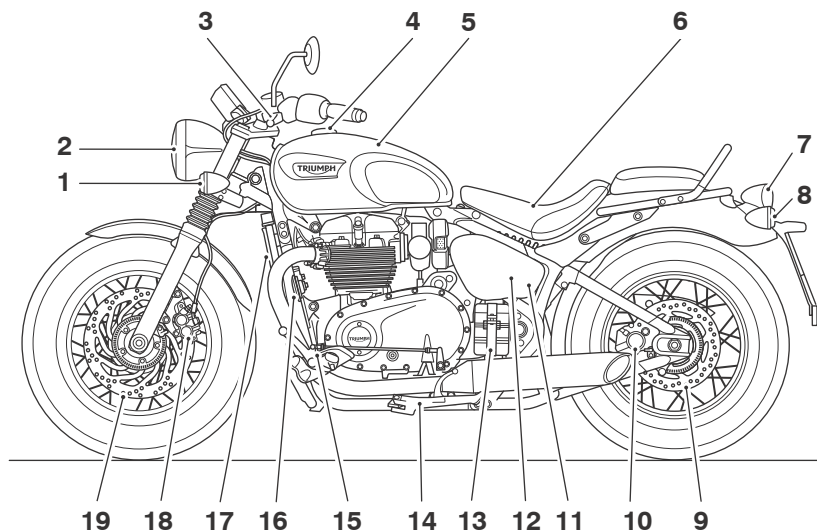


- |    |                             |     |  |
|----|-----------------------------|-----|--|
| 1. | Ignition switch             | 8.  | Rear brake fluid reservoir (behind cap)            |
| 2. | Front brake fluid reservoir | 9.  | Coolant expansion tank cap (behind sprocket cover) |
| 3. | Front brake lever           | 10. | Rear suspension unit                               |
| 4. | Steering lock               | 11. | Muffler  |
| 5. | Oil filler plug             | 12. | Final drive chain                                  |
| 6. | Rear brake pedal            |     |  |
| 7. | Oil level sight glass       |     |  |

# Parts Identification

## PARTS IDENTIFICATION

### Bonneville Speedmaster

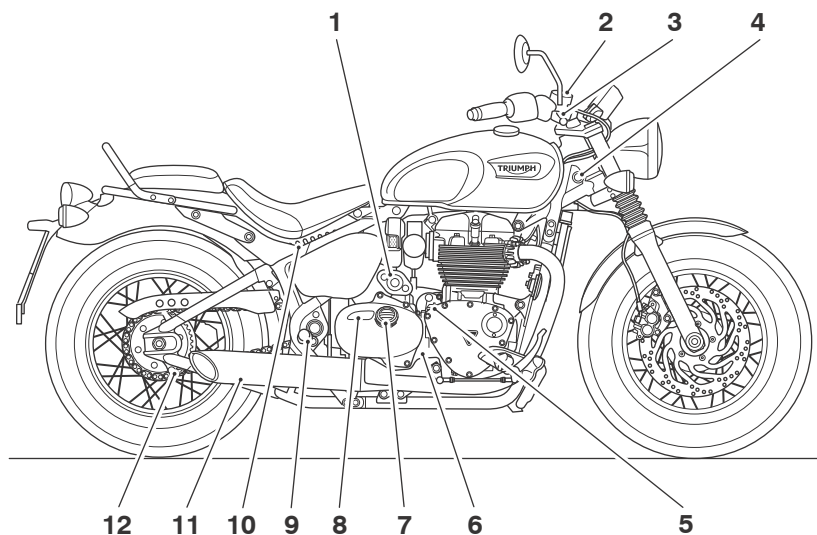


- |   |   |
|---|---|
| 1. Front turn signal  | 10. Rear brake caliper  |
| 2. Headlight  | 11. Fuse box (behind side panel)                                |
| 3. Clutch lever   | 12. Adjustment tool and inspection cap tool (behind side panel) |
| 4. Fuel tank filler cap   | 13. Battery (behind cover panel)                                |
| 5. Fuel tank  | 14. Side stand  |
| 6. C-spanner and extension handle (attached to the underside of the rider's seat) | 15. Gear shift pedal  |
| 7. Brake/tail light   | 16. Horn  |
| 8. Rear turn signal   | 17. Radiator  |
| 9. Rear brake disc  | 18. Front brake caliper   |
|   | 19. Front brake disc  |



## Parts Identification - Continued

### Bonneville Speedmaster



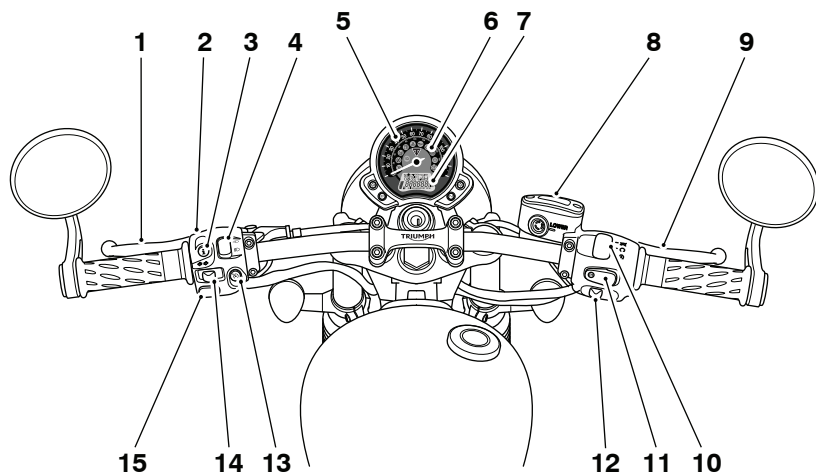
- |    |   |     |  |
|----|---|-----|--|
| 1. | Ignition switch                         | 8.  | Coolant expansion tank cap (behind sprocket cover) |
| 2. | Front brake fluid reservoir             | 9.  | Rear brake pedal                                   |
| 3. | Front brake lever                       | 10. | Rear suspension unit                               |
| 4. | Steering lock                           | 11. | Muffler  |
| 5. | Oil filler plug                         | 12. | Final drive chain                                  |
| 6. | Oil level sight glass                   |     |  |
| 7. | Rear brake fluid reservoir (behind cap) |     |  |

# Rider View Parts Identification

---

## RIDER VIEW PARTS IDENTIFICATION

Bonneville Bobber Shown

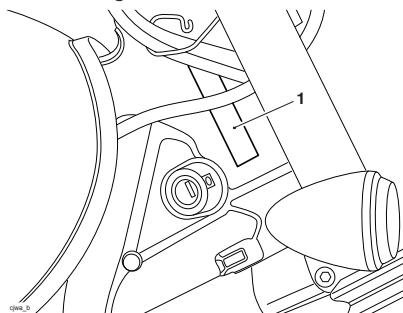


- |   |   |
|---|---|
| 1. Clutch lever   | 8. Front brake fluid reservoir          |
| 2. Headlight dimmer switch                              | 9. Front brake lever                    |
| 3. SCROLL button  | 10. Engine start/stop switch            |
| 4. Daytime Running Lights (DRL) switch<br>(if equipped) | 11. MODE button                         |
| 5. Speedometer  | 12. Hazard switch                       |
| 6. Warning lights                                       | 13. Cruise control button (if equipped) |
| 7. Odometer/Information display screen                  | 14. Turn signal switch                  |
|   | 15. Horn button                         |

## SERIAL NUMBERS

### Vehicle Identification Number (VIN)

The vehicle identification number is stamped into the steering head area of the frame. It is also shown on a label on the steering head.

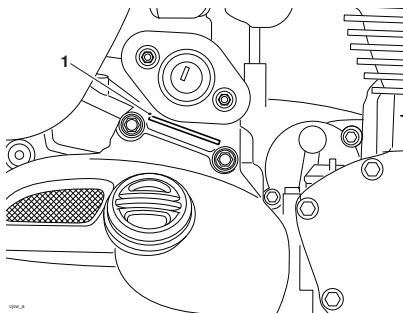


#### 1. VIN

Record the vehicle identification number in the space provided below.

### Engine Serial Number

The engine serial number is stamped on the upper engine crankcase, towards the rear, and is visible from the right hand side.



#### 1. Engine serial number

Record the engine serial number in the space provided below.

## GENERAL INFORMATION

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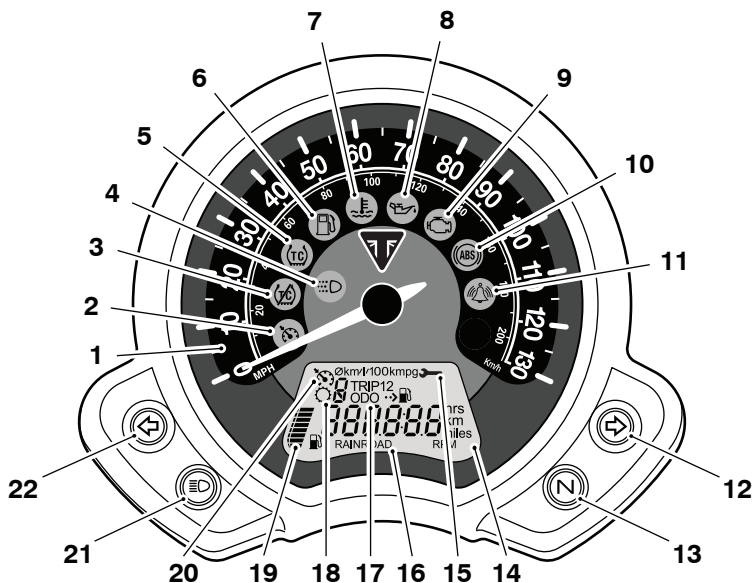
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# General Information

## Instrument Panel Layout

Note:

- For illustration purposes, the Bonneville Bobber is shown.



gix

- |   |  |
|---|--|
| 1. Speedometer  | 11. Immobilizer status indicator light     |
| 2. Cruise control indicator light (if equipped)               | 12. Right hand turn signal light           |
| 3. Traction Control (TC) disabled warning light               | 13. Neutral indicator light                |
| 4. Daytime Running Lights (DRL) indicator light (if equipped) | 14. Information display screen             |
| 5. Traction Control (TC) indicator light                      | 15. Service interval indicator             |
| 6. Low fuel level indicator light                             | 16. Rider modes                            |
| 7. High coolant temperature warning light                     | 17. Odometer/Trip meter/Clock              |
| 8. Low oil pressure warning light                             | 18. Gear position indicator                |
| 9. Engine management Malfunction Indicator Light (MIL)        | 19. Fuel gage                              |
| 10. ABS (Anti-Lock Brake System) warning light                | 20. Cruise control indicator (if equipped) |
|   | 21. High beam indicator light              |
|   | 22. Left hand turn signal light            |

### Instrument Panel Adjustment

**Bonneville Bobber and  
Bonneville Bobber Black only**

#### **Warning**

Operation of the motorcycle with an incorrectly adjusted or loose instrument panel is dangerous.

An incorrectly adjusted or loose instrument panel may result in loss of instrument vision when riding and may cause a distraction leading to loss of control of the motorcycle and an accident.

Always adjust the instrument panel to provide sufficient vision of the instruments and make sure that it is securely fixed in place before riding the motorcycle.

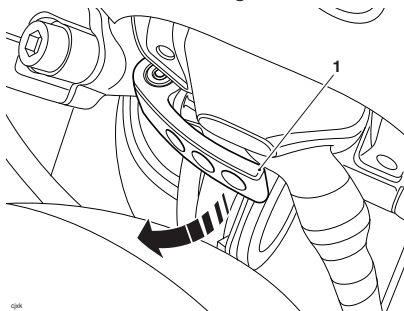
#### **Warning**

Never attempt to clean or adjust the instrument panel while riding the motorcycle. Removal of the rider's hands from the handlebars while riding the motorcycle will diminish the ability of the rider to maintain control of the motorcycle.

Attempting to clean or adjust the instrument panel while riding the motorcycle may result in loss of control of the motorcycle and an accident.

Only attempt to clean or adjust the instrument panel while stationary.

The instrument panel can be adjusted to allow for improved visibility of the instruments when riding.



1. **Adjustment lever**

# General Information

---

To adjust the instrument panel:

- Pull the adjustment lever located underneath the instrument panel to disengage the instrument panel from its locked position.
- Move the instrument panel into the correct position to view the display.
- Hold the instrument panel in place and push the lever back to engage the new locked position.

## Warning Lights

### Engine Management System Malfunction Indicator Light (MIL)



The Malfunction Indicator Light (MIL) for the engine management system illuminates when the ignition is switched ON (to indicate that it is working) but should not become illuminated when the engine is running.

If the MIL becomes illuminated when the engine is running, this indicates that a fault has occurred in one or more of the systems controlled by the engine management system. In such circumstances, the engine management system will switch to 'limp-home' mode so that the journey may be completed, if the fault is not so severe that the engine will not run.

#### **Warning**

Reduce speed and do not continue to ride for longer than is necessary with the MIL illuminated. The fault may adversely affect engine performance, exhaust emissions and fuel consumption.

Reduced engine performance could cause a dangerous riding condition, leading to loss of control and an accident.

Contact an authorized Triumph dealer as soon as possible to have the fault checked and rectified.



### Note:

- If the MIL flashes when the ignition is switched ON contact an authorized Triumph dealer as soon as possible to have the situation rectified. In these circumstances the engine will not start.

### Low Oil Pressure Warning Light



With the engine running, if the engine oil pressure becomes dangerously low, the low oil pressure warning light will illuminate.



Stop the engine immediately if the low oil pressure warning light illuminates. Do not restart the engine until the fault has been rectified.

Severe engine damage will result from running the engine when the low oil pressure warning light is illuminated.

### Note:

- The low oil pressure warning light will illuminate if the ignition is switched ON without running the engine.

### High Coolant Temperature Warning Light



With the engine running, if the engine coolant temperature becomes dangerously high, the high coolant temperature warning light will illuminate.



Stop the engine immediately if the high coolant temperature warning light illuminates. Do not restart the engine until the fault has been rectified.

Severe engine damage will result from running the engine when the high coolant temperature warning light is illuminated.

### Immobiliser/Alarm Indicator Light



This Triumph motorcycle is equipped with an engine immobilizer which is activated when the ignition switch is turned to the OFF position.

### Without Alarm Equipped

When the ignition switch is turned to the OFF position, the immobilizer/alarm light will flash on and off for 24 hours to show that the engine immobilizer is on. When the ignition switch is turned to the ON position the immobilizer and the indicator light will be off.

## General Information

If the indicator light remains on it indicates that the immobilizer has a malfunction that requires investigation. Contact an authorized Triumph dealer as soon as possible to have the fault checked and rectified.

### With Alarm Equipped

The immobilizer/alarm light will only illuminate when the conditions described in the genuine Triumph accessory alarm instructions are met.

### ABS (Anti-Lock Brake System) Warning Light



The ABS warning light illuminates to show that the ABS function is not available. Illumination is normal after engine start up, and until the motorcycle first reaches a speed exceeding 6 mph (10 km/h). Unless there is a fault, it should not illuminate again until the engine is restarted.

If the warning light becomes illuminated at any other time while riding it indicates that the ABS has a malfunction that requires investigation.

#### **Warning**

If the ABS is not functioning, the brake system will continue to function as a non-ABS braking system.

Do not continue to ride for longer than is necessary with the indicator light illuminated.

#### **Warning** Continued

Contact an authorized Triumph dealer as soon as possible to have the fault checked and rectified. In this situation braking too hard will cause the wheels to lock resulting in loss of motorcycle control and an accident.

### Traction Control (TC) Indicator Light



The TC indicator light is used to indicate that the traction control system is active and is working to limit rear wheel slip during periods of hard acceleration or under wet or slippery road conditions.

#### **Warning**

If the traction control is not functioning, care must be taken when accelerating and cornering on wet/slippy road surfaces to avoid rear wheel spin. Do not continue to ride for longer than is necessary with the Engine Management System Malfunction Indicator Light (MIL) and traction control warning lights illuminated. Contact an authorized Triumph dealer as soon as possible to have the fault checked.

Hard acceleration and cornering in this situation may cause the rear wheel to spin resulting in loss of motorcycle control and an accident.

## TC Indicator Light Operation:

### TC Switched On:

- Under normal riding conditions the indicator light will remain off.
- The indicator light will flash rapidly when the traction control system is working to limit rear wheel slip during periods of hard acceleration or under wet or slippery road conditions.

### TC Switched Off:

The indicator light will not illuminate. Instead the TC disabled warning light will be illuminated (see page 27).

#### Note:

- **Traction control will not function if there is a malfunction with the ABS system. The warning lights for the ABS, traction control and the MIL will be illuminated.**

## Traction Control (TC) Disabled Warning Light



The TC disabled warning light should not illuminate unless traction control is switched off or there is a malfunction.

If the warning light becomes illuminated at any other time while riding, it indicates that the traction control system has a malfunction that requires investigation.

## Low Fuel Indicator Light



The low fuel indicator light will illuminate when there is the following amount of fuel remaining in the tank:

- 0.53 US gallons (2.0 liters) - Bonneville Bobber and Bonneville Bobber Black
- 0.79 US gallons (3.0 liters) - Bonneville Speedmaster.

## Neutral



The neutral warning light indicates when the transmission is in neutral (no gear selected). The warning light will illuminate when the transmission is in neutral with the ignition switch in the ON position.

## Turn Signals



When the turn signal switch is turned to the left or right, the indicator warning light will flash on and off at the same speed as the turn signals.

# General Information

## Daytime Running Lights (DRL) (if equipped)



When the ignition is switched ON and the daytime running lights switch is set to DAYTIME RUNNING LIGHTS, the daytime running lights warning light will illuminate.

The daytime running lights and low beam headlights are operated manually using a switch on the left hand switch housing, see page 43.

### Warning

Do not ride for longer than necessary in poor ambient light conditions with the Daytime Running Lights (DRL) in use.

Riding with the daytime running lights when dark, in tunnels or where poor ambient light is apparent may reduce the riders vision or blind other road users.

Blinding other road users or reduced vision in low ambient light levels may result in loss of motorcycle control and an accident.

### Note:

- During daylight hours the daytime running lights improve the motorcycles visibility to other road users.
- Low beam headlights must be used in any other conditions unless the road conditions allow for high beam headlights to be used.

## Cruise Control Indicator Light (if equipped)



The cruise control can only be activated when the motorcycle is traveling at a speed between 19 to 100 mph (30 to 160 km/h) and is in 3rd gear or higher. When activated, the cruise control indicator light in the instrument panel will be illuminated.

### Warning

Cruise control must only be used where riding safely at a steady speed.

Cruise control must not be used when riding in heavy traffic, on slippery roads, or roads with sharp or blind bends.

Using cruise control in these conditions may result in loss of motorcycle control and an accident.

## Instruments

### Speedometer and Odometer

The speedometer indicates the road speed of the motorcycle.

The odometer shows the total distance that the motorcycle has travelled.

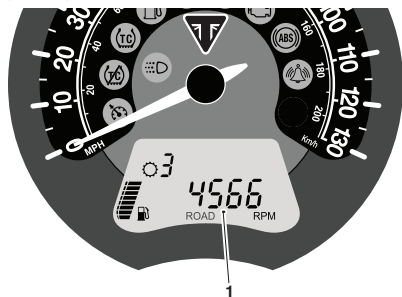
### Tachometer



#### Caution

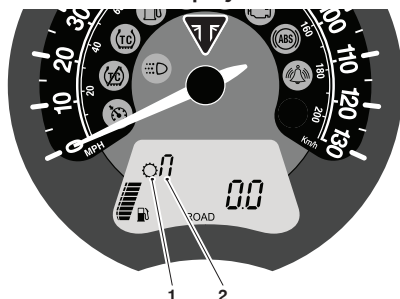
Never allow the engine speed above the maximum recommended engine speed (7,000 rpm) as severe engine damage may result.

The tachometer shows the engine speed in revolutions per minute - rpm (r/min).



1. Engine speed shown in rpm

### Gear Position Display

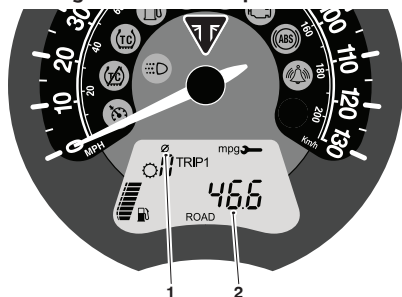


1. Gear position symbol
2. Gear position display (neutral position shown)

The gear position display indicates which gear (1-6) has been engaged. When the transmission is in neutral (no gear selected), the display screen will show **n**.

# General Information

## Average Fuel Consumption



1. Average symbol
2. Average fuel consumption

This is an indication of the average fuel consumption. After being reset the display will show dashes until 0.1 miles/km has been covered.

### Note:

- After refueling, the average consumption information will be updated only while riding the motorcycle. Depending on the riding style, updating could take up to five minutes.

## Fuel Gauge



1. Low fuel indicator light
2. Fuel gage

The fuel gage indicates the amount of fuel in the tank. With the ignition switched on, the number of bars shown in the display indicates the level of fuel.

When the fuel tank is full all eight bars are displayed and when empty, no bars are displayed. Other gage markings indicate intermediate fuel levels between full and empty.

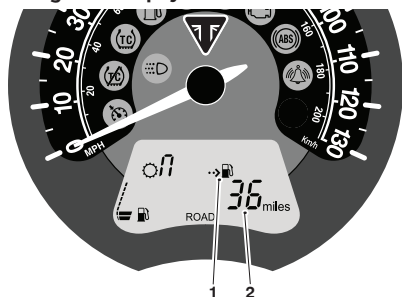
The low fuel warning light will illuminate when there is the following amount of fuel left in the tank:

- 0.53 US gallons (2.0 liters) - Bonneville Bobber and Bonneville Bobber Black
- 0.79 US gallons (3.0 liters) - Bonneville Speedmaster.

### Note:

- After refueling, the fuel gage and range to empty information will be updated only while riding the motorcycle. Depending on the riding style, updating could take up to five minutes.

### Range to Empty



1. Range to empty indicator
2. Estimated distance remaining

This is an indication of the predicted distance that can be traveled on the remaining fuel in the tank.

When less than a mile can be traveled on the remaining fuel, then '---' is shown in the display.

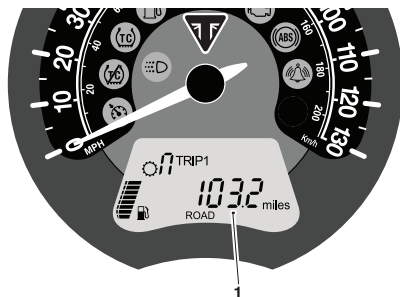
#### Note:

- After refueling, the fuel gauge and range to empty information will be updated only while riding the motorcycle. Depending on the riding style, updating could take up to five minutes.

### Trip Meter

#### Warning

Do not attempt to switch between the odometer and trip meter display modes or reset the trip meter with the motorcycle in motion as this may lead to loss of motorcycle control and an accident.

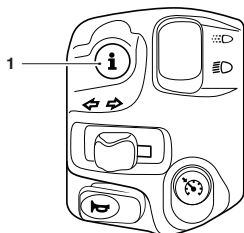


1. Trip meter display (Trip 1 selected)

There are two trip meters. Either trip meter shows the distance that the motorcycle has traveled since the meter on display was last reset to zero.

# General Information

To switch between trip meters, press and release the **SCROLL** button, located on the left hand handlebar switch housing, until the desired trip meter is shown.



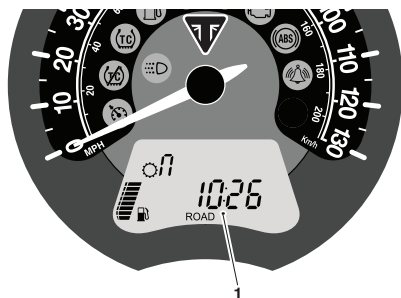
1. **SCROLL button**

## Trip Meter Reset

To reset either of the trip meters, select and display the trip meter to be zeroed. Then press and hold the **SCROLL** button for one second. After more than one second, the trip meter on display will reset to zero.

## Clock

To access the clock, press and release the **SCROLL** button, located on the left hand handlebar switch housing, until the clock is shown.



1. **Clock**

## Clock Adjustment

### **Warning**

Do not attempt to adjust the clock with the motorcycle in motion as this may lead to loss of motorcycle control and an accident.

To reset the clock:

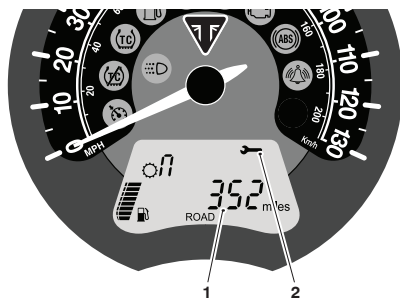
- Select the clock display.
- Press and hold the **SCROLL** button for one second, the clock's hour display will start to flash. Release the **SCROLL** button.



To reset the hour display:

- Make sure the hour display is still flashing then press and release the SCROLL button to change the setting. Each individual button press will change the setting by one digit.
- When the correct hour display is shown, press and hold the SCROLL button for one second. The hours display is set and the minutes display will begin to flash. The minutes display is adjusted in the same way as for the hour display.
- Once both hours and minutes are correctly set, press the SCROLL button for one second and the display will cease to flash.

### Service Interval



1. Remaining distance
2. Service symbol

When the ignition is switched on and the distance to the next service is 61 miles (100 km) or less, the display will flash the service symbol for five seconds after ignition is switched on.

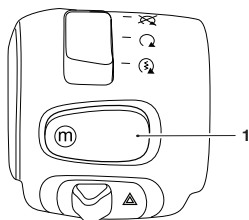
When the remaining distance is 0 miles (0 km) or overdue, the service symbol will remain on until the service has been carried out and the system has been reset by your authorized Triumph dealer.

# General Information

## Riding Modes

The riding mode system allows adjustment of the throttle response.

Riding modes are selected using the MODE button on the right hand handlebar switch housing.



### 1. MODE button

Press and release the MODE button to select one of the following riding modes.

ROAD	Standard throttle response.
RAIN	Reduced throttle response when compared to the ROAD setting, for wet or slippery conditions.

Riding modes can be selected when the motorcycle is stationary or moving.

## Selecting a Riding Mode – with the Motorcycle Stationary

Press and release the MODE button on the instrument housing until the desired riding mode is flashing in the display.

The selected riding mode is automatically activated one second after the MODE button is pressed, if the following conditions are met:

## With the Engine Off

- The ignition is switched ON.
- The engine stop switch is in the RUN position.

## With the Engine Running

- The transmission is in neutral or the clutch is pulled in.

## Selecting a Riding Mode – when Riding the Motorcycle

### Warning

The selection of riding modes while the motorcycle is in motion requires the rider to allow the motorcycle to coast (motorcycle moving, engine running, throttle closed, clutch lever pulled in and no brakes applied) for a brief period of time.

Riding mode selection while the motorcycle is in motion should only be attempted:

- At low speed
- In traffic free areas
- On straight and level roads or surfaces
- In good road and weather conditions
- Where it is safe to allow the motorcycle to briefly coast.

### Warning

Riding mode selection while the motorcycle is in motion **MUST NOT** be attempted:

- At high speeds
- While riding in traffic
- During cornering or on winding roads or surfaces
- On steeply inclined roads or surfaces
- In poor road/weather conditions
- Where it is unsafe to allow the motorcycle to coast.

Failure to observe this important warning will lead to loss of motorcycle control and an accident.

### Warning

After selecting a riding mode, operate the motorcycle in an area free from traffic to gain familiarity with the new settings.

Do not loan your motorcycle to anyone as they may change the riding mode setting from the one you are familiar with, causing loss of motorcycle control and an accident.

Press and release the MODE button on the left hand handlebar switch housing until the desired riding mode is flashing in the display.

Within 30 seconds of pressing the MODE button the rider must carry out the following simultaneously:

- Close the throttle.
- Pull the clutch in.
- Make sure that the brakes are not engaged (allow the motorcycle to coast).

#### Note:

- **The riding mode will default to ROAD when the ignition is switched ON.**

In the event of an incomplete riding mode change:

- Safely bring the motorcycle to a stop.
- Select neutral gear.
- Turn the ignition OFF and then back ON again.
- Select the desired riding mode.
- Restart the engine and continue riding.

### Warning

Do not stop the engine using the ignition switch or engine start/stop switch while the motorcycle is moving.

Always bring the motorcycle to a stop safely and engage neutral gear prior to stopping the engine.

Stopping the engine by turning off the ignition or engine start/stop switch while the motorcycle is moving can lock the rear wheel causing loss of motorcycle control and an accident.

### Caution

Do not stop the engine using the ignition switch or engine start/stop switch while the motorcycle is moving.

Stopping the engine by turning off the ignition or engine start/stop switch when the motorcycle is moving may cause damage to motorcycle components.

## Traction Control (TC)

### Warning

Traction control is not a substitute for riding appropriately for the prevailing road and weather conditions. The traction control cannot prevent loss of traction due to:

Excessive speed when entering turns

Accelerating at a sharp lean angle

Braking.

Traction control cannot prevent the front wheel from slipping.

Failure to observe any of the above may result in loss of motorcycle control and an accident.

Traction control helps to maintain traction when accelerating on wet/slippery road surfaces. If sensors detect that the rear wheel is losing traction (slipping), the traction control system will engage and alter the engine power until traction to the rear wheel has been restored. The traction control warning light will flash while it is engaged and the rider may notice a change to the sound of the engine.

#### Note:

- **Traction control will not function if there is a malfunction with the ABS system. The warning lights for the ABS, traction control and the MIL will be illuminated.**

## Traction Control Settings

### **Warning**

If the traction control is disabled, the motorcycle will handle as normal but without traction control. In this situation accelerating too hard on wet/slippery road surfaces may cause the rear wheel to slip, and may result in loss of motorcycle control and an accident.

The traction control can be set to one of the following conditions:

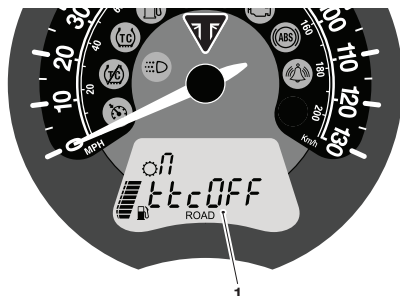
ON	Optimal traction control setting for road use, allows minimal rear wheel slip.
OFF	Traction control is turned OFF. The TC disabled warning light will be illuminated (see page 27).

Traction control defaults to ON after the ignition has been switched OFF and then switched ON again.

## To Disable the Traction Control

To disable the traction control setting:

- Make sure the motorcycle is stationary and in neutral.
- Turn the ignition to the ON position and put the engine start/stop switch in the RUN position.
- Press and release the SCROLL button on the left hand handlebar switch housing until 'ttcOn' is shown in the display.
- Press and hold the SCROLL button for more than one second to change between traction control on and traction control off.



1. Traction control off display

# General Information

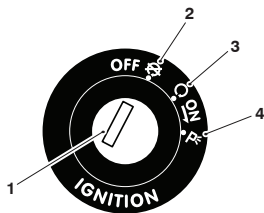
## Ignition Switch



### Warning

For reasons of security and safety, always turn the ignition to the OFF or PARK position and remove the key when leaving the motorcycle unattended.

Any unauthorized use of the motorcycle may cause injury to the user, other road users and pedestrians and may also cause damage to the motorcycle.



1. Ignition switch
2. OFF position
3. ON position
4. PARK position

## Engine Immobilizer

The ignition switch housing acts as the antenna for the engine immobilizer. When the ignition switch is turned to the OFF or PARK position and the ignition key is removed, the engine immobilizer is on. The engine immobilizer is turned off when the ignition key is in the ignition switch and it is turned to the ON position.

## Switch Location

The ignition switch is located below the rear edge of the fuel tank, on the right hand side of the motorcycle.

## Switch Operation

This is a three position, key operated switch. The key can be removed from the switch only when it is in the OFF or P (PARK) position.

To turn the switch from OFF to ON, insert the key and turn the key clockwise to the ON position.

To turn the switch from ON to PARK, push the key barrel further into the lock and turn clockwise to the PARK position. Use the PARK position only when temporarily leaving the motorcycle in a situation where the tail, license and position lights must remain on.

To turn the key back to OFF, turn the key counterclockwise.

### Ignition Key

#### **Warning**

Additional keys, key rings/chains or items attached to the ignition key may interfere with riding, leading to loss of motorcycle control and an accident.

Remove all additional keys, key rings/chains and items from the ignition key before riding the motorcycle.

#### **Caution**

Additional keys, key rings/chains or items attached to the ignition key may cause damage to the motorcycle's painted or polished components.

Remove all additional keys, key rings/chains and items from the ignition key before riding the motorcycle.

#### **Caution**

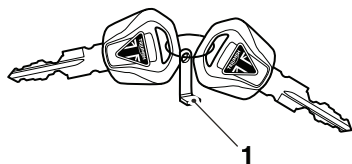
Do not store the spare key with the motorcycle as this will reduce all aspects of security.

The ignition key operates the ignition switch and the steering lock.

When the motorcycle is delivered from the factory, two ignition keys are supplied together with a small tag bearing the key number. Make a note of the key number and store the spare key and key number tag in a safe place away from the motorcycle.

There is a transponder within the ignition keys to turn off the engine immobilizer. To make sure the immobilizer functions correctly, always have only one of the ignition keys near the ignition switch. Having two ignition keys near the switch may interrupt the signal between the transponder and the engine immobilizer. In this situation the engine immobilizer will remain active until one of the ignition keys is removed.

Always get replacement keys from your authorized Triumph dealer. Replacement keys must be 'paired' with the motorcycle's immobilizer by your authorized Triumph dealer.



1. Key number tag

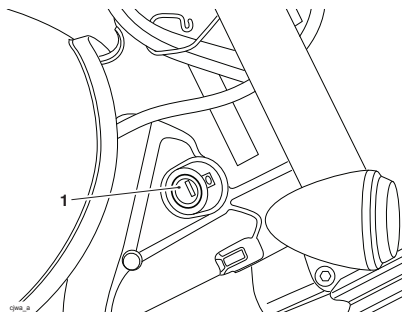
# General Information

## Steering Lock

### **Warning**

Always disengage the steering lock before riding as, with the steering lock engaged, it will not be possible to turn the handlebars or steer the motorcycle.

Riding without motorcycle steering control will lead to loss of control and an accident.



### **1. Steering lock**

This is a two position, key operated steering lock.

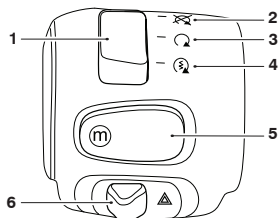
To engage the steering lock:

- Insert the key.
- Turn the handlebars fully left before turning the key clockwise.
- Remove the key.

To disengage the steering lock:

- Insert the key and at the same time turn the handlebars slightly to relieve any weight on the lock.
- Turn the key counterclockwise.
- Remove the key.

## Right Handlebar Switches



1. Engine start/stop switch
2. STOP position
3. RUN position
4. START position
5. MODE button
6. Hazard warning light switch

### **STOP Position**

The STOP position is for emergency use. If an emergency arises which requires the engine to be stopped, move the engine start/stop switch to the STOP position.

### **Caution**

Do not leave the ignition switch in the ON position unless the engine is running as this may cause damage to electrical components and will discharge the battery.



**Note:**

- **Although the engine stop switch stops the engine, it does not turn off all the electrical circuits and may cause difficulty in restarting the engine due to a discharged battery. Ordinarily, only the ignition switch should be used to stop the engine.**

## **RUN Position**

In addition to the ignition switch being turned to the ON position, the engine start/stop switch must be in the RUN position for the motorcycle to operate.

## **START Position**

The START position operates the electric starter. For the starter to operate, the clutch lever must be pulled to the handlebar.

**Note:**

- **Even if the clutch lever is pulled to the handlebar, the starter will not operate if the side stand is down and a gear is engaged.**

## **MODE Button**

The MODE button allows throttle response adjustment. Press and release the MODE button to select one of the different rider modes available (see page **34** for more information).

## **Hazard Warning Lights Switch**

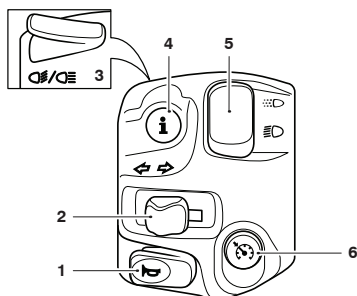
To turn the hazard warning lights on or off, push the hazard warning light switch to the left or right.

The ignition must be switched ON for the hazard warning lights to function.

The hazard warning lights will remain on if the ignition is switched OFF, until the hazard warning light switch is switched off again.

# General Information

## Left Handlebar Switches



1. Horn button
2. Turn signal switch
3. High beam button
4. SCROLL button
5. Daytime Running Lights (DRL) (if equipped)
6. Cruise control button (if equipped)

### SCROLL Button

The SCROLL button is used to operate the following functions of the instruments:

- Odometer functions (see page 31)
- Trip reset (see page 31)
- Clock reset (see page 32)
- Traction control functions (see page 36).

### High Beam Button

When the high beam button is pressed the high beam will be switched on. Each press of the button will swap between dip and high beam.

#### Note:

- A lighting on/off switch is not installed on this model. The position light, brake/tail light and license plate light all function automatically when the ignition is turned to the ON position.
- The headlight will function when the ignition switch is turned to the ON position. The headlight will go off while pressing the starter button until the engine starts.

### Turn Signal Switch

When the turn signal switch is pushed to the left or right, the corresponding direction indicators will flash on and off. The turn signal switch will always return to the central position.

The turn signals can only be canceled manually. To manually turn off the turn signals, press and release the indicator switch in the central position.

### Horn Button

When the horn button is pushed, with the ignition switch turned to the ON position, the horn will sound.

### Cruise Control Button (if equipped)

When the cruise control button is pressed in, the cruise control is on. The button remains in until it is pressed again to turn off the cruise control.

## Daytime Running Lights (DRL) Switch (if equipped)



When the ignition is switched ON and the daytime running lights switch is set to DAYTIME RUNNING LIGHTS, the daytime running lights warning light will illuminate.

The daytime running lights and low beam headlights are operated manually using a switch on the left hand switch housing (if equipped).

### **Warning**

Do not ride for longer than necessary in poor ambient light conditions with the Daytime Running Lights (DRL) in use.

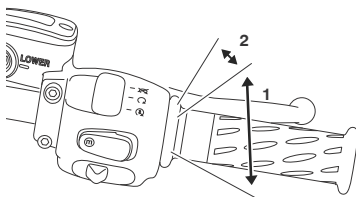
Riding with the daytime running lights when dark, in tunnels or where poor ambient light is apparent may reduce the riders vision or blind other road users.

Blinding other road users or reduced vision in low ambient light levels may result in loss of motorcycle control and an accident.

### **Note:**

- During daylight hours the daytime running lights improve the motorcycles visibility to other road users.
- Low beam headlights must be used in any other conditions unless the road conditions allow for high beam headlights to be used.

## Throttle Control



1. Throttle open position
2. Throttle closed position

All models have an electronic throttle twist grip to open and close the throttles via the engine Electronic Control Module (ECM). There are no direct-acting cables in the system.

The throttle grip has a resistive feel to it as it is rolled rearwards to open the throttles. When the grip is released it will return to the throttle closed position by its internal return spring and the throttles will close.

There are no user adjustments for the throttle control.

## General Information

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If there is a malfunction with the throttle control the Malfunction Indicator Light (MIL) becomes illuminated and one of the following engine conditions may occur:

- MIL illuminated, restricted engine RPM and throttle movement
- MIL illuminated, limp-home mode with the engine at a fast idle condition only
- MIL illuminated, engine will not start.

For all of the conditions mentioned contact an authorized Triumph dealer as soon as possible to have the fault checked and rectified.

## Cruise Control (if equipped)

### **Warning**

Cruise control must only be used where you can drive safely at a steady speed.

Cruise control should not be used when riding in heavy traffic, on roads with sharp/blind bends or when they are slippery.

Using cruise control in heavy traffic, on roads with sharp/blind bends or when they are slippery, may result in loss of motorcycle control and an accident.

### **Warning**

This Triumph motorcycle should be operated within the legal speed limits for the particular road traveled.

Operating a motorcycle at high speeds can be potentially dangerous since the time available to react to given traffic situations is greatly reduced as speed increases.

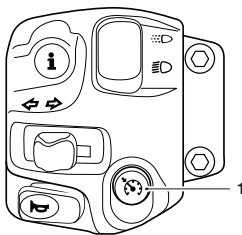
Always reduce speed in consideration of weather and traffic conditions.

### **Warning**

Only operate this Triumph motorcycle at high speed in closed-course, on-road competition or on closed-course racetracks. High speed operation should only then be attempted by riders who have been instructed in the techniques necessary for high speed riding and are familiar with the motorcycle's behavior in all conditions.

High speed operation in any other circumstances is dangerous and will lead to loss of motorcycle control and an accident.

The cruise control button is located on the left hand switch housing and can be operated with minimum movement when riding.



#### **1. Cruise control button**

Cruise control can be switched on or off at any time but it cannot be activated until all the conditions described on page 45 have been met.

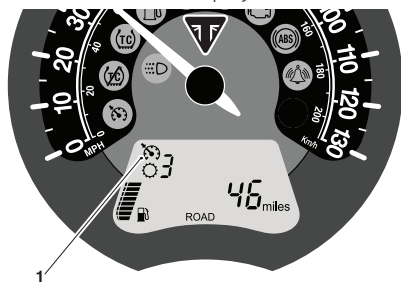
### **Activating Cruise Control**

The following conditions must be met to activate cruise control:

- The motorcycle must be traveling at a speed between 19 to 100 mph (30 to 160 km/h).
- The motorcycle must be in 3<sup>rd</sup> gear or higher.

To activate cruise control:

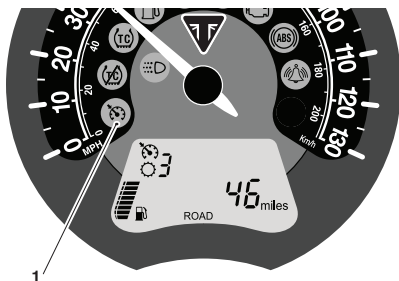
- Press the cruise control button to turn the cruise control system on. The cruise control symbol will be shown in the display screen.



#### **1. Cruise control symbol**

# General Information

- When the desired cruising speed is achieved, press the cruise control button again to activate the cruise control. The cruise control light in the tachometer will illuminate indicating that the cruise control is active.



1. Cruise control light

## Deactivating Cruise Control

The cruise control can be deactivated by one of the following methods:

- Roll the throttle twist grip fully forward.
- Pull the clutch lever.
- Operate the front or rear brake.
- Increase speed by using the throttle for more than 60 seconds.

Upon deactivation, the cruise control light will go out in the tachometer.

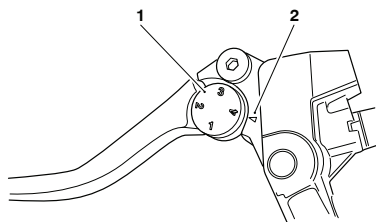
## Brake and Clutch Lever Adjusters

### Warning

Do not attempt to adjust the levers with the motorcycle in motion as this may lead to loss of motorcycle control and an accident.

After adjusting the levers, operate the motorcycle in an area free from traffic to gain familiarity with the new lever setting.

Do not loan your motorcycle to anyone as they may change the lever setting from the one you are familiar with causing loss of motorcycle control and an accident.



- Adjuster wheel, clutch lever shown
- Arrow mark

An adjuster is mounted to both the front brake and clutch levers. The adjusters allow the distance from the handlebar to the lever to be changed to one of five positions for the front brake lever or four positions for the clutch lever, to suit the span of the operator's hands.

To adjust the lever, push the lever forward and turn the adjuster wheel to align one of the numbered positions with the arrow mark on the lever holder. The distance from the handlebar grip to the released lever is shortest when set to number four/five, and longest when set to number one.

### Fuel



### Fuel Grade

These Triumph motorcycles are designed to run on unleaded gasoline with a CLC or AKI octane rating (R+M)/2 of 87 or higher. Federal regulations require that pumps delivering unleaded gasoline are marked 'UNLEADED' and that the Cost of Living Council (CLC) or Anti-Knock Index (AKI) octane rating is also displayed. These ratings are an average of the Research Octane Number (RON) and the Motor Octane Number (MON).

### Caution

The use of leaded gasoline is illegal in some countries, states or territories. Check local regulations before using leaded gasoline.

### Note:

- If 'knocking' or 'pinging' occurs at a steady engine speed under normal load, use a different brand of gasoline or gasoline which has a higher octane rating.

# General Information

## Oxygenated Gasoline

To help in meeting clean air standards, some areas of the U.S. use oxygenated gasoline to help reduce harmful emissions. These gasolines are a blend of conventional gasoline and another compound such as alcohol. This Triumph motorcycle will give its best performance when using unleaded gasoline. However, the following should be used as a guide if you use any oxygenated fuels.

## Ethanol

Ethanol fuel is a mixture of 10% Ethanol and 90% gasoline and is often described under the names 'gasohol', 'Ethanol enhanced', or 'contains Ethanol'. This fuel may be used in your Triumph motorcycle.

## MTBE (Methyl Tertiary Butyl Ether)

The use of gasolines containing up to 15% MTBE (Methyl Tertiary Butyl Ether) is permitted in this Triumph motorcycle.

## Methanol

### Caution

Fuels containing methanol should not be used as damage to components in the fuel system can be caused by contact with methanol.

### Caution

Because of the generally higher volatility of oxygenated fuels, starting, engine response and fuel consumption may be adversely affected by their use. Should any of these difficulties be experienced, run the motorcycle on normal unleaded gasoline.

## Refueling

### Warning

To help reduce hazards associated with refueling, always observe the following fuel safety instructions:

Gasoline (fuel) is highly flammable and can be explosive under certain conditions. When refueling, turn the ignition switch to the OFF position.

Do not smoke.

Do not use a mobile telephone.

Make sure the refueling area is well ventilated and free from any source of flame or sparks. This includes any appliance with a pilot light.

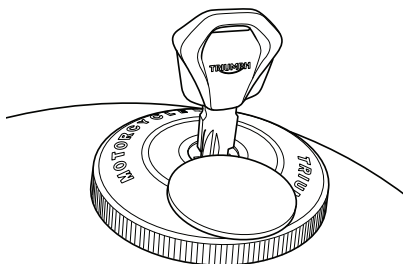
Never fill the tank until the fuel level rises into the filler neck. Heat from sunlight or other sources may cause the fuel to expand and overflow creating a fire hazard.

After refueling always check that the fuel filler cap is correctly closed.

Because gasoline (fuel) is highly flammable, any fuel leak or spillage, or any failure to observe the safety advice given above will lead to a fire hazard, which could cause damage to property, injury to persons or death.



## Fuel Tank Cap



### 1. Fuel tank cap

To open the fuel tank cap:

- Slide the cover to the side to show the key lock.
- Insert the key into the lock and turn the key counterclockwise. Rotate the cap counterclockwise and lift clear of the tank filler neck.

To close and lock the cap:

- Align the cap to the tank filler neck and rotate the cap clockwise until the cap seals against the filler neck.
- In the fully closed position, a ratchet mechanism prevents overtightening of the cap by allowing the outer part of the cap to turn independently of the internal part.
- Turn the key clockwise to lock and remove the key.
- Slide the cover back into place.

## Filling the Fuel Tank

### ! Warning

Overfilling the tank can lead to fuel spillage.

If fuel is spilled, thoroughly clean up the spillage immediately and dispose of the materials used safely.

Take care not to spill any fuel on the engine, exhaust pipes, tires or any other part of the motorcycle.

Because fuel is highly flammable, any fuel leak or spillage, or any failure to observe the safety advice given above may lead to a fire hazard, which could cause damage to property and injury or death to persons.

Fuel spilled near to, or onto the tires will reduce the tires' ability to grip the road. This will result in a dangerous riding condition potentially causing loss of motorcycle control and an accident.

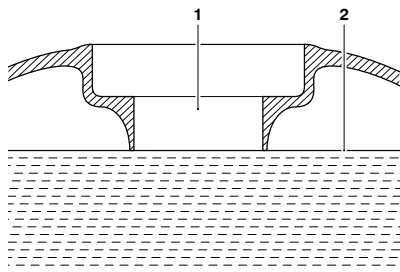
### ! Caution

Avoid filling the tank in rainy or dusty conditions where airborne material can contaminate the fuel.

Contaminated fuel may cause damage to fuel system components.

# General Information

Fill the fuel tank slowly to help prevent spillage. Do not fill the tank to a level above the bottom of the filler neck. This will make sure there is enough air space to allow for fuel expansion if the fuel inside the tank expands through absorption of heat from the engine or from direct sunlight.



1. Fuel filler neck
2. Maximum fuel level

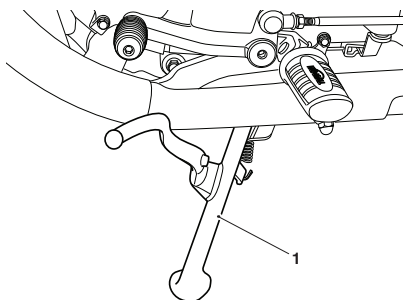
After refueling always check that the fuel filler cap is correctly closed.

## Side Stand

### Warning

The motorcycle is equipped with an interlock system to prevent it from being ridden with the side stand in the down position.

Never attempt to ride with the side stand down or interfere with the interlock mechanism as this will cause a dangerous riding condition leading to loss of motorcycle control and an accident.



1. Side stand

The motorcycle is equipped with a side stand on which it can be parked.

## Note:

- **When using the side stand, always turn the handlebars fully to the left and leave the motorcycle in first gear.**

Whenever the side stand is used, before riding, always make sure that the stand is fully up after first sitting on the motorcycle.

For instructions on safe parking, refer to the 'How to Ride the Motorcycle' section.

## Side Panels

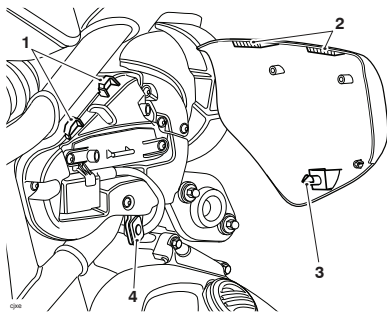
The left hand side panel can be removed to gain access to the fuse box, adjustment tool and inspection cap tool.

To remove either side panel:

- Grasp the panel firmly in both hands and pull the lower edge of the panel away from the motorcycle until the spigot clears the retaining grommet (leaving the grommet in place).
- Slide the side panel rearwards and lift the side panel clear of the locating tangs.

To reinstall either side panel:

- Slide the side panel forwards while place the locating tangs into the side panel locating slots.
- Position the spigot to the grommet.
- Press firmly to secure the panel.
- Grasp the panel and make sure that it is fully retained.



1. Locating tangs
2. Side panel locating slots
3. Spigot
4. Grommet

# General Information

## Seat Adjustment

### Bonneville Bobber and Bonneville Bobber Black only



To prevent damage to the seat or seat cover, care must be taken not to drop the seat.

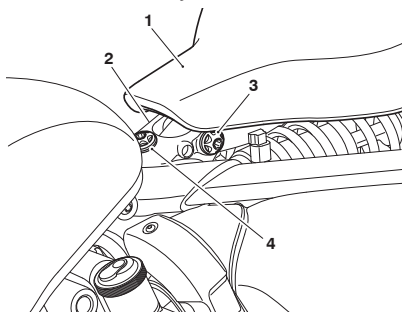
Do not lean the seat against the motorcycle or any surface which may damage the seat or seat cover. Instead, place the seat, with the seat cover facing upwards, on a clean, flat surface which is covered with a soft cloth.

Do not place any item on the seat which may cause damage or staining to the seat cover.

The seat does not need to be removed to be adjusted. The seat assembly can be adjusted for position along the seat mount by up to 1.18 in (30 mm).

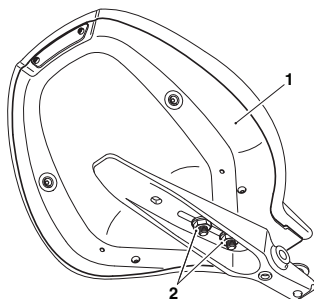
To adjust the seat:

- Remove the front fastener from the seat assembly.



1. **Seat**
2. **Right hand side fastener**
3. **Left hand side fastener**
4. **Front fastener**

- Loosen the left hand side fastener and rotate the seat around the two side fasteners to access the adjustment slot under the seat.
- Loosen, but do not remove, the two nuts underneath the seat.



L0130

1. **Seat (shown removed for clarity)**
2. **Nuts**

- Slide the seat along the seat mount to the desired position.
- Tighten the nuts to **28 lbf ft** (38 Nm).
- Rotate the seat back to its original position. Make sure that the front of the seat mount is in contact with the frame.
- Tighten the left hand side fastener to **35 lbf ft** (48 Nm).
- Install the front fastener and tighten to **35 lbf ft** (48 Nm).

### Rider's Seat

#### Bonneville Speedmaster only

#### Caution

To prevent damage to the seats or seat covers, care must be taken not to drop the seats.

Do not lean the seats against the motorcycle or any surface which may damage the seats or seat covers. Instead, place the seats, with the seat cover facing upwards, on a clean, flat surface which is covered with a soft cloth.

Do not place any item on the seats which may cause damage or staining to the seat covers.

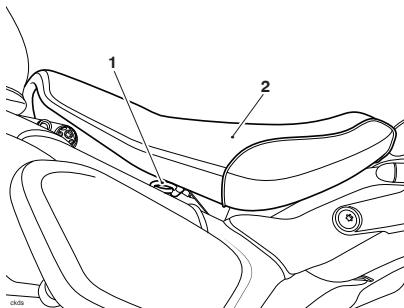
To remove the seat:

#### Note:

- **The rider's seat is tethered to the motorcycle by a lanyard.**
- Pull the lock release, located at the front left hand side of the seat, forwards to release the seat from its lock.

# General Information

- Lift the seat up at the back to detach it from the motorcycle frame.



1. Lock release
2. Rider's seat

To reinstall the seat:

- Engage the seat's locating tongue under the fuel tank.
- Press firmly down in the center of the seat to engage the seat lock. An audible click can be heard when the seat lock is engaged.

## ! Warning

To prevent detachment of the seat during riding, after installation always grasp the seat and pull firmly upwards.

If the seat is not correctly secured it may detach from the motorcycle.

A loose or detached seat could cause loss of motorcycle control and an accident.

## Passenger Seat

### Bonneville Speedmaster only

## ! Caution

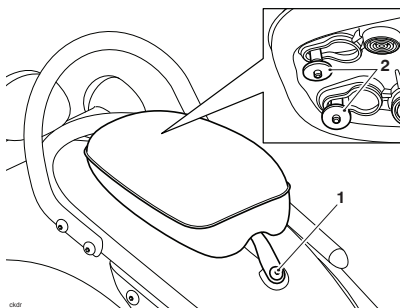
To prevent damage to the seats or seat covers, care must be taken not to drop the seats.

Do not lean the seats against the motorcycle or any surface which may damage the seats or seat covers. Instead, place the seats, with the seat cover facing upwards, on a clean, flat surface which is covered with a soft cloth.

Do not place any item on the seats which may cause damage or staining to the seat covers.

To remove the seat:

- Remove the rider's seat (see page 53).
- Remove the fastener securing the passenger seat to the fender.
- Raise the front of the seat and slide rearwards to disengage it from the two securing lugs on the fender.



1. Fastener
2. Securing lugs

To reinstall the seat:

- Align the holes on the rear of the seat base to the seat two locating lugs on the fender.
- Slide the seat forward until the lugs are engaged into the seat.
- Install the fastener for the front of the seat and tighten to **80 lbf in** (9 Nm).
- Install the rider's seat (see page 53).

### Warning

To prevent detachment of the seat during riding, after installation always grasp the seat and pull firmly upwards.

If the seat is not correctly secured it may detach from the motorcycle.

A loose or detached seat could cause loss of motorcycle control and an accident.

# General Information

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## Tool Kit

The tool kit consists of an adjustment tool and inspection cap tool.

The adjustment tool is attached to the inside of the left hand side panel. The adjustment tool can be used for many tasks.

The inspection cap tool is attached to the fuse box which is located under the left hand side panel. The inspection cap tool is used to open the cap on the sprocket cover to view the brake fluid level reservoir.

## Bonneville Speedmaster only

There is a C-spanner and an extension handle attached to the underside of the rider's seat. This is used for adjusting the spring preload rear suspension settings.

## Breaking-In



Breaking-in is the name given to the process that occurs during the first hours of a new vehicle's operation.

In particular, internal friction in the engine will be higher when components are new. Later on, when continued operation of the engine has ensured that the components have 'bedded in', this internal friction will be greatly reduced.

A period of careful breaking-in will ensure lower exhaust emissions, and will optimize performance, fuel economy and longevity of the engine and other motorcycle components.

During the first 500 miles (800 km):

- Do not use full throttle;
- Avoid high engine speeds at all times;
- Avoid riding at one constant engine speed, whether fast or slow, for a long period of time;
- Avoid aggressive starts, stops, and rapid accelerations, except in an emergency;
- Do not ride at speeds greater than 3/4 of maximum speed.

From 500 to 1,000 miles (800 to 1,500 km):

- Engine speed can gradually be increased to the rev limit for short periods.



Both during and after breaking-in has been completed:

- Do not overrev the engine when cold;
- Do not lug the engine. Always downshift before the engine begins to 'struggle';
- Do not ride with engine speeds unnecessarily high. Shifting up a gear helps reduce fuel consumption, reduces noise and helps to protect the environment.

## Daily Safety Checks



### Warning

Failure to perform these checks every day before you ride may result in serious motorcycle damage or an accident causing serious injury or death.

Check the following items each day before you ride. The time required is minimal, and these checks will help ensure a safe, reliable ride.

If any irregularities are found during these checks, refer to the Maintenance and Adjustment section or see your authorized Triumph dealer for the action required to return the motorcycle to a safe operating condition.

Check:

**Fuel:** Adequate supply in tank, no fuel leaks (see page 49).

**Engine Oil:** Correct level on dipstick or shown in sight glass. Add correct specification oil as required. No leaks from the engine or oil cooler (see page 80).

**Drive Chain:** Correct adjustment (see page 89).

**Tires/Wheels:** Correct inflation pressures (when cold). Tread depth/wear, tire/wheel damage, loose/broken spokes, punctures etc. (see page 103).

# General Information

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**Nuts, Bolts, Fasteners:** Visually check that steering and suspension components, axles, and all controls are properly tightened or fastened. Inspect all areas for loose/damaged fasteners.

**Steering Action:** Smooth but not loose from lock to lock. No binding of any of the control cables (see page 99).

**Brakes:** Pull the brake lever and push the brake pedal to check for correct resistance. Investigate any lever/pedal where the travel is excessive before meeting resistance, or if either control feels spongy in operation (see page 94 and page 94).

**Brake Pads:** Check that the correct amount of friction material is remaining on all the brake pads (see page 93).

**Brake Fluid Levels:** No brake fluid leakage. Brake fluid levels must be between the MAX and MIN marks on both reservoirs (see page 94).

**Front Forks:** Smooth action. No fork oil leakage (see page 101).

**Throttle:** Make sure that the throttle grip returns to the idle position without sticking (see page 87).

**Clutch:** Smooth operation and correct cable free play (see page 88).

**Coolant:** No coolant leakage. Check the coolant level in the expansion tank (when the engine is cold) (see page 84).

**Electrical Equipment:** All lights and horn function correctly (see page 42).

**Engine Stop:** Engine start/stop switch turns the engine OFF when the switch is moved to the STOP position (see page 40).

**Stands:** Returns to the fully up position by spring tension. Return springs not weak or damaged (see page 50).

## HOW TO RIDE THE MOTORCYCLE

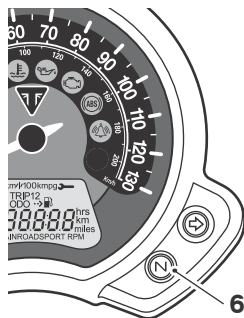
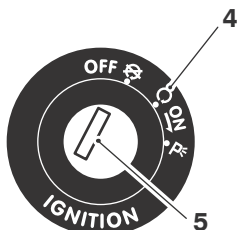
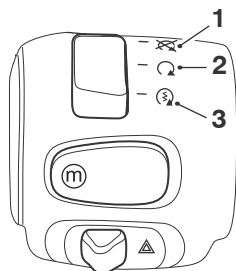
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# How to Ride the Motorcycle

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## How to Ride the Motorcycle



1. STOP position
2. RUN position
3. START position

4. ON position
5. Ignition switch
6. Neutral indicator light

## Stopping the Engine

### **Caution**

The engine should normally be stopped by turning the ignition switch to the OFF position. The engine stop switch is for emergency use only.

Do not leave the ignition switched on with the engine stopped.

Electrical damage may result.

To stop the engine:

- Close the throttle completely.
- Select neutral.
- Turn the ignition switch off.
- Select first gear.
- Position the motorcycle on a firm, level surface with the side stand (see page 69).
- Lock the steering (see page 40).

## Starting the Engine

### **Warning**

Never start the engine or run the engine in a confined area.

Exhaust fumes are poisonous and can cause loss of consciousness and death within a short period of time.

Always operate your motorcycle in the open air or in an area with adequate ventilation.

### **Caution**

Do not operate the starter continuously for more than five seconds as the starter motor will overheat and the battery will become discharged.

Wait 15 seconds between each operation of the starter to allow for cooling and recovery of battery power.

Do not let the engine idle for long periods as this may lead to overheating which will cause damage to the engine.

### **Caution**

The low oil pressure warning light should go out shortly after the engine starts.

If the low oil pressure warning light stays on after starting the engine, stop the engine immediately and investigate the cause.

Running the engine with low oil pressure will cause severe engine damage.

# How to Ride the Motorcycle

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To start the engine:

- Check that the engine stop switch is in the RUN position.
- Make sure the transmission is in neutral.
- Turn the ignition switch on.

## Note:

- **When the ignition is switched on, the instrument warning lights will illuminate and will then go off (except those which normally remain on until the engine starts – see page 24).**
- Pull the clutch lever fully into the handlebar.
- Leaving the throttle fully closed, push the starter button until the engine starts.

The motorcycle is equipped with starter lockout switches. The switches prevent the electric starter from operating when the transmission is not in neutral with the side stand down.

If the side stand is extended while the engine is running, and the transmission is not in neutral then the engine will stop regardless of the clutch lever position.

## Moving Off

To move the motorcycle:

- Pull in the clutch lever and select first gear.
- Open the throttle a little and let out the clutch lever slowly.
- As the clutch starts to engage, open the throttle a little more, allowing enough engine speed to avoid stalling.

## Shifting Gears

### Warning

Take care to avoid opening the throttle too far or too fast in any of the lower gears as this can lead to the front wheel lifting from the ground (pulling a 'wheelie') and to the rear tire breaking traction (wheel spin).

Always open the throttle cautiously, particularly if you are unfamiliar with the motorcycle, as a 'wheelie' or loss of traction will cause loss of motorcycle control and an accident.

### Warning

Do not shift to a lower gear at speeds that will cause excessive engine rpm (r/min).

This can lock the rear wheel causing loss of control and an accident. Engine damage may also be caused.

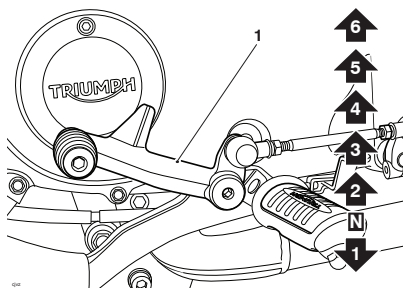
Shifting down should be done such that low engine speeds will be ensured.

To shift gears:

- Close the throttle while pulling in the clutch lever.
- Shift into the next higher or lower gear.
- Open the throttle part way, while releasing the clutch lever. Always use the clutch when shifting gear.

**Note:**

- **The gear shift mechanism is the 'positive stop' type. This means that, for each movement of the gear shift pedal/lever, you can only select each gear, one after the other, in ascending or descending order.**



1. Gear shift pedal

# How to Ride the Motorcycle

## Braking

### **Warning**

WHEN BRAKING, OBSERVE THE FOLLOWING:

Close the throttle completely, leaving the clutch engaged to allow the engine to help slow down the motorcycle.

Shift down one gear at a time such that the transmission is in first gear when the motorcycle comes to a complete stop.

When stopping, always apply both brakes at the same time. Normally the front brake should be applied a little more than the rear.

Shift down or fully disengage the clutch as necessary to keep the engine from stalling.

Never lock the brakes, as this may cause loss of control of the motorcycle and an accident.

### **Warning**

For emergency braking, disregard down shifting, and concentrate on applying the front and rear brakes as hard as possible without skidding. Riders should practice emergency braking in a traffic-free area (see ABS warnings below/over).

Triumph strongly recommends that all riders take a course of instruction, which includes advice on safe brake operation. Incorrect brake technique could result in loss of control and an accident.

### **Warning**

For your safety, always exercise extreme caution when braking, accelerating or turning as any improper action can cause loss of control and an accident. Independent use of the front or rear brakes reduces overall braking performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle and causing an accident.

When possible, reduce speed or brake before entering a turn as closing the throttle or braking in mid-turn may cause wheel slip leading to loss of control and an accident.

When riding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Sudden acceleration, braking or turning may cause loss of control and an accident.



# How to Ride the Motorcycle

## Warning

When descending a long, steep gradient or mountain pass, make use of the engine's braking effect by down shifting and use both front and rear brakes intermittently.

Continuous brake application or use of the rear brake only can overheat the brakes and reduce their effectiveness leading to loss of motorcycle control and an accident.

## Warning

Riding with your foot on the brake pedal or your hand on the brake lever may actuate the brake light, giving a false indication to other road users.

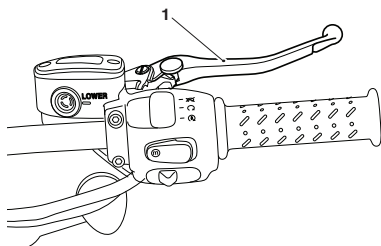
It may also overheat the brake, reducing braking effectiveness leading to loss of motorcycle control and an accident.

## Warning

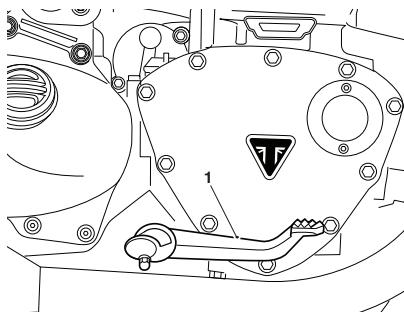
Do not coast with the engine switched off, and do not tow the motorcycle.

The transmission is pressure lubricated only when the engine is running.

Inadequate lubrication may cause damage or seizure of the transmission, which can lead to sudden loss of motorcycle control and an accident.



1. Front brake lever



1. Rear brake pedal (Bonneville Bobber shown)

# How to Ride the Motorcycle

## ABS (Anti-Lock Brake System)

### **Warning**

ABS prevents the wheels from locking, therefore maximizing the effectiveness of the braking system in emergencies and when riding on slippery surfaces. The potentially shorter braking distances ABS allows under certain conditions are not a substitute for good riding practice.

Always ride within the legal speed limit.

Never ride without due care and attention and always reduce speed in consideration of weather, road and traffic conditions.

Take care when cornering. If the brakes are applied in a corner, ABS will not be able to counteract the weight and momentum of the motorcycle. This can result in loss of control and an accident.

Under some circumstances it is possible that a motorcycle equipped with ABS may require a longer stopping distance than an equivalent motorcycle without ABS.

If the ABS warning light becomes illuminated at any other time while riding, it indicates that the ABS has a malfunction that requires investigation.

- Normally, the rider will perceive ABS operation as a harder feel or a pulsation of the brake lever and pedal. As the ABS is not an integrated braking system and it does not control both the front and rear brake at the same time, this pulsation may be felt in the lever, the pedal or both.
- The ABS may be activated by sudden upward or downward changes in the road surface.

### **Warning**

If the ABS is not functioning, the brake system will continue to function as a non-ABS braking system.

Do not continue to ride for longer than is necessary with the indicator light illuminated.

Contact an authorized Triumph dealer as soon as possible to have the fault checked and rectified. In this situation, braking too hard will cause the wheels to lock resulting in loss of control and an accident.

## ABS Warning Light



The ABS warning light illuminates to show that the ABS function is not available. Illumination is normal after engine start-up, and until the motorcycle first reaches a speed exceeding 6 mph (10 km/h). Unless there is a fault, it should not illuminate again until the engine is restarted.

## **Warning**

The ABS warning light will illuminate when the rear wheel is driven at high speed for more than 30 seconds when the motorcycle is on a stand. This reaction is normal.

When the ignition is switched off and the motorcycle is re-started, the warning light will illuminate until the motorcycle reaches a speed exceeding 19 mph (30 km/h).

## **Warning**

The ABS computer operates by comparing the relative speed of the front and rear wheels.

Use of non-recommended tires can affect wheel speed and cause the ABS function not to operate, potentially leading to loss of control and an accident in conditions where the ABS would normally function.

## Considerations for High Speed Operation

### **Warning**

This Triumph motorcycle should be operated within the legal speed limits for the particular road traveled.

Operating a motorcycle at high speeds can be potentially dangerous since the time available to react to given traffic situations is greatly reduced as road speed increases.

Always reduce speed in consideration of weather and traffic conditions.

### **Warning**

Only operate this Triumph motorcycle at high speed in closed-course on-road competition or on closed-course racetracks. High speed operation should only then be attempted by riders who have been instructed in the techniques necessary for high speed riding and are familiar with the motorcycle's characteristics in all conditions.

High speed operation in any other circumstances is dangerous and will lead to loss of motorcycle control and an accident.

# How to Ride the Motorcycle

---

## **Warning**

The handling characteristics of a motorcycle at high speed may vary from those you are familiar with at legal road speeds. Do not attempt high speed operation unless you have received sufficient training and have the required skills as a serious accident may result from incorrect operation.

## **Warning**

The items listed below are extremely important and must never be neglected. A problem, which may not be noticed at normal operating speeds, may be greatly exaggerated at high speeds.

### **General**

Make sure that the motorcycle has been maintained according to the scheduled maintenance chart.

### **Steering**

Check that the handlebar turns smoothly without excessive free play or tight spots. Make sure that the control cables do not restrict the steering in any way.

### **Luggage**

Make sure that any luggage containers are closed, locked and securely installed on the motorcycle.

### **Brakes**

Check that the front and rear brakes are functioning correctly.

### **Tires**

High speed operation is hard on tires, and tires that are in good condition are crucial to riding safely. Examine their overall condition, inflate to the correct pressure (when the tires are cold), and check the wheel balance. Securely fit the valve caps after checking tire pressures. Observe the information given in the maintenance and specification sections on tire checking and tire safety.

### **Fuel**

Have sufficient fuel for the increased fuel consumption that will result from high speed operation.

## **Caution**

In many countries, the exhaust system for this model is equipped with a catalytic converter to help reduce exhaust emission levels.

The catalytic converter can be permanently damaged if the motorcycle is allowed to run out of fuel or if the fuel level is allowed to get very low.

Always make sure you have adequate fuel for your trip.

### **Engine Oil**

Check that the engine oil level is correct. Make sure that the correct grade and type of oil is used when topping off.

### **Drive Chain**

Make sure that the drive chain is correctly adjusted and lubricated. Inspect the chain for wear and damage.

# How to Ride the Motorcycle

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## Coolant

Check that the coolant level is at the upper level line in the expansion tank. Always check the level with the engine cold.

## Electrical Equipment

Make sure that all electrical equipment such as the headlight, rear/brake light, turn signals and horn all work correctly.

## Miscellaneous

Visually check that all fasteners are tight.

## Parking

### **Warning**

Do not park on a soft or on a steeply inclined surface. Parking under these conditions may cause the motorcycle to fall over causing damage to property and personal injury.

### **Warning**

Gasoline is extremely flammable and can be explosive under certain conditions. If parking inside a garage or other structure, be sure it is well ventilated and the motorcycle is not close to any source of flame or sparks. This includes any appliance with a pilot light.

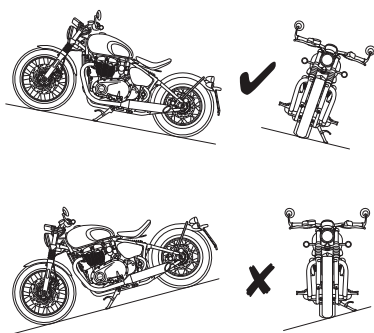
Failure to follow the above advice may cause a fire resulting in damage to property or personal injury.

# How to Ride the Motorcycle

## Warning

The engine and exhaust system will be hot after riding. DO NOT park where pedestrians and children are likely to touch the motorcycle.

Touching any part of the engine or exhaust system when hot may cause unprotected skin to burn.



Select neutral and turn the ignition switch to the OFF position.

Lock the steering to help prevent theft.

Always park on a firm, level surface to prevent the motorcycle from falling.

When parking on a hill, always park facing uphill to prevent the motorcycle from rolling off the stand. Engage first gear to prevent the motorcycle from moving.

On a lateral (sideways) incline, always park such that the incline naturally pushes the motorcycle towards the sidestand.

Do not park on a lateral (sideways) incline of greater than 6° and never park facing downhill.

### Note:

- **When parking near traffic at night, or when parking in a location where parking lights are required by law, leave the tail, license plate and position lights on by turning the ignition switch to P (PARK).**

Do not leave the switch in the P position for long periods of time as this will discharge the battery.

Make sure that the side stand is fully retracted before riding off.

## ACCESSORIES, LOADING AND PASSENGERS

The addition of accessories and carrying additional weight can affect the motorcycle's handling characteristics causing changes in stability and necessitating a reduction in speed.

The following information has been prepared as a guide to the potential hazards of adding accessories to a motorcycle and carrying additional loads.

### Accessories

#### **Warning**

Do not install accessories or carry luggage that impairs the control of the motorcycle.

Make sure that you have not adversely affected any lighting component, road clearance, banking capability (i.e. lean angle), control operation, wheel travel, front fork movement, visibility in any direction, or any other aspect of the motorcycle's operation.

#### **Warning**

Never ride an accessory equipped motorcycle, or a motorcycle carrying a payload of any kind, at speeds above 80 mph (130 km/h). In either/both of these conditions, speeds in excess of 80 mph (130 km/h) should not be attempted even where the legal speed limit permits this.

#### **Warning** Continued

The presence of accessories and/or payload will cause changes in the stability and handling of the motorcycle.

Failure to allow for changes in motorcycle stability may lead to loss of motorcycle control and an accident. When riding at high speed, always be aware that various motorcycle configuration and environmental factors can adversely affect the stability of your motorcycle. For example:

- Incorrectly balanced loads on both sides of the motorcycle
- Incorrectly adjusted front and rear suspension settings
- Incorrectly adjusted tire pressures
- Excessively or unevenly worn tires
- Side winds and turbulence from other vehicles
- Loose clothing.

Remember that the 80 mph (130 km/h) absolute limit will be reduced by the installation of non-approved accessories, incorrect loading, worn tires, overall motorcycle condition and poor road or weather conditions.

# Accessories, Loading and Passengers

## Loading

### **Warning**

Incorrect loading may result in an unsafe riding condition leading to an accident.

Always make sure that any loads carried are evenly distributed on both sides of the motorcycle. Make sure that the load is correctly secured so that it will not move around while the motorcycle is in motion.

Evenly distribute the load within each pannier (if equipped). Pack heavy items at the bottom and on the inboard side of the pannier.

Always check the load security regularly (though not while the motorcycle is in motion) and make sure that the load does not extend beyond the rear of the motorcycle.

Never exceed the maximum vehicle loading weight of:

275 lb (125 kg) - Bonneville Bobber and Bonneville Bobber Black

463 lb (210 kg) - Bonneville Speedmaster

This maximum loading weight is made up from the combined weight of the rider, passenger (if allowed), any accessories installed and any load carried.

### **Warning**

Never attempt to store any items between the frame and the fuel tank. This can restrict the steering and will cause loss of control leading to an accident.

### **Warning** Continued

Weight attached to the handlebar or front fork will increase the mass of the steering assembly and can result in loss of steering control leading to an accident.

### **Warning**

If the passenger seat is used to carry small objects, they must not exceed 11 lb (5 kg) in weight, must not impair control of the motorcycle, must be securely attached and must not extend beyond the rear or sides of the motorcycle.

Carrying objects in excess of 11 lb (5 kg) in weight, that are insecure, impair control or extend beyond the rear or sides of the motorcycle may lead to loss of motorcycle control and an accident.

Even if small objects are correctly loaded onto the passenger seat, the maximum speed of the motorcycle must be reduced to 80 mph (130 km/h).

## Passengers (Bonneville Speedmaster only)

### **Warning**

Bonneville Speedmaster

This motorcycle is designed for use as a two-wheeled vehicle capable of carrying a rider on their own, or a rider and one passenger (subject to a passenger seat, passenger handhold and footrests being installed).



## Accessories, Loading and Passengers

### **Warning**

Bonneville Bobber and Bonneville Bobber Black

This motorcycle is designed for use as a two-wheeled vehicle capable of carrying a rider on their own.

Operation of this motorcycle with a passenger is dangerous and could lead to loss of control and an accident.

### **Warning**

Do not carry a passenger unless they are tall enough to reach the footrests provided.

A passenger who is not tall enough to reach the footrests will be unable to sit securely on the motorcycle and may cause instability leading to loss of motorcycle control and an accident.

### **Warning**

The handling and braking capabilities of a motorcycle will be affected by the presence of a passenger. The rider must make allowances for these changes when operating the motorcycle with a passenger and should not attempt such operation unless trained to do so and without becoming familiar and comfortable with the changes in motorcycle operating characteristics that this brings about.

Motorcycle operation without making allowances for the presence of a passenger could lead to loss of motorcycle control and an accident.

### **Warning**

Your passenger should be instructed that they can cause loss of motorcycle control by making sudden movements or by adopting an incorrect seated position.

The rider should instruct the passenger as follows:

- It is important that the passenger sits still while the motorcycle is in motion and does not interfere with the operation of the motorcycle.
- To keep their feet on the passenger footrests and to firmly hold onto the grab handles or the rider's waist or hips.
- Advise the passenger to lean with the rider when traveling around corners and not to lean unless the rider does so.

### **Warning**

Do not carry animals on your motorcycle.

An animal could make sudden and unpredictable movements that could lead to loss of motorcycle control and an accident.

## MAINTENANCE

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# Maintenance

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## Scheduled Maintenance

### **Warning**

Triumph Motorcycles cannot accept any responsibility for damage or injury resulting from incorrect maintenance or improper adjustment carried out by the owner.

Since incorrect or neglected maintenance can lead to a dangerous riding condition, always have an authorized Triumph dealer carry out the scheduled maintenance of this motorcycle.

### **Warning**

All maintenance is vitally important and must not be neglected. Incorrect maintenance or adjustment may cause one or more parts of the motorcycle to malfunction. A malfunctioning motorcycle may lead to loss of control and an accident.

Weather, terrain and geographical location affect maintenance. The maintenance schedule should be adjusted to match the particular environment in which the vehicle is used and the demands of the individual owner.

Special tools, knowledge and training are required in order to correctly carry out the maintenance items listed in the scheduled maintenance chart. Only an authorized Triumph dealer will have this knowledge and equipment.

Since incorrect or neglected maintenance can lead to a dangerous riding condition, always have an authorized Triumph dealer carry out the scheduled maintenance of this motorcycle.

To maintain the motorcycle in a safe and reliable condition, the maintenance and adjustments outlined in this section must be carried out as specified in the schedule of daily checks, and also in line with the scheduled maintenance chart. The information that follows describes the procedures to follow when carrying out the daily checks and some simple maintenance and adjustment items.

Scheduled maintenance may be carried out by your authorized Triumph dealer in three ways; annual maintenance, mileage based maintenance or a combination of both, depending on the mileage the motorcycle travels each year.

1. Motorcycles traveling less than 10,000 miles (16,000 km) per year must be maintained annually. In addition to this, mileage based items require maintenance at their specified intervals, as the motorcycle reaches this mileage.
2. Motorcycles traveling approximately 10,000 miles (16,000 km) per year must have the annual maintenance and the specified mileage based items carried out together.
3. Motorcycles traveling more than 10,000 miles (16,000 km) per year must have the mileage based items maintained as the motorcycle reaches the specified mileage. In addition to this, annual based items will require maintenance at their specified annual intervals.

In all cases maintenance must be carried out at or before the specified maintenance intervals shown. Consult an authorized Triumph dealer for advice on which maintenance schedule is most suitable for your motorcycle.

Triumph Motorcycles cannot accept any responsibility for damage or injury resulting from incorrect maintenance or improper adjustment.

# Maintenance

## Scheduled Maintenance Table

Operation Description	Odometer Reading in Miles (Km) or Time Period, whichever comes first					
		First Service	Annual Service	Mileage Based Service		
	Every	500 (800) 1 month	Year	10,000 and 30,000 (16,000 and 48,000)	20,000 (32,000)	40,000 (64,000)
Lubrication						
Engine - check for leaks	Day	*	*	*	*	*
Engine oil - replace	-	*	*	*	*	*
Engine oil filter - replace	-	*	*	*	*	*
Fuel System and Engine Management						
Autoscan - Carry out a full Autoscan using the Triumph Diagnostic Tool (print a customer copy)	-	*	*	*	*	*
Fuel system - check for leaks	-			*	*	*
Fuel system - check fuel hoses for chafing, cracks or damage. Replace if necessary.				*	*	*
Air cleaner - replace	-			*	*	*
Fuel filter - replace	-				*	*
Throttle body plate (butterfly) - check/clean	-			*	*	*
Throttle bodies - balance	-			*	*	*
Fuel hoses - replace	Every 4 years regardless of mileage					
Evaporative hoses* - replace (if equipped)	Every 4 years regardless of mileage					
Ignition System						
Spark plugs - check	-			*		
Spark plugs - replace	-				*	*
Cooling System						
Cooling system - check for leaks	-	*	*	*	*	*
Cooling system - check coolant hoses for chafing/cracks/damage. Replace if necessary.	-			*	*	*
Coolant level - check/adjust	Day	*	*	*	*	*
Coolant - replace	Every 3 years regardless of mileage					
Engine						
Clutch cable - check function and adjust as necessary	Day	*	*	*	*	*
Valve clearances - check/adjust	-				*	*
Camshaft timing	-				*	*
Wheels and Tires						
Wheels - inspect for damage	Day	*	*	*	*	*
Wheel bearings - check for wear/smooth operation	-	*	*	*	*	*
Wheels - check wheels for broken or damaged spokes and check spoke tightness	Day	*	*	*	*	*
Tire wear/tire damage - check	Day	*	*	*	*	*
Tire pressures - check/adjust	Day	*	*	*	*	*

Operation Description	Odometer Reading in Miles (Km) or Time Period, whichever comes first					
		First Service	Annual Service	Mileage Based Service		
	Every	500 (800) 1 month	Year	10,000 and 30,000 (16,000 and 48,000)	20,000 (32,000)	40,000 (64,000)
Steering and Suspension						
Steering - check for free operation	Day	*	*	*	*	*
Front and rear suspension - check for damage/leaks/smooth operation	Day	*	*	*	*	*
Fork oil - replace	-					*
Steering head bearings - check/adjust	-	*	*	*	*	*
Steering head bearings - lubricate	-				*	*
Rear suspension unit linkage - lubricate	-				*	*
Brakes						
ABS and immobilizer ECMs - check for stored DTCs	-	*	*	*	*	*
Brake pads - check wear levels	Day	*	*	*	*	*
Brake master cylinders - check for fluid leaks	-	*	*	*	*	*
Brake calipers - check for fluid leaks and seized pistons	-	*	*	*	*	*
Brake fluid levels - check	Day	*	*	*	*	*
Brake fluid - replace	Every 2 years regardless of mileage					
Drive Chain						
Drive chain slack - check/adjust	Day	*	*	*	*	*
Drive chain - wear check	Every 500 miles (800 km)					
Drive chain - lubricate	Every 200 miles (300 km)					
Drive chain rubbing strips - check for wear, cracks or damage	Day	*	*	*	*	*
Electrical						
All lights, instruments and electrical systems - check/adjust	Day	*	*	*	*	*
General						
Instruments, chassis ECM (if equipped) and engine ECM - check for latest calibration download using the Triumph diagnostic tool	-	*	*	*	*	*
Bank angle indicators - check for wear	Day	*	*	*	*	*
Fasteners - inspect visually for security	Day	*	*	*	*	*
Center and/or side stand - check for wear/smooth operation	*	*	*	*	*	*
Center stand flanged sleeves (if equipped) - clean/grease		*	*	*	*	*
Side stand pivot pin - clean/grease	-			*	*	*
Carry out all outstanding Service Bulletin and warranty work	*	*	*	*	*	*
Carry out road test	*	*	*	*	*	*
Complete the service record book and reset the service indicator (if equipped)	*	*	*	*	*	*
* Evaporative system equipped on models for certain markets only.						

# Maintenance

## Engine Oil



cbnz

### Warning

Motorcycle operation with insufficient, deteriorated, or contaminated engine oil will cause accelerated engine wear and may result in engine or transmission seizure. Seizure of the engine or transmission may lead to sudden loss of control and an accident.

In order for the engine, transmission, and clutch to function correctly, maintain the engine oil at the correct level, and change the oil and oil filter in accordance with scheduled maintenance requirements.

## Oil Level Inspection

### Warning

Never start the engine or run the engine in a confined area.

Exhaust fumes are poisonous and can cause loss of consciousness and death within a short period of time.

Always operate your motorcycle in the open air or in an area with adequate ventilation.

### Warning

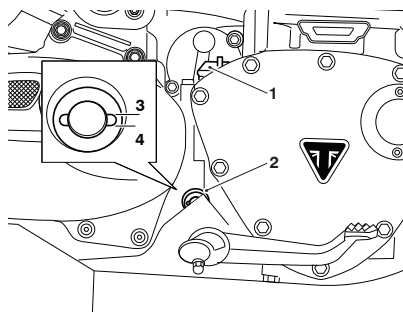
If the engine has recently been running, the exhaust system will be hot.

Before working on or near the exhaust system, allow sufficient time for the exhaust system to cool as touching any part of a hot exhaust system could cause burn injuries.

### Caution

Running the engine with insufficient oil will cause engine damage.

If the low oil pressure indicator remains on, stop the engine immediately and investigate the situation.



1. Filler plug
2. Sight glass
3. Maximum limit
4. Minimum limit



To inspect the oil level:

- Start the engine and run at idle for approximately five minutes. Stop the engine and wait for at least three minutes to allow the oil to settle.
- Note the oil level visible in the sight glass.
- When correct, oil should be visible in the sight glass at a point midway between the upper (maximum) and lower (minimum) markings on the sight glass.

**Note:**

- **An accurate indication of the level of oil in the engine is only shown when the engine is at normal operating temperature and the motorcycle is upright (not on the side stand).**
- If it is necessary to top off the oil level, remove the filler plug and add oil, a little at a time, until the level registered in the sight glass is correct.

## **Caution**

Make sure no foreign matter or contamination enters the engine during an oil change or top off.

Contamination entering the engine may lead to engine damage.

- Once the correct level is reached, install and tighten the filler plug.

## Oil and Oil Filter Change

### **Warning**

Prolonged or repeated contact with engine oil can lead to skin dryness, irritation and dermatitis.

In addition, used engine oil contains harmful contamination that can lead to skin cancer.

Always wear suitable protective clothing and avoid skin contact with used oil.

### **Warning**

The oil may be hot to the touch.

Avoid contact with the hot oil by wearing suitable protective clothing, gloves, eye protection, etc.

Contact with hot oil may cause the skin to be scalded or burned.

### **Warning**

If the engine has recently been running, the exhaust system will be hot.

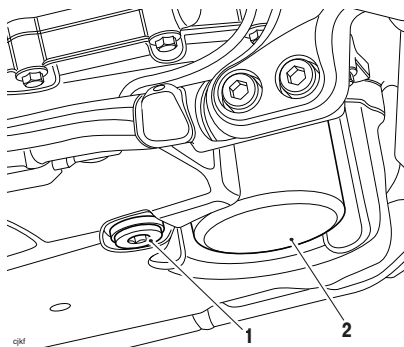
Before working on or near the exhaust system, allow sufficient time for the exhaust system to cool as touching any part of a hot exhaust system could cause burn injuries.

The engine oil and filter must be replaced in accordance with scheduled maintenance requirements.

# Maintenance

To change the engine oil and filter:

- Warm up the engine thoroughly then stop the engine. Secure the motorcycle on the side stand.
- Allow the oil to settle for five minutes before draining.
- Place an oil drain pan beneath the engine.
- Remove the sump plug from the bottom of the sump and allow the oil to drain.



1. Sump plug
2. Oil filter

- Remove the sump plug from the bottom of the sump and allow the oil to drain.
- Secure the motorcycle in an upright position on level ground.
- Position the oil drain pan beneath the oil filter.
- Unscrew and remove the oil filter using the Triumph service tool T3880313. Dispose of the old filter in an environmentally friendly way.
- Prefill the replacement oil filter with new engine oil.

- Apply a smear of clean engine oil to the sealing ring of the new oil filter. Install the oil filter and tighten to **89 lbf in** (10 Nm).
- After the oil has completely drained out, install a new sealing washer to the sump plug. Install and tighten the plug to **18 lbf ft** (25 Nm).
- Remove the oil filler plug.
- Fill the engine with a 10W/40 or 10W/50 semi or fully synthetic motorcycle engine oil that meets specification API SH (or higher) and JASO MA, such as Castrol Power 1 Racing 4T 10W-40 (fully synthetic) engine oil, sold as Castrol Power RS Racing 4T 10W-40 (fully synthetic) in some countries.
- Do not overfill or exceed the capacities given in the Specifications section.
- Start the engine and allow it to idle for a minimum of 30 seconds.

## Caution

Raising the engine speed above idle, before the oil reaches all parts of the engine can cause engine damage or seizure.

Only raise engine speed after running the engine for 30 seconds to allow the oil to circulate fully.

- Make sure that the low oil pressure warning light extinguishes shortly after starting.

## ! Caution

If the engine oil pressure is too low, the low oil pressure warning light will illuminate. If this light stays on when the engine is running, stop the engine immediately and investigate the cause.

Running the engine with low oil pressure will cause engine damage.

- Turn the ignition OFF, check the oil level using the method previously described, and top off to between the minimum and maximum level lines in the sight glass.

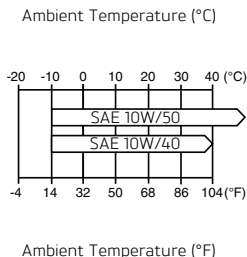
## Disposal of Used Engine Oil and Oil Filters

To protect the environment, do not pour oil on the ground, down sewers or drains, or into groundwater sources. Do not place used oil filters in with general waste. If in doubt, contact your local authority.

## Oil Specification and Grade

Triumph's high performance fuel injected engines are designed to use 10W/40 or 10W/50 semi or fully synthetic motorcycle engine oil that meets specification API SH (or higher) and JASO MA, such as Castrol Power 1 Racing 4T 10W-40 (fully synthetic) engine oil, sold as Castrol Power RS Racing 4T 10W-40 (fully synthetic) in some countries.

Refer to the chart below for the correct oil viscosity (10W/40 or 10W/50) to be used in your riding area.



## Oil Viscosity Temperature Range

Do not add any chemical additives to the engine oil. The engine oil also lubricates the clutch and any additives could cause the clutch to slip.

Do not use mineral, vegetable, non-detergent oil, castor based oils or any oil not conforming to the required specification. The use of these oils may cause instant, severe engine damage.

Make sure that no foreign matter enters the crankcase during an engine oil change or top off.

# Maintenance

## Cooling System



To ensure efficient engine cooling, check the coolant level each day before riding the motorcycle, and top off the coolant if the level is low.

### Note:

- A year round, Hybrid Organic Acid Technology (known as Hybrid OAT or HOAT) coolant is installed in the cooling system when the motorcycle leaves the factory. It is colored green, contains a 50% solution of ethylene glycol based antifreeze, and has a freezing point of  $-31^{\circ}\text{F}$  ( $-35^{\circ}\text{C}$ ).

## Corrosion Inhibitors

### Warning

HD4X Hybrid OAT coolant contains corrosion inhibitors and antifreeze suitable for aluminum engines and radiators. Always use the coolant in accordance with the instructions of the manufacturer.

Coolant that contains anti-freeze and corrosion inhibitors contains toxic chemicals that are harmful to the human body. Never swallow antifreeze or any of the motorcycle coolant.

### Note:

- HD4X Hybrid OAT coolant, as supplied by Triumph, is premixed and does not need to be diluted prior to filling or topping off the cooling system.

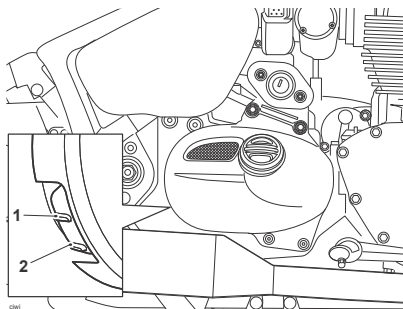
To protect the cooling system from corrosion, the use of corrosion inhibitor chemicals in the coolant is essential.

If coolant containing a corrosion inhibitor is not used, the cooling system will accumulate rust and scale in the water jacket and radiator. This will block the coolant passages, and considerably reduce the efficiency of the cooling system.

## Coolant Level Inspection

### Note:

- The coolant level should be checked when the engine is cold (at room or ambient temperature).



1. Maximum mark
2. Minimum mark

To inspect the coolant level:

- Position the motorcycle on level ground and in an upright position.
- The expansion tank can be viewed from the right hand side of the motorcycle, towards the rear of the engine.
- Check the coolant level in the expansion tank.
- The coolant level must be between the maximum (top) and minimum (bottom) marks. If the coolant is below the minimum level, the coolant level must be adjusted.

## Coolant Level Adjustment

### **Warning**

Do not remove the expansion tank or radiator pressure cap when the engine is hot.

When the engine is hot, the coolant inside the radiator will be hot and also under pressure.

Contact with this hot, pressurized coolant will cause scalds and skin damage.

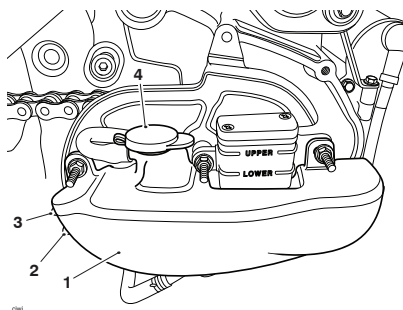
### **Caution**

If hard water is used in the cooling system, it will cause scale accumulation in the engine and radiator and considerably reduce the efficiency of the cooling system.

Reduced cooling system efficiency may cause the engine to overheat and suffer severe damage.

### Note:

- If the coolant level is being checked because the coolant has overheated, also check the level in the radiator and top off if necessary.
- In an emergency, distilled water can be added to the cooling system. However, the coolant must then be drained and replenished with HD4X Hybrid OAT coolant as soon as possible.



1. Coolant expansion tank
2. Minimum mark
3. Maximum mark
4. Coolant expansion tank cap

# Maintenance

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To adjust the coolant level:

- Position the motorcycle on level ground and in an upright position.
- Allow the engine to cool.
- Disconnect the battery, see page **108**.
- Remove the sprocket cover on the right hand side of the motorcycle.
- Remove the cap from the expansion tank and add coolant mixture through the filler opening until the level reaches the maximum (top) mark.
- Reinstall the cap.
- Reinstall the sprocket cover and tighten the fasteners to **80 lbf in** (9 Nm).
- Reconnect the battery, see page **112**.

## Coolant Change

It is recommended that the coolant is changed by an authorised Triumph dealer in accordance with scheduled maintenance requirements.

## Radiator and Hoses

### **Warning**

The fan operates automatically when the engine is running. Always keep hands and clothing away from the fan as contact with the rotating fan can cause injury.

### **Caution**

Using high pressure water sprays, such as from a car wash facility or household pressure washer, can damage the radiator fins, cause leaks and impair the radiator's efficiency.

Do not obstruct or deflect airflow through the radiator by installing unauthorized accessories, either in front of the radiator or behind the cooling fan. Interference with the radiator airflow can cause overheating, potentially resulting in engine damage.

Check the radiator hoses for cracks or deterioration, and hose clips for tightness in accordance with scheduled maintenance requirements. Have your authorized Triumph dealer replace any defective items.

Check the radiator grille and fins for obstructions by insects, leaves or mud. Clean off any obstructions with a stream of low pressure water.

### Throttle Control

#### **Warning**

Always be alert for changes in the 'feel' of the throttle control and have the throttle system checked by an authorized Triumph dealer if any changes are detected. Changes can be due to wear in the mechanism, which could lead to a sticking throttle control.

A sticking or stuck throttle control will lead to loss of motorcycle control and an accident.

Check that there is 1 - 2 mm of throttle grip free play when lightly turning the throttle grip back and forth.

If there is an incorrect amount of free play, Triumph recommends that you have your authorized Triumph dealer investigate.

### Throttle Inspection

#### **Warning**

Use of the motorcycle with a sticking or damaged throttle control will interfere with the throttle function resulting in loss of motorcycle control and an accident.

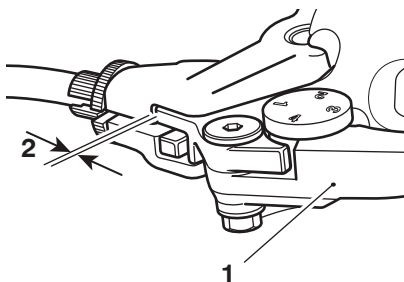
To avoid continued use of a sticking or damaged throttle control, always have it checked by your authorized Triumph dealer.

Check that the throttle opens smoothly, without undue force and that it closes without sticking. Have your authorized Triumph dealer check the throttle system if a problem is detected or any doubt exists.

# Maintenance

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## Clutch



1. Clutch lever
2. 0.08 - 0.12 in (2 - 3 mm)

The motorcycle is equipped with a cable-operated clutch.

If the clutch lever has excessive free play, the clutch may not disengage fully. This will cause difficulty in shifting gear and selecting neutral. This may cause the engine to stall and make the motorcycle difficult to control.

Conversely, if the clutch lever has insufficient free play the clutch may not engage fully, causing the clutch to slip, which will reduce performance and cause premature clutch wear.

Clutch lever free play must be checked in accordance with scheduled maintenance requirements.

## Clutch Inspection

Check that there is 0.08 - 0.12 in (2 - 3 mm) clutch lever free play at the lever.

If there is an incorrect amount of free play, adjustments must be made.

## Clutch Adjustment

Turn the adjuster sleeve until the correct amount of clutch lever free play is achieved.

Check that there is 0.08 - 0.12 in (2 - 3 mm) clutch lever free play at the lever.

If there is an incorrect amount of free play, adjustments must be made.

If correct adjustment cannot be made using the lever adjuster, use the cable adjuster at the lower end of the cable.

Loosen the adjuster lock nut.

Turn the outer cable adjuster to give 0.08 - 0.12 in (2 - 3 mm) of free play at the clutch lever.

Tighten the locknut to **30.1 lbf in** (3.4 Nm).



## Drive Chain



### **Warning**

A loose or worn chain, or a chain that breaks or jumps off the sprockets could catch on the engine sprocket or lock the rear wheel.

A chain that snags on the engine sprocket will injure the rider and lead to loss of motorcycle control and an accident.

Similarly, locking the rear wheel will lead to loss of motorcycle control and an accident.

For safety and to prevent excessive wear the drive chain must be checked, adjusted and lubricated in accordance with scheduled maintenance requirements. Checking, adjustment and lubrication must be carried out more frequently for extreme conditions such as salty or heavily gritted roads.

If the chain is badly worn or incorrectly adjusted (either too loose or too tight) the chain could jump off the sprockets or break. Therefore, always replace worn or damaged chains using genuine Triumph parts supplied by an authorized Triumph dealer.

## Drive Chain Lubrication

Lubrication is necessary every 200 miles (300 km) and also after riding in wet weather, on wet roads, or any time that the chain appears dry.

To lubricate the drive chain:

- Use the special chain lubricant as recommended in the Specifications section.
- Apply lubricant to the sides of the rollers then allow the motorcycle to stand unused for at least eight hours (overnight is ideal). This will allow the oil to penetrate to the chain O-rings etc.
- Before riding, wipe off any excess oil.
- If the chain is especially dirty, clean first and then apply oil as mentioned above.

### **Caution**

Do not use a pressure washer to clean the chain as this may cause damage to the chain components.

# Maintenance

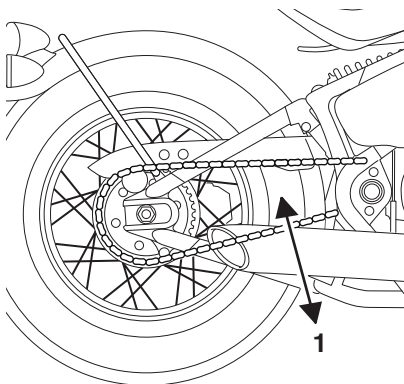
## Chain Free Movement Inspection



### Warning

Before starting work, make sure the motorcycle is stabilized and adequately supported.

This will help prevent personal injury and/or damage to the motorcycle.



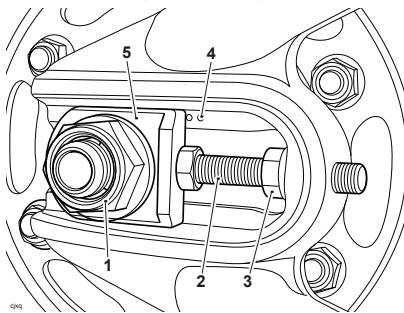
### 1. Maximum movement position

To check the chain free movement:

- Place the motorcycle on a level surface and hold it in an upright position with no weight on it.
- Rotate the rear wheel by pushing the motorcycle to find the position where the chain is tightest, and measure the vertical movement of the chain midway between the sprockets.

## Chain Free Movement Adjustment

The vertical movement of the final drive chain must be in the range of 1.02 - 1.3 in (26 - 33 mm).



1. Rear wheel spindle nut
2. Adjuster bolt
3. Adjuster bolt lock nut
4. Adjuster markings
5. Spindle adjuster

If the chain free movement measurement is incorrect, adjustments must be made as follows:

- Loosen the wheel spindle nut.
- Loosen the lock nuts on both the left hand and right hand chain adjuster bolts.
- Move both adjusters by an equal amount using the adjuster markings as a guideline.
- Turn the adjuster bolts clockwise to increase chain free movement and counterclockwise to reduce chain free movement.
- When the correct amount of chain free movement has been set, push the wheel into firm contact with the adjusters.

- Make sure the same adjuster marking is aligned with the spindle adjuster on both sides of the swinging arm.
- Tighten both adjuster lock nuts to **15 lbf ft** (20 Nm) and the rear wheel spindle nut to **81 lbf ft** (110 Nm).
- Repeat the chain adjustment check. Readjust if necessary.

## ! Warning

Operation of the motorcycle with insecure adjuster lock nuts or a loose wheel spindle may result in impaired stability and handling of the motorcycle. This impaired stability and handling may lead to loss of control or an accident.

- Check the rear brake effectiveness. Rectify if necessary.

## ! Warning

It is dangerous to operate the motorcycle with defective brakes; you must have your authorized Triumph dealer take remedial action before you attempt to ride the motorcycle again.

Failure to take remedial action may reduce braking efficiency leading to loss of motorcycle control or an accident.

## Chain and Sprocket Wear Inspection

### ! Warning

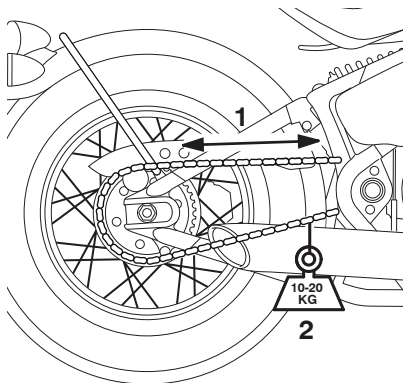
Never neglect chain maintenance and always have chains installed by an authorized Triumph dealer. Use a genuine Triumph supplied chain as specified in the Triumph Parts Catalog.

The use of non-approved chains may result in a broken chain or may cause the chain to jump off the sprockets leading to loss of motorcycle control or an accident.

### ! Caution

If the sprockets are found to be worn, always replace the sprockets and drive chain together.

Replacing worn sprockets without also replacing the chain will lead to premature wear of the new sprockets.



1. Measure across 20 links
2. Weight

# Maintenance

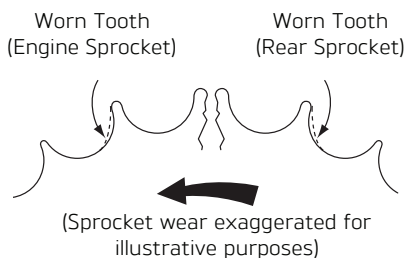
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To inspect the chain and sprocket wear:

- Stretch the chain taut by hanging a 20 - 40 lb (10 - 20 kg) weight on the chain.
- Measure the length of 20 links on the straight part of the chain from pin center of the 1st pin to the pin center of the 21st pin. Since the chain may wear unevenly, take measurements in several places.
- If the length exceeds the maximum service limit of 12.6 in (320 mm), the chain must be replaced.
- Rotate the rear wheel and inspect the drive chain for damaged rollers, and loose pins and links.
- Also inspect the sprockets for unevenly or excessively worn or damaged teeth.

## Note:

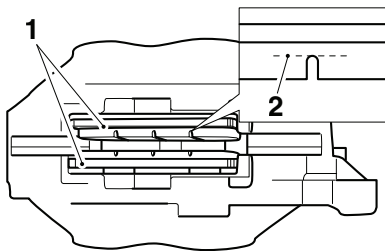
- **Illustration shows wear on sprockets mounted on the left hand side of the motorcycle.**
- **For sprockets mounted on the right hand side of the motorcycle, the wear is on the opposite side of the tooth.**
- If there is any irregularity, have the drive chain and/or the sprockets replaced by an authorized Triumph dealer.



ccol

## Brakes

### Brake Wear Inspection



cbmz\_2

1. Brake pads
2. Minimum thickness line

Brake pads must be inspected in accordance with scheduled maintenance requirements and replaced if worn to, or beyond the minimum service thickness.

If the lining thickness of any pad (front or rear brakes) is less than 0.06 in (1.5 mm), that is, if the pad has worn down to the bottom of the grooves, replace all the pads on the wheel.

### Breaking-in New Brake Pads and Discs

#### Warning

Brake pads must always be replaced as a wheel set. At the front, where two calipers are installed on the same wheel, replace all the brake pads in both calipers.

Replacing individual pads will reduce braking efficiency and may cause an accident.

After replacement brake pads have been installed, ride with extreme caution until the new pads have 'broken in'.

New brake discs and pads require a period of careful breaking-in that will optimize the performance and longevity of the discs and pads. The recommended distance for breaking-in new pads and discs is 200 miles (300 km).

During this period, avoid extreme braking, ride with caution and allow for greater braking distances.

# Maintenance

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## Brake Pad Wear Compensation

### **Warning**

If the brake lever or pedal feels soft when it is applied, or if the lever/pedal travel becomes excessive, there may be air in the brake lines and hoses or the brakes may be defective.

It is dangerous to operate the motorcycle under such conditions and your authorized Triumph dealer must rectify the fault before riding.

Riding with defective brakes may lead to loss of motorcycle control and an accident.

Disc and brake pad wear is automatically compensated for and has no effect on the brake lever or pedal action. There are no parts that require adjustment on the front and rear brakes.

## Disc Brake Fluid

### **Warning**

Brake fluid is hygroscopic which means it will absorb moisture from the air.

Any absorbed moisture will greatly reduce the boiling point of the brake fluid causing a reduction in braking efficiency.

Because of this, always replace brake fluid in accordance with scheduled maintenance requirements.

Always use new brake fluid from a sealed container and never use fluid from an unsealed container or from one which has been previously opened.

Do not mix different brands or grades of brake fluid.

Check for fluid leakage around brake installed, seals and joints and also check the brake hoses for splits, deterioration and damage.

Always rectify any faults before riding.

Failure to observe and act upon any of these items may cause a dangerous riding condition leading to loss of control and an accident.

## Warning

If the ABS is not functioning, the brake system will continue to function as a non-ABS equipped brake system. In this situation, braking too hard will cause the wheels to lock resulting in loss of control and an accident.

Reduce speed and do not continue to ride for longer than is necessary with the indicator light illuminated. Contact an authorized Triumph dealer as soon as possible to have the fault checked and rectified.

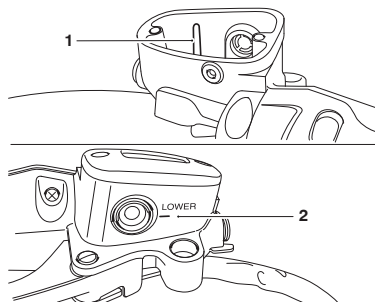
Inspect the level of brake fluid in both reservoirs and change the brake fluid in accordance with scheduled maintenance requirements. Use only DOT 4 fluid as recommended in the Specification section. The brake fluid must also be changed if it becomes, or is suspected of having become contaminated with moisture or any other contaminants.

### Note:

- **A special tool is required to bleed the ABS braking system. Contact your authorized Triumph dealer when the brake fluid needs replacing or the hydraulic system requires maintenance.**

## Front Brake Fluid Level Inspection and Adjustment

Inspect and adjust the brake fluid level as described below.



1. **Upper level line**
2. **Lower level line**

To inspect the front brake fluid level:

- Check the level of fluid visible in the window at the front of the reservoir body.
- The brake fluid level must be kept between the upper and lower level lines (reservoir held horizontal).

To adjust the brake fluid level:

- Loosen the cap retaining screws and remove the reservoir cap and the diaphragm seal.
- Fill the reservoir to the upper level line using new DOT 4 brake fluid from a sealed container.
- Reinstall the reservoir cap making sure that the diaphragm seal is correctly positioned between the cap and reservoir body.
- Tighten the cap retaining screws to **9 lbf in (1 Nm)**.

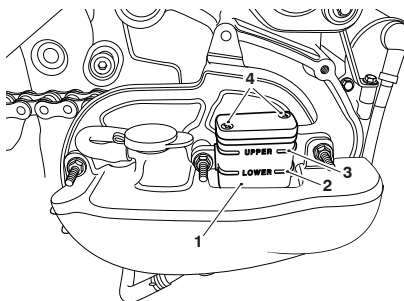
# Maintenance

## Rear Brake Fluid Level Inspection and Adjustment

### Warning

If there has been an appreciable drop in the level of the fluid in either fluid reservoir, consult your authorized Triumph dealer for advice before riding.

Riding with depleted brake fluid levels, or with a brake fluid leak is dangerous and will cause reduced brake performance potentially leading to loss of motorcycle control and an accident.



1. Rear brake fluid reservoir
2. Lower level line
3. Upper level line
4. Cap retaining screws

The rear brake fluid reservoir is located behind the sprocket cover on the right hand side of the motorcycle.

## Inspection

To inspect the rear brake fluid level:

- Remove the cap from the sprocket cover using the special tool attached to the fuse box.
- Insert the short end of the tool into the grooves at the center of the cap and turn the tool counterclockwise to loosen the cap and remove.
- The rear brake fluid reservoir is then visible.
- The brake fluid level in the rear reservoir must be kept between the upper and lower level lines.
- Replace the cap if the rear brake fluid level is acceptable.

## Adjustment

To adjust the rear brake fluid level:

- Disconnect the battery, see page **108**.
- Remove the sprocket cover to access the rear brake fluid reservoir.
- Loosen the reservoir cap retaining screws and remove the cover noting the position of the sealing diaphragm.
- Fill the reservoir to the upper level line using new DOT 4 from a sealed container.
- Reinstall the reservoir cap making sure that the diaphragm seal is correctly positioned between the cap and the reservoir body.
- Tighten the cap retaining screws to **13.3 lbf in** (1.5 Nm).
- Reinstall the sprocket cover and tighten the fasteners to **80 lbf in** (9 Nm).
- Reconnect the battery, see page **112**.



## Brake Light Switches

### **Warning**

Riding the motorcycle with defective brake lights is illegal and dangerous.

An accident causing injury to the rider and other road users may result from use of a motorcycle with defective brake lights.

The brake light is activated independently by either the front or rear brake. If, with the ignition in the ON position, the brake light does not work when the front brake lever is pulled or the rear brake pedal is pressed, have your authorized Triumph dealer investigate and rectify the fault.

## Mirrors

### **Warning**

Operation of the motorcycle with incorrectly adjusted mirrors is dangerous.

Operation of the motorcycle with incorrectly adjusted mirrors will result in loss of vision to the rear of the motorcycle. It is dangerous to ride a motorcycle without sufficient rearward vision.

Always adjust the mirrors to provide sufficient rearward vision before riding the motorcycle.

### **Warning**

Never attempt to clean or adjust mirrors while riding the motorcycle. Removal of the rider's hands from the handlebars while riding the motorcycle will diminish the ability of the rider to maintain control of the motorcycle.

Attempting to clean or adjust mirrors while riding the motorcycle may result in loss of control of the motorcycle and an accident.

Only attempt to clean or adjust the mirrors while stationary.

# Maintenance

## Models with Bar End Mirrors

### **Warning**

Incorrect adjustment of the bar end mirrors may cause the mirror arm to contact the fuel tank, brake or clutch levers or other parts of the motorcycle.

This will restrict brake or clutch lever operation or restrict steering movement, resulting in loss of motorcycle control and an accident.

Adjust the mirrors as required to make sure they do not contact any part of the motorcycle. After adjustment, move the handlebar to the left and right full lock while checking that the mirrors do not contact the fuel tank, brake or clutch levers or other parts of the motorcycle.

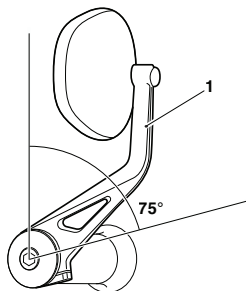
### **Caution**

Incorrect adjustment of the bar end mirrors may cause the mirror arm to contact the fuel tank, brake or clutch levers or other parts of the motorcycle.

This will result in damage to the fuel tank, brake or clutch levers or other parts of the motorcycle.

Adjust the mirrors as required to make sure they do not contact any part of the motorcycle. After adjustment, move the handlebar to the left and right full lock while checking that the mirrors do not contact the fuel tank, brake or clutch levers or other parts of the motorcycle.

The bar end mirrors will be set by your authorized Triumph dealer and will not normally require any adjustment. Should adjustment be necessary, do not rotate the mirror beyond 75°, measured from the vertical section of the mirror arm.



1. Mirror arm vertical section

### Steering/Wheel Bearings

#### **Warning**

To prevent risk of injury from the motorcycle falling during the inspection, make sure that the motorcycle is stabilized and secured on a suitable support.

Do not exert extreme force against each wheel or rock each wheel vigorously as this may cause the motorcycle to become unstable and cause injury by falling from its support.

Make sure that the position of the support block will not cause damage to the motorcycle.

### Steering Inspection

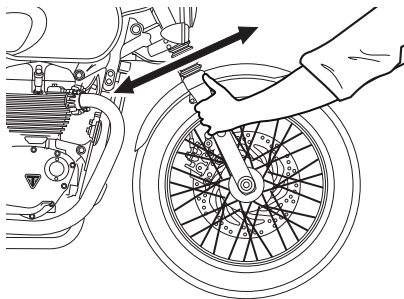
#### **Warning**

Riding the motorcycle with incorrectly adjusted or defective steering (steering head) bearings is dangerous and may cause loss of motorcycle control and an accident.

#### **Note:**

- **Always inspect the wheel bearings at the same time as the steering bearings.**

Lubricate and inspect the condition of the steering (steering head) bearings in accordance with scheduled maintenance requirements.



#### **Inspecting the Steering for Free Play**

To inspect the steering:

- Position the motorcycle on level ground, in an upright position.
- Raise the front wheel above the ground and support the motorcycle.
- Standing at the front of the motorcycle, hold the lower end of the front forks and try to move them forward and backward.
- If any free play can be detected in the steering (steering head) bearings, ask your authorized Triumph dealer to inspect and rectify any faults before riding.
- Remove the support and place the motorcycle on the side stand.

# Maintenance

## Wheel Bearings Inspection

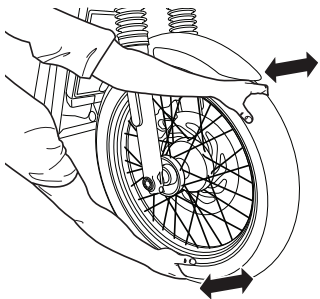


### Warning

Riding with worn or damaged front or rear wheel bearings is dangerous and may cause impaired handling and instability leading to an accident. If in doubt, have the motorcycle inspected by an authorized Triumph dealer before riding.

If the wheel bearings in the front or rear wheel allow play in the wheel hub, are noisy, or if the wheel does not turn smoothly, have your authorized Triumph dealer inspect the wheel bearings.

The wheel bearings must be inspected at the intervals specified in the scheduled maintenance chart.



Inspecting the Wheel Bearings

To inspect the wheel bearings:

- Position the motorcycle on level ground, in an upright position.
- Raise the front wheel off the ground and support the motorcycle.
- Standing at the side of the motorcycle, gently rock the top of the front wheel from side to side.
- If any free play can be detected, ask your authorized Triumph dealer to inspect and rectify any faults before riding.
- Reposition the lifting device and repeat the procedure for the rear wheel.
- Remove the support and place the motorcycle on the side stand.

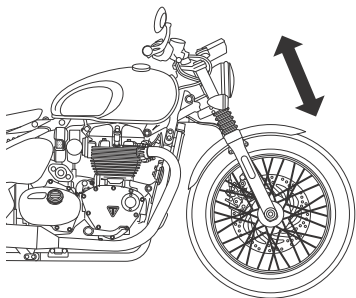
### Front Suspension - Front Fork Inspection

#### **Warning**

Riding the motorcycle with defective or damaged suspension is dangerous and may lead to loss of control and an accident.

#### **Warning**

Never attempt to dismantle any part of the suspension units, as all units contain pressurized oil. Skin and eye damage can result from contact with the pressurized oil.



Examine each fork for any sign of damage, scratching of the slider surface, or for oil leaks.

If any damage or leakage is found, consult an authorized Triumph dealer.

To check that the forks operate smoothly:

- Position the motorcycle on level ground.
- While holding the handlebars and applying the front brake, pump the forks up and down several times.
- If roughness or excessive stiffness is detected, consult your authorized Triumph dealer.

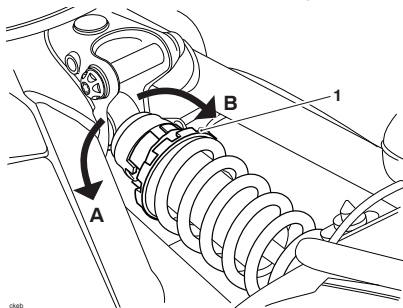
# Maintenance

## Rear Suspension Preload Adjustment

### Bonneville Speedmaster only

The spring preload adjuster is located at the top of the rear suspension unit and is accessed by removing the rider's seat.

Rear adjuster settings are counted from one, with position one being with the adjuster turned fully clockwise. Position one gives the minimum amount of spring preload. There are seven adjuster positions in total. Position seven gives the maximum amount of spring preload.



1. Rear suspension preload adjuster ring
- A. Counterclockwise direction  
B. Clockwise direction

To change the rear suspension spring preload setting:

- Remove the rider's seat, see page 53.
- Insert the C-spanner (C-spanner and handle attached to the underside of the rider's seat) into the slots of the adjuster ring.

- Turn the adjuster ring counter-clockwise (shown as direction A in the diagram) towards the left hand side of the motorcycle to increase spring preload.
- Turn the adjuster ring clockwise (shown as direction B in the diagram) towards the right hand side of the motorcycle to decrease spring preload.

### Rear Suspension Settings

Preload Loading Condition	Rear Spring Preload <sup>1</sup>
Solo riding	1
Solo riding with accessories/ loading (not exceeding limits)	3
Rider and passenger	7
Rider and passenger with accessories/loading (not exceeding limits)	7

<sup>1</sup> Position 1 is minimum (fully clockwise) and position 7 is maximum (fully counterclockwise).

#### Note:

- **This chart is only a guide. Setting requirements may vary for rider weight and personal preferences.**
- **The motorcycle is delivered from the factory with the preload adjuster set at position one.**

## Bank Angle Indicators

### **Warning**

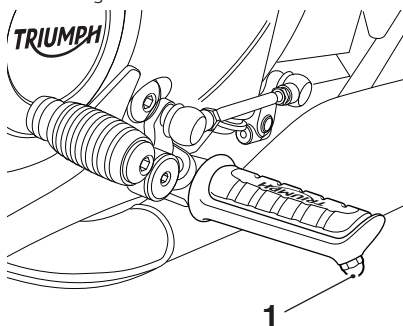
Use of a motorcycle with bank angle indicators worn beyond the maximum limit will allow the motorcycle to be banked to an unsafe angle.

Banking to an unsafe angle may cause instability, loss of motorcycle control and an accident.

Bank angle indicators are located on the rider's footrests.

Regularly check the bank angle indicators for wear.

Bank angle indicators must be replaced when they have reached the maximum wear limit of 0.2 in (5 mm) in length remaining.



1. Bank angle indicator

## Tires



The motorcycles are equipped with spoked wheels which require a tire suitable for use with an inner tube.

### **Warning**

Inner tubes must only be used on motorcycles equipped with spoked wheels and with tires marked 'TUBE TYPE'.

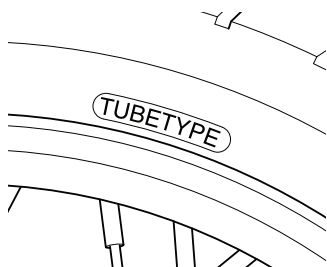
Some brands of approved tires marked 'TUBELESS' may be suitable for use with an inner tube. Where this is the case, the tire wall will be marked with text permitting the installation of an inner tube (see the following illustrations).

Use of an inner tube with a tire marked 'TUBELESS', and NOT marked as suitable for use with an inner tube, or use of an inner tube on an alloy wheel marked 'SUITABLE FOR TUBELESS TYRES' will cause deflation of the tire resulting in loss of motorcycle control and an accident.

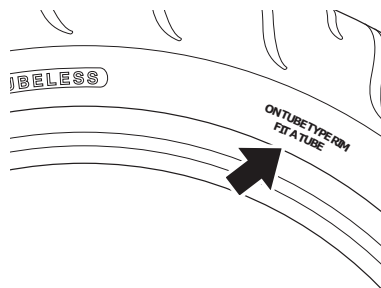
# Maintenance

## Warning

Failure to use an inner tube in a spoked wheel will cause deflation of the tire resulting in loss of motorcycle control and an accident.



Typical Tire Marking



Typical Tire Marking - Tubeless Tire Suitable For Use With An Inner Tube

## Tire Inflation Pressures

### Warning

Incorrect tire inflation will cause abnormal tread wear and instability problems that may lead to loss of control and an accident.

Underinflation may result in the tire slipping on, or coming off the rim. Overinflation will cause instability and accelerated tread wear.

Both conditions are dangerous as they may cause loss of control leading to an accident.

Correct inflation pressure will provide maximum stability, rider comfort and tire life. Always check tire pressures before riding when the tires are cold. Check tire pressures daily and adjust if necessary. See the Specification section for details of the correct inflation pressures.

## Tire Wear

As the tire tread wears down, the tire becomes more susceptible to punctures and failure. It is estimated that 90% of all tire problems occur during the last 10% of tread life (90% worn). It is recommended that tires are changed before they are worn to their minimum tread depth.



## Minimum Recommended Tread Depth

### **Warning**

Operation with excessively worn tires is hazardous and will adversely affect traction, stability and handling which may lead to loss of control and an accident.

When tubeless tires, used without a tube, become punctured, leakage is often very slow. Always inspect tires very closely for punctures. Check the tires for cuts, embedded nails or other sharp objects. Operation with punctured or damaged tires will adversely affect motorcycle stability and handling which may lead to loss of control or an accident.

Check the rims for dents or deformation. Operation with damaged or defective wheels or tires is dangerous and loss of motorcycle control or an accident could result.

Always consult your authorized Triumph dealer for tire replacement, or for a safety inspection of the tires.

In accordance with the periodic maintenance chart, measure the depth of the tread with a depth gage, and replace any tire that has worn to, or beyond the minimum allowable tread depth specified in the table below:

Under 80 mph (130 km/h)	0.08 in (2 mm)
Over 80 mph (130 km/h)	Front 0.08 in (2 mm) Rear 0.12 in (3 mm)

## Tire Replacement

All Triumph motorcycles are carefully and extensively tested in a range of riding conditions to ensure that the most effective tire combinations are approved for use on each model. It is essential that approved tires and inner tubes (if installed) mounted in approved combinations, are used when purchasing replacement items. The use of non-approved tires and inner tubes, or approved tires and inner tubes in non-approved combinations, may lead to motorcycle instability, loss of control and an accident.

A list of approved tires and inner tubes specific to your motorcycle are available from your authorized Triumph dealer, or on the Internet at [www.triumph.co.uk](http://www.triumph.co.uk). Always have tires and inner tubes mounted and balanced by your authorized Triumph dealer who has the necessary training and skills to ensure safe, effective installation.

Different wheel speeds, caused by non-approved tires, can affect the function of the ABS computer.

### **Warning**

The ABS system operates by comparing the relative speed of the front and rear wheels. Use of non-recommended tires can affect wheel speed and cause the ABS function not to operate, potentially leading to loss of control and an accident in conditions where the ABS would normally function.

## **Warning**

If a tire or inner tube sustains a puncture, the tire and inner tube must be replaced. Failure to replace a punctured tire and inner tube, or operation with a repaired tire or inner tube can lead to instability, loss of motorcycle control or an accident.

## **Warning**

Inner tubes must only be used on motorcycles equipped with spoked wheels and with tires marked 'TUBE TYPE'.

Some brands of approved tires marked 'TUBELESS' may be suitable for use with an inner tube. Where this is the case, the tire wall will be marked with text permitting the installation of an inner tube.

Use of an inner tube with a tire marked 'TUBELESS', and NOT marked as suitable for use with an inner tube, or use of an inner tube on an alloy wheel marked 'SUITABLE FOR TUBELESS TYRES' will cause deflation of the tire resulting in loss of motorcycle control and an accident.

## **Warning**

Do not install tube-type tires on tubeless rims. The bead will not seat and the tires could slip on the rims, causing rapid tire deflation that may result in a loss of vehicle control and an accident. Never install an inner tube inside a tubeless tire without the appropriate marking. This will cause friction inside the tire and the resulting heat build-up may cause the tube to burst resulting in rapid tire deflation, loss of vehicle control and an accident.

## **Warning**

If tire damage is suspected, such as after striking the curb, ask your authorized Triumph dealer to inspect the tire both internally and externally. Remember, tire damage may not always be visible from the outside. Operation of the motorcycle with damaged tires could lead to loss of control and an accident.

## **Warning**

Tires and inner tubes that have been used on a rolling road dynamometer may become damaged. In some cases, the damage may not be visible on the external surface of the tire.

Tires and inner tubes must be replaced after such use as continued use of a damaged tire or inner tube may lead to instability, loss of motorcycle control and an accident.

### **Warning**

Accurate wheel balance is necessary for safe, stable handling of the motorcycle. Do not remove or change any wheel balance weights. Incorrect wheel balance may cause instability leading to loss of control and an accident.

When wheel balancing is required, such as after tire or inner tube replacement, see your authorized Triumph dealer.

Only use self-adhesive weights. Clip on weights may damage the wheel, tire or inner tube resulting in tire deflation, loss of motorcycle control and an accident.

### **Warning**

When replacement tires or inner tubes are required, consult your authorized Triumph dealer who will arrange for the tires and inner tubes to be selected, in a correct combination, from the approved list and mounted according to the tire and inner tube manufacturer's instructions.

When tires and inner tubes are replaced, allow time for the tires and inner tubes to seat to the rim (approximately 24 hours). During this seating period, ride cautiously as an incorrectly seated tire or inner tube could cause instability, loss of motorcycle control and an accident.

### **Warning** Continued

Initially, the new tires and inner tubes will not produce the same handling characteristics as the worn tires and inner tubes and the rider must allow adequate riding distance (approximately 100 miles (160 km)) to become accustomed to the new handling characteristics.

24 hours after mounting, the tire pressures must be checked and adjusted, and the tires and inner tubes examined for correct seating. Rectification must be carried out as necessary. The same checks and adjustments must also be carried out when 100 miles (160 km) have been traveled after mounting.

Use of a motorcycle with incorrectly seated tires or inner tubes, incorrectly adjusted tire pressures, or when not accustomed to its handling characteristics may lead to loss of motorcycle control and an accident.

# Maintenance

## Battery

### Warning

Under some circumstances, the battery can give off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using the battery in an enclosed space.

The battery contains sulfuric acid (battery acid). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.

If battery acid gets on your skin, flush with water immediately.

If battery acid gets in your eyes, flush with water for at least 15 minutes and SEEK MEDICAL ATTENTION IMMEDIATELY.

If battery acid is swallowed, drink large quantities of water and SEEK MEDICAL ATTENTION IMMEDIATELY.

KEEP BATTERY ACID OUT OF THE REACH OF CHILDREN.

### Warning

The battery contains harmful materials. Always keep children away from the battery whether or not it is installed in the motorcycle.

Do not attach jump leads to the battery, touch the battery cables together or reverse the polarity of the cables as any of these actions may cause a spark which would ignite battery gases causing a risk of personal injury.

## Battery Removal

### Warning

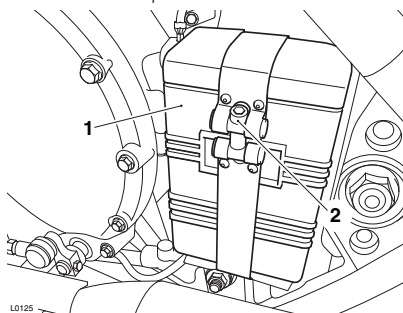
Before starting work, ensure the motorcycle is stabilized and adequately supported. This will help prevent it from falling and causing injury to the operator or damage to the motorcycle.

### Warning

Make sure that the battery terminals do not touch the motorcycle frame as this may cause a short circuit or spark, which would ignite battery gases causing a risk of personal injury.

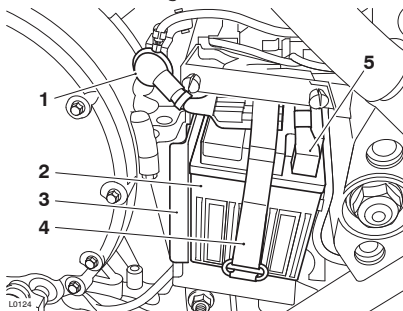
To remove the battery:

- Remove the fastener securing the battery cover strap and remove the lower strap.



- L0125
1. Battery cover
  2. Fastener

- Remove the battery cover by pulling the cover away from the motorcycle. Leave the grommets attached to the battery cover.
- Disconnect the negative (black) lead from the engine ground connection bracket. Do not remove the bracket from the engine.



1. **Engine ground connection**
2. **Battery**
3. **Battery strap guide**
4. **Battery strap**
5. **Battery positive terminal**

- Loosen the battery strap and partially slide the battery out of the battery tray in order to gain access to the positive battery connection.
- Disconnect the positive (red) lead from the battery.
- Remove the battery and battery strap guide from the battery tray, noting the routing of the negative (black) battery lead for installation.

## Battery Disposal

Should the battery ever require replacement, the original battery must be handed to a recycling agent who will make sure that the dangerous substances from which the battery is manufactured do not pollute the environment.

## Battery Maintenance

### **Warning**

Battery acid is corrosive and poisonous and will cause damage to unprotected skin. Never swallow battery acid or allow it to come into contact with the skin. To prevent injury, always wear eye and skin protection when handling the battery.

Clean the battery using a clean, dry cloth. Make sure that the cable connections are clean.

The battery is a sealed type and does not require any maintenance other than checking the voltage and routine recharging when required, such as during storage (see the following paragraphs).

It is not possible to adjust the battery acid level in the battery; the sealing strip must not be removed.

# Maintenance

---

## Battery Discharge



The charge level in the battery must be maintained to maximize battery life.

Failure to maintain the battery charge level could cause serious internal damage to the battery.

Under normal conditions, the motorcycle charging system will keep the battery fully charged. However, if the motorcycle is unused, the battery will gradually discharge due to a normal process called self discharge; the clock, Engine Control Module (ECM) memory, high ambient temperatures, or the addition of electrical security systems or other electrical accessories will all increase this rate of battery discharge. Disconnecting the battery from the motorcycle during storage will reduce the rate of discharge.

## Battery Discharge During Storage and Infrequent Use of the Motorcycle

During storage or infrequent use of the motorcycle, inspect the battery voltage weekly using a digital multimeter. Follow the manufacturer's instructions supplied with the meter.

Should the battery voltage fall below 12.7 Volts, the battery should be charged.

Allowing a battery to discharge or leaving it discharged for even a short period of time causes sulphation of the lead plates. Sulphation is a normal part of the chemical reaction inside the battery, however over time the sulphate can crystallize on the plates making recovery difficult or impossible. This permanent damage is not covered by the motorcycle warranty, as it is not due to a manufacturing defect.

Keeping the battery fully charged reduces the likelihood of it freezing in cold conditions. Allowing a battery to freeze will cause serious internal damage to the battery.

## Battery Charging

### **Warning**

The battery gives off explosive gases; keep sparks, flames and cigarettes away. Provide adequate ventilation when charging or using the battery in an enclosed space.

The battery contains sulfuric acid (battery acid). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.

If battery acid gets on your skin, flush with water immediately.

If battery acid gets in your eyes, flush with water for at least 15 minutes and SEEK MEDICAL ATTENTION IMMEDIATELY.

If battery acid is swallowed, drink large quantities of water and SEEK MEDICAL ATTENTION IMMEDIATELY.

KEEP BATTERY ACID OUT OF THE REACH OF CHILDREN.

### **Caution**

Do not use an automotive quick charger as it may overcharge and damage the battery.

For help with selecting a battery charger, checking the battery voltage or battery charging, contact your local authorized Triumph dealer.

Should the battery voltage fall below 12.7 Volts, the battery should be charged using a Triumph approved battery charger. Always remove the battery from the motorcycle and follow the instructions supplied with the battery charger.

For extended periods of storage (beyond two weeks) the battery should be removed from the motorcycle and kept charged using a Triumph approved maintenance charger.

Similarly, should the battery charge fall to a level where it will not start the motorcycle, remove the battery from the motorcycle before charging.

## Battery Installation

### **Warning**

Before starting work, make sure that the motorcycle is stabilized and adequately supported. This will help prevent it from falling and causing personal injury and/or damage to the motorcycle.

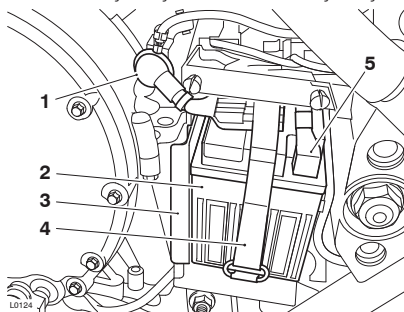
### **Warning**

Make sure that the battery terminals do not touch the motorcycle frame as this may cause a short circuit or spark, which would ignite battery gases causing a risk of personal injury.

# Maintenance

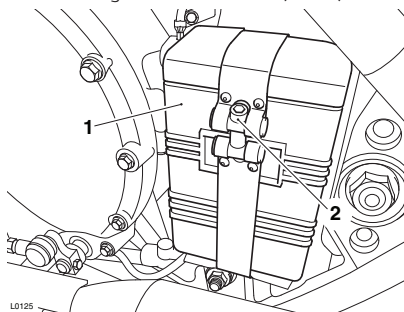
To install the battery:

- Make sure the battery strap is correctly positioned on the hook at the rear of the battery cage.
- Position the battery strap guide and battery in the battery tray, routing the negative (black) battery lead as noted during removal.
- Connect the positive (red) battery lead to the battery and tighten to **39.8 lbf in** (4.5 Nm). Push the battery fully into the battery tray.



1. Engine ground connection
2. Battery
3. Battery strap guide
4. Battery strap
5. Battery positive connection

- Secure the battery with the battery strap.
- Connect the negative (black) battery lead to the engine ground connection on the frame and tighten to **53 lbf in** (6 Nm).
- Install the battery cover, lower edge first. Make sure that the rubber seals are positioned correctly.
- Secure the strap with the fastener and tighten to **27 lbf in** (3 Nm).



1. Battery cover
2. Fastener



## Fuse Box



### Warning

Always replace blown fuses with new ones of the correct rating (as specified on the fuse box cover) and never use a fuse of higher rating.

Use of an incorrect fuse could lead to an electrical problem, resulting in motorcycle damage, loss of motorcycle control and an accident.

### Note:

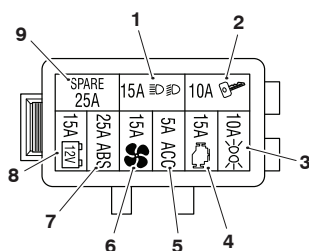
- **A blown fuse is indicated when all of the systems protected by that fuse become inoperative. When checking for a blown fuse, use the table to establish which fuse has blown.**

The fuse box is located behind the left hand side panel.

To gain access to the fuse box, remove the left hand side panel (see page 51).

Position	Circuit Protected	Rating (Amps)
1	Dip and high headlight beams	15
2	Ignition switch, starter circuit	10
3	Auxiliary lights	10
4	Engine management system	15
5	Accessory socket	5
6	Cooling fan	15
7	ABS	25
8	Instruments	15
9	Spare	25

The 30 Amp main fuse is in a separate fuse box also located behind the left hand side panel.



ctm\_dv

Fuse Box

# Maintenance

## Headlights



### **Warning**

Adjust road speed to suit the visibility and weather conditions in which the motorcycle is being operated.

Make sure that the beam is adjusted to illuminate the road surface sufficiently far ahead without blinding oncoming traffic. An incorrectly adjusted headlight may impair visibility causing an accident.

### **Warning**

Never attempt to adjust a headlight beam when the motorcycle is in motion.

Any attempt to adjust a headlight beam when the motorcycle is in motion may result in loss of control and an accident.

### **Caution**

Do not cover the headlight or lens with any item likely to obstruct air flow to, or prevent heat escaping from, the headlight lens.

Covering the headlight lens during operation with items of clothing, luggage, adhesive tape, devices intended to alter or adjust the headlight beam or non genuine headlight lens covers will cause the headlight lens to over-heat and distort, causing irreparable damage to the headlight assembly.

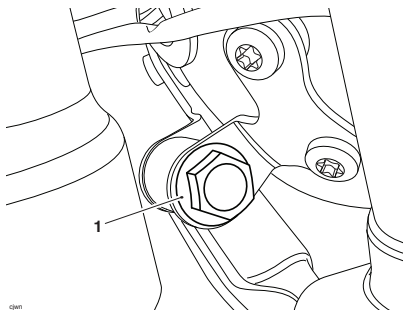
Damage caused by overheating is not considered a manufacturing defect and will not be covered under warranty.

If the headlight must be covered during use - such as taping of the headlight lens required during closed-course conditions - the headlight must be disconnected.

## Headlight Adjustment

### Note:

- Always make sure the handlebars are in the straight ahead position when checking and adjusting the headlight beam setting.



### 1. Headlight assembly mounting bolt

Vertical adjustment of the headlight beam is controlled by loosening the headlight assembly mounting bolt and altering the position of the headlight assembly.

Retighten the fasteners after adjustment to **19 lbf ft (26 Nm)**.

## Headlight/Position Light Bulb Replacement

### Bonneville Bobber Black and Bonneville Speedmaster

The headlight unit is a sealed, maintenance-free LED unit.

## Bonneville Bobber only

### ! Warning

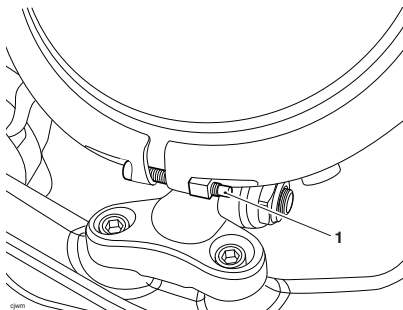
The bulbs become hot during use. Always allow sufficient time for the bulbs to cool before handling. Avoid touching the glass part of the bulb. If the glass is touched or gets dirty, clean with alcohol before reuse.

### ! Caution

The use of non-approved headlight bulbs may result in damage to the headlight lens.

Use a genuine Triumph supplied headlight bulb as specified in the Triumph Parts Catalog.

When possible always have replacement headlight bulbs installed by an authorized Triumph dealer.



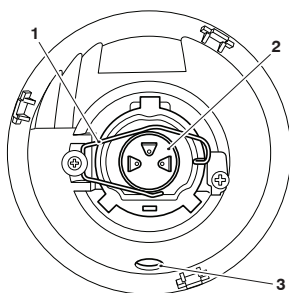
### 1. Headlight rim fastener

# Maintenance

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To replace the headlight and/or position light bulb:

- Disconnect the battery, negative (black) lead first.
- Remove the headlight rim fastener.
- Detach the headlight and rim assembly from the headlight bowl.
- While supporting the light unit, disconnect the multipin electrical connector from the headlight bulb and carefully remove the position light bulb from the light unit.
- Remove the rubber dust cover.



1. **Wire retainer**
2. **Headlight bulb**
3. **Position bulb location**

- Unhook the headlight bulb's wire retainer.
- The headlight bulb can now be removed.
- Remove the position bulb from its bulb holder if it needs replacing.
- Installation is the reversal of removal.
- Tighten the headlight rim fastener to **18 lbf in** (2 Nm).

## Brake/Tail Light

The LED brake/tail light units are sealed, maintenance free LED units. The brake/tail light assembly must be replaced in the event of the failure of the brake/tail light.

## Turn Signal Lights - Bulb Replacement

The turn signal light units are sealed, maintenance-free LED units.

### CLEANING AND STORAGE

#### Cleaning

Frequent, regular cleaning is an essential part of the maintenance of your motorcycle. If regularly cleaned, the appearance will be preserved for many years.

Cleaning with cold water containing an automotive cleaner is essential at all times but particularly so after exposure to sea breezes, sea water, dusty or muddy roads and in winter when roads are treated for ice and snow.

Do not use household detergent, as the use of such products will lead to premature corrosion.

Although, under the terms of your motorcycle warranty, cover is provided against the corrosion of certain items, the owner is expected to observe this reasonable advice which will safeguard against corrosion and enhance the appearance of the motorcycle.

#### Preparation for Washing

Before washing, precautions must be taken to keep water off the following places.

Rear opening of the exhausts: Cover with a plastic bag secured with rubber bands.

Clutch and brake levers, switch housings on the handlebar: Cover with plastic bags.

Ignition switch and steering lock: Cover the keyhole with tape.

Remove any items of jewelry such as rings, watches, zips or belt buckles, which may scratch or otherwise damage painted or polished surfaces.

Use separate cleaning sponges or cleaning cloths for washing painted/polished surfaces and chassis areas. Chassis areas (such as wheels and under fenders) will be exposed to more abrasive road grime and dust, which may then scratch painted or polished surfaces, if the same sponge or cleaning cloths are used.

# Cleaning and Storage

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## Where to be Careful

### Caution

Do not spray any water at all near the air intake duct. The air intake duct is normally located under the rider's seat, under the fuel tank or near the steering head. Any water sprayed in this area could enter the airbox and engine, causing damage to both items.

### Caution

Use of high pressure spray washers is not recommended. When using pressure washers, water may be forced into bearings and other components causing premature wear from corrosion and loss of lubrication.

Avoid spraying water with any great force near the following places:

- Instruments;
- Brake cylinders and brake calipers;
- Under the fuel tank;
- Air intake duct;
- Steering head bearings;
- Wheel bearings.

### Note:

- **Use of soaps that are highly alkaline will leave a residue on painted surfaces, and may also cause water spotting. Always use a low alkaline soap to aid the cleaning process.**

## Washing

Prepare a mixture of cold water and mild automotive cleaner. Do not use a highly alkaline soap as commonly found at commercial car washes because it leaves a residue.

Wash the motorcycle with a sponge or soft cloth. Do not use abrasive scouring pads or steel wool. They will damage the finish.

Rinse the motorcycle thoroughly with cold water.

## After Washing



Never wax or lubricate the brake discs. Loss of braking power and an accident could result. Clean the disc with a proprietary brand of oil-free brake disc cleaner.

Remove the plastic bags and tape, and clear the air intakes.

Lubricate the pivots, bolts and nuts.

Test the brakes before motorcycle operation.

Use a dry cloth or chamois leather to absorb water residue. Do not allow water to stand on the motorcycle as this will lead to corrosion.

Start the engine and run it for 5 minutes. Make sure that there is adequate ventilation for the exhaust fumes.

## Care of Gloss Paintwork

Gloss paintwork should be washed and dried as described above, then protected using a high quality automotive polish. Always follow the manufacturer's instructions and repeat regularly to maintain your motorcycle's appearance.

## Care of Matt Paintwork

Matt paintwork requires no greater care than that already recommended for high gloss paintwork.

- Do not use any polish or wax on matt paintwork.
- Do not try and polish out scratches.

## Aluminum Items - not Lacquered or Painted

Items such as brake and clutch levers, wheels, engine covers, engine cooling fins, upper and lower yokes and throttle bodies on some models must be correctly cleaned to preserve their appearance. Please contact your dealer if you are unsure which components on your motorcycle are aluminum parts not protected by paint or lacquer, and for guidance on how to clean those items.

Use a proprietary brand of aluminum cleaner which does not contain abrasive or caustic elements.

Clean aluminum items regularly, in particular after use in inclement weather, where the components must be hand washed and dried each time the machine is used.

Warranty claims due to inadequate maintenance will not be allowed.

# Cleaning and Storage

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## Cleaning of Chrome and Stainless Steel Items

All chrome and stainless steel parts of your motorcycle must be cleaned regularly to avoid a deterioration of its appearance.

### Washing

Wash as previously described.

### Drying

Dry the chrome and stainless steel parts as far as possible with a soft cloth or chamois leather.

### Protecting



The use of products containing silicone will cause discoloration of the chrome and stainless steel parts and must not be used. Similarly, the use of abrasive cleaners will damage the finish and must not be used.

When the chrome and stainless steel is dry, apply a suitable proprietary chrome cleaner on to the surface, following the manufacturer's instructions.

It is recommended that regular protection be applied to the motorcycle as this will both protect and enhance its appearance.

## Black Chrome

Items such as headlight bowls and mirrors on some models must be correctly cleaned to preserve their appearance. Please contact your dealer if you are unsure which components on your motorcycle are black chrome parts. Maintain the appearance of black chrome items by rubbing a small amount of light oil into the surface.

## Cleaning of the Exhaust System

All parts of the exhaust system of your motorcycle must be cleaned regularly to avoid a deterioration of its appearance. These instructions can be applied to chrome, brushed stainless steel and carbon fiber components; matt painted exhaust systems should be cleaned as above, noting the care instructions in the Matt Paintwork section previously.

### Note:

- **The exhaust system must be cool before washing to prevent water spotting.**

### Washing

Wash as previously described.

Make sure that no soap or water enters the exhausts.

### Drying

Dry the exhaust system as far as possible with a soft cloth or chamois leather. Do not run the engine to dry the system or spotting will occur.



### Protecting

#### **Caution**

The use of products containing silicone will cause discoloration of the chrome and must not be used. Similarly, the use of abrasive cleaners will damage the system and must not be used.

When the exhaust system is dry, apply a suitable proprietary motorcycle protection spray onto the surface, following the manufacturer's instructions.

It is recommended that regular protection be applied to the system as this will both protect and enhance the system's appearance.

### Seat Care

#### **Caution**

Use of chemicals or high pressure spray washers is not recommended for cleaning the seat.

Using chemicals or high pressure spray washers may damage the seat cover.

To help maintain its appearance, clean the seat using a sponge or cleaning cloth with soap and water.

### Windshield Cleaning (if equipped)



#### **Warning**

Never attempt to clean the windshield while the motorcycle is in motion as releasing the handlebars may cause loss of motorcycle control and an accident.

Operation of the motorcycle with a damaged or scratched windshield will reduce the rider's forward vision. Any such reduction in forward vision is dangerous and may lead to loss of motorcycle control and an accident.

#### **Caution**

Corrosive chemicals such as battery acid will damage the windshield. Never allow corrosive chemicals to contact the windshield.

# Cleaning and Storage

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## Caution

Products such as window cleaning fluids, insect remover, rain repellent, scouring compounds, gasoline or strong solvents such as alcohol, acetone, carbon tetrachloride, etc. will damage the windshield.

Never allow these products to contact the windshield.

Clean the windshield with a solution of mild soap or detergent and cold water.

After cleaning, rinse well and then dry with a soft, lint-free cloth.

If the transparency of the windshield is reduced by scratches or oxidation which cannot be removed, the windshield must be replaced.

## Care of Leather Products

We recommend that you periodically clean your leather products with a damp cloth and allow them to dry naturally at room temperature. This will maintain the appearance of the leather and ensure the long life of your product. Your Triumph leather product is a natural product and lack of care can result in damage and permanent wear. Follow these simple instructions and give your leather product the respect it deserves:

- Do not use household cleaning products, bleach, detergents containing bleach or any kind of solvent to clean your leather product.
- Do not immerse your leather product in water.
- Avoid direct heat from fires and radiators which can dry out and distort the leather.
- Do not leave your leather product in direct sunlight for prolonged periods of time.
- Do not dry your leather product by applying direct heat to it at any time.
- If your leather product does get wet, absorb any excess water with a soft clean cloth then leave the product to dry naturally at room temperature.
- Avoid exposure of your leather product to high levels of salt, for example sea/salt water or road surfaces that have been treated during the winter for ice and snow.

- If exposure to salt is unavoidable, clean your leather product immediately after each exposure using a damp cloth then leave the product to dry naturally at room temperature.
- Gently clean any minor marks with a damp cloth then leave the product to dry naturally at room temperature.
- Place your leather product in a fabric bag or cardboard box to protect it when in storage. Do not use a plastic bag.

### Preparation for Storage

Clean and dry the entire vehicle thoroughly.

Fill the fuel tank with the correct grade of unleaded fuel and add a suitable fuel stabilizer (if available), following the fuel stabilizer manufacturer's instructions.

#### **Warning**

Gasoline is extremely flammable and can be explosive under certain conditions. Turn the ignition switch OFF. Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

Remove one of the spark plugs from each cylinder and put several drops 0.17 fl oz (5 ml) of engine oil into each cylinder. Cover the spark plug holes with a piece of cloth or rag. With the engine stop switch in the RUN position, push the starter button for a few seconds to coat the cylinder walls with oil. Install the spark plugs, tightening to **9 lbf ft (12 Nm)**.

Change the engine oil and filter (see page **81**).

Check and if necessary correct the tire pressures (see page **104**).

Set the motorcycle on a stand so that both wheels are raised off the ground. (If this cannot be done, put boards under the front and rear wheels to keep dampness away from the tires.)

# Cleaning and Storage

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Spray rust inhibiting oil (there are a host of products on the market and your authorized Triumph dealer will be able to offer you local advice) on all unpainted metal surfaces to prevent rusting. Prevent oil from getting on rubber parts, brake discs or in the brake calipers.

Make sure the cooling system is filled with a 50% mixture of coolant (noting that HD4X Hybrid OAT coolant, as supplied by Triumph, is pre-mixed and requires no dilution) and distilled water solution (see page **84**).

Remove the battery, and store it where it will not be exposed to direct sunlight, moisture, or freezing temperatures. During storage it should be given a slow charge (one Ampere or less) about once every two weeks (see page **111**).

Store the motorcycle in a cool, dry area, away from sunlight, and with a minimum daily temperature variation.

Put a suitable porous cover over the motorcycle to keep dust and dirt from collecting on it. Avoid using plastic or similar non-breathable, coated materials that restrict air flow and allow heat and moisture to accumulate.

## Preparation after Storage

Install the battery (if removed) (see page **112**).

If the motorcycle has been stored for more than four months, change the engine oil (see page **81**).

Check all the points listed in the Daily Safety Checks section.

Before starting the engine, remove the spark plugs from each cylinder.

Put the side stand down.

Crank the engine on the starter motor several times until the oil pressure light goes out.

Replace the spark plugs, tightening to **9 lbf ft (12 Nm)**, and start the engine.

Check and if necessary correct the tire pressures (see page **104**).

Check and if necessary adjust the drive chain tension (see page **90**).

Clean the entire vehicle thoroughly.

Check the brakes for correct operation.

Test ride the motorcycle at low speeds.

## SPECIFICATIONS

### Bonneville Bobber and Bonneville Bobber Black

#### Dimensions, Weights and Performance

A list of model specific dimensions, weights and performance figures is available from your authorized Triumph dealer, or on the Internet at [www.triumph.co.uk](http://www.triumph.co.uk).

<b>Payload</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Maximum Payload	463 lb (125 kg)	463 lb (125 kg)
<b>Engine</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Type	Liquid cooled parallel twin, 270° firing angle	Liquid cooled parallel twin, 270° firing angle
Displacement	73.2 cu in (1,200 cc)	73.2 cu in (1,200 cc)
Bore x Stroke	3.84 x 3.15 in (97.6 x 80 mm)	3.84 x 3.15 in (97.6 x 80 mm)
Compression Ratio	10:1	10:1
Cylinder Numbering	Left to Right	Left to Right
Cylinder Sequence	1-2	1-2
Firing Order	1-2	1-2
Starting System	Electric Starter	Electric Starter
<b>Lubrication</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Lubrication System	Wet sump	Wet sump
Engine Oil Capacities:		
Dry Fill	1 US gallon (3.8 liters)	1 US gallon (3.8 liters)
Oil/Filter Change	0.9 US gallons (3.4 liters)	0.9 US gallons (3.4 liters)
Oil Change only	0.85 US gallons (3.2 liters)	0.85 US gallons (3.2 liters)
<b>Cooling</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Coolant Type	Triumph HD4X Hybrid OAT	Triumph HD4X Hybrid OAT
Water/Coolant Ratio	50/50 (pre-mixed as supplied by Triumph)	50/50 (pre-mixed as supplied by Triumph)
Coolant Capacity	0.41 US gallons (1.558 liters)	0.41 US gallons (1.558 liters)
Thermostat Opens	190°F (88°C) +/- 35°F (2°C)	190°F (88°C) +/- 35°F (2°C)

# Specifications

## Fuel System

Fuel Type

Fuel Pump

Fuel Pressure (nominal)

## Bonneville Bobber

Electronic Fuel Injection

Submerged Electronic

51 lb/in<sup>2</sup> (3.5 bar)

## Bonneville Bobber Black

Electronic Fuel Injection

Submerged Electronic

51 lb/in<sup>2</sup> (3.5 bar)

## Tank Capacity

Type

Tank Capacity

## Bonneville Bobber

AKI octane rating (R+M)/2  
of 87 unleaded

2.4 US gallons (9.1 liters)

## Bonneville Bobber Black

AKI octane rating (R+M)/2  
of 87 unleaded

2.4 US gallons (9.1 liters)

## Ignition

Ignition System

Spark Plug

Spark Plug Gap

## Bonneville Bobber

Digital Inductive

NGK LMAR8A-9

0.4 in +0.0/-0.004 in  
(0.9 mm +0.0/-0.1 mm)

## Bonneville Bobber Black

Digital Inductive

NGK LMAR8A-9

0.4 in +0.0/-0.004 in  
(0.9 mm +0.0/-0.1 mm)

## Transmission

Transmission Type

Clutch Type

Final Drive Chain

Primary Drive Ratio

Gear Ratio:

1st

2nd

3rd

4th

5th

6th

Final Drive Ratio

## Bonneville Bobber

6 speed, constant mesh

Wet, multiplate

EK 525 MVXZ2, 108 link

93/74 (1.26)

49/14 (3.5)

45/18 (2.5)

37/20 (1.85)

37/25 (1.48)

35/27 (1.3)

34/29 (1.17)

37/17 (2.18)

## Bonneville Bobber Black

6 speed, constant mesh

Wet, multiplate

EK 525 MVXZ2, 108 link

93/74 (1.26)

49/14 (3.5)

45/18 (2.5)

37/20 (1.85)

37/25 (1.48)

35/27 (1.3)

34/29 (1.17)

37/17 (2.18)



## Warning

Use the recommended tires ONLY in the combinations given. Do not mix tires from different manufacturers or mix different specification tires from the same manufacturers as this may result in loss of motorcycle control and an accident.

## Approved Tires

A list of approved tires specific to these models is available from your authorized Triumph dealer, or on the Internet at [www.triumph.co.uk](http://www.triumph.co.uk).

<b>Tires</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Tire Sizes:		
Front	100/90-19	MT90B16
Rear	150/80 R16	150/80 R16
Tire Pressures (Cold):		
Front	32 lbs/in <sup>2</sup> (2.2 bar)	33 lbs/in <sup>2</sup> (2.3 bar)
Rear	42 lbs/in <sup>2</sup> (2.9 bar)	38 lbs/in <sup>2</sup> (2.6 bar)
<b>Electrical Equipment</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Battery Type	YTX9-BS	YTX9-BS
Battery Rating	12 Volt, 8 Ah	12 Volt, 8 Ah
Alternator	25 Amps at 1,000 rpm 46.5 Amps at 3,000 rpm	25 Amps at 1,000 rpm 46.5 Amps at 3,000 rpm
Headlight	12 Volt, 60/55 Watt, H4 Halogen	12 Volt, 60/55 Watt, H4 Halogen
Position Light	12 Volt, 5 Watt	12 Volt, 5 Watt
Tail/Brake Light	LED	LED
License Plate Light	LED	LED
Turn Signal Lights	LED	LED
<b>Electrical Equipment</b>	<b>Bonneville Bobber</b>	<b>Bonneville Bobber Black</b>
Battery Type	YTX9-BS	YTX9-BS
Battery Rating	12 Volt, 8 Ah	12 Volt, 8 Ah
Alternator	25 Amps at 1,000 rpm 46.5 Amps at 3,000 rpm	25 Amps at 1,000 rpm 46.5 Amps at 3,000 rpm
Headlight	12 Volt, 60/55 Watt, H4 Halogen	12 Volt, 60/55 Watt, H4 Halogen
Position Light	12 Volt, 5 Watt	12 Volt, 5 Watt
Tail/Brake Light	LED	LED
License Plate Light	LED	LED
Turn Signal Lights	LED	LED

# Specifications

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## Frame

Rake

## Bonneville Bobber

25.7°

Trail

3.5 in (87 mm)

## Bonneville Bobber Black

25.4°

3.7 in (92 mm)

## Tightening Torques

## Bonneville Bobber

## Bonneville Bobber Black

Battery Terminals

39.8 lbf in (4.5 Nm)

39.8 lbf in (4.5 Nm)

Battery Strap

27 lbf in (3 Nm)

27 lbf in (3 Nm)

Chain Adjuster Lock Nuts

15 lbf ft (20 Nm)

15 lbf ft (20 Nm)

Chain Guard - Front

80 lbf in (9 Nm)

80 lbf in (9 Nm)

Chain Guard - Rear

22 lbf ft (30 Nm)

22 lbf ft (30 Nm)

Clutch Lever Nut

30.1 lbf in (3.4 Nm)

30.1 lbf in (3.4 Nm)

Headlight Rim Fastener

18 lbf in (2 Nm)

18 lbf in (2 Nm)

Oil Filter

89 lbf in (10 Nm)

89 lbf in (10 Nm)

Spark Plug

9 lbf ft (12 Nm)

9 lbf ft (12 Nm)

Sump Plug

18 lbf ft (25 Nm)

18 lbf ft (25 Nm)

Rear Wheel Spindle Nut

81 lbf ft (110 Nm)

81 lbf ft (110 Nm)

Seat Bolts

35 lbf ft (48 Nm)

35 lbf ft (48 Nm)

Seat Nuts

28 lbf ft (38 Nm)

28 lbf ft (38 Nm)

## Fluids and Lubricants

## Bonneville Bobber and Bonneville Bobber Black

Bearings and Pivots

Grease to NLGI 2 specification

Brake Fluid

DOT 4 brake fluid

Coolant

Triumph HD4X Hybrid OAT coolant (pre-mixed)

Drive Chain

Chain spray suitable for XW-ring chains

Engine Oil

Semi or fully synthetic 10W/40 or 10W/50 motorcycle engine oil which meets specification API SH (or higher) and JASO MA, such as Castrol Power 1 Racing 4T 10W-40 (fully synthetic) engine oil, sold as Castrol Power RS Racing 4T 10W-40 (fully synthetic) in some countries.



## SPECIFICATIONS

### Bonneville Speedmaster

#### Dimensions, Weights and Performance

A list of model specific dimensions, weights and performance figures is available from your authorized Triumph dealer, or on the Internet at [www.triumph.co.uk](http://www.triumph.co.uk).

#### Payload

Maximum Payload

#### Bonneville Speedmaster

463 lb (210 kg)

#### Engine

Type

Liquid cooled parallel twin, 270° firing angle

Displacement

73.2 cu in (1,200 cc)

Bore x Stroke

3.84 x 3.15 in (97.6 x 80 mm)

Compression Ratio

10:1

Cylinder Numbering

Left to Right

Cylinder Sequence

1-2

Firing Order

1-2

Starting System

Electric Starter

#### Lubrication

Lubrication System

Wet sump

Engine Oil Capacities:

Dry Fill

1 US gallon (3.8 liters)

Oil/Filter Change

0.9 US gallons (3.4 liters)

Oil Change only

0.85 US gallons (3.2 liters)

#### Cooling

Coolant Type

Triumph HD4X Hybrid OAT

Water/Coolant Ratio

50/50 (pre-mixed as supplied by Triumph)

Coolant Capacity

0.41 US gallons (1.558 liters)

Thermostat Opens

190°F (88°C) +/- 35°F (2°C)

#### Fuel System

Fuel Type

Electronic Fuel Injection

Fuel Pump

Submerged Electronic

Fuel Pressure (nominal)

51 lb/in<sup>2</sup> (3.5 bar)

# Specifications

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## **Tank Capacity**

Fuel Type

Tank Capacity

## **Bonneville Speedmaster**

AKI octane rating (R+M)/2 of 87 unleaded

3.17 US gallons (12 liters)

## **Ignition**

Ignition System

Spark Plug

Spark Plug Gap

## **Bonneville Speedmaster**

Digital Inductive

NGK LMAR8A-9

0.4 in +0.0/-0.004 in (0.9 mm +0.0/-0.1 mm)

## **Transmission**

Transmission Type

Clutch Type

Final Drive Chain

Primary Drive Ratio

Gear Ratio:

1st

2nd

3rd

4th

5th

6th

Final Drive Ratio

## **Bonneville Speedmaster**

6 speed, constant mesh

Wet, multiplate

EK 525 MVXZ2, 108 link

93/74 (1.26)

49/14 (3.5)

45/18 (2.5)

37/20 (1.85)

37/25 (1.48)

35/27 (1.3)

34/29 (1.17)

37/17 (2.18)



## **Warning**

Use the recommended tires **ONLY** in the combinations given. Do not mix tires from different manufacturers or mix different specification tires from the same manufacturers as this may result in loss of motorcycle control and an accident.

## **Approved Tires**

A list of approved tires specific to these models is available from your authorized Triumph dealer, or on the Internet at [www.triumph.co.uk](http://www.triumph.co.uk).

## **Tires**

Tire Sizes:

Front

Rear

## **Bonneville Speedmaster**

MT90B16

150/80 R16

## Tires

Tire Pressures (Cold):

Front

33 lbs/in<sup>2</sup> (2.3 bar)

Rear

36 lbs/in<sup>2</sup> (2.5 bar)

## Electrical Equipment

Battery Type

BS

Battery Rating

12 Volt, 8 Ah

Alternator

25 Amps at 1,000 rpm

46.5 Amps at 3,000 rpm

Headlight

12 Volt, 60/55 Watt, H4 Halogen

Position Light

12 Volt, 5 Watt

Tail/Brake Light

LED

License Plate Light

LED

Turn Signal Lights

LED

## Frame

Rake

25.3°

Trail

3.6 in (91.4 mm)

## Tightening Torques

Battery Terminals

39.8 lbf in (4.5 Nm)

Battery Strap

27 lbf in (3 Nm)

Chain Adjuster Lock Nuts

15 lbf ft (20 Nm)

Chain Guard - Front

80 lbf in (9 Nm)

Chain Guard - Rear

22 lbf ft (30 Nm)

Clutch Lever Nut

30.1 lbf in (3.5 Nm)

Oil Filter

89 lbf in (10 Nm)

Spark Plug

9 lbf ft (12 Nm)

Sump Plug

18 lbf ft (25 Nm)

Rear Wheel Spindle Nut

81 lbf ft (110 Nm)

Passenger Seat Fastener

80 lbf in (9 Nm)

## Bonneville Speedmaster

## Bonneville Speedmaster YTX9-

## Bonneville Speedmaster

## Bonneville Speedmaster

# Specifications

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## Fluids and Lubricants

Bearings and Pivots

Brake Fluid

Coolant

Drive Chain

Engine Oil

## Bonneville Speedmaster

Grease to NLGI 2 specification

DOT 4 brake fluid

Triumph HD4X Hybrid OAT coolant (pre-mixed)

Chain spray suitable for XW-ring chains

Semi or fully synthetic 10W/40 or 10W/50 motorcycle engine oil which meets specification API SH (or higher) and JASO MA, such as Castrol Power 1 Racing 4T 10W-40 (fully synthetic) engine oil, sold as Castrol Power RS Racing 4T 10W-40 (fully synthetic) in some countries.

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