



Accessory Fitting Instructions

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

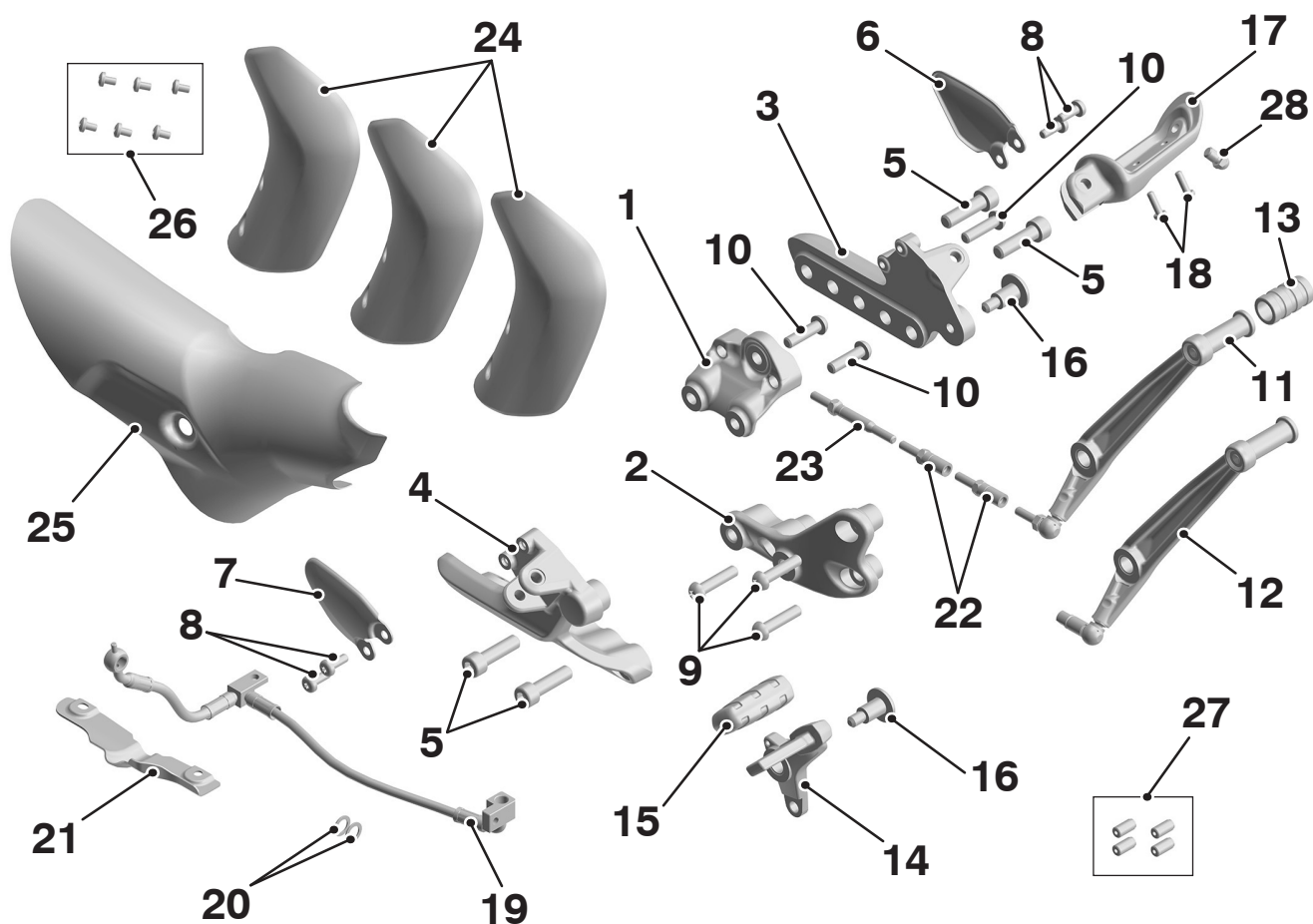
Completely read all of these instructions before commencing the installation of the accessory kit in order to become thoroughly familiar with the kit's features and the installation process.

These instructions should be considered a permanent part of your accessory kit, and should remain with it even if your accessory equipped motorcycle is subsequently sold.

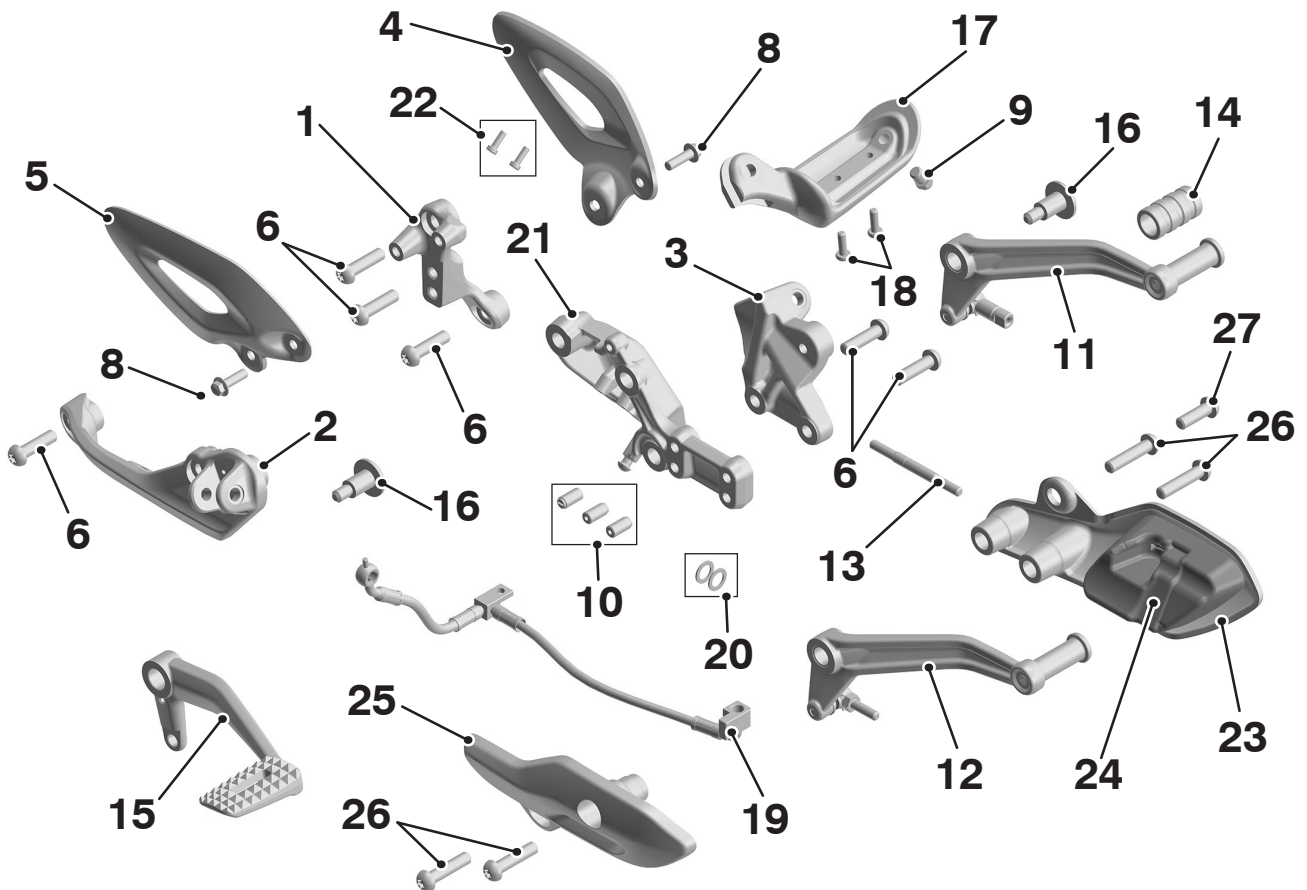
Mounted Foot Control Kits	
Kit Number	Models
Forward Mounted Foot Control Kit	
A9770217, A9770247	Rocket 3 R, Rocket 3 TFC
A9770249	Rocket 3 R Black, Rocket 3 R Storm
Rear Mounted Foot Control Kit	
A9770218, A9770248	Rocket 3 GT
A9770250	Rocket 3 GT Triple Black, Rocket 3 GT Storm

Parts supplied

A9770217, A9770247, A9770249



1. Control plate mounting, left hand	1 off	15. Rubber, brake pedal	1 off
2. Control plate mounting, right hand	1 off	16. Pivot bolt	2 off
3. Control plate, left hand	1 off	17. Footrest, left hand	1 off
4. Control plate, right hand	1 off	18. Fixing, M5 x 16 mm	2 off
5. Fixing, M10 x 35 mm	4 off	19. Brake line, rear master cylinder	1 off
6. Heel guard, left hand	1 off	20. Sealing washer	2 off
7. Heel guard, right hand	1 off	21. Cover bracket, brake line	1 off
8. Fixing, M6 x 16 mm	4 off	22. Extension piece	2 off
9. Fixing, M8 x 35 mm	3 off	23. Gear change rod	1 off
10. Fixing, M8 x 30 mm	3 off	24. Heat shield, header pipe	3 off
11. Gear change pedal (gear change rod)	1 off	25. Heat shield, catalytic converter	1 off
12. Gear change pedal (TSA)	1 off	26. Fixing, M5 x 8 mm (where included)	6 off
13. Rubber, gear change pedal	1 off	27. Plug, M8 (where included)	4 off
14. Brake pedal	1 off	28. Bank angle indicator (where included)	1 off



1. Control plate mounting, right hand	1 off	15. Brake pedal	1 off
2. Control plate, right hand	1 off	16. Pivot bolt	2 off
3. Control plate, left hand	1 off	17. Footrest, left hand	1 off
4. Heel guard, left hand	1 off	18. Fixing, M5 x 16 mm	2 off
5. Heel guard, right hand	1 off	19. Brake line, rear master cylinder	1 off
6. Fixing, M8 x 30 mm	6 off	20. Sealing washer	2 off
7. Circlip (where included - not shown)	1 off	21. Sidestand bracket	1 off
8. Fixing, M6 x 20 mm	2 off	22. Fixing, M4 x 12 mm	2 off
9. Bank angle indicator (where included)	1 off	23. Crankcase protector, left hand	1 off
10. Plug, M8	3 off	24. Rubber protector	1 off
11. Gear change pedal (gear change rod)	1 off	25. Crankcase protector, right hand	1 off
12. Gear change pedal (TSA)	1 off	26. Fixing, M8 x 35 mm	4 off
13. Gear change rod	1 off	27. Fixing, M8 x 25 mm	1 off
14. Rubber, gear change pedal	1 off		

⚠ WARNING

Fit only genuine Triumph accessories to those models approved by Triumph as listed in the associated Triumph fitting instructions.

The accessory kits covered in this instruction are designed for use on specific models of Triumph motorcycle. The accessory kits and the models applicable are listed at the start of the instruction. They should never be fitted to any other Triumph model or to any other manufacturer's motorcycle.

Fitting an accessory kit to a Triumph model not listed, or to any other manufacturer's motorcycle, will affect the performance, stability and handling of the motorcycle.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

Always have Triumph approved parts, accessories and conversions fitted by a competent person with the specialist knowledge and technical understanding of motorcycles, such as an authorised Triumph dealer.

The fitment of parts, accessories and conversions by a person without the specialist knowledge and technical understanding of motorcycles may affect the handling, stability or other aspects of the motorcycle's operation.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

A torque wrench of known accurate calibration must be used when fitting this accessory kit.

Failure to tighten any of the fasteners to the correct torque specification may affect motorcycle performance, handling and stability.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

Make sure the motorcycle is stabilised and adequately supported.

Do not support the motorcycle on any ancillary component, the exhaust system or any other non structural parts of the motorcycle frame.

A correctly supported motorcycle will help prevent it from falling.

An unstable motorcycle may fall resulting in motorcycle damage, serious injury or death.

NOTICE

Triumph offers a broad range of approved genuine accessories for your motorcycle.

We cannot therefore cover all possible equipment variations in these instructions. For removal and installation of Triumph Genuine Accessories, always refer to the instructions supplied with the respective accessory kit.

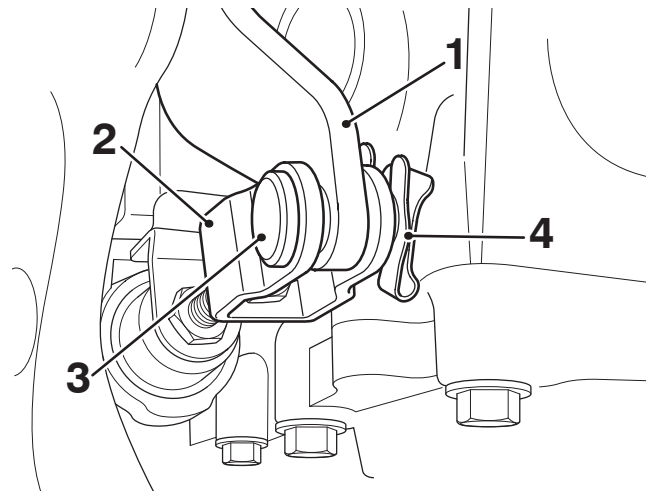
To obtain additional copies of any Triumph accessory instructions, visit www.triumphinstructions.com or contact your authorised Triumph dealer.

NOTICE

To prevent paint damage, do not spill brake fluid onto any area of the bodywork.

Spilled brake fluid will damage paintwork.

1. Drain the brake fluid from the rear brake master cylinder as described in the Service Manual.
2. Remove the rear brake master cylinder brake line as described in the Service Manual. Retain the union bolt for reuse. Retain the brake line for reuse if the motorcycle is to be returned to its original condition. Discard the sealing washers.
3. Remove the retaining clip and clevis pin securing the rear brake master cylinder clevis to the master cylinder brake lever. Retain the clevis pin and retaining clip for reuse.



1. Brake pedal
2. Master cylinder clevis
3. Clevis pin
4. Retaining clip

4. Remove the heel guards from the left hand and right hand side. Retain the heel guards and fixings for reuse if the motorcycle is to be returned to its original condition.

Models with Triumph Shift Assist (TSA) Fitted Only

5. Remove the seat, as described in the Service Manual.
6. Disconnect the battery as described in the Service Manual.
7. Remove the starter motor cover. Retain the starter motor cover and fixings for reuse.
8. Disconnect the TSA sensor cable connector from the main wiring harness connector, which is positioned behind the top of the starter motor, and release the cable.

NOTICE

The TSA assembly has a right hand thread at one end and a left hand thread at the other end.

9. Turn the TSA assembly to remove it from the gear change pedal ball joint (left hand thread) and gear clamp ball joint (right hand thread). Retain the TSA assembly for reuse.
10. Remove the gear change pedal assembly from the control plate as described in the Service Manual.
11. Remove the left hand threaded lock nut from the gear change pedal ball joint or extension piece. Retain the lock nut for reuse. Retain the gear change pedal assembly for reuse if the motorcycle is to be returned to its original condition. Discard the pivot bolt.

Models with Original Gear Change Rod Fitted Only

NOTICE

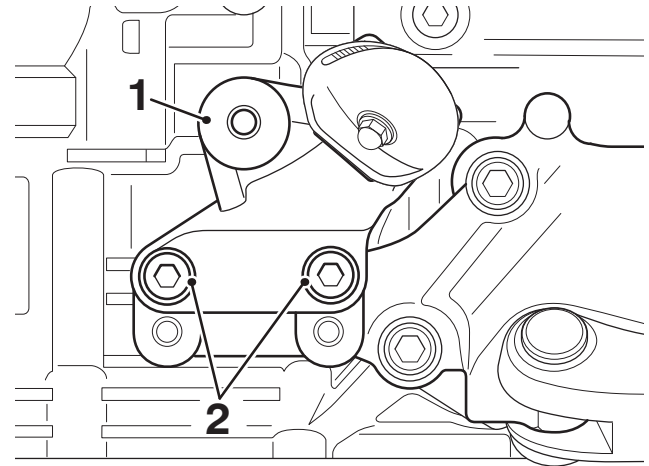
The gear change rod has a right hand thread at one end and a left hand thread at the other end.

12. Remove the gear change rod. Remove the lock nuts from the gear change rod. Retain the lock nuts for reuse. Retain the gear change rod for reuse if the motorcycle is to be returned to its original condition.
13. Remove the gear change pedal assembly from the control plate as described in the Service Manual. Retain the gear change pedal assembly for reuse if the motorcycle is to be returned to its original condition. Discard the pivot bolt.

Fitment of Forward Mounted Foot Control Kit to Rocket 3 R Models Only

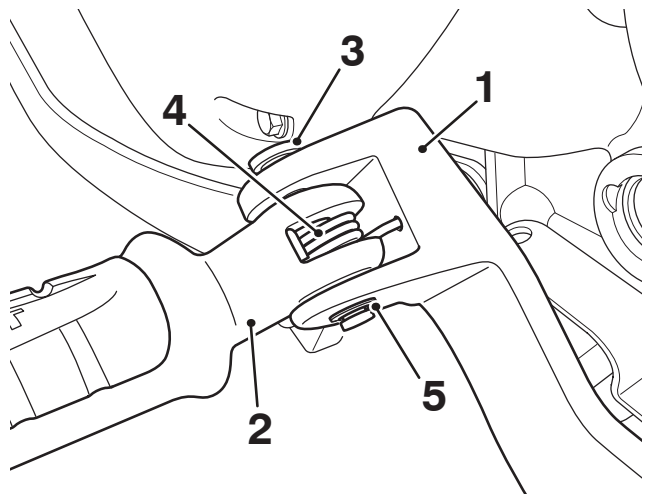
Left Hand Side

1. Remove the control plate. Retain the control plate and fixings for reuse if the motorcycle is to be returned to its original condition.



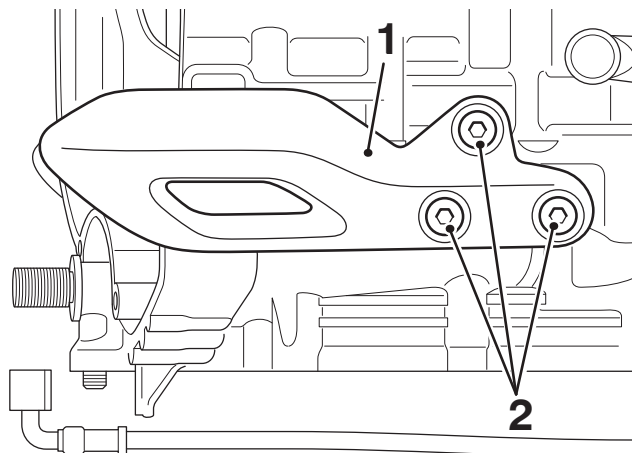
1. Control plate
2. Fixings

2. Remove the footrest. Retain the footrest, return spring, pivot pin and circlip for reuse.



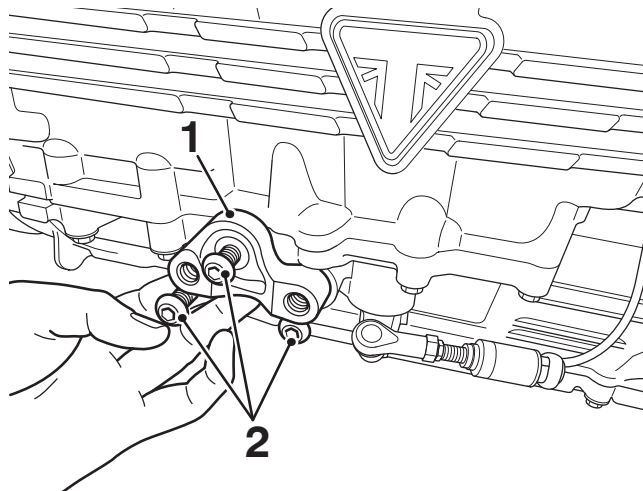
1. Control plate
2. Footrest
3. Pivot pin
4. Return spring
5. Circlip

- Remove the crankcase protector from the engine crankcase. Retain the crankcase protector and fixings for reuse if the motorcycle is to be returned to its original condition.



- Crankcase protector
- Fixings

- Position the left hand control plate mounting from the kit on the engine crankcase and align it with the three crankcase protector fixing positions. Fit the M8 x 30 mm fixings from the kit and tighten to **25 Nm**.

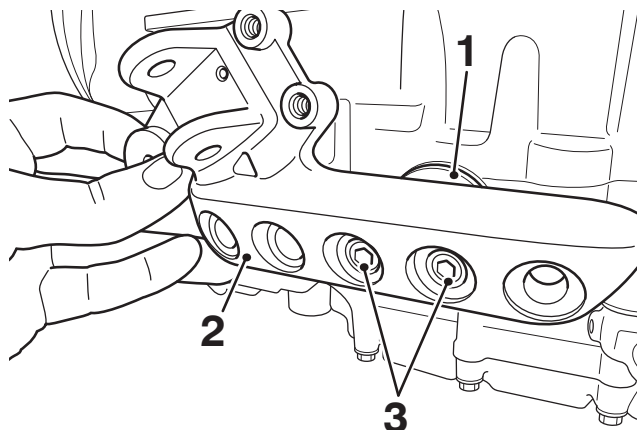


- Control plate mounting
- Fixings, M8 x 30 mm

NOTICE

The control plate has a series of mounting holes allowing the control plate to be positioned to a rider's preference, either forward mounted, centre mounted or rear mounted.

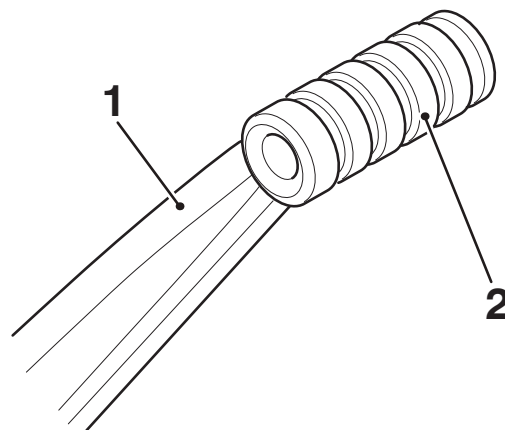
- Fit the left hand control plate on to the control plate mounting in the orientation shown. Align the preferred fixing positions with the control plate mounting and fit two M10 x 35 mm fixings. Tighten the fixings to **36 Nm**.



- Control plate mounting
- Control plate (centre mounted shown)
- Fixings, M10 x 35 mm

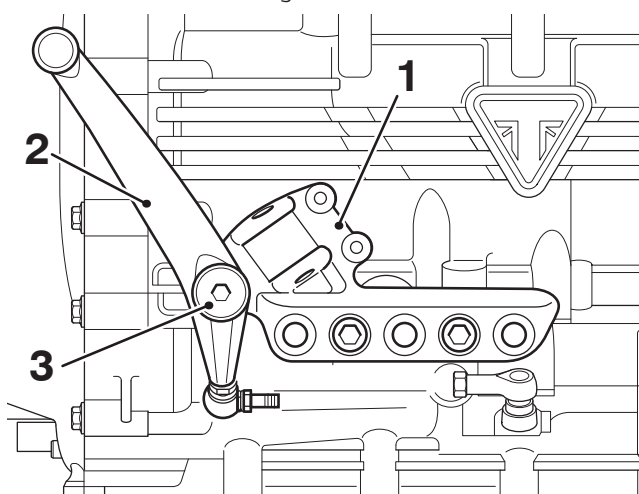
Motorcycles with TSA fitted only

- Collect the TSA gear change pedal assembly from the kit.
- Fit the gear change pedal rubber from the kit on to the gear change pedal.



- Gear change pedal pin
- Gear change pedal rubber

- Fit the gear change pedal to the control plate in the orientation shown. Fit a new pivot bolt from the kit and tighten to **22 Nm**.



- Control plate
- Gear change pedal
- Pivot bolt

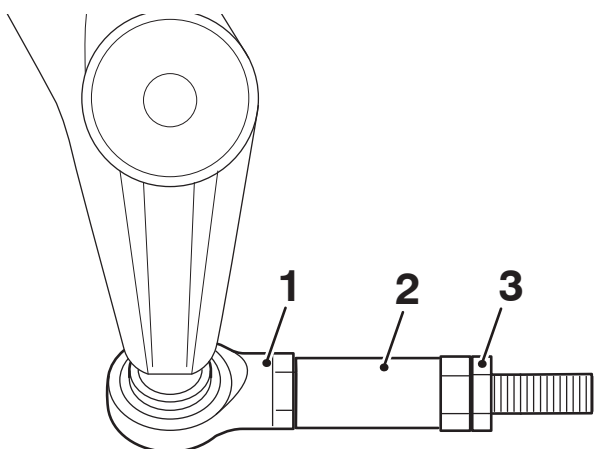
NOTICE

If the control plate has been fitted to the forward mounted position, both extension pieces from the kit must be fitted.

If the control plate has been fitted to the centre mounted position one of the extension pieces from the kit must be fitted.

If the control plate is fitted to the rear mounted position it is not necessary to use an extension piece from the kit.

- If required, collect the extension piece/pieces from the kit and fit the original left hand threaded lock nut fully on to the extension piece.
- If required, fit the extension piece/pieces fully on to the gear change pedal ball joint, as shown.



- Gear change pedal ball joint (left hand thread)
- Extension piece (centre mounted control plate shown)
- Lock nut, left hand thread

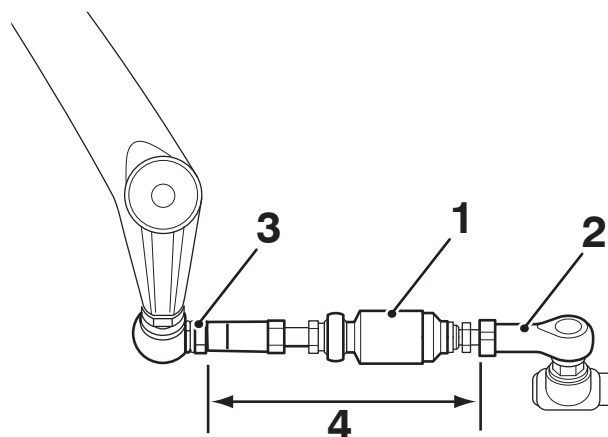
NOTICE

The gear clamp ball joint has a right hand thread. The gear change pedal ball joint has a left hand thread.

Make sure the TSA sensor cable is positioned at the top of the assembly when the adjustment below is completed.

- Fit the TSA sensor to the gear change pedal, or extension rod/s and gear clamp ball joints in the orientation shown below. By turning the TSA sensor adjust the length of the TSA assembly until the correct measurement between the ball joints is achieved, as detailed below:

- Forward Mounted Control Plate = **121.9 mm**
- Centre Mounted Control Plate = **96.9 mm**
- Rear Mounted Control Plate = **71.9 mm**



- TSA sensor
- Gear clamp ball joint
- Gear change pedal ball joint
- Measurement between the ball joints

- Tighten the extension rod lock nut (left hand thread) against the TSA body to **6 Nm**. Tighten the lock nut (right hand thread) against the gear clamp ball joint to **6 Nm**.

NOTICE

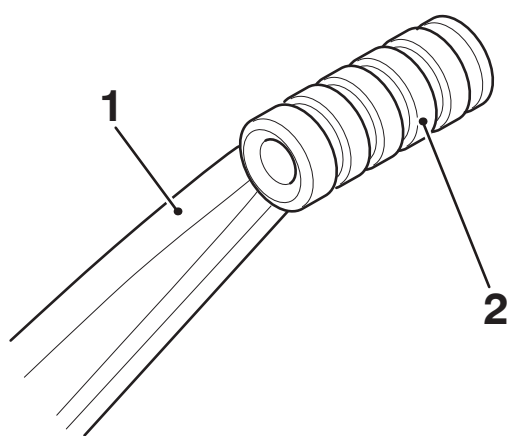
A wiring harness which becomes trapped or kinked during installation, or motorcycle operation, may result in wiring harness damage and electrical malfunctions.

- Route the TSA sensor cable through the motorcycle frame to the area behind the bottom of the starter motor.
- Remove the blanking plug from the main harness connector and plug in the TSA sensor cable connector.

15. Make sure there is no excessive TSA sensor cable extending to the outside of the motorcycle, any excess cable should be tucked into the area behind the starter motor.
16. Refit the starter motor cover with the original fixings. Tighten the fixings to **8 Nm**.
17. Reconnect the battery, as described in the Service Manual.
18. Refit the seat, as described in the Service Manual.

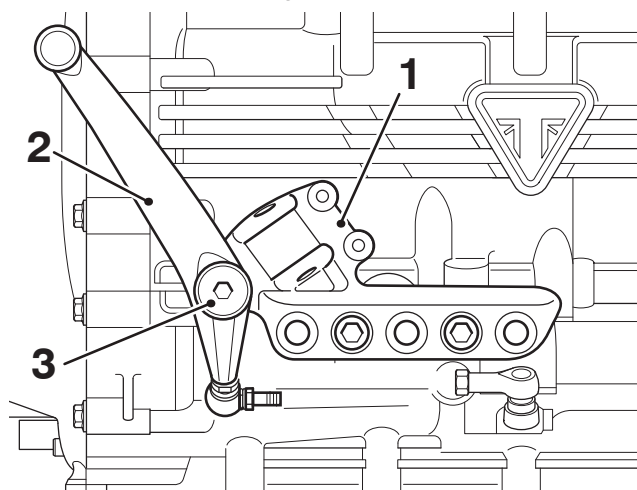
Motorcycles without TSA fitted only

19. Collect the gear change rod and gear change pedal assembly from the kit.
20. Fit the gear change pedal rubber from the kit on to the gear change pedal.



1. Gear change pedal pin
2. Gear change pedal rubber

21. Fit the gear change pedal to the control plate in the orientation shown. Fit a new pivot bolt from the kit and tighten to **22 Nm**.



1. Control plate
2. Gear change pedal
3. Pivot bolt

NOTICE

The gear change rod has a right hand thread at one end and a left hand thread at the other end. The left hand thread should be connected to the gear change pedal ball joint.

One of the original gear change rod lock nuts has a right hand thread, the other has a left hand thread.

NOTICE

If the control plate has been fitted to the forward mounted position, both extension pieces from the kit must be fitted.

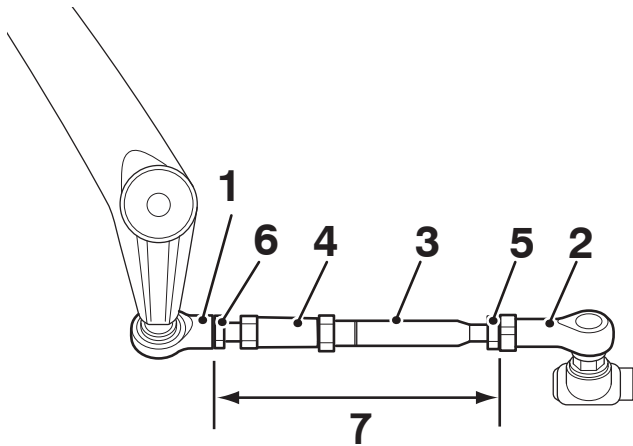
If the control plate has been fitted to the centre mounted position one of the extension pieces from the kit must be fitted.

If the control plate is fitted to the rear mounted position it is not necessary to use an extension piece from the kit.

22. Where applicable, fit one or both of the extension pieces from the kit onto the left hand threaded end of the gear change rod. Tighten the extension piece/s to **6 Nm**.
23. Fit the original lock nuts to the gear change rod.

24. Fit the gear change rod to the gear change pedal ball joint and gear change clamp ball joint. Turn the gear change rod to adjust the length of the gear change rod until the correct measurement between the ball joints is achieved, as detailed below. Tighten the gear change rod lock nuts to **6 Nm**.

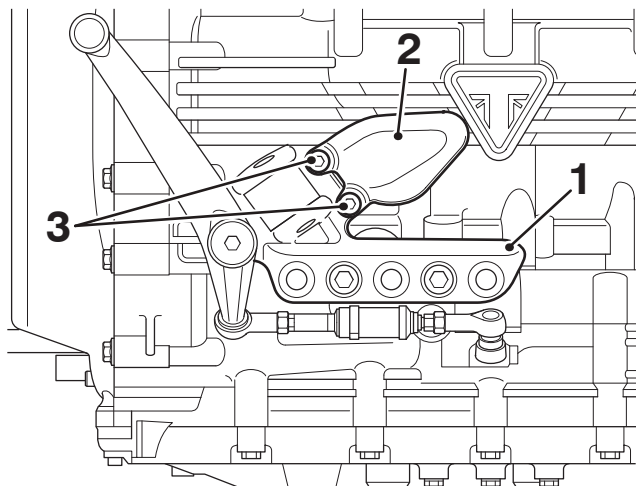
- ▼ Forward Mounted Control Plate = **102.9 mm**
- ▼ Centre Mounted Control Plate = **77.9 mm**
- ▼ Rear Mounted Control Plate = **52.9 mm**



1. Ball joint, gear change pedal
2. Ball joint, gear change clamp
3. Gear change rod
4. Extension piece (centre mounted control plate shown)
5. Lock nut, right hand thread
6. Lock nut, right hand thread
7. Measurement between the ball joints

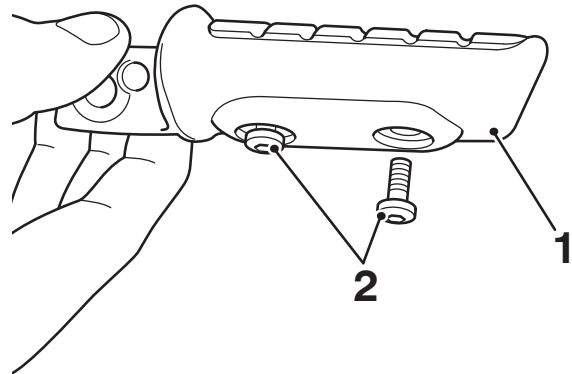
Models with or without TSA fitted

25. Fit the left hand heel guard from the kit to the control plate with two M6 x 16 mm fixings. Tighten the fixings to **7 Nm**.



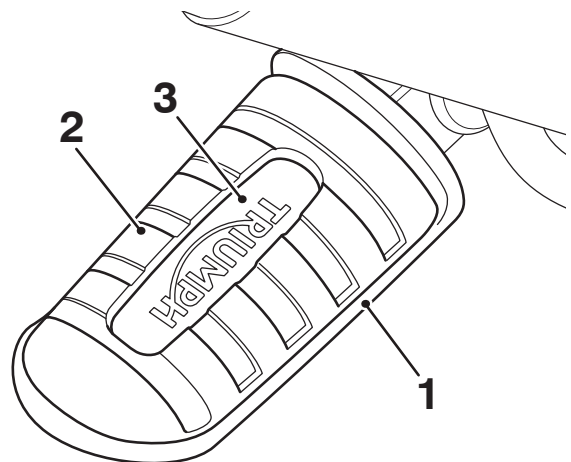
1. Control plate
2. Heel guard, left hand
3. Fixings, M6 x 16 mm

26. Remove the two fixings securing the footrest rubber to the original left hand footrest. Remove the footrest rubber and insert from the footrest. Retain the footrest rubber and insert for reuse. Retain the left hand footrest for reuse if the motorcycle is to be returned to its original condition.



1. Footrest
2. Fixings

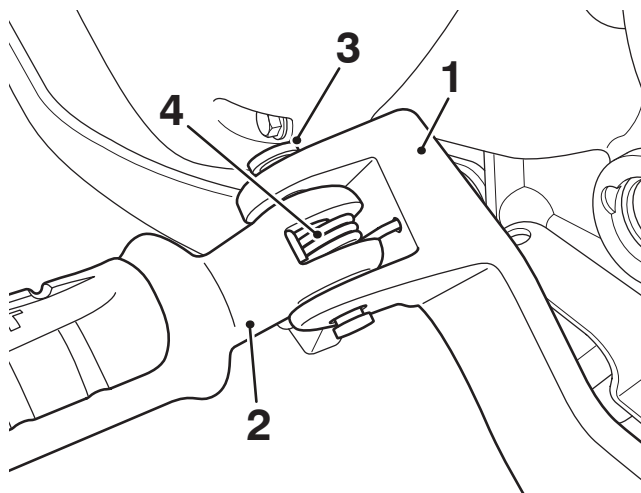
27. Fit the footrest rubber and insert onto the left hand footrest from the kit in the orientation shown and secure with the two M5 x 16 mm fixings from the kit. Tighten the fixings to **6 Nm**.



1. Footrest
2. Footrest rubber
3. Footrest insert

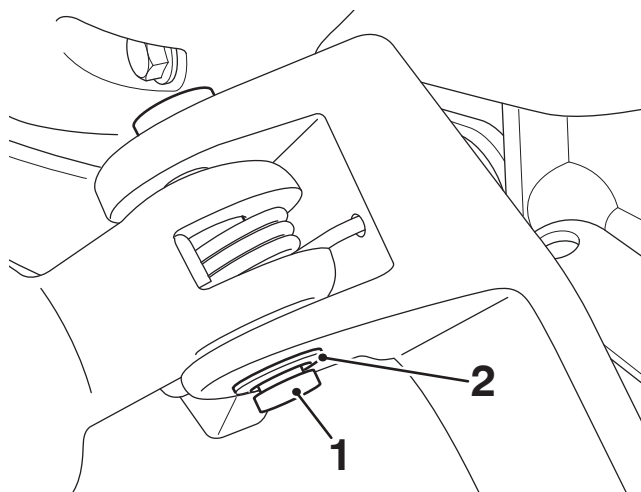
28. Fit the bank angle indicator from the kit, as described in the Service Manual.

29. Fit the footrest in to the footrest mount on the control plate, with the original footrest return spring positioned as shown. Fit the original pivot pin.



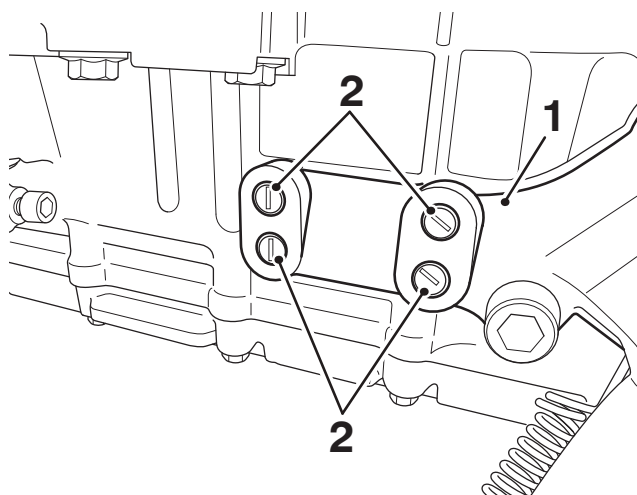
- 1. Footrest mount, control plate
- 2. Footrest
- 3. Pivot pin
- 4. Footrest return spring

30. Fit the original circlip to retain the pivot pin.



- 1. Pivot pin
- 2. Circlip

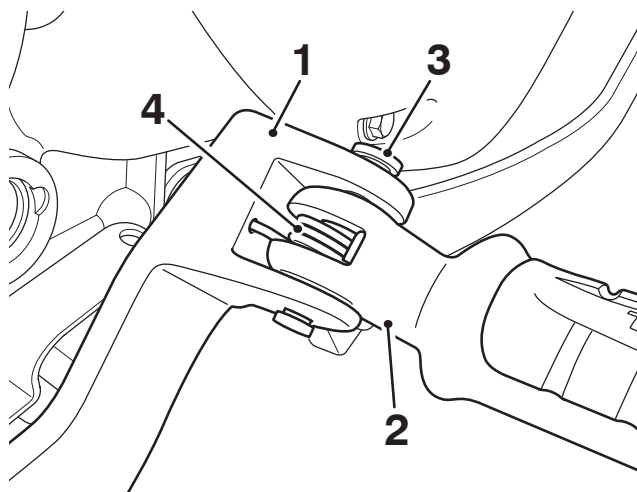
31. Fit the M8 blanking plugs from the kit into the exposed fixing positions on the side stand bracket, as shown.



- 1. Side stand bracket
- 2. Blanking plugs, M8

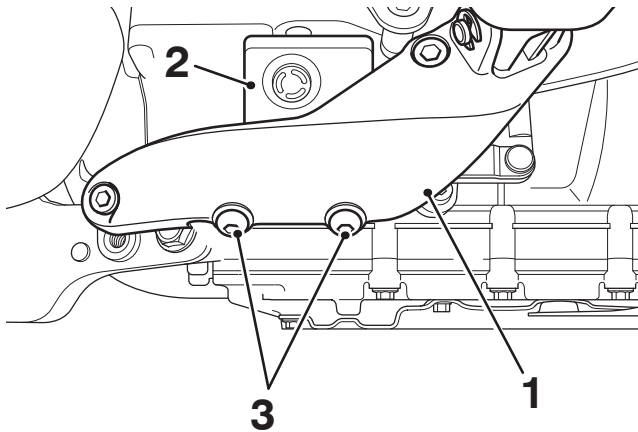
Right Hand Side

32. Remove the footrest. Retain the footrest, return spring, pivot pin and circlip for reuse.



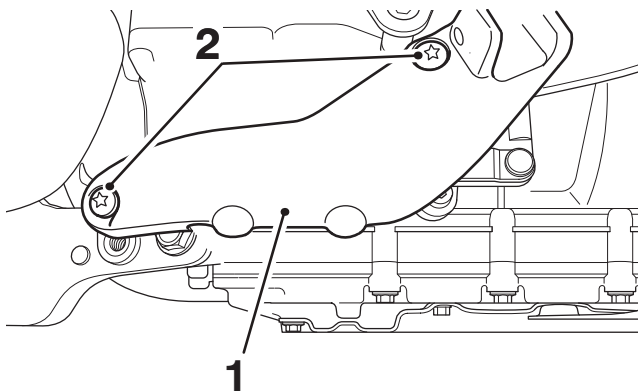
- 1. Control plate
- 2. Footrest
- 3. Pivot pin
- 4. Return spring
- 5. Circlip

33. Remove the rear brake master cylinder fixings and remove the rear brake master cylinder from the control plate. Retain the master cylinder and fixings for reuse.



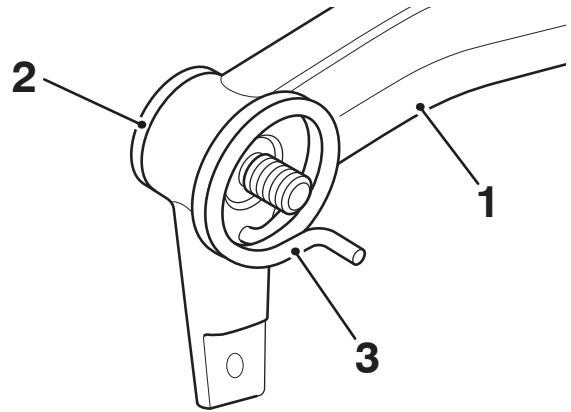
- 1. Control plate
- 2. Rear brake master cylinder
- 3. Fixings, M10 x 35 mm

34. Remove the control plate. Retain the control plate and fixings for reuse if the motorcycle is to be returned to its original condition.



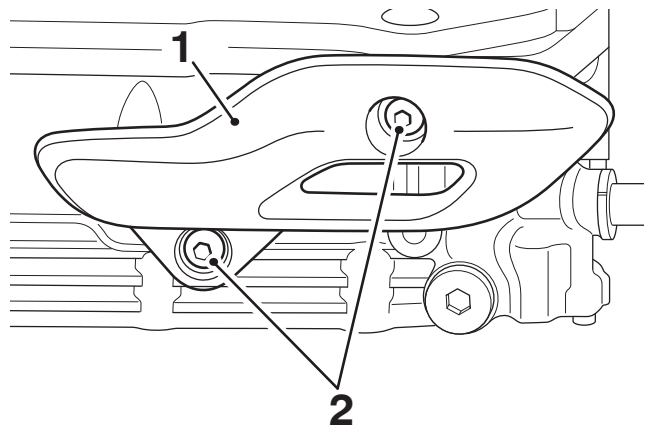
- 1. Control plate
- 2. Fixings

35. Remove the brake pedal pivot bolt and remove the brake pedal from the control plate. Retain the return spring for reuse. Retain the brake pedal for reuse if the motorcycle is to be returned to its original condition. Discard the pivot bolt. Note the control plate is not shown for clarity.



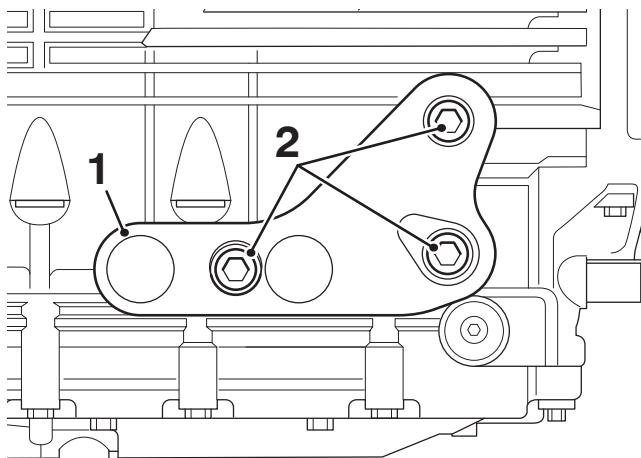
- 1. Brake pedal
- 2. Pivot bolt
- 3. Return spring

36. Remove the crankcase protector from the engine crankcase. Retain the crankcase protector and fixings for reuse if the motorcycle is to be returned to its original condition.



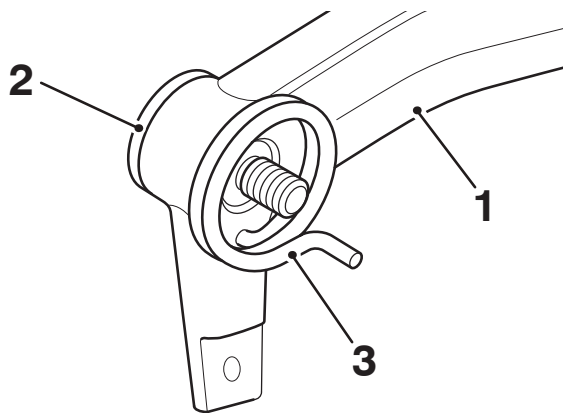
- 1. Crankcase protector
- 2. Fixings

37. Position the right hand control plate mounting from the kit on the engine crankcase and align it with the three fixing positions. Fit the M8 x 35 mm fixings from the kit and tighten to **25 Nm**.



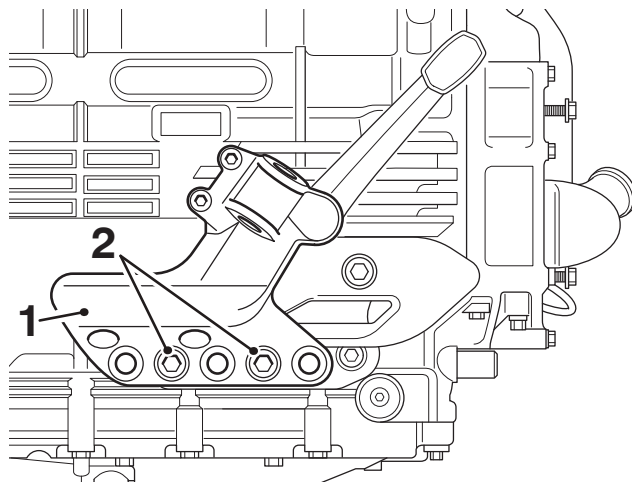
- 1. Control plate mounting
- 2. Fixings, M8 x 35 mm

38. Fit the brake pedal from the kit to the control plate with the original return spring and pivot bolt from the kit. Make sure the return spring is in the correct orientation and locates correctly in the brake pedal and control plate. Tighten the pivot bolt to **22 Nm** (the control plate is not shown for clarity).



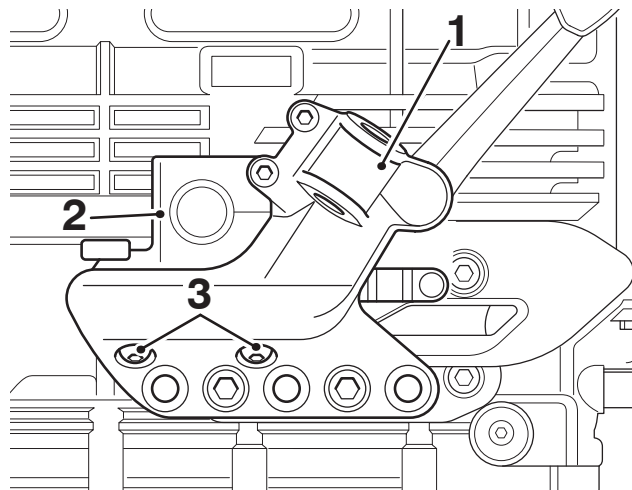
- 1. Brake pedal
- 2. Pivot bolt
- 3. Return spring

39. Fit the right hand control plate on to the control plate mounting in the orientation shown. Align the preferred fixing positions with the control plate mounting and fit two M10 x 35 mm fixings. Tighten the fixings to **36 Nm**.



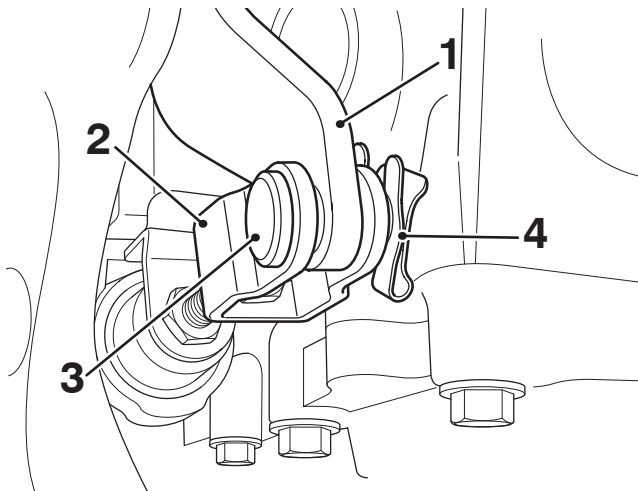
- 1. Control plate
- 2. Fixings, M10 x 35 mm

40. Fit the rear brake master cylinder to the control plate with the original fixings. Tighten the fixings to **18 Nm**.



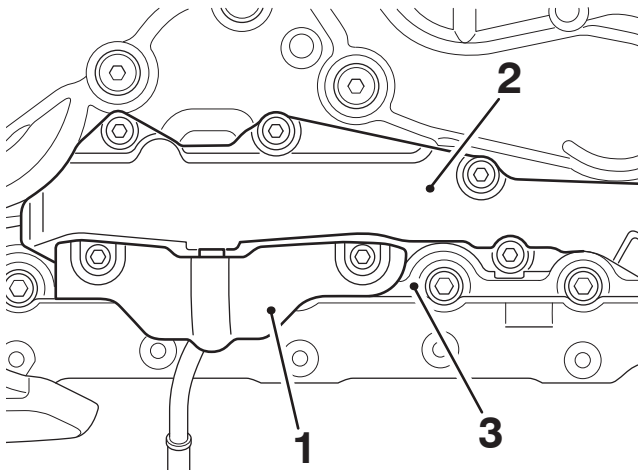
- 1. Control plate
- 2. Fixings, M10 x 35 mm

41. Align the brake pedal with the master cylinder clevis and fit the original clevis pin and retaining clip.



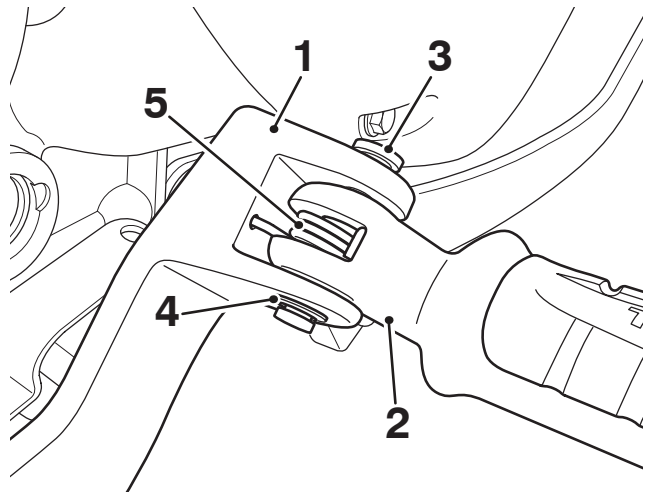
- 1. Brake pedal
- 2. Master cylinder clevis
- 3. Clevis pin
- 4. Retaining clip

42. Fit the brake pedal rubber from the kit to the brake pedal.
43. Fit the rear brake master cylinder brake line from the kit with the original union bolt and sealing washers from the kit, as described in the Service Manual.
44. Fit the brake line cover bracket from the kit and the original brake line rear bracket to the underside of the crankcase with the original fixings, as shown. Tighten the fixings to **5 Nm**.



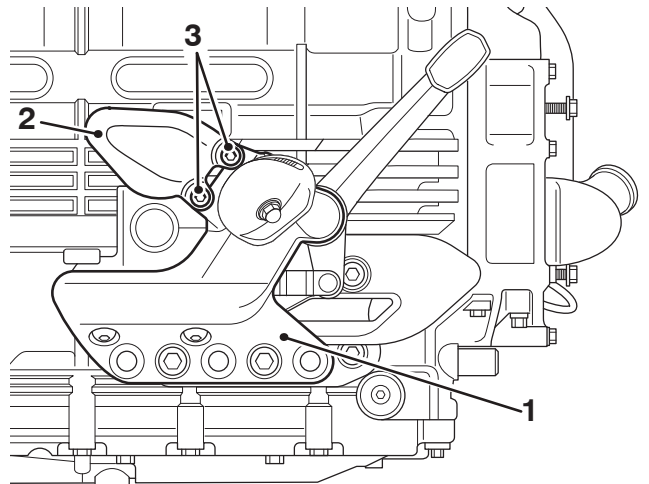
- 1. Brake line cover bracket
- 2. Brake line rear bracket
- 3. Crankcase

45. Fit the original right hand footrest in to the footrest mount on the control plate, with the original footrest return spring positioned as shown. Fit the original pivot pin. Fit the original circlip to retain the pivot pin.



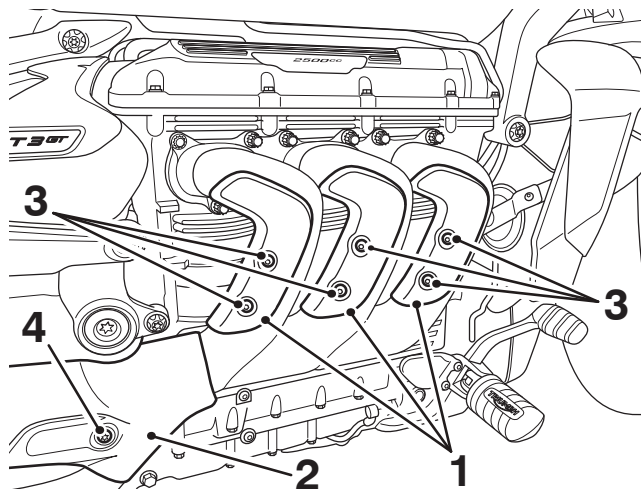
- 1. Footrest mount, control plate
- 2. Footrest
- 3. Pivot pin
- 4. Circlip
- 5. Footrest return spring

46. Fit the right hand heel guard from the kit to the control plate with two M6 x 16 mm fixings. Tighten the fixings to **7 Nm**.



- 1. Control plate
- 2. Heel guard, right hand
- 3. Fixings, M6 x 16 mm

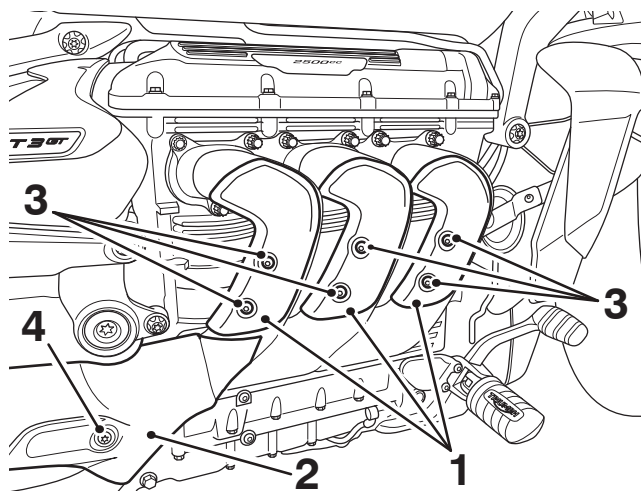
47. Remove the exhaust downpipe heat shields and catalytic converter heat shield. Retain the catalytic converter heat shield fixing for reuse, discard the downpipe heat shield fixings.



1. Heat shields, exhaust header pipes
2. Heat shield, catalytic converter
3. Downpipe heat shield fixings
4. Catalytic converter fixing

48. Collect the exhaust downpipe larger heat shields, catalytic converter longer heat shield and six M5 x 8 mm fixings from the kit.

49. Fit the exhaust downpipe larger heat shields with the M5 x 8 mm fixings and the catalytic converter longer heat shield using the original fixing as shown. Tighten the all fixings to **5 Nm**.



1. Heat shields, exhaust header pipes
2. Heat shield, catalytic converter
3. Fixings, M5 x 8 mm
4. Original fixing

⚠ 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 fittings, seals and joints and also check the brake hoses for splits, deterioration and damage.

Always rectify any faults before riding.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

Ensure absolute cleanliness when adding brake fluid to the brake fluid reservoir.

Do not allow moisture or debris to enter the cylinder as this will adversely affect the brake fluid properties.

Do not use brake fluid from a container which has been opened for any period of time. Always use brake fluid from a sealed container.

Always check for fluid leakage around hydraulic fittings and for damage to hoses.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

It is dangerous to operate the motorcycle with defective brakes.

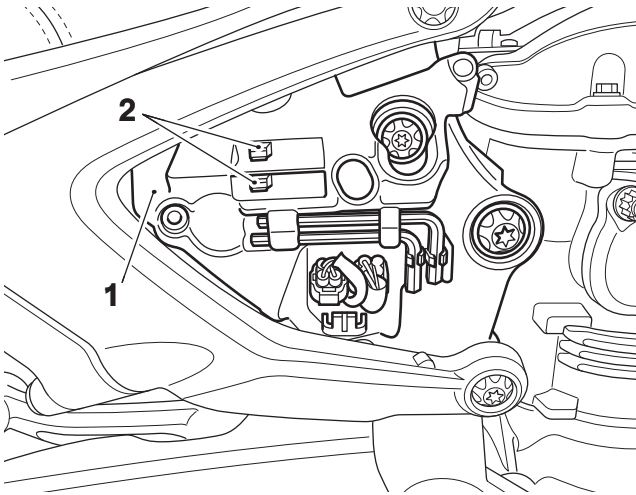
The fault must be checked and rectified by a competent person with the specialist knowledge and technical understanding of motorcycles, such as an authorised Triumph dealer.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death..

⚠ WARNING

Check for fluid leakage around brake fittings, seals and joints. Leaks around fittings and joints may allow air to enter the braking system. Air entering the braking system may cause a reduction in braking efficiency leading to loss of motorcycle control and an accident.

50. Fill the rear brake fluid reservoir with new DOT 4 brake fluid and bleed the rear brakes, as described in the Service Manual.
51. To inspect the brake fluid level, check the level of fluid visible in the window on the brake fluid reservoir.
52. Remove the right hand side panel, as described in the Service Manual.
53. With the right hand side panel removed, the original gear change rod and unused extension piece can be clipped to the infill panel for storage.



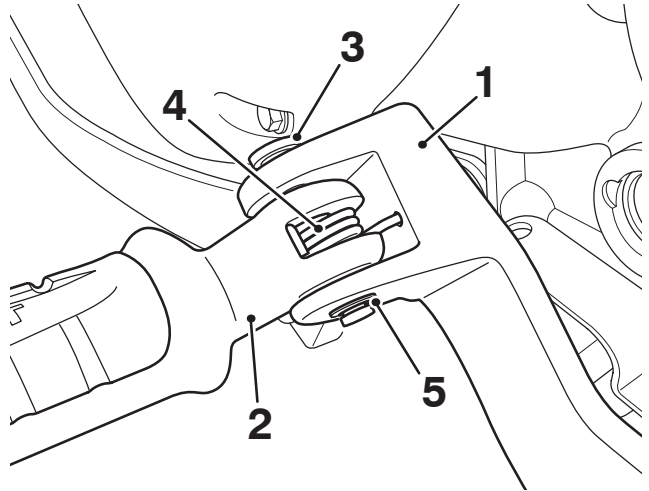
1. Infill panel, right hand side
2. Storage clips

54. Refit the right hand side panel as described in the Service Manual.

Fitment of Rear Mounted Foot Control Kit to Rocket 3 GT Models Only

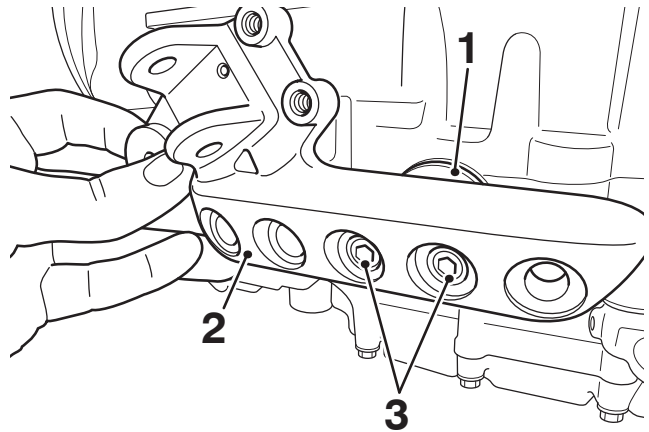
Left Hand Side

1. Remove the footrest. Retain the footrest, return spring, pivot pin and circlip for reuse.



1. Control plate
2. Footrest
3. Pivot pin
4. Return spring
5. Circlip

2. Remove the forward control plate and gear change pedal assembly. Retain the control plate assembly and fixings for reuse if the motorcycle is to be returned to its original condition (the gear change pedal is not shown for clarity).



1. Control plate mounting
2. Control plate
3. Fixings

3. Remove the forward control plate mounting. Retain the control plate mounting and fixings for reuse if the motorcycle is to be returned to its original condition.
4. Remove the side stand return spring and side stand from the side stand bracket as described in the Service Manual. Retain the side stand, return spring and fittings for reuse.

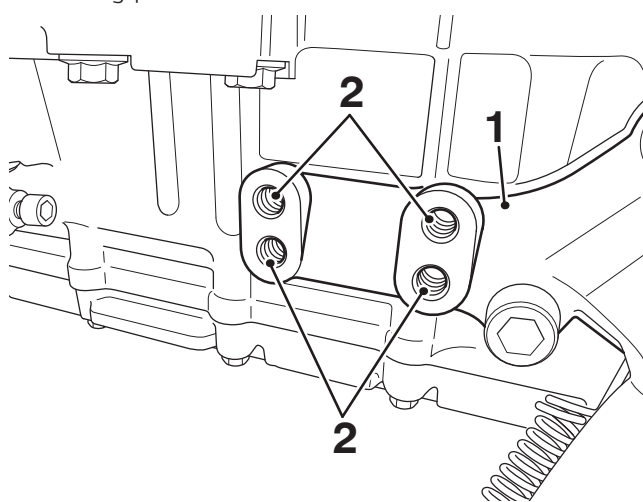
5. Remove the side stand bracket as described in the Service Manual. Retain the side stand bracket for reuse if the motorcycle is to be returned to its original condition. Retain the fixings for reuse.
6. Remove the side stand switch from the side stand bracket, as described in the Service Manual. Discard the fixings.
7. Collect the side stand bracket and M4 x 12 mm fixings from the kit. Fit the side stand switch to the side stand bracket with the M4 x 12 mm fixings, as described in the Service Manual.
8. Fit the side stand bracket from the kit with the original fixings, as described in the Service Manual.
9. Using the new circlip from the kit, fit the side stand with the original fittings and return spring to the side stand bracket as described in the Service Manual.

NOTICE

The rear control plate can be fitted to either the upper or lower two fixing positions on the side stand bracket allowing the control plate to be positioned to a rider's preference.

Fit the blanking plugs from the kit to the unused fixing positions.

10. Locate the rear control plate mounting location on the side stand bracket identified by the four fixing positions.

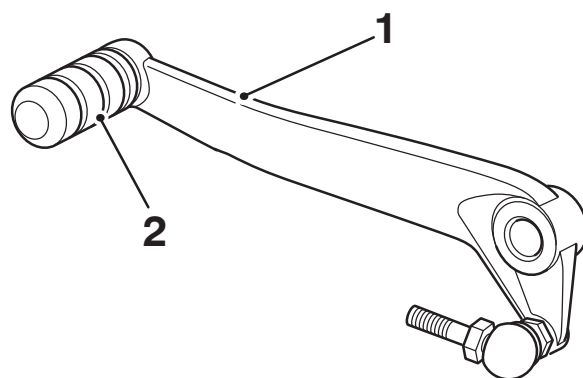


1. Side stand bracket
2. Fixing positions

11. Position the left hand rear control plate from the kit on the side stand bracket and align it with the preferred fixing positions. Fit two M8 x 30 mm fixings from the kit and tighten to **25 Nm**.

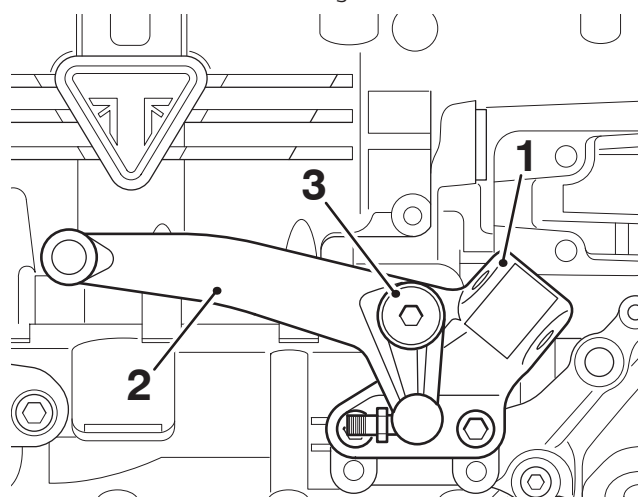
Motorcycles with TSA fitted Only

12. Collect the TSA gear change pedal assembly from the kit.
13. Fit the gear change pedal rubber on to the gear change pedal.



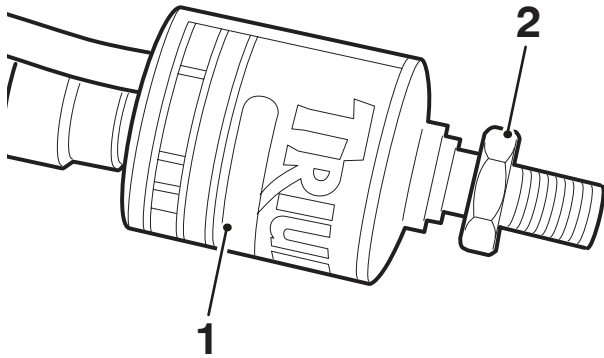
1. Gear change pedal
2. Gear change pedal rubber

14. Fit the gear change pedal to the rear control plate in the orientation shown. Fit a new pivot bolt from the kit and tighten to **22 Nm**.



1. Control plate
2. Gear change pedal
3. Pivot bolt

- Screw the right hand threaded lock nut fully onto the TSA sensor, as shown.



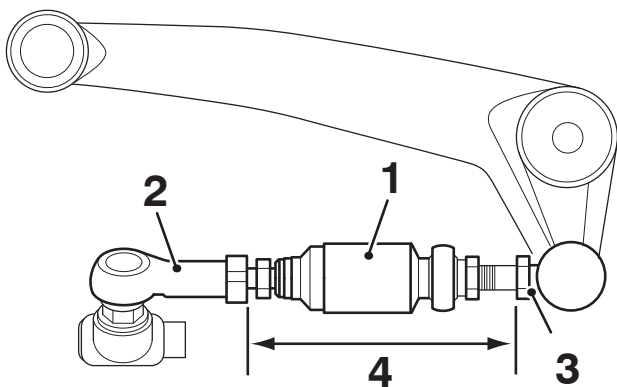
- TSA sensor
- Lock nut, right hand thread

NOTICE

The gear clamp ball joint has a right hand thread. The gear change pedal ball joint has a left hand thread.

Make sure the TSA sensor cable is positioned at the top of the assembly when the adjustment below is completed.

- Fit the original lock nut (left hand thread) to the gear change pedal ball joint.
- Fit the TSA sensor to the gear change pedal and gear clamp ball joints in the orientation shown. By turning the TSA sensor adjust the length of the TSA assembly until a measurement of **67.1 mm** between the ball joints is achieved, as shown.



- TSA sensor
- Gear clamp ball joint (right hand thread)
- Gear change pedal ball joint (left hand thread)
- Measurement between the ball joints

- Tighten the lock nut on the gear change pedal ball joint (left hand thread) against the TSA sensor body to **6 Nm**. Tighten the lock nut (right hand thread) against the gear clamp ball joint to **6 Nm**.

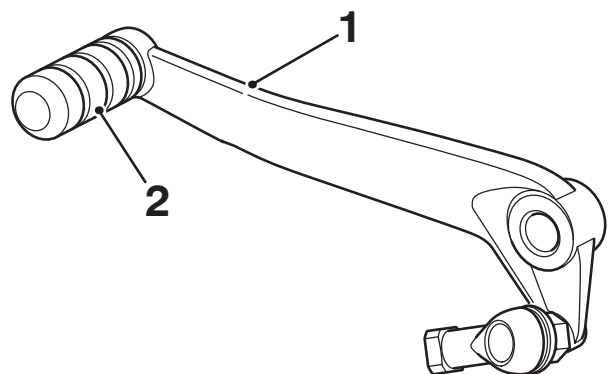
NOTICE

A wiring harness which becomes trapped or kinked during installation, or motorcycle operation, may result in wiring harness damage and electrical malfunctions.

- Route the TSA sensor cable through the motorcycle frame to the area behind the bottom of the starter motor.
- Remove the blanking plug from the main harness connector and plug in the TSA sensor cable connector.
- Make sure there is no excessive TSA sensor cable extending to the outside of the motorcycle, any excess cable should be tucked into the area behind the starter motor.
- Refit the starter motor cover together with the left hand heel guard from the kit and secure with the original fixings. Tighten the fixings to **9 Nm**.
- Reconnect the battery as described in the Service Manual.
- Refit the seat as described in the Service Manual.

Motorcycles without TSA fitted Only

- Collect the gear change rod and gear change pedal assembly from the kit.
- Fit the gear change pedal rubber on to the gear change pedal.



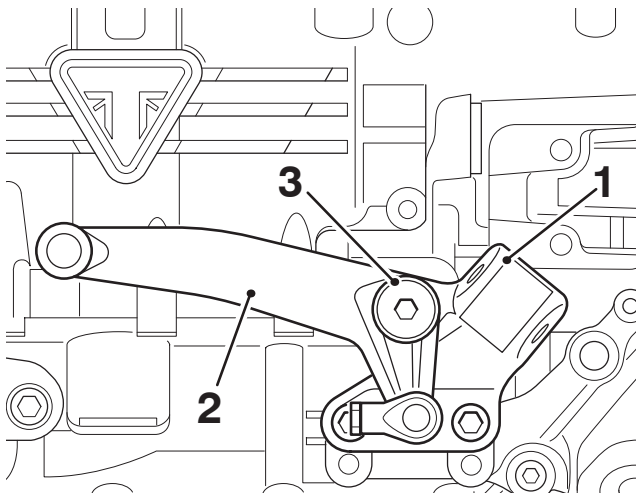
- Control plate
- Gear change pedal

NOTICE

The gear change rod has a right hand thread at one end and a left hand thread at the other end. The left hand thread should be connected to the gear selector arm.

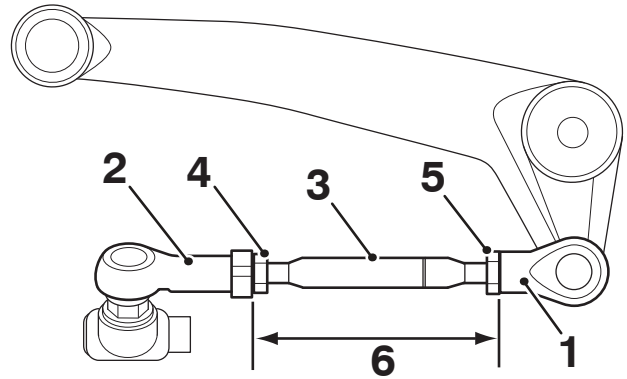
One of the original gear change rod lock nuts has a right hand thread, the other has a left hand thread.

27. Fit the original lock nuts to the gear change rod from the kit.
28. Fit the gear change pedal to the rear control plate in the orientation shown. Fit a new pivot bolt from the kit and tighten to **22 Nm**.



1. Control plate
2. Gear change pedal
3. Pivot bolt

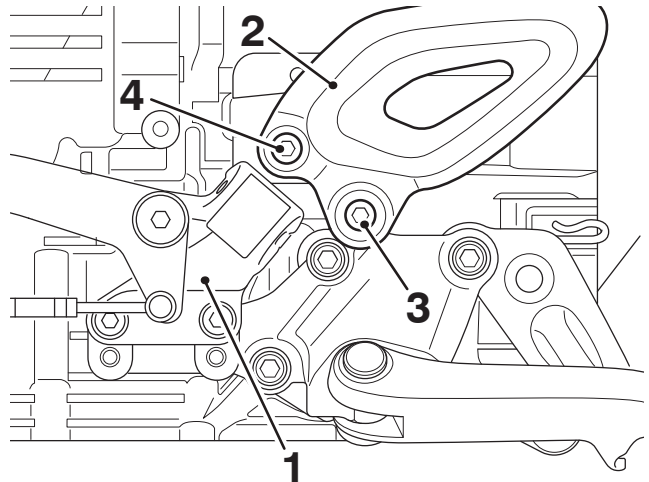
29. Fit the gear change rod to the gear change pedal ball joint and gear change clamp ball joint. Turn the gear change rod to adjust the length of the gear change rod until a measurement of **48.6 mm** between the ball joints is achieved, as shown. Tighten the gear change rod lock nuts to **6 Nm**.



1. Gear clamp ball joint (right hand thread)
2. Gear change pedal ball joint (left hand thread)
3. Gear change rod
4. Lock nut, right hand thread
5. Lock nut, left hand thread
6. Measurement between the ball joints

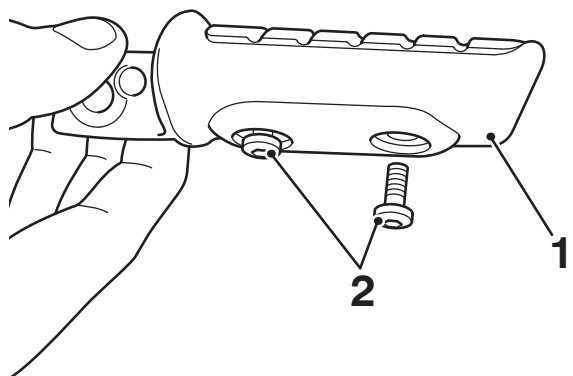
Models with or without TSA fitted

30. Fit the left hand heel guard from the kit to the rear control plate with the original fixings in the positions shown below. Tighten the fixings to **7 Nm**.



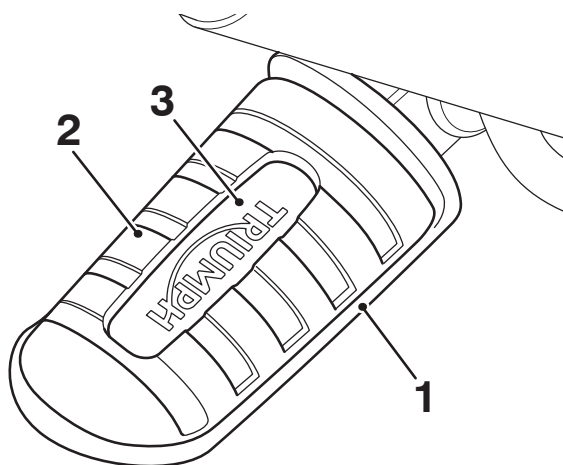
1. Control plate
2. Heel guard, left hand
3. Fixing, M6 x 42 mm
4. Fixing, M6 x 20 mm

31. Remove the two fixings securing the footrest rubber to the original left hand footrest. Remove the footrest rubber and insert from the footrest. Retain the footrest rubber and insert for reuse. Retain the left hand footrest for reuse if the motorcycle is to be returned to its original condition.



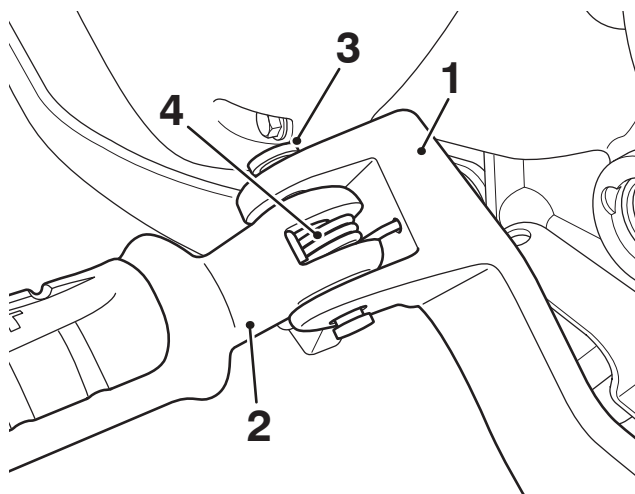
- 1. Footrest
- 2. Fixings

32. Fit the footrest rubber and insert onto the left hand footrest from the kit in the orientation shown and secure with the two M5 x 16 mm fixings from the kit. Tighten the fixings to 6 Nm.



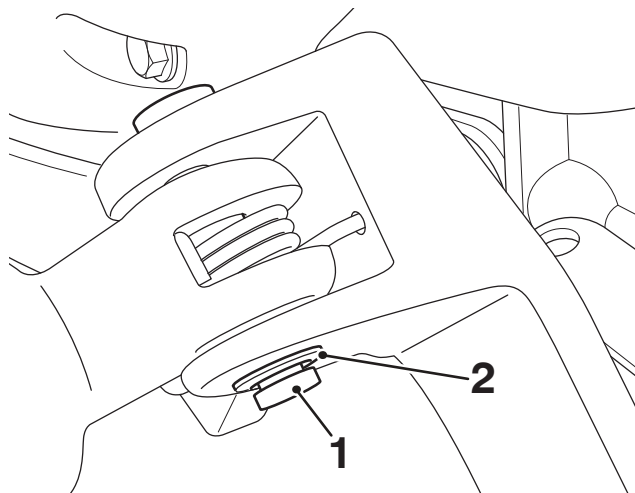
- 1. Footrest
- 2. Footrest rubber
- 3. Footrest insert

33. Fit the bank angle indicator from the kit as described in the Service Manual.
 34. Fit the left hand footrest from the kit in to the footrest mount on the rear control plate, with the original footrest return spring positioned as shown. Fit the original pivot pin.



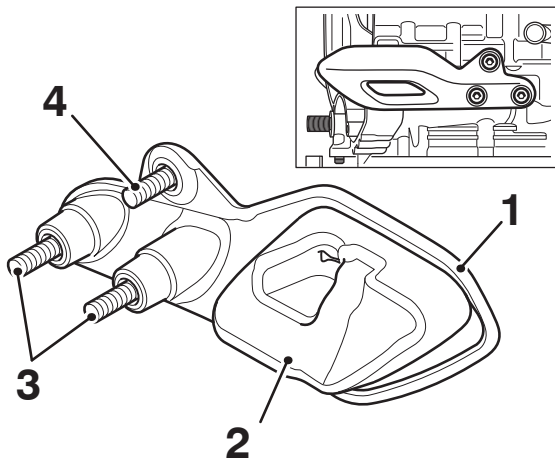
- 1. Footrest mount, control plate
- 2. Footrest
- 3. Pivot pin
- 4. Footrest return spring

35. Fit the original circlip to retain the pivot pin.



- 1. Pivot pin
- 2. Circlip

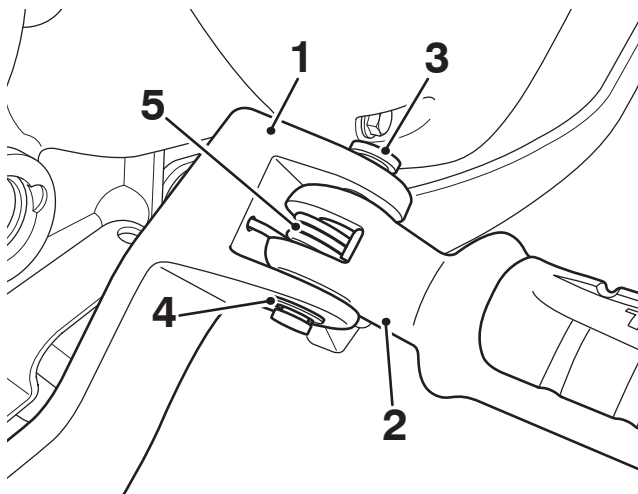
36. Fit the left hand crankcase protector with the M8 x 35 mm fixings and M8 x 25 mm fixing, together with the rubber protector from the kit, positioned as shown. Tighten the fixings to 12 Nm.



- 1. Crankcase protector
- 2. Rubber protector
- 3. Fixings, M8 x 35 mm
- 4. Fixing, M8 x 25 mm

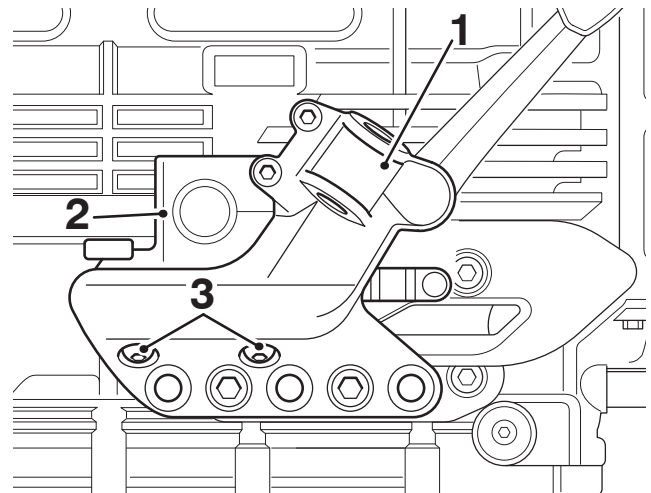
Right Hand Side

37. Remove the footrest. Retain the footrest, return spring, pivot pin and circlip for reuse.



- 1. Control plate
- 2. Footrest
- 3. Pivot pin
- 4. Circlip
- 5. Return spring

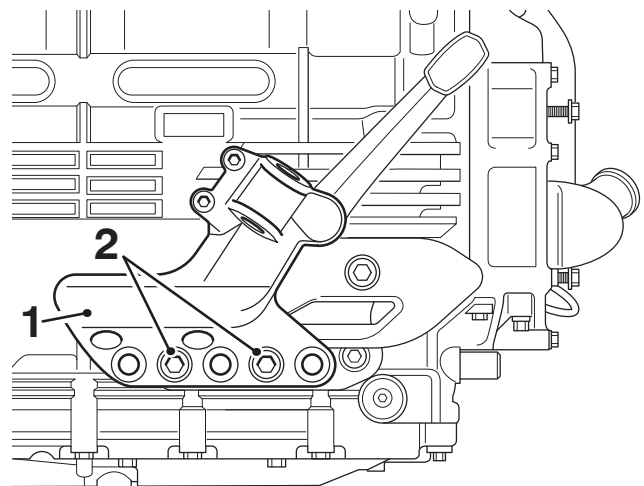
38. Remove the rear brake master cylinder fixings and remove the rear brake master cylinder from the forward control plate. Retain the master cylinder and fixings for reuse.



- 1. Control plate
- 2. Rear brake master cylinder
- 3. Fixings

39. Remove the brake pedal pivot bolt and remove the brake pedal from the control plate. Retain the brake pedal return spring for reuse. Retain the brake pedal and pivot bolt for reuse if the motorcycle is to be returned to its original condition.

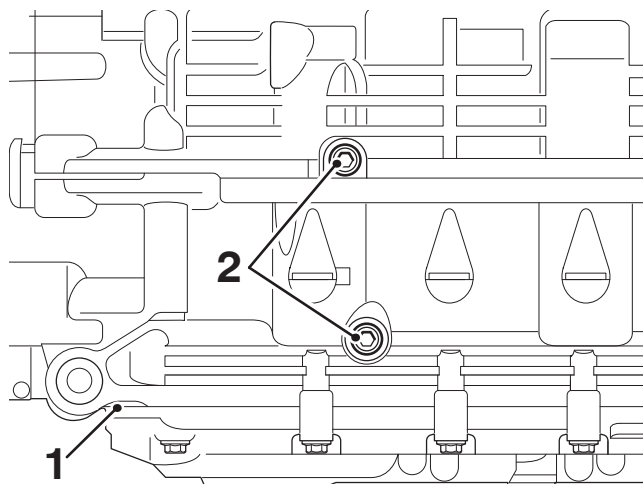
40. Remove the forward control plate. Retain the control plate and fixings for reuse if the motorcycle is to be returned to its original condition.



- 1. Control plate
- 2. Fixings

41. Remove the forward control plate mounting. Retain the control plate mounting and fixings for reuse if the motorcycle is to be returned to its original condition.

42. Remove the fixings from the engine crankcase, as shown. Retain the fixings for reuse if the motorcycle is to be returned to its original condition.

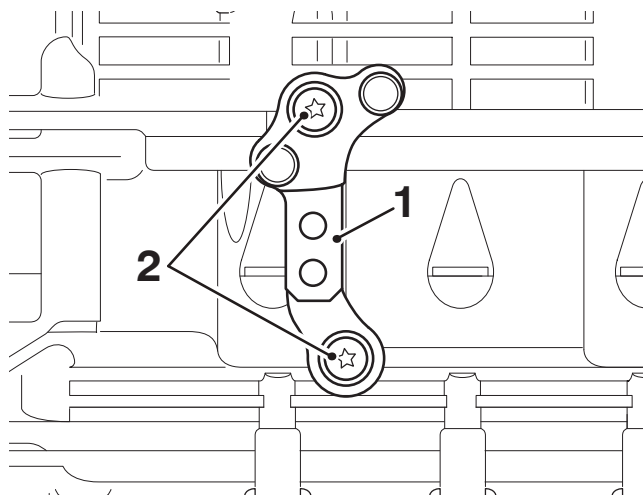


1. Engine crankcase
2. Fixings

NOTICE

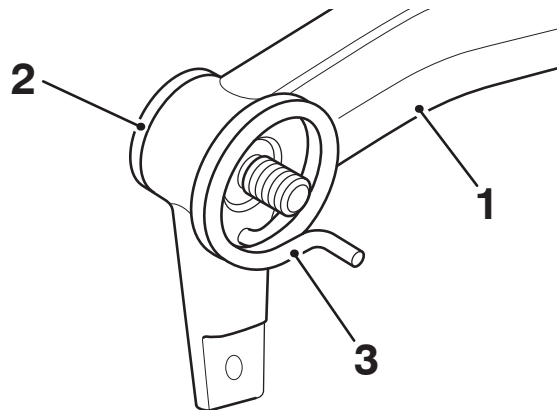
Note: • Fit the blanking plugs from the kit to the unused fixing positions

43. Position the right hand rear control plate mounting from the kit on the engine crankcase and align it with the two fixing positions. Fit the M8 x 30 mm fixings from the kit and tighten to **25 Nm**.



1. Control plate mounting
2. Fixings, M8 x 30 mm

44. Fit the brake pedal from the kit to the control plate with the original return spring and pivot bolt from the kit. Make Sure the return spring is in the correct orientation and locates correctly in the brake pedal and control plate. Tighten the pivot bolt to **22 Nm**. Note the control plate is not shown for clarity.



1. Brake pedal
2. Pivot bolt
3. Return spring

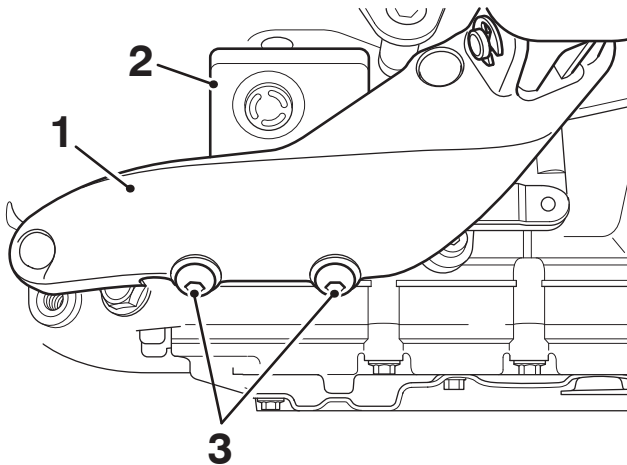
NOTICE

When fitting the accessory brake line from the kit make sure it is secured to the same mounting positions on the sump as the original brake line.

Do not fit the original brake line cover bracket. The brake line cover bracket should be retained for reuse if the motorcycle is to be returned to its original condition.

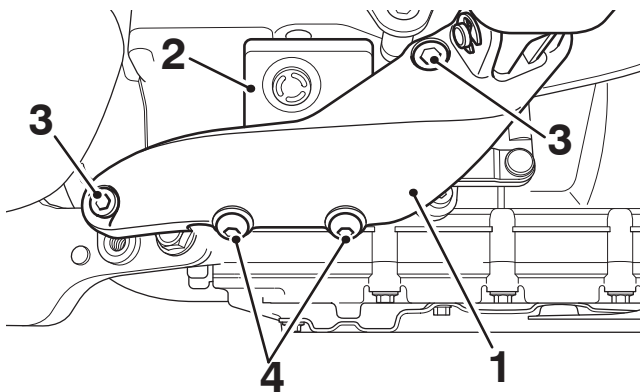
45. Fit the rear brake master cylinder brake line from the kit with the original union bolt and sealing washers from the kit at the master cylinder connection, as described in the Service Manual.

46. Fit the rear brake master cylinder to the control plate from the kit with the original fixings. Do not tighten the fixings at this stage.



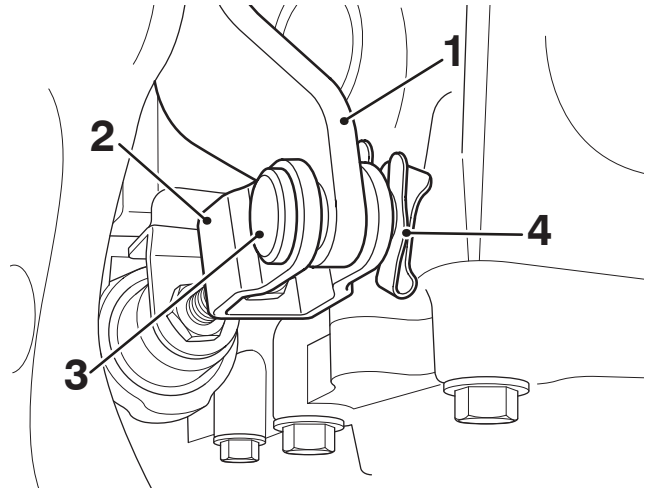
- 1. Control plate
- 2. Master cylinder
- 3. Fixings

47. Fit the control plate on to the control plate mounting in the orientation shown. Align the preferred fixing positions with the control plate mounting and fit two M8 x 30 mm fixings from the kit. Tighten the control plate fixings to **25 Nm**. Tighten the master cylinder fixings to **18 Nm**.



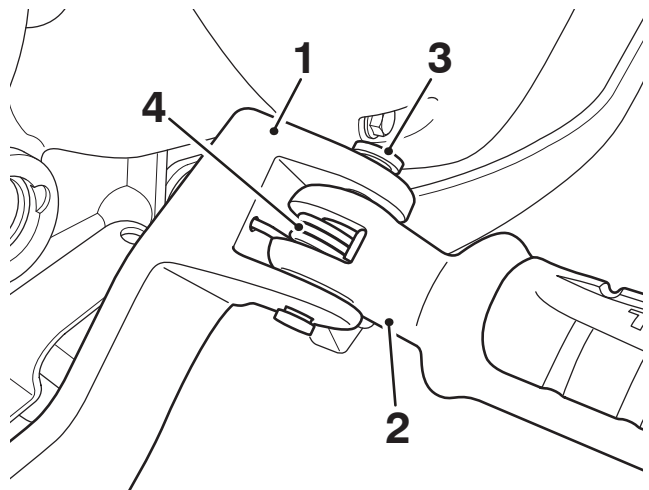
- 1. Control plate
- 2. Rear brake master cylinder
- 3. Fixings, M8 x 30 mm
- 4. Master cylinder fixings

48. Align the brake pedal with the master cylinder clevis and fit the original clevis pin and retaining clip.



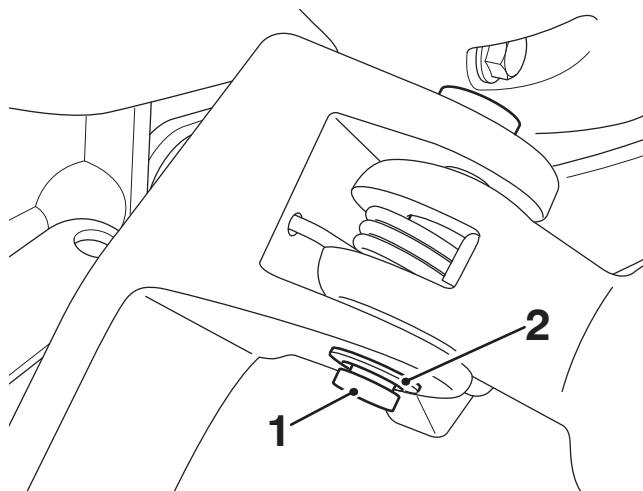
- 1. Brake lever
- 2. Master cylinder clevis
- 3. Clevis pin
- 4. Retaining clip

49. Fit the right hand footrest in to the footrest mount on the rear control plate, with the original footrest return spring positioned as shown. Fit the original pivot pin.



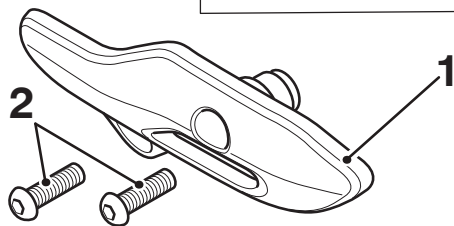
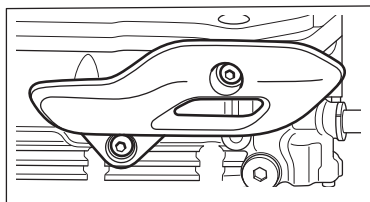
- 1. Footrest mount, control plate
- 2. Footrest
- 3. Pivot pin
- 4. Footrest return spring

50. Fit the original circlip to retain the pivot pin.



- 1. Pivot pin
- 2. Circlip

51. Fit the right hand crankcase protector with the M8 x 35 mm fixings from the kit. Tighten the fixings to **12 Nm**.



- 1. Crankcase protector
- 2. Fixings, M8 x 35 mm

⚠ 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 fittings, seals and joints and also check the brake hoses for splits, deterioration and damage.

Always rectify any faults before riding.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

Ensure absolute cleanliness when adding brake fluid to the brake fluid reservoir.

Do not allow moisture or debris to enter the cylinder as this will adversely affect the brake fluid properties.

Do not use brake fluid from a container which has been opened for any period of time. Always use brake fluid from a sealed container.

Always check for fluid leakage around hydraulic fittings and for damage to hoses.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

It is dangerous to operate the motorcycle with defective brakes.

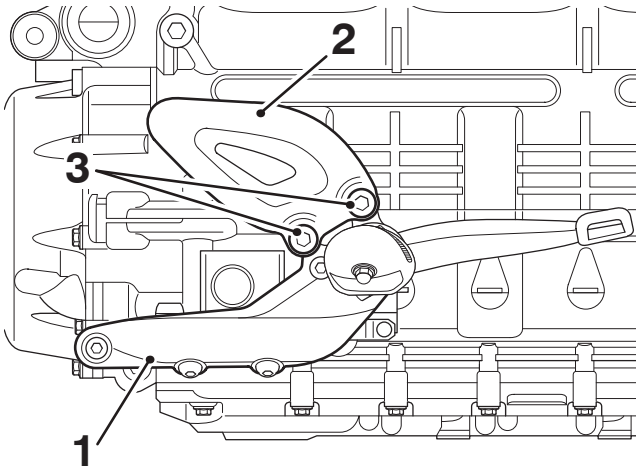
The fault must be checked and rectified by a competent person with the specialist knowledge and technical understanding of motorcycles, such as an authorised Triumph dealer.

Failure to follow the advice above may lead to loss of motorcycle control which could result in serious injury or death..

⚠ WARNING

Check for fluid leakage around brake fittings, seals and joints. Leaks around fittings and joints may allow air to enter the braking system. Air entering the braking system may cause a reduction in braking efficiency leading to loss of motorcycle control and an accident.

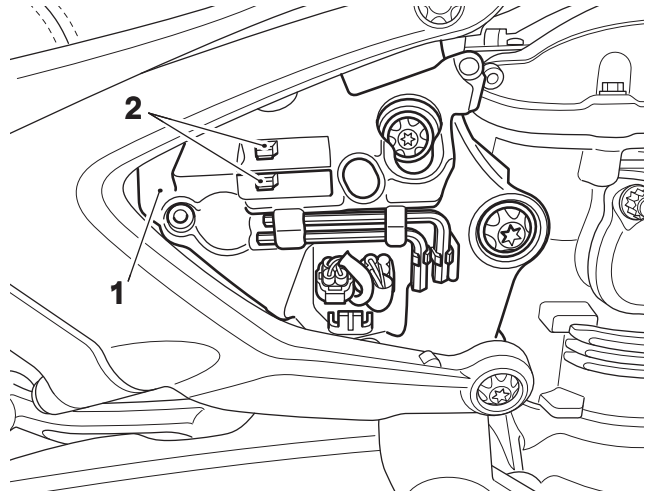
52. Fill the rear brake fluid reservoir with new DOT 4 brake fluid and bleed the rear brakes, as described in the Service Manual.
53. To inspect the brake fluid level, check the level of fluid visible in the window on the brake fluid reservoir.
54. Tighten the control plate fixings to **25 Nm**.
55. Collect the right hand heel guard and two M6 x 20 mm fixings from the kit.
56. Fit the right hand heel guard to the control plate with two M6 x 20 mm fixings. Tighten the fixings to **7 Nm**.



1. Control plate
2. Heel guard, right hand
3. Fixings, M6 x 20 mm

57. Remove the right hand side panel, as described in the Service Manual.

58. With the right hand side panel removed the original gear change rod and unused extension piece can be clipped to the infill panel for storage.



1. Infill panel, right hand side
2. Storage clips

59. Refit the right hand side panel as described in the Service Manual.

Enabling and Adjusting the Triumph Shift Assist

NOTICE

The Triumph Shift Assist must be enabled first, then the shift pattern adjusted to suit the type of foot controls fitted using the Triumph diagnostic software.

1. Connect the Triumph diagnostic tool and turn the ignition ON.
2. Make sure the engine stop switch is in the RUN position.
3. Navigate to 'ENGINE DIAGNOSTICS - Adjust'.
4. Select 'Enable/Disable Triumph Shift Assist'.
5. Click 'Start', then click 'Enable'.
6. Navigate back to 'ENGINE DIAGNOSTICS - Adjust'.
7. Select 'Adjust Shift Force sensor shift pattern'.
8. Click 'Start', then select the foot control type fitted: 'Forward mounted foot controls' or 'Rear mounted foot controls'.

NOTICE

The Shift Force Sensor voltages should read as shown in the following table.

Gear Pedal Position	Forward Mounted Controls (sensor in tension on up shifts)	Rear Mounted Controls (sensor in compression on up shifts)
Up shift	3.6 V	1.6 V
Rest	2.6 V	2.6 V
Down shift	1.6 V	3.6 V

9. Start the engine and allow it to idle for several seconds to allow adaption of the shift force sensor.
10. Ride the motorcycle for 10 seconds in each gear to enable the gear position sensor to adapt. The adaption status can be checked using the Triumph Diagnostic Tool.

NOTICE

Triumph Shift Assist (TSA) is optimised for on-road use only. It must not be used during off-road or track riding.

NOTICE

In the event of a TSA system fault when riding, the TSA system will be disabled. Use the clutch to change gears in the normal way otherwise damage to the engine or gear box may occur. Contact a Triumph dealer as soon as possible to have the fault checked and rectified.

NOTICE

Changing gears must be completed with a quick and forceful pedal movement, making sure that the pedal moves through its full range of travel. Always take care when changing gears. After a gear change, the pedal must be fully released before another gear change can be made. Incorrect gear changes can cause damage to the engine and transmission.

Triumph Shift Assist (TSA) adjusts the engine torque to allow gears to engage, without closure of the throttle twist grip or operation of the clutch. TSA is not an automatic system for changing gears. Gears must be selected and changed in the normal way using the gear pedal as described in the Changing Gears section in the Owner's Handbook.

TSA works for both up shifts and down shifts of gear. The clutch must be used for stopping and pulling away. The clutch must be used when selecting any gear from neutral, and also when selecting neutral from any other gear.

Triumph Shift Assist will not operate if:

- The clutch is applied.
- An up shift is attempted by mistake when in 6th gear
- A down shift is attempted by mistake when in 1st gear.
- An up shift is attempted at very low engine speeds.
- A down shift is attempted at very high engine speeds.
- An up shift is attempted during overrun.
- The vehicle speed limiter is active.
- Cruise control is active.
- Traction control is operating.
- If the previous gear has not fully engaged.
- The throttle is changed during a shift.

If TSA does not operate, the clutch can be used to change gears in the normal way. For more information on enabling and disabling the Triumph Shift Assist functionality, see the Triumph Shift Assist section in the Instrument chapter of the Owner's Handbook.

⚠ WARNING

After fitting the accessory kit the motorcycle will exhibit new handling characteristics. Operate the motorcycle in a safe area free from traffic to gain familiarity with any new characteristics. Operation of the motorcycle when not familiar with any new handling characteristics may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

If, after fitting this accessory kit, you have any doubt about the performance of any aspect of the motorcycle, contact a competent person with the specialist knowledge and technical understanding of motorcycles, such as an authorised Triumph dealer. Riding a motorcycle when there is any doubt as to any aspect of the performance of the motorcycle may lead to loss of motorcycle control which could result in serious injury or death.

⚠ WARNING

Never ride an accessory-equipped motorcycle at speeds above 80 mph (130 km/h).

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

The presence of accessories 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 which could result in serious injury or death.

⚠ WARNING

High-speed operation should only 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.

Only operate this Triumph motorcycle at high speed in closed-course, on-road competition or on closed-course racetracks.

High-speed operation in any other circumstances is dangerous and may lead to loss of motorcycle control which could result in serious injury or death.

NOTICE

The motorcycle must not be operated above the legal road speed limit except in closed-course conditions.