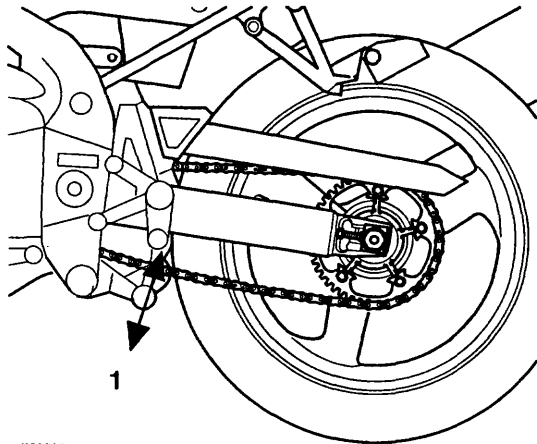


CHAIN ADJUSTMENT

NOTE:

- The correct adjustment setting for twin sided swinging arm models is 30-35 mm.

Chain Free-movement Inspection



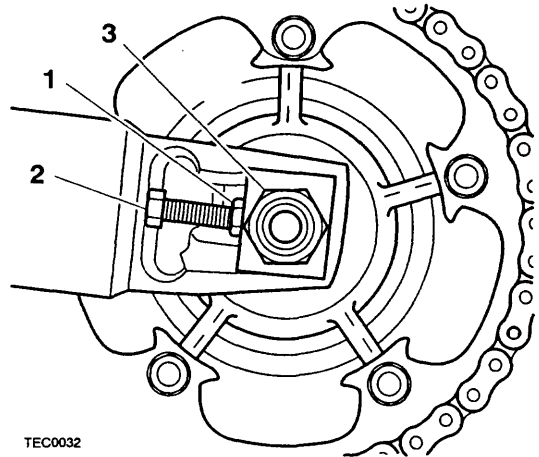
T595024

1. Maximum Movement Position

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

1. Park the motorcycle on the sidestand.
2. Rotate the rear wheel to find the position where the chain is tightest, and measure the vertical movement of the chain midway between the sprockets.
3. The vertical movement of the drive chain must be 30-35 mm.
4. If the chain free-movement measurement is incorrect, adjustments must be made.

Chain Free-movement Adjustment (twin-sided swinging arm version)



TEC0032

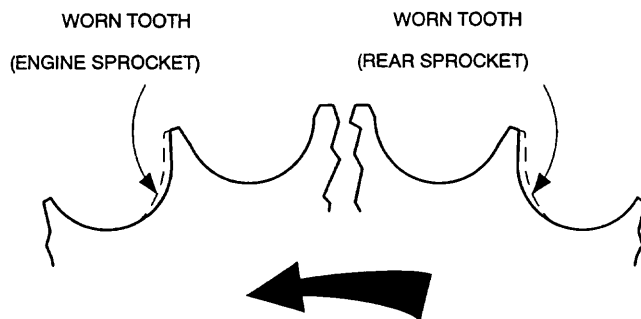
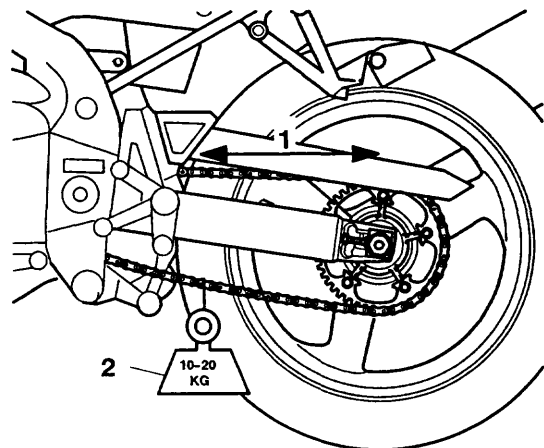
- 1. Adjuster Bolt**
- 2. Adjuster Bolt Locknut**
- 3. Rear Wheel Spindle Nut**

1. Loosen the wheel spindle nut.
2. Release the locknuts on the left and right chain adjuster bolts.
3. Moving both adjusters by an equal amount, turn the adjuster bolts clockwise to increase chain free-movement and anti-clockwise to reduce chain free-movement.
4. When the correct amount of chain free-movement has been set, push the wheel into firm contact with the adjuster. Tighten both adjuster locknuts to **27 Nm** and the rear wheel spindle nut to **110 Nm**.
5. Rotate the rear wheel and repeat the chain adjustment check. Re-adjust if necessary

! WARNING: Operation of the motorcycle with insecure adjuster locknuts 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.

6. Check the rear brake effectiveness.

Chain Wear Inspection



T500-33

NOTE:

- Sprocket wear is exaggerated for illustration.

1. Measure Across 20 Links

2. Weight



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

1. Remove the chain guard(s).
2. Stretch the chain taut by hanging a 10-20 kg (20-40 lb) weight on the chain.
3. Measure the length of 20 links on the straight part of the chain from pin centre of the 1st pin to the centre of the 21st pin. Since the chain may wear unevenly, take measurements at several places.
4. If the length exceeds the maximum service limit of 321 mm, the chain must be replaced.



WARNING: A chain that breaks or jumps off the sprockets could snag on the engine sprocket or lock the rear wheel, severely damaging the motorcycle and causing loss of control and an accident.



WARNING: The use of non-approved chains may result in a broken chain or may cause the chain to jump off the sprockets.

Use a genuine Triumph supplied chain as specified in the Triumph Parts Catalogue.

Never neglect chain maintenance and always have chains installed by an authorised Triumph dealer.

5. Rotate the rear wheel and inspect the drive chain for damaged rollers, and loose pins and links.
6. Also inspect the sprockets for unevenly or excessively worn or damaged teeth.
7. If there is any irregularity, have the drive chain and/or the sprockets replaced by an authorised Triumph dealer.
8. Replace the chain guard.

REAR SUSPENSION UNIT

Removal

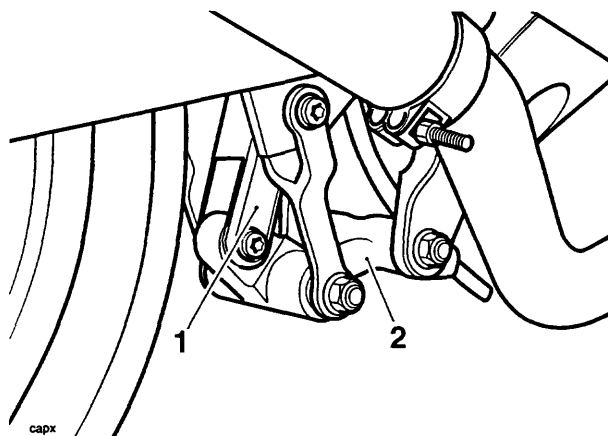
! WARNING: If the engine has recently been running, the exhaust system will be hot. Before working on or near the exhaust system, allow sufficient time for the exhaust system to cool as touching any part of a hot exhaust system could cause burn injuries.

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

1. Raise and support the rear of the motorcycle under the frame or engine. Position a block to support the rear wheel.
2. Remove the seat.
3. Disconnect the battery, negative (black) lead first.
4. Remove the rear bodywork as described in the body section.
5. Remove the fuel tank as described in the fuel system section.

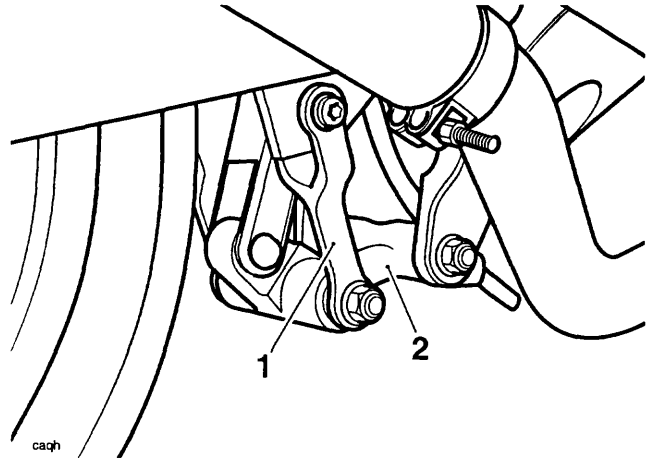
! WARNING: Observe the warning advice given in the general information section on the safe handling of fuel and fuel containers. A fire, causing personal injury and damage to property could result from spilled fuel or fuel not handled or stored correctly.

6. Remove the nut and bolt securing the rear suspension unit lower mounting to the drag link.



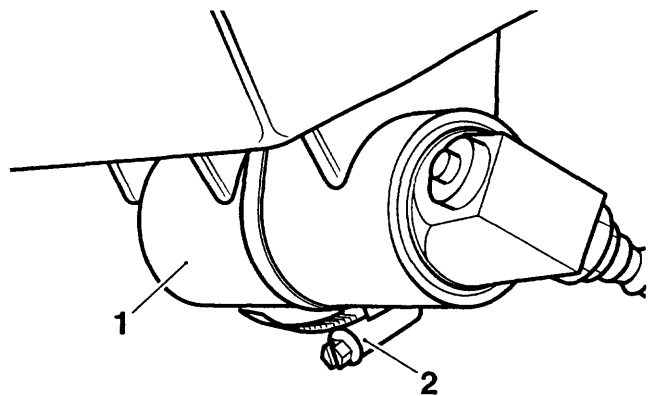
1. Rear suspension unit
2. Drag link

7. Release the nut and bolt securing the left and right hand drop links to the drag link.



1. Drop link (right hand)
2. Drag link

8. Pivot the drag link forward and down to allow room for the rear suspension unit to be removed.
9. Remove the rear suspension unit upper mounting nut and bolt. Collect the spacer.
10. Detach the rear suspension unit reservoir from the battery box by releasing it from the re-usable clip.



1. Reservoir
2. Clip

11. Withdraw the rear suspension unit and reservoir downwards through the frame and swinging arm.

NOTE:

- Depending upon the height of the motorcycle above the ground, it may be necessary to lift the rear wheel and swinging arm to allow room for the suspension unit to be withdrawn.

Inspection

1. Clean all components and inspect for damage and wear to:
 - rear suspension unit upper and lower mountings,
 - lower mounting sleeve in the drag link.Renew parts as necessary.

Installation

1. Locate the rear suspension unit to the frame/swinging arm and loosely fit the upper mounting bolt, spacer and nut.

NOTE:

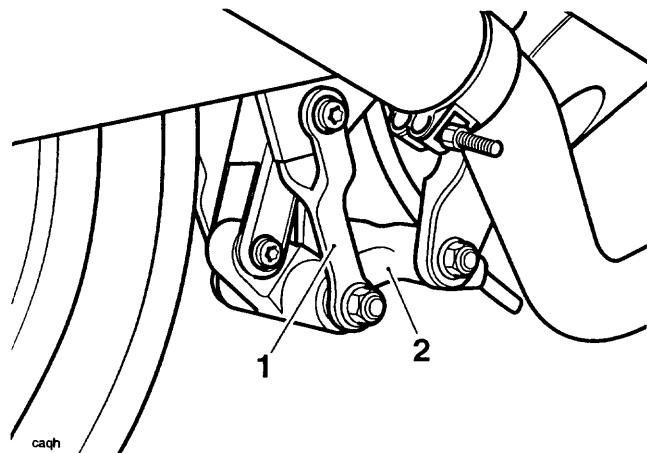
- **For ease of access, the bolt should be fitted from the left side of the motorcycle.**
2. Position the reservoir to the battery box and secure with the clips.
 3. Pivot the drag and drop links until the drop links can be refitted to the swinging arm. Loosely fit the bolts and nuts.
 4. Align the rear suspension unit to the drag link and loosely fit the securing bolt and nut.
 5. Tighten the rear suspension unit upper mounting to **48 Nm**.
 6. Tighten the rear suspension unit lower mounting to **48 Nm**.
 7. Tighten the drop link nuts and bolts to **65 Nm**.
 8. Refit the fuel tank as described in the fuel system section.
 9. Refit the rear bodywork.
 10. Connect the battery, red (positive) lead first.
 11. Refit the seat.
 12. Lower the motorcycle to the ground and park on the sidestand.

DRAG LINK

Removal

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

1. Raise and support the rear of the motorcycle under the frame or engine. Position a block to support the rear wheel.
2. Remove the nut and bolt securing the the drop links to the drag link.

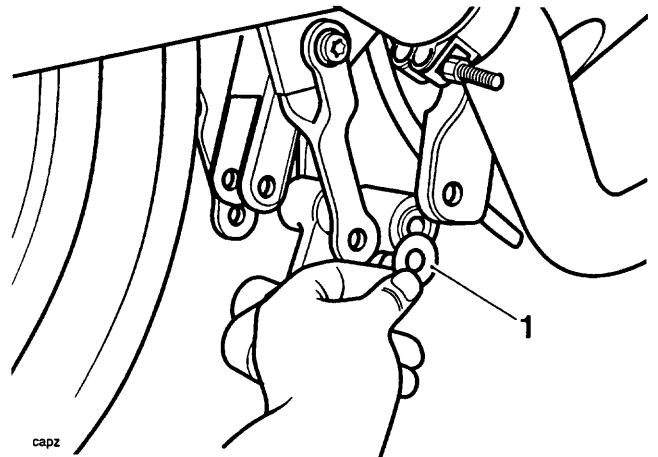


1. Drop link (right hand)

2. Drag link

3. Remove the bolt and nut securing the drag link to the rear suspension unit lower mounting point.
4. Remove the bolt and nut securing the drag link to the frame.

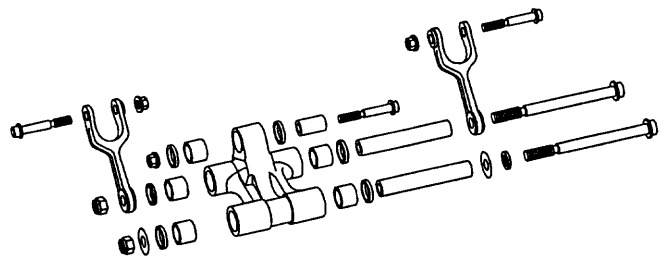
5. Detach the drag link from the frame collecting the drag link thrust washer and any additional shims from the right hand side.



1. Thrust washer

Inspection

1. Clean all components and inspect for damage and wear to:
 - drag link bearing, sleeve and seals,
 - fixing bolts,
 Renew as necessary.



Exploded view - drop/drag link components

Installation

1. Pack the drag link bearings with grease.
2. Fit the drag link sleeves and seals.
3. Position the drag link to the frame relocating the shims (if any) and the thrust washer to the right hand side of the link.

NOTE:

- **The shims and thrust washer must be fitted between the drag link and frame.**
4. Loosely fit the drag link to frame fixing.
 5. Pivot the drop links until they can be refitted to the drag link. Loosely fit the bolt and nut.
 6. Align the rear suspension unit to the drag link and loosely fit the securing bolt and nut.
 7. Tighten the drag link fixing to **95 Nm**.
 8. Tighten the drop link to drag link nut and bolt to **65 Nm**.
 9. Tighten the rear suspension unit lower mounting to **48 Nm**.
 10. Lower the motorcycle to the ground and park on the sidestand.

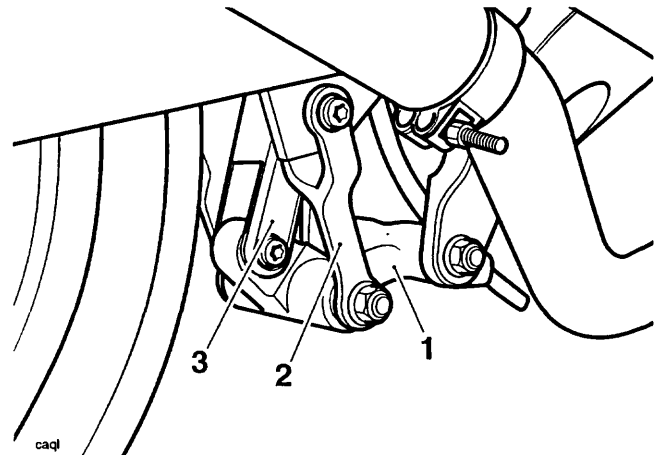
DROP LINKS

Removal



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

1. Raise and support the rear of the motorcycle beneath the frame or engine. Position a block to support the rear wheel.



1. Drag Link

2. Drop Link

3. Rear Suspension Unit

2. Remove the nut and bolt securing the the drop links to the drag link.
3. Detach the drop links from the drag link.
4. Release the bolts securing the drop links to the swinging arm.
5. Release the drop links from the swinging arm.

Inspection

1. Clean all components and inspect for damage and wear. Renew parts as necessary.

Installation

1. Position the drop links to the swinging arm and loosely secure with the bolts and nuts.
2. Align the drop links to the drag link and secure with the bolt and nut.
3. Tighten the drop link to drag link nut and bolt to **65 Nm**.
4. Tighten the drop link to swinging arm bolts and nuts to **48 Nm**.
5. Lower the motorcycle to the ground and park on the sidestand.

SWINGING ARM/DRIVE CHAIN

Removal

1. Remove the seat.
2. Disconnect the battery, negative (black) lead first.
3. Remove the silencer as described in the fuel system section.

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.

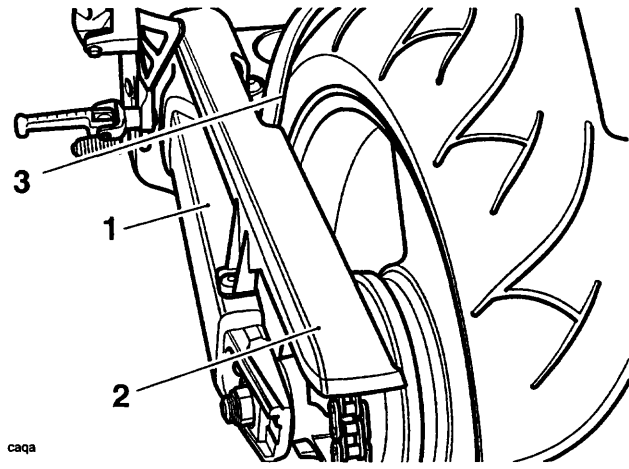
4. Raise and support the rear of the motorcycle under the frame or engine.

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

5. Detach the brake hose from its clip.
6. Remove the rear wheel as described in the wheel section.

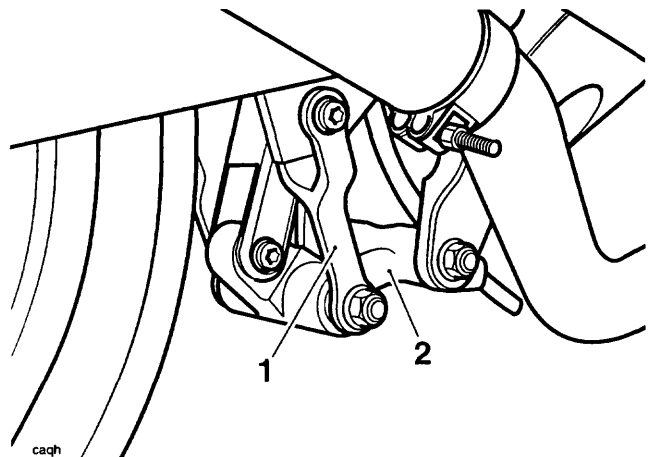
CAUTION: To prevent damage to the brake pipe and caliper, do not allow the caliper to hang on the brake pipe.

7. Remove the chain guard and wheel hugger.



1. Swinging arm
2. Chain guard
3. Wheel hugger

8. Support the swinging arm.
9. Remove the drop link bolts and nuts from the swinging arm.

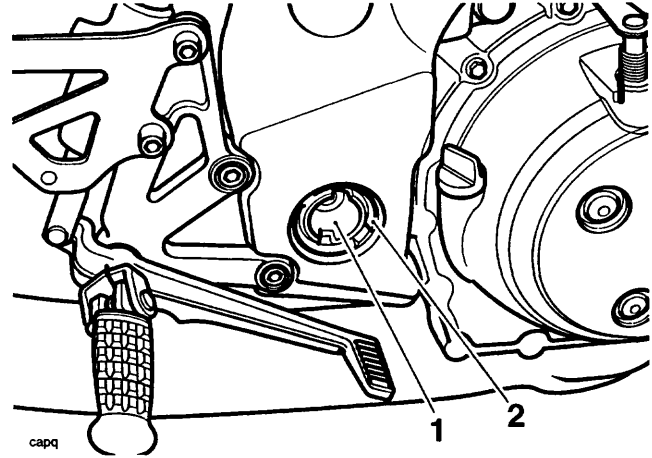


1. Drop link (right hand)
2. Swinging arm

10. Remove the rear suspension unit as described earlier in this section.

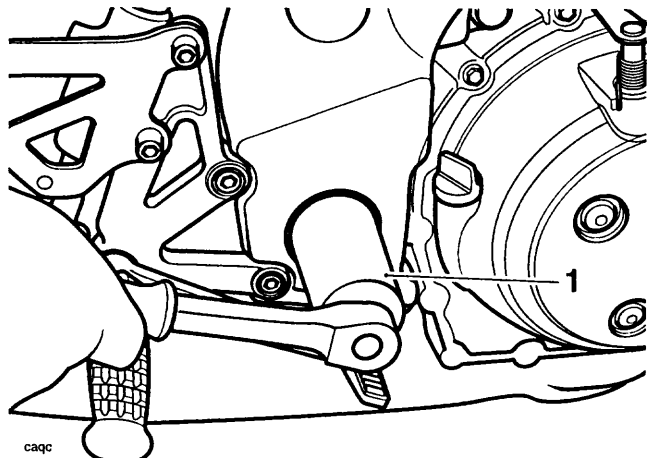
NOTE:

- To remove the swinging arm, tools T3880295 and T3880290 must be used to release the lateral-float adjuster and lock-ring on the right hand side of the motorcycle.



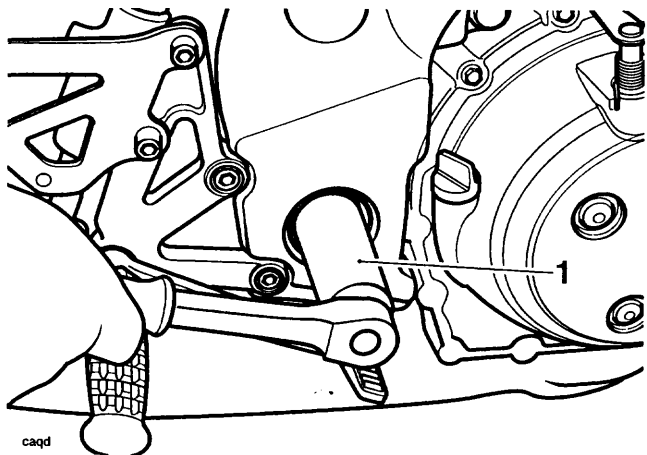
1. Adjuster ring
2. Lock ring

11. Using tool T3880295, slacken the locking ring from the right hand side of the swinging arm spindle.



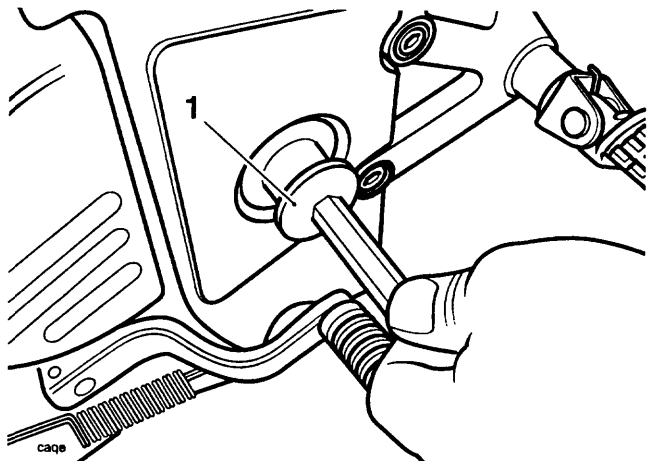
1. Tool T3880295

12. Using tool T3880290, slacken the swinging arm adjuster ring on the right hand side of the swinging arm spindle.



1. Tool T3880290

13. Support the swinging arm and remove the swinging arm spindle nut from the left hand side of the frame.



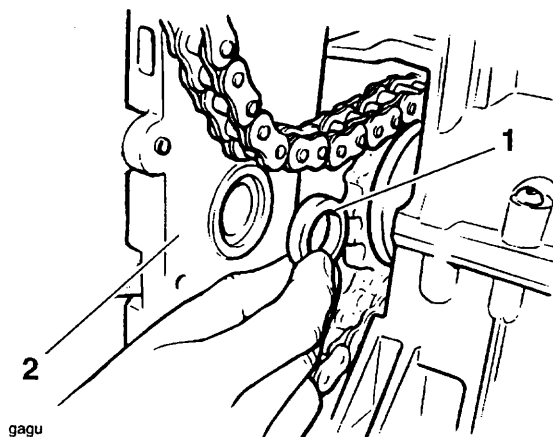
1. Swinging arm spindle nut

14. Support the swinging arm.

15. Withdraw the swinging arm spindle from the right hand side of the frame.

16. Carefully detach the swinging arm from the frame.

17. Collect the spacer from the recess inside the left hand frame outrigger.



1. Spacer

2. Frame outrigger

NOTE:

- If the drive chain is being replaced, but not the swinging arm, proceed through paragraphs 19 to 20.

18. Remove the sprocket cover.

19. Detach the chain from the output sprocket and remove the chain.

Inspection

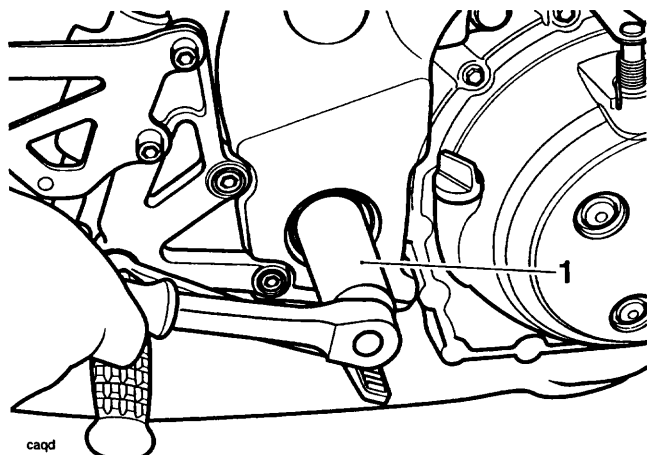
1. Check all swinging arm bearing for damage, pitting, and cracks. Replace as necessary.
2. Check the swinging arm for damage. Replace as necessary.
3. Check all bearing seals for damage, splits etc. Replace as necessary.
4. Check the chain for wear, damage etc. Replace as necessary.
5. Check both chain sprockets for wear, damage etc. Replace as necessary.

Installation

1. Fit the drive chain to the output sprocket.
2. Apply Loctite A1388 to the sprocket cover bolt threads then refit the sprocket cover and tighten the bolts to **9 Nm**.
3. Fit the spacer to the recess on the inside of the left hand frame outrigger.

NOTE:

- **A smear of grease will help to retain the spacer while the swinging arm is being positioned.**
4. Position the swinging arm to the frame.
 5. Refit the swinging arm spindle and fit the domed nut to the left hand side.
 6. Using tool T3880290, tighten the swinging arm adjustment ring to **15 Nm**.

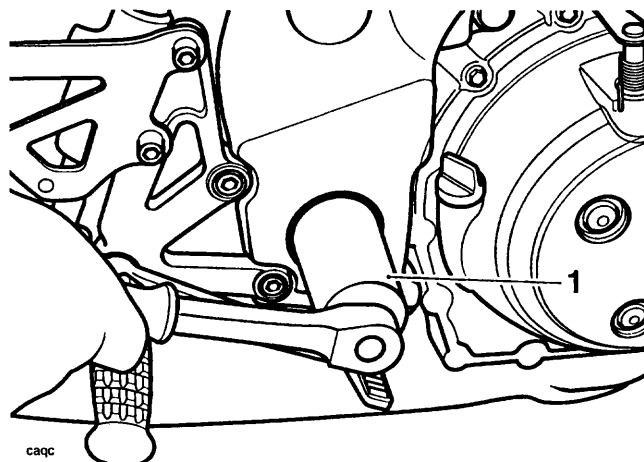


1. Tool T3880290

CAUTION: Incorrect adjustment of the swinging arm clamping ring will damage the bearings, seals and swinging arm.

Never overtighten the clamping ring or set the adjustment to allow excessive sideways movement.

7. Tighten the locking ring to **30 Nm** using tool T3880295.



1. Tool T3880296

8. Check that the adjustment has not changed, re-adjust if necessary.
9. Tighten the swinging arm spindle bolt to **110 Nm**.
10. Apply a smear of grease to the drop link bearings in the swinging arm.
11. Align the drop links to the swinging arm and fit the drop link bolts and nuts.
12. Tighten the drop link bolts and nuts to **48 Nm**.
13. Refit the rear suspension unit as described earlier in this section.
14. Refit the chainguard and wheel hugger tightening the fixings to **9 Nm**.
15. Refit the exhaust silencer as described in the fuel system section.
16. Refit the rear wheel as described in the wheel section.
17. Secure the brake hose to its press-in clip.
18. Check, and if necessary adjust, the chain free movement.
19. Support the motorcycle and remove the paddock stand. Park the motorcycle on the side stand.
20. Pump the rear brake pedal to ensure correct function after detachment of the brake caliper.
21. Reconnect the battery positive (red) lead first.
22. Refit the seat.