

# Final Drive

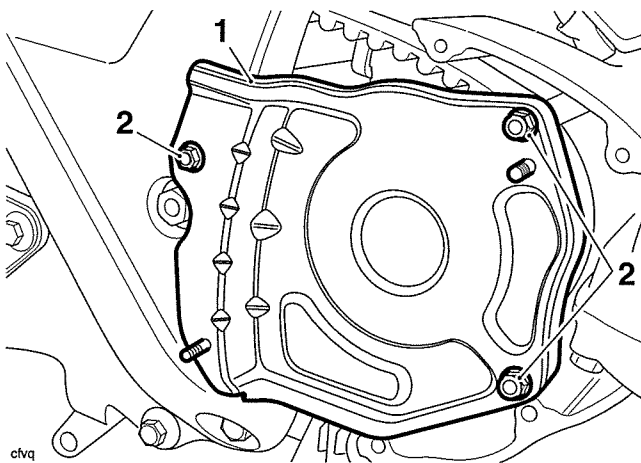
## Inspection

### Note:

- **If the drive belt is to be renewed, always check and if necessary replace the rear belt pulley drive flange bearings.**
1. Inspect the drive belt for wear, cracks in the teeth, frayed edges or damage (see page 15-3). Renew if necessary.
  2. Inspect the drive belt pulleys for wear or damage (see page 15-4). Renew if necessary.

## Installation

1. Position the belt to the motorcycle, and align to the front drive pulley flange. If a previously used belt is to be refitted, fit the belt in its original direction of rotation as noted during removal.
2. Refit the front drive belt pulley and secure with new bolts. Do not fully tighten the bolts at this stage.
3. Refit the swinging arm (see page 14-6), but **DO NOT** adjust the final drive belt tension at this stage.
4. Lower the motorcycle to the ground and prevent the rear wheel from turning by applying the rear brake.
5. Tighten the front drive belt pulley bolts to **105 Nm**.
6. Refit the coolant expansion tank bracket and secure with new nuts. Tighten to **3 Nm**.



- civq
1. **Coolant expansion tank bracket**
  2. **Nuts**

7. Refit the coolant expansion tank to its bracket.
8. Refit the two flanged sleeves and secure with new nuts, tighten the nuts to **3 Nm**.
9. Align the final drive belt cover to the crankcase. Fit and tighten the four screws to **9 Nm**.
10. Adjust the final drive belt tension as described for swinging removal (see page 14-7).
11. Reconnect the battery, positive (identified with red tape) lead first.
12. Refit the rider's seat (see page 17-9).

## Cush Drive

### Removal

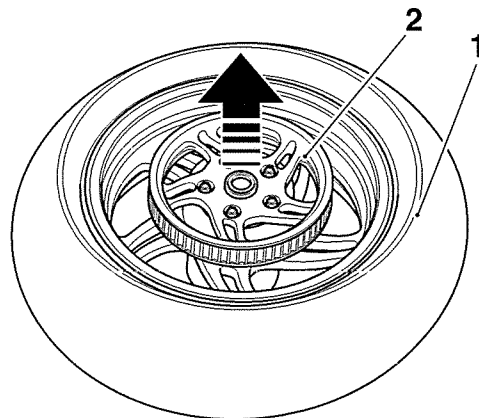
1. Remove the rear wheel (see page 16-8).



### Caution

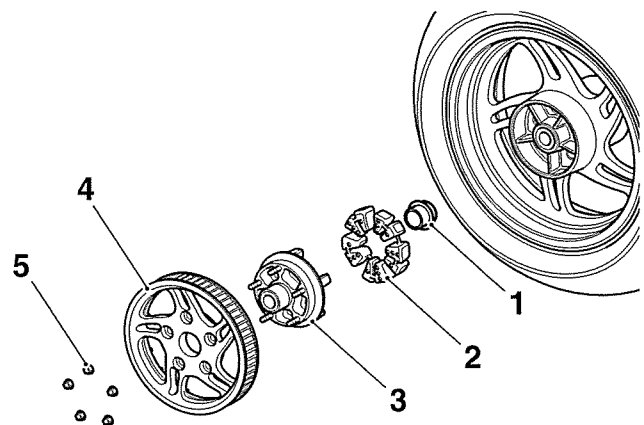
Do not allow the wheel to rest on the brake disc, as this may damage the disc. Support the wheel on wooden blocks, equally spaced around the rim, such that the brake disc is raised above the ground.

2. Place the wheel on wooden blocks with the drive belt pulley uppermost.
3. Gently lever the drive belt pulley and flange from the wheel hub.



1. **Rear wheel**
2. **Drive flange**

4. Remove the spacer and cush drive rubbers.



1. **Spacer**
2. **Cush drive rubbers**
3. **Drive flange**
4. **Drive belt pulley**
5. **Drive belt pulley nuts**

5. If the drive belt pulley is to be removed, remove and discard the nuts and remove the pulley from the flange.

## Inspection

1. Check the cush drive rubbers for deterioration, cracks etc.
2. Inspect the drive belt pulley teeth for wear, damage and chips.
3. Check the wheel and drive flange for wear, cracks and damage.
4. Check the rear belt pulley drive flange bearings spin smoothly with no signs of play. If not, renew the bearings.

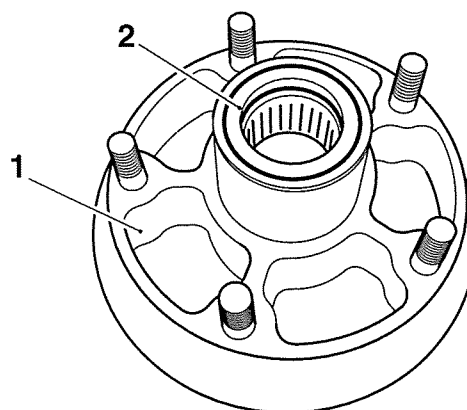
## Installation

1. If removed, refit the drive belt pulley to the drive flange. Fit new nuts and tighten to **68 Nm**.
2. Install the cush drive rubbers to the wheel.
3. Check the drive flange bearing spacer is correctly installed in the drive flange bearing.
4. Refit the drive flange to the wheel.
5. Refit the rear wheel (see page 16-8).

## Drive Pulley Flange Bearings

### Disassembly

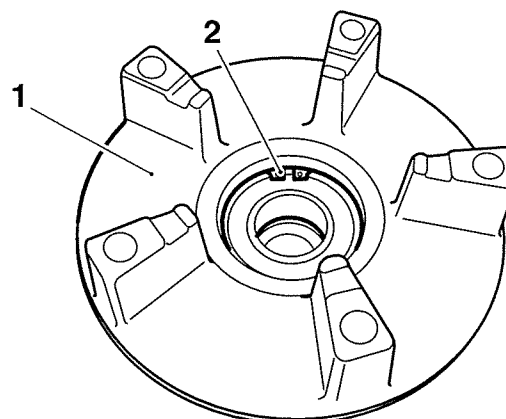
1. Remove the cush drive (see page 15-10).
2. Remove the drive pulley from the drive flange. Discard the nuts.
3. Remove and discard the seal.



### 1. Drive flange

### 2. Seal

4. Working from the opposite side of the drive flange, remove and discard the bearing circlip.



### 1. Drive flange

### 2. Circlip

## Warning

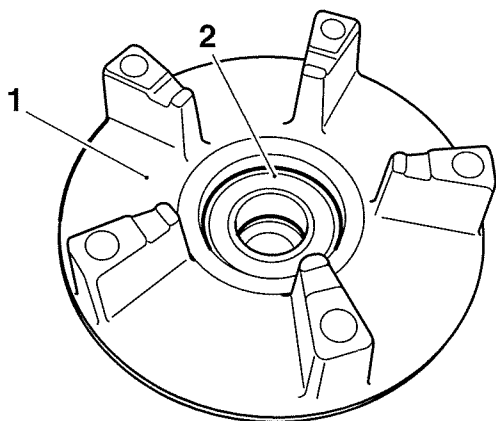
Always wear eye, hand and face protection when using a hammer and drift. Use of a hammer and drift can cause bearings to fragment. Pieces of fragmented bearing could cause eye and soft tissue injuries if suitable protective apparel is not worn.

# Final Drive

## ⚠ Caution

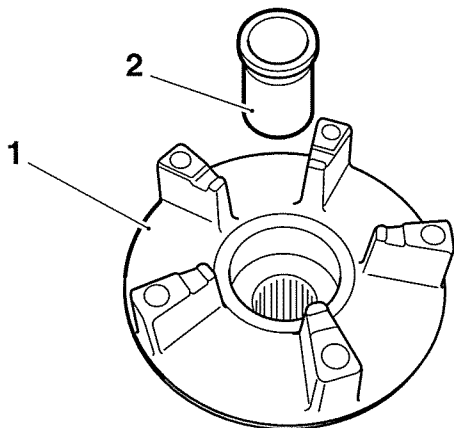
To prevent drive flange damage and to aid bearing removal, always apply force evenly on both sides of the bearing to prevent it from 'tipping' and becoming stuck. Application of uneven force will lead to difficulty in removing the bearing and to a damaged drive flange.

5. Working through the hole in the centre of the needle roller bearing, use a pin punch to drift out the ball bearing.



1. Drive flange
2. Ball bearing

6. Collect the inner bearing sleeve from the needle roller bearing.

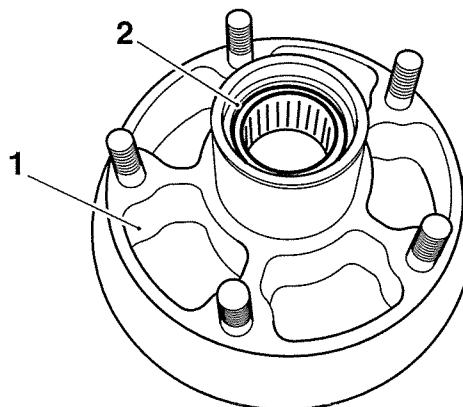


1. Drive flange
2. Inner bearing sleeve

## ⚠ Warning

Always wear eye, hand and face protection when using a hammer and drift. Use of a hammer and drift can cause bearings to fragment. Pieces of fragmented bearing could cause eye and soft tissue injuries if suitable protective apparel is not worn.

7. Working through the hole in the centre of the drive flange, use a pin punch to drift out the needle roller bearing.



1. Drive flange
2. Needle roller bearing

## Inspection

1. Inspect the bearings and bearing sleeve for wear or damage. Renew if necessary.

## Assembly

1. Position the needle roller bearing, marked side facing outwards, to the drive flange.

### Warning

When using a press, always wear overalls, eye face and hand protection. Objects such as bearings frequently break-up under load and the debris caused during break-up may cause damage and injury to unprotected parts of the body.

Never wear loose clothing, which could become trapped in the press and cause crushing injury to the hand, arms or other parts of the anatomy.

2. Using a suitable press, fully insert the needle roller bearing in to the drive flange.
3. Lubricate the bearing with grease to NLGI 2 specification (we recommend Mobil HP222).
4. Install a new seal, marked side facing outwards, to the drive flange.
5. Lubricate the seal's knife-edge with grease to NLGI 2 specification (we recommend Mobil HP222).

6. Working from the opposite side of the drive flange, install the inner bearing sleeve to the needle roller bearing.
7. Position the inner ball bearing, marked side facing outwards, to the drive flange.

### Warning

When using a press, always wear overalls, eye face and hand protection. Objects such as bearings frequently break-up under load and the debris caused during break-up may cause damage and injury to unprotected parts of the body.

Never wear loose clothing, which could become trapped in the press and cause crushing injury to the hand, arms or other parts of the anatomy.

8. Using a suitable press, fully insert the ball bearing in to the drive flange.
9. Fit a new circlip.
10. Refit the drive pulley to the drive flange. Fit new nuts and tighten to **68 Nm**.
11. Refit the cush drive (see page 15-11).

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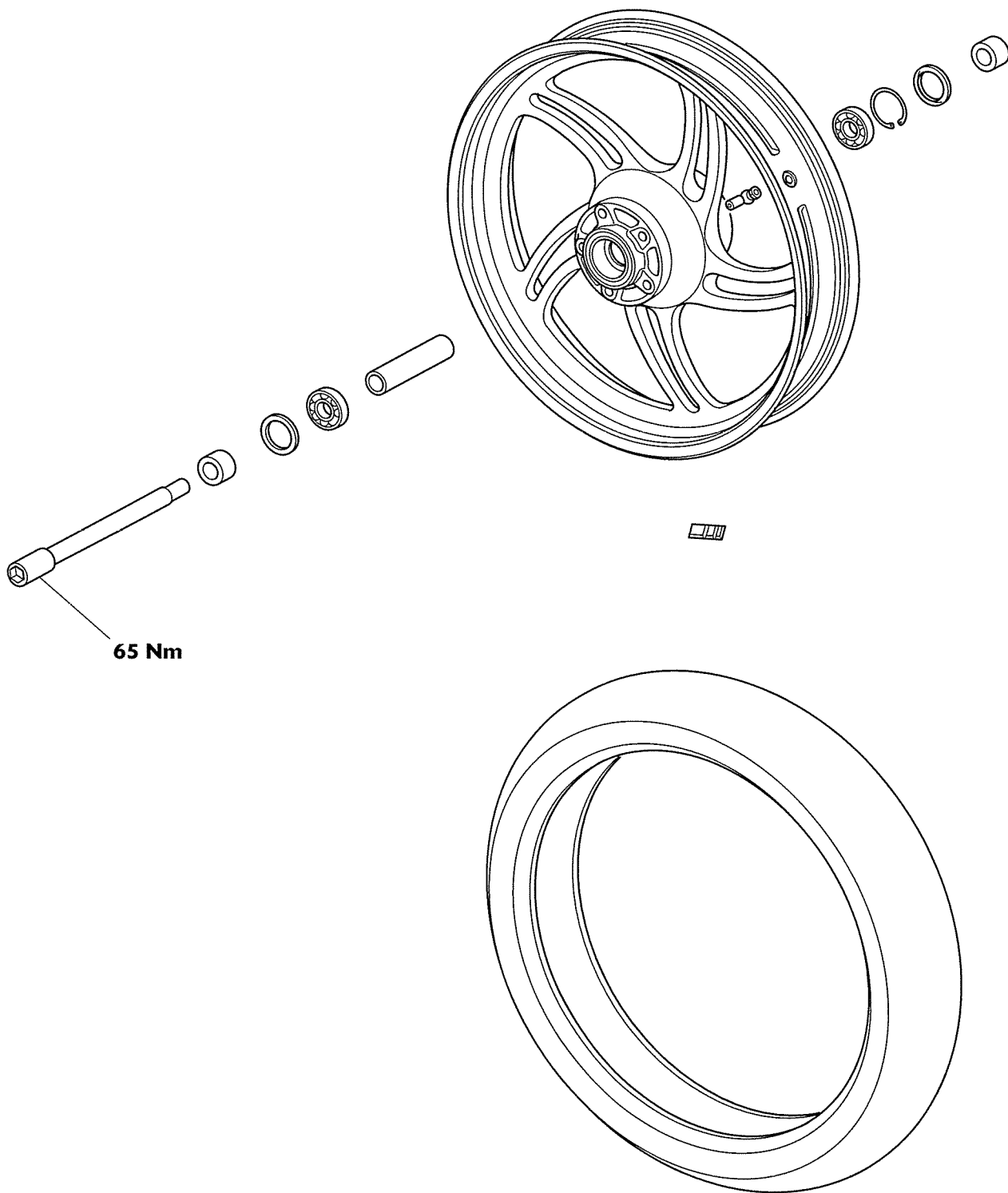
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# Wheels & Tyres

## Exploded view - Front Wheel



Exploded View - Rear Wheel and Cush Drive

