



Technical News 162
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Item 1.

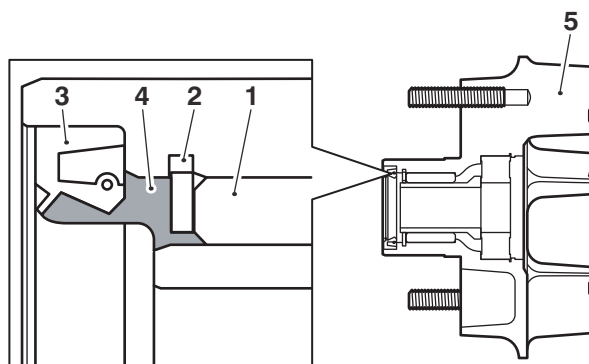
Description: Rear Pulley Carrier Needle Roller Bearing

Models affected: Thunderbird ABS, Thunderbird Commander, Thunderbird LT and Thunderbird Storm

Additional grease to NLGI 2 specification (Triumph recommends Castrol Grease) has been added to fill the gap between the seal and the needle roller bearing within the rear pulley carrier on the above models from VIN 667870.

All Thunderbird Models from start of production

When the rear wheel spindle has been removed for whatever reason, check and, if necessary, add grease to fill the gap between the seal and the needle roller bearing, as shown in the illustration below.



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1. Needle roller bearing
2. Circlip
3. Seal
4. Grease
5. Pulley carrier

Please mark your copy of the Service Manual with this information.

Item 2.

Description: Engine Covers

Models affected: Bonneville EFI, Bonneville T100 EFI, Scrambler EFI, Thruxton EFI, America EFI, America LT and Speedmaster EFI

The torque figure for the following engine covers has changed to **8 Nm** on the above models:

- Clutch Cover.
- Alternator Cover.

The tightening sequence of these engine covers are as described in the Service Manual or Technical News 131 dated January 2012.

Please mark your copy of the Service Manual with this information.

Item 3.**Description:** Main Bearing Shell Selection**Models affected:** Thunderbird - All models, Tiger 800 - All models, Street Triple - All models, Daytona 675 up to VIN 564947

The main bearing shell selection charts have been updated on the above models. When selecting crankshaft main bearing shells, refer to the charts below.

Crankshaft Main Bearing Selection Chart and Main Bearing/Journal Clearance.

Main Bearing Selection Chart - Tiger 800 - All models, Street Triple - All models, Daytona 675 up to VIN 564947 (all dimensions in millimetres)						
Shell Colour	White	Red	Red	Blue	Blue	Green
Crankcase Bore	35.980	35.980	35.989	35.989	35.997	35.997
	35.973	35.973	35.981	35.981	35.990	35.990
Journal Dia.	33.000	32.992	33.000	32.992	33.000	32.992
	32.993	32.984	32.993	32.984	32.993	32.984
Running Clearance	0.042	0.043	0.043	0.044	0.043	0.044
	0.022	0.022	0.022	0.022	0.023	0.021

Crankshaft main bearing/journal clearance	
Standard:	0.021 - 0.044 mm
Service limit:	0.07 mm

Main Bearing Selection Chart - Thunderbird - All models (all dimensions in millimetres)						
Shell Colour	White	Red	Red	Blue	Blue	Green
Crankcase Bore	55.502	55.502	55.511	55.511	55.520	55.520
	55.510	55.510	55.519	55.519	55.528	55.528
Journal Dia.	52.491	52.483	52.491	52.483	52.491	52.483
	52.499	52.490	52.499	52.490	52.499	52.490
Running Clearance	0.021	0.022	0.022	0.023	0.023	0.024
	0.043	0.044	0.044	0.044	0.045	0.045

Crankshaft main bearing/journal clearance	
Standard:	0.021 - 0.045 mm
Service limit:	0.07 mm

Please mark your copy of the Service Manual with this information.

Item 4.

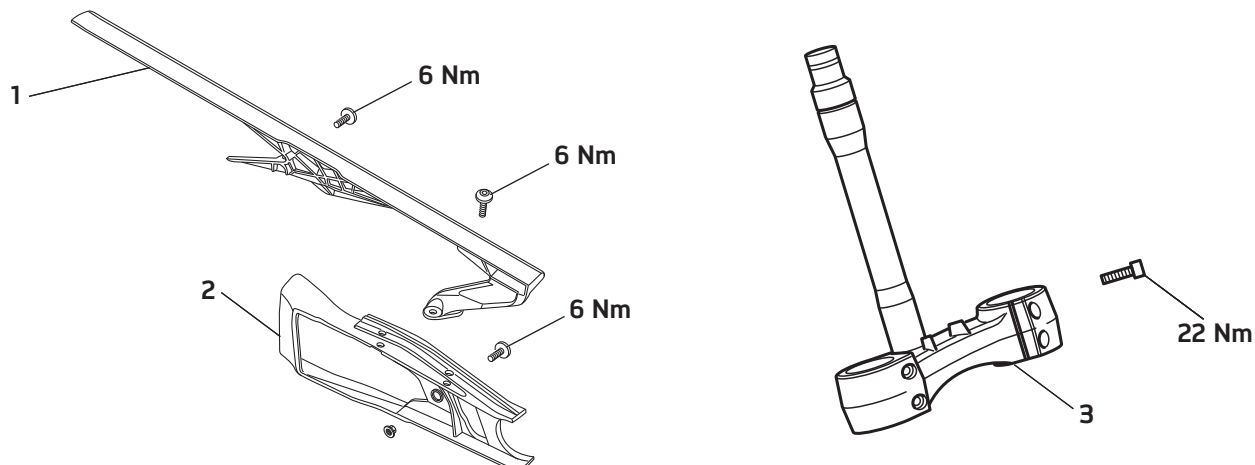
Description: Drive Chain Guard, Drive Chain Rubbing Strip and Lower Yoke Pinch Bolts

Models affected: Street Triple, Street Triple 660 cc, Street Triple R and Street Triple Rx

The torque figure for the lower yoke pinch bolts has changed to **22 Nm** on the above models. The torque figures for the drive chain guard screws and the drive chain rubbing strip have also changed to **6 Nm**.

Note:

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



1. Drive chain guard
2. Drive chain rubbing strip
3. Lower yoke

Please mark your copy of the Service Manual with this information.

Item 5.

Description: Horn Fixing

Models affected: Thunderbird Commander and Thunderbird LT

New encapsulated fixings and a washer have been introduced to secure the horn on the above models at various VINs. Different fixings are required for the Thunderbird Commander and Thunderbird LT, as described below.

Thunderbird Commander

The encapsulated fixing M6 x 20 mm (part number T3205085) and a washer (part number T3554200) was introduced at VIN 685177.

Thunderbird LT

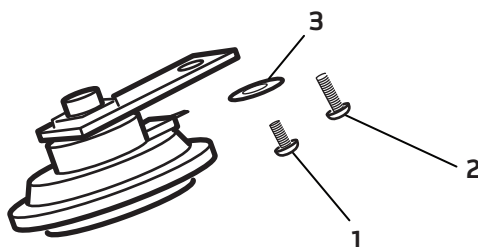
The encapsulated fixing M6 x 28 mm (part number T3205081) and a washer (part number T3554200) was introduced at VIN 684982.

Both Models

The torque figure for both fixings is **9 Nm**.

Note:

- Models already in service need not be retightened unless the fixings have been loosened or removed.
- If loosened or removed for any reason the fixings must be replaced and a washer fitted.



1. Encapsulated fixing M6 x 20 mm (Thunderbird Commander)
2. Encapsulated fixing M6 x 28 mm (Thunderbird LT)
3. Washer (both models)

When ordering replacement parts, always refer to EPC.

Please mark your copy of the Service Manual with this information.

Item 6.

Description: Clutch Cable

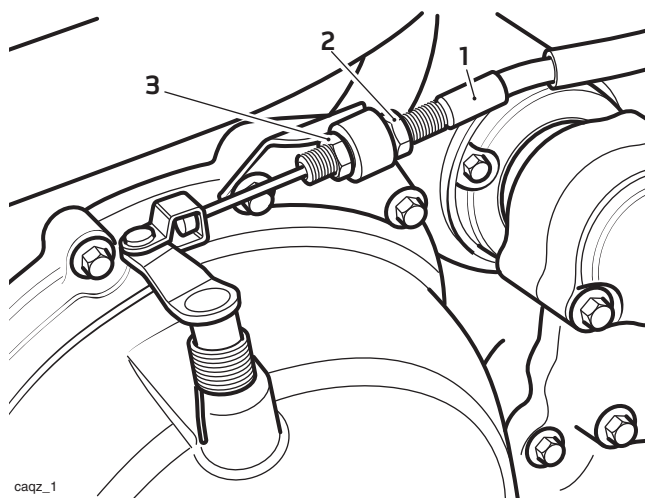
Models affected: Tiger 1050, Tiger 1050 ABS and Tiger Sport

A torque figure for the clutch cable adjuster nut, at the clutch end, has been introduced on the above models.

The adjustment of the clutch cable is as described in the Service Manual with the addition of tightening the adjuster nut to **3 Nm**.

Note:

- Models already in service need not be retightened unless the fixings have been loosened or removed.



1. Clutch cable
2. Adjuster nut
3. Lock nut

Please mark your copy of the Service Manual with this information.

Item 7.

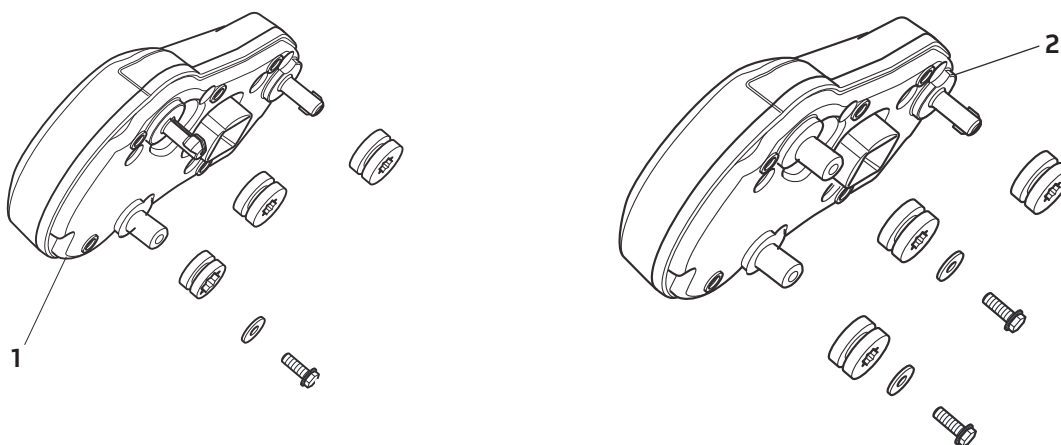
Description: Instrument Assembly

Models affected: Various

Model	From VIN
Daytona 675 and Daytona 675 R - All Models	Refer to Parts Table
Speed Triple 1050, Speed Triple SE, Speed Triple 1050 ABS and Speed Triple 1050 R ABS	
Street Triple and Street Triple R - All Models	
Tiger 800, Tiger 800 ABS, Tiger 800XC and Tiger 800XC ABS	
Tiger 1050, Tiger 1050 ABS, Tiger 1050 and Tiger Sport	
Tiger Explorer and Tiger Explorer XC	

Revised instrument assemblies have been introduced to the above models at various VINs.

The difference between the original and latest versions of the instrument assemblies is the mounting of the instrument assembly to the motorcycle. The latest version has an extra fixing and washer to secure the instrument assembly to its mounting, as shown in the illustration below.



1. Original instrument assembly (Speed Triple shown)

2. Latest instrument assembly (Speed Triple shown)

Parts will no longer support the original condition instrument assemblies, replacement instrument assemblies will be to the new condition.

For models built before the instrument assembly change, parts kits are available if the instrument assembly requires replacing. Refer to the parts table for the relevant part number.

Models built after the instrument assembly change do not require the parts kits.

When ordering replacement parts, always refer to EPC.

Parts Table

Model	VIN Range	Parts Kit Number
Daytona 675	From VIN 381275 to 559017	T2503721
Daytona 675	From VIN 249504 to 377509	T2503726
Daytona 675	From VIN 564948 to 610921	T2503730
Daytona 675 ABS	From VIN 572533	T2503730
Daytona 675 R	From VIN 569021	T2503730
Speed Triple 1050	From VIN 336377 to 461331	T2503723
Speed Triple SE	From VIN 435418 to 459627	T2503723
Speed Triple 1050	From VIN 467858	T2503725
Speed Triple 1050 ABS	From VIN 46283 to 581421	T2503725
Speed Triple 1050	From VIN 462834 to 581421	T2503728
Speed Triple 1050 ABS	From VIN 467858	T2503728
Speed Triple 1050 ABS Special Edition	From VIN 583093 to 602492	T2503728
Speed Triple 1050 R ABS Special Edition	From VIN 697412	T2503728
Speed Triple 1050 R ABS	From VIN 518877	T2503728
Street Triple	From VIN 316225 to 553873	T2503722
Street Triple, Street Triple R	From VIN 560477 to 614427	T2503731
Street Triple ABS and Street Triple R ABS	From VIN 565000	T2503731
Street Triple 70 kW	From VIN 562337 to 614302	T2503732
Street Triple ABS 70 kW	From VIN 568731	T2503732
Street Triple 660 cc	From VIN 663100	T2503732
Tiger 800, Tiger 800 ABS, Tiger 800XC ABS and Tiger 800XC SE	From VIN 466334 to 674854	T2503727
Tiger 1050 and Tiger 1050 ABS	From VIN 287504 to 512846	T2503724
Tiger 1050 ABS	From VIN 570778 to 595496	T2503733
Tiger Explorer and Tiger Explorer XC	From VIN 524056	T2503729
Tiger Sport	From VIN 570059	T2503733

Please mark your copy of the Service Manual with this information.

Item 8.**Description:** Instrument Nacelle**Models affected:** Rocket III Touring, Rocket III Touring SE and Rocket III Touring ABS

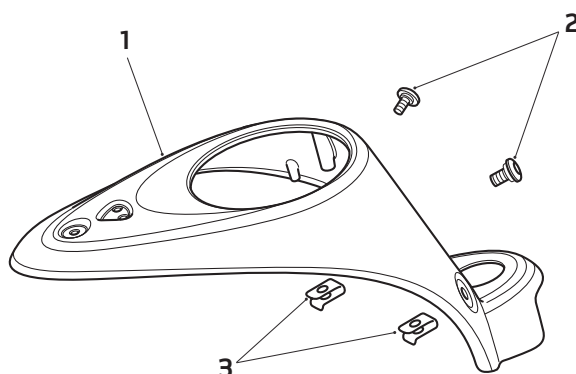
A new instrument nacelle and its two front fixings have been introduced to the above models from VIN 679547.

The difference between the original and new instrument nacelle is that the two front fixing holes diameter has increased to 12 mm.

The two front fixings have changed to a shouldered bolt and the captive nuts have also changed.

The torque figure for the front two fixings has changed to **5 Nm**.

The torque figure for the rear fixing remains at **7 Nm**.

**1. Nacelle****2. Shouldered bolt****3. Captivated nuts**

For models built from VIN 679547 the items can be replaced like for like.

For models built up to VIN 679546 a parts kit (part number T2501464) is available when replacing the instrument nacelle. The parts kit consists of the following items listed in table below.

Parts Kit Number	Item	Quantity	Item Part Number
T2501464	Instrument nacelle	1	T2501465
	Shouldered bolt, M6 x 15 mm	2	T3330858
	Captive nut M6	2	T3350141

Please mark your copy of the Service Manual with this information.

Item 9.

Description: Final Drive Chain and Sprockets

Models affected: All Bonneville Models, All Scrambler Models, All Thruxton Models, All America Models and All Speedmaster Models

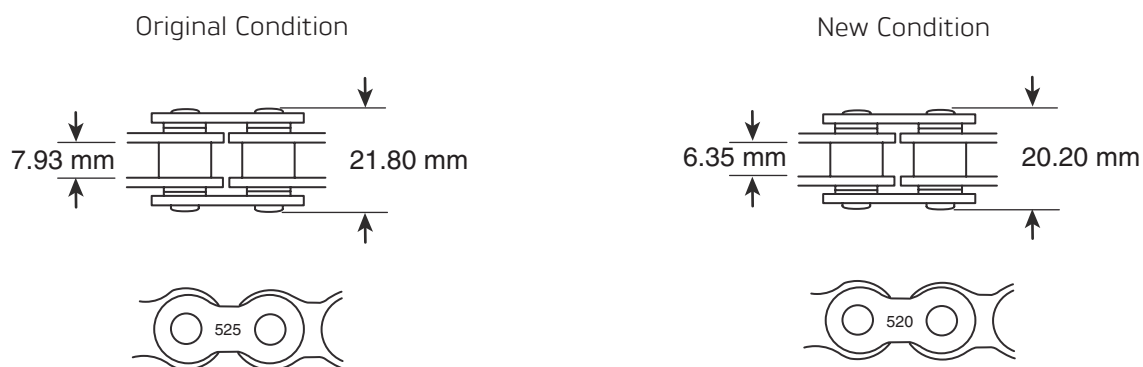
New sprockets and final drive chain have been introduced to the above models from the following VINs which are not retrofittable:

- All Bonneville models from VIN 694352
- All Scrambler models from VIN 694350
- All Thruxton models from VIN 694350
- All America models from VIN 694429
- All Speedmaster models from VIN 694387.

The difference between the original condition and new condition drive chain is the width of the chain.

The original condition drive chain can be identified with the number 525 etched on to some of the outer and/or inner plates of the links.

The new condition drive chain can be identified with the number 520 etched on to the links.



Width Dimensions and Identification Markings of the Final Drive Chains

The thickness of the sprockets has also been reduced to suit the width of the new final drive chain.

Triumph recommends that when replacing the final drive chain, the front and rear sprockets should also be replaced. To facilitate this the following spares kits are available.

Caution

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

Replacing a worn final drive chain without replacing the sprockets will lead to premature wear of the new final drive chain.

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

Models Up To The VINs Listed in the Table Below

Each spares kit will consist of a drive chain, front sprocket and rear sprocket for the relevant model.

Model	Up To VIN	Spares Kit Number
All Bonneville EFI Models	694351	T2017210
All Scrambler and Thruxton EFI Models	694349	T2017320
All America EFI Models	694428	T2017188
All Speedmaster EFI Models	617620	T2017188
All Speedmaster EFI Models	From 617621 to 694386	T2017190

Models From VIN Listed in the Table Below

Each spares kit will consist of a drive chain, front sprocket and rear sprocket for the relevant model.

Model	From VIN	Spares Kit Number
All Bonneville EFI Models	694352	T2017213
All Scrambler and Thruxton EFI Models	694350	T2017223
All America EFI Models	694429	T2017243
All Speedmaster EFI Models	694387	T2017244

The final drive chain adjustment, final drive ratio and the removal and installation of the final drive chain and sprockets are not changed but are as described in the Service Manual.

Please mark your copy of the Service Manual with this information.

Item 10.

Description: Rear Mudguard Fixings

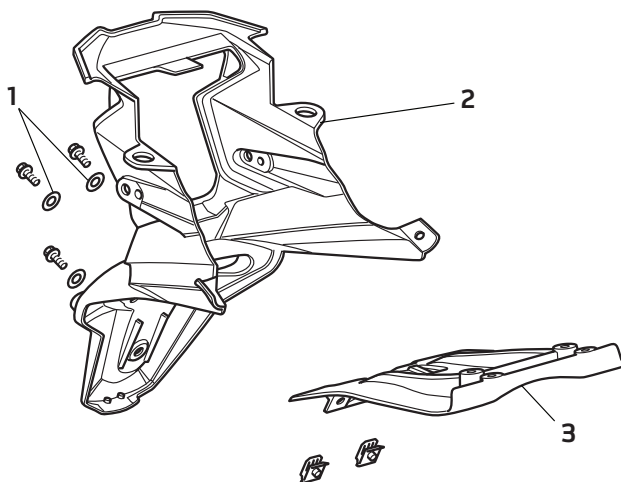
Models affected: Tiger XRx, Tiger XCx

Washers have been introduced to the fixings securing the licence plate hanger to the under tray moulding on the above models from VIN 688563.

The torque figure for both fixings is **3 Nm**.

Note:

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



1. Washers
2. Licence plate hanger
3. Under tray moulding

When ordering replacement parts, always refer to EPC.

Please mark your copy of the Service Manual with this information.

Item 11.

Description: Lubrication Main Gallery Threaded Insert

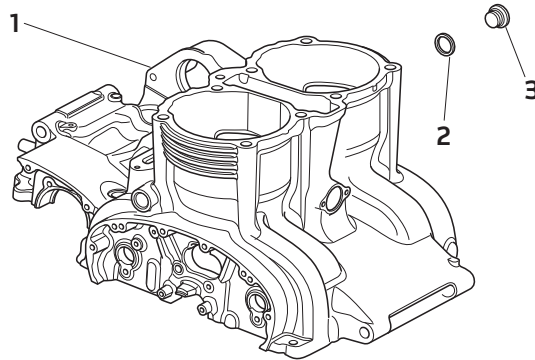
Models affected: Thunderbird ABS, Thunderbird Commander, Thunderbird LT and Thunderbird Storm

The torque figure for the lubrication main gallery threaded insert on the left hand side of the crankcase has changed to **60 Nm** on the above models.

As a reminder, always install a new copper washer if the threaded insert has been loosened or removed.

Note:

- **Models already in service need not be retightened unless the insert has been loosened or removed.**



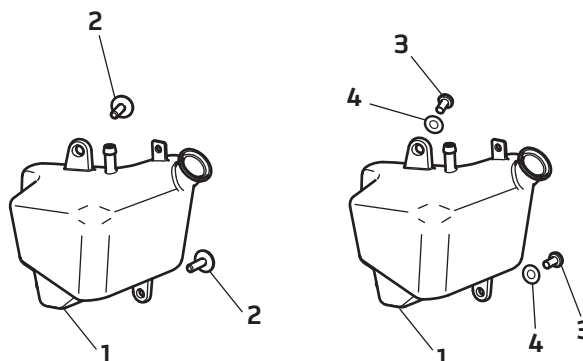
1. Crankcase upper
2. Copper washer
3. Threaded insert

Please mark your copy of the Service Manual with this information.

Item 12.

Description: Coolant Expansion Tank
Models affected: Tiger Explorer and Tiger Explorer XC

New fixings and washers have been introduced for the coolant expansion tank on the above models from VIN 700222. The new fixings have a smaller size head and a washer must also be fitted with these fixings. The torque figure for these fixings remains at **9 Nm**.



1. Coolant expansion tank
2. Original fixings
3. New fixings
4. New washers

When ordering replacement parts, always refer to EPC.

Please mark your copy of the Service Manual with this information.

Item 13.

Description: Piston Rings
Models affected: Thunderbird 1700 cc Models

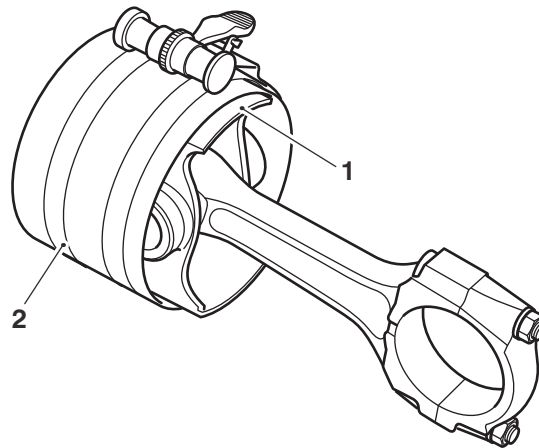
A revised method of installing the piston to the liner has been introduced on the above models and will be included in the next Service Manual update.

1. Place the liner on a level surface and smear the internal circumference with clean engine oil.
2. If previously removed refit the connecting rod to the piston as described in the Service Manual.
3. Lubricate the piston rings and fit them to the piston as described in the Service Manual.
4. Smear the piston with engine oil.

Note:

- Allow approximately 10 mm of the piston skirt to be visible when the piston ring compressor is fitted.
- Check the piston rings are correctly aligned to the piston as instructed in the Service Manual prior to fitting the piston ring compressor.

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- Using a suitable automotive piston ring compressor, compress the piston rings ensuring the piston rings locate into their piston grooves.

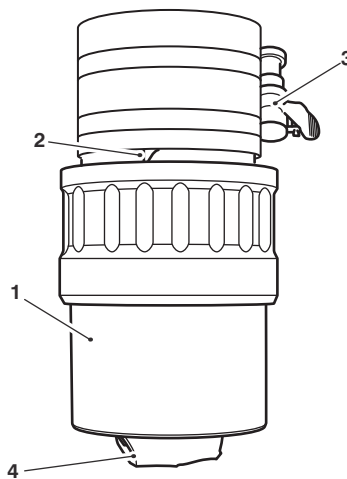


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- Piston
- Piston ring compressor

Note:

- Ensure the connecting rod and big end are protected with a protective covering (e.g. masking tape) before placing the big end into the liner.
- Align the piston skirt to the top edge of the liner.



cbh

- Liner
- Piston
- Piston ring compressor
- Protective cover

Note:

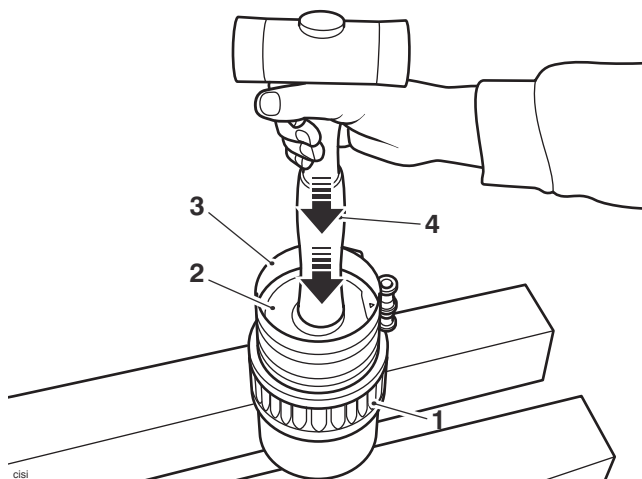
- Use a suitable tool (such as a wooden hammer shaft) when tapping the piston into the liner.



Caution

Do not use excessive amounts of force when installing the piston into the liner. Excessive force may cause the piston to fracture or the piston rings to become dislodged causing severe engine damage.

7. Whilst supporting the liner and piston ring compressor, gently tap the piston into the liner until it becomes free from the piston ring compressor.



1. Liner
2. Piston
3. Piston ring compressor
4. Hammer shaft

8. Remove the protective covering from the big end cap.
9. Fit the liner into the crankcase as described in the Service Manual.

Please mark your copy of the Service Manual with this information.

Item 14.

Description: Öhlins Suspension Fluid

Models affected: Daytona 675 R from VIN 569021 and Speed Triple 1050 R from VIN 518877

Öhlins recommend that the models listed above, fitted with Öhlins front forks, must have the fork oil renewed with Öhlins suspension fluid with the viscosity of 19.0 cSt at 40°C (Öhlins part number 01303-01 for 1 litre or 01309-10 for 10 litres).

The fork oil level chart in the relevant Service Manual will need to be modified for the Öhlins front fork oil specification, as shown in the tables below.

Fork Oil Level Chart

Daytona 675 R from VIN 569021

Oil Level*	Oil Volume	Oil Grade	Fork Pull Through
150 mm	Not specified by Öhlins	Öhlins suspension fluid 19.0 cSt at 40°C	Top of the outer tube 12 mm above the upper surface of the upper yoke

*** Spring and Spring Spacer Removed and Fork Fully Compressed**

Speed Triple 1050 R from VIN 518877

Oil Level*	Oil Volume	Oil Grade	Fork Pull Through
130 mm	478 cc	Öhlins suspension fluid 19.0 cSt at 40°C	Groove on outer tube 5 mm below the lower surface of the upper yoke

*** Spring Removed and Fork Fully Compressed**

The interval for front fork oil change is as described in the Service Manual and Owner’s Handbooks.

Service Data Sheets

The suspension and wheels section in the Service Data Sheets will also need to be modified for the Öhlins front fork oil specification, as shown in the tables below.

Suspension and Wheels

Daytona 675/Daytona 675 R from VIN 564948

- Recommended fork oil grade Kayaba KHL 15-10 (SAE 5W) (Daytona 675)
- Recommended fork oil grade Öhlins suspension fluid 19.0 cSt at 40°C (Daytona 675 R)
- Oil volume (dry fill) 503 cc (Daytona 675), Not specified by Öhlins (Daytona 675 R)
- Oil level (fork fully compressed) 95 mm (Daytona 675), 150 mm (Daytona 675 R)

Speed Triple from VIN 461332/Speed Triple R

- Recommended fork oil grade Showa SS8 (SAE 10W) (Speed Triple)
- Recommended fork oil grade Öhlins suspension fluid 19.0 cSt at 40°C (Speed Triple R)
- Oil volume (dry fill) 552 cc (Speed Triple), 478 cc (Speed Triple R)
- Oil level (fork fully compressed) 85 mm (Speed Triple), 130 mm (Speed Triple R)

Please mark your copy of the Service Manual and Service Data Sheets with this information.

Circulation

Initial and date when read and return to central file holder

Service Manager	Parts Manager	Sales Manager	Workshop Supervisor	Technician 1	Technician 2