

*Front Fork kit for BMW R nineT*

***FKS 509 0***

*Spare Parts List Workshop Manual*



ADVANCED SUSPENSION TECHNOLOGY

## SAFETY PRECAUTIONS

### **⚠ Warning!**

The shock absorber/front fork/steering damper is an important part of the vehicle and will affect the stability.

### **⚠ Warning!**

After installing the Öhlins product, take a test ride at low speed to make sure your vehicle has maintained stability.

### **⚠ Warning!**

Some of Öhlins products contain pressurized nitrogen gas (N<sub>2</sub>). Do not open, service or modify pressurized products without proper education (approved Öhlins dealer/distributor) and proper tools.

### **👁 Note!**

Read and ensure you understand the information in this manual and other technical documents provided by Öhlins, before you use the product.

### **👁 Note!**

Öhlins Racing AB can not be held responsible for any damage to the shock absorber/front fork/steering damper, vehicle, other property or injury to persons, if the instructions for mounting, usage and maintenance are not obeyed.

### **⚠ Warning!**

If the suspension makes an abnormal noise, or the function is irregular, or if you notice any leakage from the product, stop the vehicle immediately and return the product to an Öhlins Service Centre.

### **⚠ Warning!**

The product warranty shall only apply if the product has been operated and maintained in accordance with recommendations in this manual. If you have any questions regarding usage, service, inspection and/or maintenance contact Öhlins.

### **👁 Note!**

When working with the Öhlins product, read the Vehicle Service Manual.

### **⚠ Warning!**

This product was developed and designed exclusively for a specific vehicle model and shall only be installed on the intended vehicle model in its original condition as delivered from the vehicle manufacturer.

## Contents

Figure 1 - Top cap .....	3
Figure 2 - Shaft assembly .....	4
Figure 3 - Damping unit .....	5

## SAFETY SYMBOLS

In this manual, mounting instructions and other technical documents, important information concerning safety is distinguished by the following symbols:



The Safety Alert Symbol means: Warning! Your safety is involved.

### **⚠ Warning!**

The Warning Symbol means: Failure to follow warning instructions can result in severe or fatal injury to anyone working with, inspecting or using the shock absorber, or to bystanders.

### **👉 Caution!**

The Caution Symbol means: Special precautions must be taken to avoid damage to the shock absorber.

### **👁 Note!**

The Note Symbol indicates information that is important regarding procedures.

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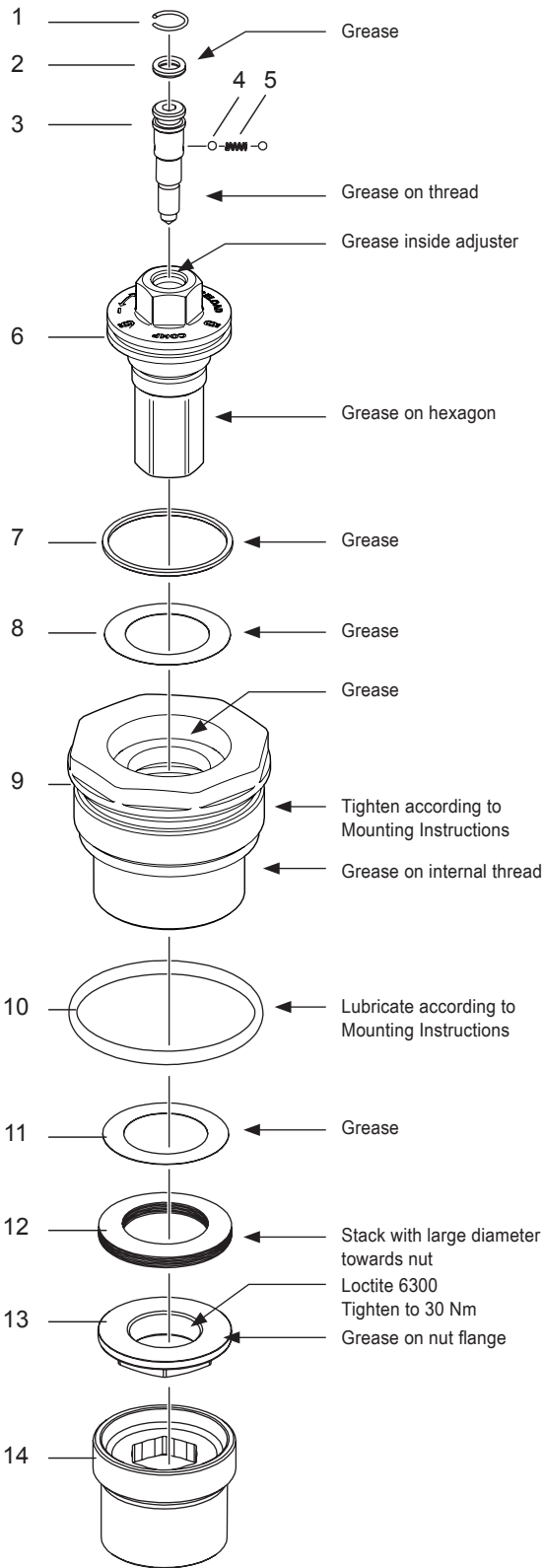
Torque, threadlocker and grease listed below apply to both cartridges.

### Special tools required:

Part number	Description	Note
01791-25	Threadlocker Loctite 2400	50 ml
01791-27	Threadlocker Loctite 2700	50 ml
01791-23	Threadlocker Loctite 6300	50 ml
01888-01	WD-40	
00146-01	Grease	100 g
00727-02	Clamp	Shaft
00727-06	Clamp	Cylinder tube

# SPL FKS 505 0

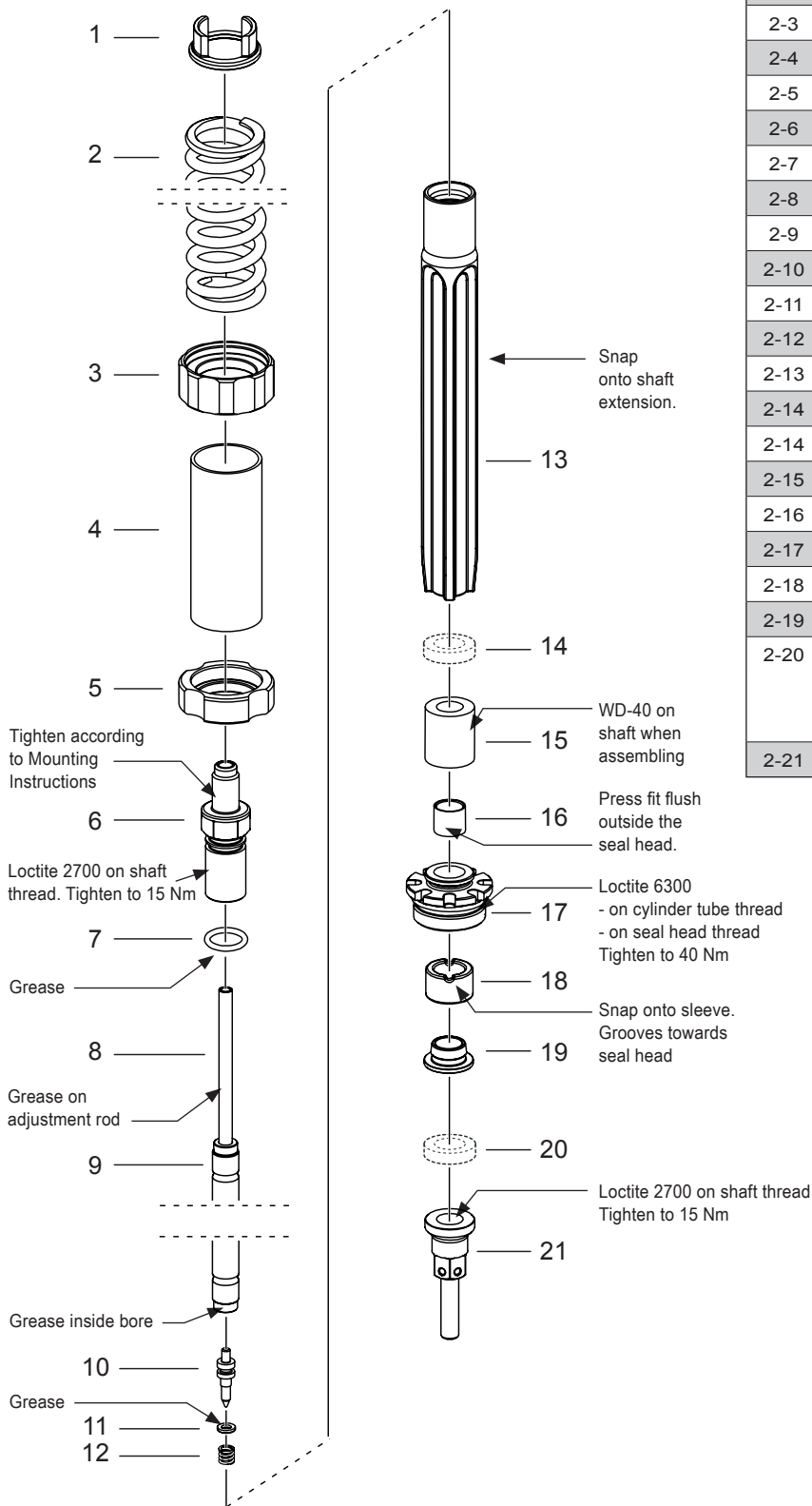
Figure 1 - Top cap



Pos	Part No	Pcs	Description	Notes
1-1	01473-01	2	Circlip	
1-2	00577-01	2	O-ring	
1-3	01467-02	2	Adjuster	
1-4	00884-04	4	Ball	
1-5	01474-01	2	Spring	
1-6	21934-01	1	Adjuster	Compression
1-6	21934-02	1	Adjuster	Rebound
1-7	00338-72	2	O-ring	
1-8	03309-01	2	Shim	
1-9	21933-05	2	Adjustment housing	
1-10	00438-26	2	O-ring	
1-11	03309-01	2	Shim	
1-12	03317-01	8	Spring washer	
1-13	03313-01	2	Nut	
1-14	03315-01	2	Preload socket	

# SPL FKS 505 0

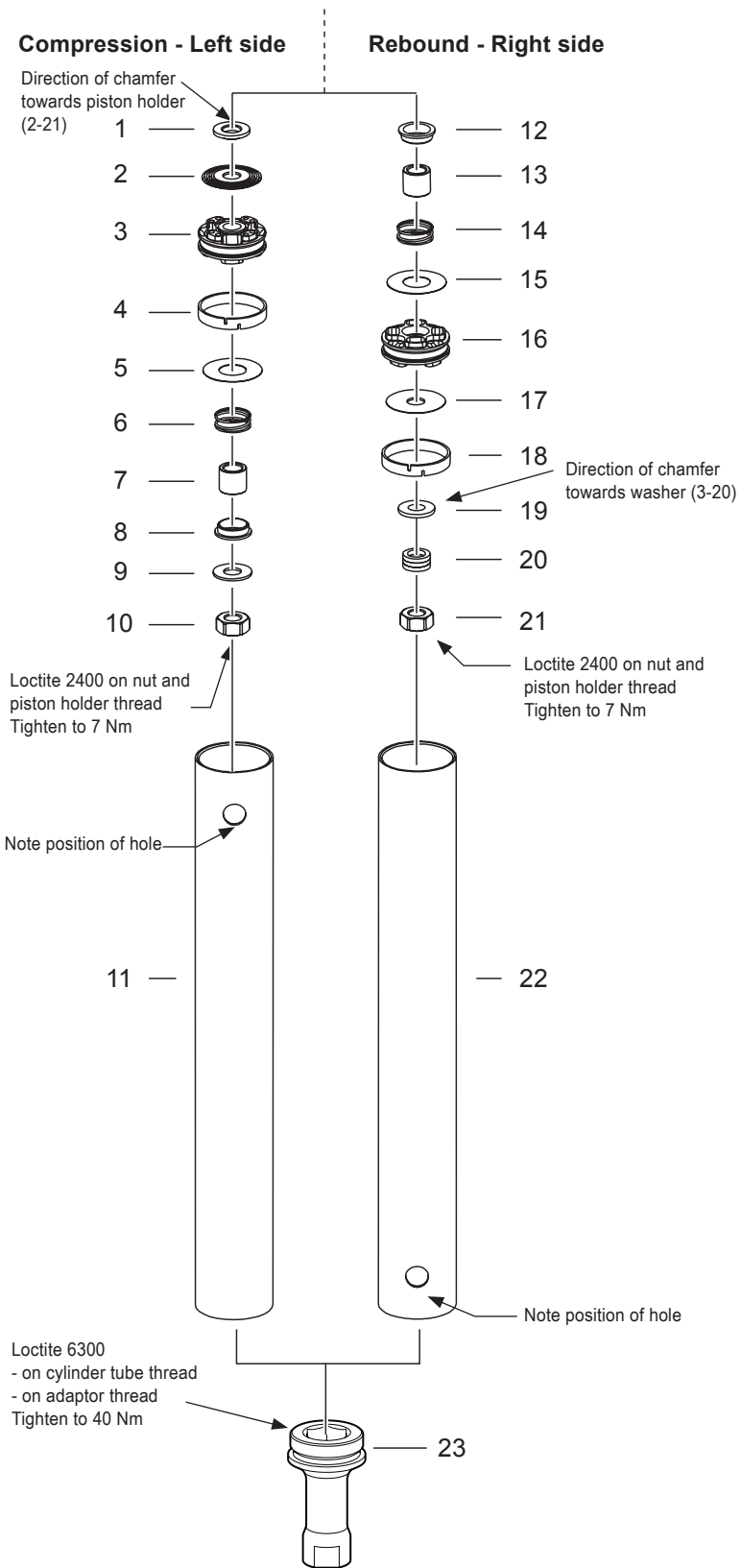
Figure 2 - Shaft assembly



Pos	Part No	Pcs	Description	Notes
2-1	03316-02	2	Spring support	
2-2	08790-90	1	Main spring	
2-3	21669-01	2	Guide ring	
2-4	01460-84	2	Preload tube	
2-5	01438-02	2	Guide ring	
2-6	03314-12	2	Shaft extension	
2-7	00338-76	2	O-ring	
2-8	02366-08	2	Adjustment rod	
2-9	21637-01	2	Shaft	
2-10	01698-42	2	Needle	
2-11	00438-31	2	O-ring	
2-12	02322-01	2	Spring	
2-13	21663-01	2	Guide sleeve	
2-14	21620-02	2	Spacer	2 mm
2-14	21620-03	6	Spacer	3 mm
2-15	01580-01	2	Bump rubber	
2-16	00110-03	2	Bushing	
2-17	21670-03	2	Seal head	
2-18	21752-01	2	Top out rubber	
2-19	21751-01	2	Sleeve	
2-20	21620-02	4	Spacer	2 mm
	21620-03	2	Spacer	3 mm
	21620-10	6	Spacer	10 mm
2-21	01654-13	2	Piston holder	

# SPL FKS 505 0

**Figure 3 - Damping unit**



Pos	Part No	Pcs	Description	Notes
3-1	21750-16	1	Washer	Compression
3-2	See spec. card	-	Shim stack	Compression
3-3	21645-02	1	Piston	Compression
3-4	01447-03	1	Piston ring	Compression
3-5	00520-26	1	Check valve shim	Compression
3-6	01693-03	1	Check valve spring	Compression
3-7	01669-06	1	Sleeve	Compression
3-8	01672-01	1	Spring collar	Compression
3-9	00120-01	2	Washer	Compression
3-10	01657-01	1	Nut	Compression
3-11	21646-01	1	Cylinder tube	Compression
3-12	01672-01	1	Spring collar	Rebound
3-13	01669-06	1	Sleeve	Rebound
3-14	01693-03	1	Check valve spring	Rebound
3-15	00520-26	1	Check valve shim	Rebound
3-16	21645-02	1	Piston	Rebound
3-17	See spec. card	-	Shim stack	Rebound
3-18	01447-03	1	Piston ring	Rebound
3-19	21750-16	1	Washer	Rebound
3-20	00120-01	1	Washer	Rebound
3-21	01657-01	1	Nut	Rebound
3-22	21646-01	1	Cylinder tube	Rebound
3-23	21649-07	2	Adaptor	

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