1. GENERAL

1.1 VALIDITY
This manual describes the component specified on the front page and the footer. It is valid for the technical condition of the component at the Sep. 02, 2019. Design changes remain reserved.

1.2 SAFETY
The safety instructions are classified as follows:

![DANGER]
---
...indicates a hazardous situation that, if not avoided, will result in death or serious injury.

![CAUTION]
---
...indicates a hazard with a medium level of risk which, if not avoided, may result in minor or moderate injury.

![NOTE]
---
...indicates a potentially hazardous situation that may result in damage to property.

1.3 TARGET GROUP
This manual is only intended for DT Swiss service centers. The works described in this manual may only be done by skilled professionals trained by DT Swiss. If you have any doubts about your own abilities, you should definitely contact a specialist or a DT Swiss Service Center. If the work is not carried out properly, any warranty claims expire.

1.4 USING THIS MANUAL
The steps described in this manual must be carried out in the order they are shown. If steps are ignored or executed in a wrong order, the function of the component cannot be guaranteed. Instructions begin with the table «Preparatory Steps» and end with the table «Closing Steps». The instructions in these tables must be carried out.
1.5 GENERAL MAINTENANCE INFORMATION

Unless otherwise specified, O-rings and seals must be greased before assembly.

CLEANING

For an optimal result of the maintenance works, every component that will be disassembled must be cleaned. Only use cleaners which do not damage the components. Especially the cleaning of O-rings and sealings requires mild cleaners. Observe the instructions for use of the respective cleaning agent.

DT Swiss recommends the following cleaning products:

- Motorex Rex
- Motorex Swissclean
- Motorex OPAL 2400, 3000 OPAL, OPAL 5000

Use soap water or similar mild cleaners for external cleaning.

TOOLS

To ensure a damage-free mounting and dismounting of the components, only use the tools which are mentioned in this manual. Special tools are indicated at the beginning of a chapter in the table “Required material”.

The use of different tools is at the discretion of the user. If components are damaged by the usage of differing tools, the user is liable.

DT Swiss special tools are precision tools. Damage-free mounting and dismounting of the components can only be ensured if the tools are working properly and if the conditions of the tools are perfect. Always keep the tools in their original packaging or adequate devices to save them from damages.
1.6 ENVIRONMENTAL PROTECTION
The statutory regulations shall apply. Whenever possible, avoid creating waste. Waste, especially carbon, lubricants, cleaners and any other fluids must be disposed in an environmentally compatible manner. Only print this manual if electronic usage is not possible.

1.7 EXCLUSION OF LIABILITY
The activities listed in this manual may only be carried out by persons with sufficient specialist knowledge. The user is liable for any damage or consequential damage caused by wrong maintained or wrong installed components. If you have doubts, please contact your allocated DT Swiss pro level service center.

1.8 WARRANTY (EUROPE)
In addition to the general guarantee required by law, DT Swiss AG based in Biel/Switzerland, provides a guarantee for 24 months from the date of purchase. DT Swiss AG shall reject any liability for both indirect damage caused by accidents and consequential damage. Any contradictory or extended national rights of the purchaser are not affected by this warranty. Place of performance and jurisdiction is Biel/Switzerland. Swiss law shall apply.
Submit any warranty claims to your retailer or a DT Swiss service center. Any defects recognized by DT Swiss AG as a warranty claim will be repaired or replaced by a DT Swiss service center.
Warranty and guarantee claims can only be made by the original purchaser with a valid sales receipt.
There shall be no claim under the guarantee for:

- Normal wear and tear caused by use of the components
- Incorrect assembly
- Incorrect or nonexistent maintenance
- Incorrectly completed repairs
- Use of unsuitable products
- Modification of components
- Incorrect use or misuse
- Carelessness
- Leasing, commercial use or use in competitions
- Damage caused by accidents
- Delivery and transport damage
- Modification, defacing or removal of the serial number
2. DESCRIPTION

2.1 SPRING

2.1.1 SAB (SMOOTH AUTO BALANCING)

The SAB (Smooth Auto Balancing) system only consists of a bypass located in the air chamber. The bypass ensures that the pressure inside the negative air chamber is higher than in the positive air chamber when the shock is fully extended. This reduces the force of the beginning stroke. The shock responds very smooth and offers more comfort and traction.

Function in detail, see following.
After inflating or changing the air pressure:
When the shock compresses, the piston moves over the bypass of the air chamber. When the piston is located on the bypass, the bypass ensures a pressure equalization of the positive and negative air chamber (see red arrow).

Function during operation:
Due to the pressure equalization, the pressure in the negative air chamber is higher than in the positive air chamber when the shock is fully extended.
This increased pressure inside the negative air chamber counteracts to the breakaway torque and improves the response characteristics drastically.

When the shock is compressed further, only the air inside the positive air chamber is compressed.
When the shock extends again, a pressure builds up in the negative air chamber and the cycles starts again.
2.2 DAMPING

The shock is a closed system. The damping oil is kept under pressure by a prestressed internal floating piston (IFP) even in the rest position. This prevents the oil from foaming and ensures a constant damping performance even on long, rough downhills.

The oil touches the inside of the oil chamber over the entire area, enabling optimum heat dissipation.

2.2.1 COMPRESSION

The compression damping regulates the compression speed of the shock and can be adjusted in three stages via the lever on the shock or using the remote lever on the handlebars.

**OPEN**

In “OPEN” mode, the compression of the shock is in the most sensitive, factory-set setting. The shock responds sensitively to small unevennesses in the terrain.

The fine tuning of the low and high speed compression is factory set and cannot be changed.


**DRIVE**

If the lever on the shock or remote lever on the handlebars is moved to the middle position, the compression damping is partially closed. This makes the bike much more firm and encourages effective pedalling in situations where the full performance of the shock is not required (uphill climbing on roads or easy trails, rides on level ground).

Detailed description, see chap. „Function in detail: DRIVE Mode“ on page 10.

**LOCK**

The «LOCK» mode blocks the shock in fully extended position. This is mostly suitable for situations where no suspension is needed (for example riding on the road or connecting trails).

A blow-off valve protects rider and material from unexpected hits.

Detailed description, see chap. „Function in detail: LOCK Mode / Blow Off“ on page 11.
When the shock compresses, the damping piston moves through the oil chamber. The oil flows through the damping piston. During slow compression movements, the oil flows through the low speed compression (LSC) channel. The oil flow is regulated by shims. Depending on the “factory setting”, these shims are differently hard and thus influence the damping curve.

In the case of rapid compression movements, the oil also flows through the oil channel of the high speed compression (HSC). Before the oil can flow into the rebound chamber, it must first overcome the force exerted by the shims. Depending on the “factory setting”, these shims are differently hard and thus influence the damping curve.

Due to the piston rod, the volume of the oil chamber is different on both sides of the damping piston. More oil is displaced than can be absorbed behind the piston. This excess oil compresses a chamber filled with nitrogen, which is separated from the damping oil by an internal floating piston (IFP).
If the DRIVE mode is activated, a slider blocks the oil channel of the low speed compression (LSC). The displaced oil can only flow through the oil channel of the high speed compression (HSC).
FUNCTION IN DETAIL: LOCK MODE / BLOW OFF

The Blow Off function is a safety mechanism to protect against excessive forces acting on the components of the shock while it is in “LOCK” mode.

If the shock is blocked in the “LOCK” mode, a slider blocks the oil channels of the low speed and high speed compression. There are two channels in the damping piston which directly connect the compression chamber and the rebound chamber. These channels are closed by shims. There is no oil flow from the compression chamber to the rebound chamber until the force of the shims is overcome. Since the two channels have a small pressure surface (2x Ø1.5 mm), there must be a high pressure so that the blow off enables the oil flow.
2.2.2 REBOUND

The rebound controls the speed of the decompression movement of the shock. Depending on the decompression speed, the decompression movement is controlled by the low speed rebound or the high speed rebound.

The low speed rebound damping can be adjusted from the outside using the red rebound wheel. The rotation of the rebound wheel is passed on to the rebound pin. The rebound pin is moved forwards and backwards via a thread.

FUNCTION IN DETAIL

When the shock is relieved, the damping piston is pushed through the oil chamber. The oil flows from the rebound chamber into the compression chamber. All the oil must flow through the damping piston where the rebound damping takes place.

During slow decompression movements, the oil flows through the low speed rebound (LSR) channel. The position of the rebound pin controls the flow resistance of the oil and thus the intensity of damping. The higher the flow resistance, the higher the damping.

Oil which cannot flow through the oil channels of the LSR (because of fast rebound speed of the shock and thus big displacement of the oil generated by the piston) flows through the oil channels of the high speed rebound (HSR). At the end of the oil channel there is a pre-tensioned shim which only opens at a certain oil pressure, thus enabling oil flow. This separation of the low speed and high speed rebound ensures separate damping characteristics at low to medium and high extension speeds.

Like the high speed compression, the high speed rebound is controlled by pre-tensioned shims. Depending on the “factory setting”, these shims are differently hard and thus influence the damping curve.
3. OPERATION AND SETTING

3.1 SETTING THE SAG (NEGATIVE TRAVEL)

The SAG (negative spring deflection) is the degree by which the shock compresses under the weight of the rider. If the SAG is set correctly, the rear wheel can follow the unevenness of the terrain better during the ride.

The setting of the SAG depends on the riding style. If you prefer a firm suspension for cross country or marathon use, you should choose a low SAG value. If you ride all mountain or enduro, a higher SAG value should be chosen. The stroke of the shock will be used more efficient and the rear wheel will follow the bumps much better.

The following values can be used for setting the SAG:

<table>
<thead>
<tr>
<th>shock length / stroke [mm]</th>
<th>SAG [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>170*30</td>
<td>20 %</td>
</tr>
<tr>
<td>170*35</td>
<td>35 %</td>
</tr>
<tr>
<td>165<em>40 / 190</em>40</td>
<td></td>
</tr>
<tr>
<td>165<em>45 / 190</em>45</td>
<td></td>
</tr>
<tr>
<td>205<em>65 / 230</em>65</td>
<td></td>
</tr>
<tr>
<td>205<em>60 / 230</em>60</td>
<td></td>
</tr>
<tr>
<td>185<em>55 / 210</em>55</td>
<td></td>
</tr>
<tr>
<td>185<em>50 / 210</em>50</td>
<td></td>
</tr>
<tr>
<td>170*35</td>
<td></td>
</tr>
</tbody>
</table>

To set the SAG, you should use the help of a second person.

1. Inflate the air chamber of the shock to approx. 15 bar (see chap. „3.2 Adjusting the air pressure” on page 14). Based on this pressure, the SAG can be set.

2. Deactivate the lockout: Turn the remote lever on the shock or on the handlebar in position «OPEN».

3. Push the SAG O-ring onto the wiper seal.
4. With full cycling equipment (helmet, backpack, shoes, etc.), sit on the bicycle.

5. Assume the normal position.
   → Only strain the shock with the weight of the rider.
   → Avoid sudden load impacts.

6. Get off the bicycle and measure the distance between the SAG O-ring and the wiper seal.
   → This dimension is referred to as SAG.
   → The SAG should be between 20% and 35% of the shock stroke and varies depending on use and riding style (see image, top).

7. Adjust the air pressure if necessary (see following).

8. Repeat the steps above until you reach the required SAG.

3.2 ADJUSTING THE AIR PRESSURE

USING THE DT SWISS SHOCK PUMP

The DT Swiss shock pump has a pressure gauge (1) which can be used to precisely adjust the shock’s pressure. A release valve (2) allows the pressure in the shock to be reduced. A valve lever (3) on the pump head (4) allows the shock pump to be unscrewed without any loss of pressure.

Operating the shock pump

A Screw the pump head (4) fully onto the valve on the shock.

B Close the valve lever (3) (push the lever towards the valve) and inflate the shock.
   → Closing the valve lever (3) opens the valve on the shock.
   → Pressing the release valve (2) allows the pressure in the shock to be reduced.

C Open the valve lever (3) (push the lever towards the pump tube).
   → Opening the valve lever closes the valve on the shock. When unscrewing, no air can escape from the shock.

D Unscrew the pump head (4) from the valve on the shock.
INCREASING THE AIR PRESSURE

By adjusting the air pressure of the air chamber, the spring rate will be affected. The higher the air pressure, the harder the spring.

Adjusting the air pressure to the weight of the rider can slightly change the total length of the shock.

1. Set the shock to “OPEN” mode.
2. Unscrew the valve cap on the shock.

3. Screw the shock pump onto the valve of the shock and inflate the shock up to the required pressure.
   → Note the instructions issued by the shock pump’s manufacturer!
   → When using the DT Swiss shock pump, see chap. „Using the DT Swiss shock pump” on page 14.

4. Slowly compress the shock with the shock pump screwed on ten times by around 25% of its stroke.
   → This equalizes the positive and negative air chambers (also see chap. „2.1.1 SAB [Smooth Auto Balancing]” on page 6).
   → Once the pressure displayed on the shock pump stops changing after compression, the two air chambers have equalized.

5. Repeat the process until the desired pressure is displayed on the shock pump after compression.
6. Unscrew the shock pump and screw the valve cap onto the valve.

REDUCING THE AIR PRESSURE

1. Set the shock to “OPEN” mode.
2. Unscrew the valve cap on the shock.
3. GRADUALLY press the valve insert with the back of the valve cap.
   or
   Screw on the shock pump and GRADUALLY reduce the air pressure by pressing the release valve on the shock pump.

The shock can compress up to the point at which the equalization of the positive and negative air chambers occurs.
3.3 SETTING THE DAMPING

3.3.1 ADJUSTING THE REBOUND

The rebound damping regulates the rebound speed of the shock and can be set by rotating the red rebound wheel by around 40 clicks (shock with standard mount) or 22 clicks (shock with trunnion mount).

→ The rebound damping is increased in a clockwise direction.
→ The rebound damping is decreased in a counterclockwise direction.

If the rebound damping is too low, the rear wheel will rebound too quickly. A rebound damping that is set too low will be felt through the frame bouncing up when riding.

If the rebound damping is too high, the rear wheel can no longer follow rapid-succession impacts and the suspension hardens.

The aim of the rebound setting is to absorb the rebound movement as effectively as possible based on the demands of the terrain. On fast, rough descents, for example, a lower rebound damping (= faster rebound speed) should be selected than on smooth descents without any major obstacles.
3.3.2 ADJUSTING THE COMPRESSION

The compression controls the speed of the compression movement of the shock.

**OPEN:**

In "OPEN" mode, the compression of the shock is in the most sensitive, factory-set setting. The shock responds sensitively to small bumps in the terrain.

**DRIVE:**

If the lever on the shock or remote lever on the handlebars is moved to the middle position "DRIVE", the compression damping is partially closed. This makes the bike much more firm and encourages effective pedalling in situations where the full performance of the shock is not required (uphill climbing on roads or easy trails, rides on level ground).

**LOCK:**

If the lever on the shock or remote lever on the handlebars is moved to the "LOCK" position, the flow of oil at the shock piston is blocked. A blow off valve opens the flow of oil in the event of heavy impacts and therefore prevents damage to the shock.
4.  SERVICE AND CARE

4.1  SAFETY

DANGER

DANGER TO LIFE DUE TO WRONG MAINTENANCE OF THE SHOCK!

Incorrect maintenance or assembly of the shock can lead to unpredictable errors!

- Maintenance and assembly may only be done by a skilled professional.
- In case of any doubt, contact a DT Swiss service center.
- Only use original spare parts.

4.2  CARE

The following care and cleaning instructions must be observed:

- Clean the shock with a damp cloth after each ride. Remove dirt accumulations in the area of the wiper seal.
- Never use aggressive cleaners that damage the wiper seal.
- Never use high pressure cleaners. Water and dirt can get into the shock and damage it!
- Remove all visible, dried dirt from the area of the wiper seal. This will prevent dirt from getting into the shock.
- It is not necessary to grease the shock in the area of the wiper seal.
- After cleaning, lubricate the sliding surface of the remote lever on the handlebar.

4.3  SERVICE INTERVALS

If service intervals are not respected, any warranty claims can be denied.

<table>
<thead>
<tr>
<th>Task</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small service (see 4.5 auf Seite 20)</td>
<td>• intensive use: 40 operating hours</td>
</tr>
<tr>
<td></td>
<td>• normal use: 100 operating hours</td>
</tr>
<tr>
<td></td>
<td>• or as required</td>
</tr>
<tr>
<td>Full service carried out by a DT Swiss service center</td>
<td>Annually or after 200 operating hours</td>
</tr>
<tr>
<td>Check the shock for damage</td>
<td>Before and after each ride</td>
</tr>
<tr>
<td>Check the fastening is correct</td>
<td>Before each ride</td>
</tr>
<tr>
<td>Check the functionality</td>
<td>Before each ride</td>
</tr>
<tr>
<td>Clean with a soft sponge and a suitable cleaning agent, especially in the area around the wiper seal.</td>
<td>After each ride</td>
</tr>
<tr>
<td>Do not use high pressure cleaners or aggressive cleaning agents!</td>
<td></td>
</tr>
</tbody>
</table>
The seal kit includes all parts needed for a small service. All of these parts can be changed without using special tools.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>O-ring air chamber standard mount</td>
<td>4</td>
</tr>
<tr>
<td>1b</td>
<td>O-ring air chamber trunnion mount</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>support ring</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>quad-ring</td>
<td>7</td>
</tr>
</tbody>
</table>
4.5 SMALL SERVICE

This chapter describes a small service. Further service works will be carried out by a DT Swiss service center.

A small service should be carried out in the following cases:

- The interval for a small service is expired (see table at the beginning of this chapter).
- Leakage that becomes apparent through repeated air loss. The shock must be inflated regularly.
- Unusual sounds (squeaking).
- Other defects or malfunctions.

## Preparatory Steps

<table>
<thead>
<tr>
<th>Preparatory Steps</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismount the shock from the bike.</td>
<td></td>
</tr>
<tr>
<td>Dismount the shock hardware.</td>
<td></td>
</tr>
<tr>
<td>Clean the surface of the shock.</td>
<td>see „1.5 General Maintenance Information“ on page 4</td>
</tr>
</tbody>
</table>

## Required Material

<table>
<thead>
<tr>
<th>Required Material</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>service kit air chamber</td>
<td>standard mount: CWXXXXX10095S</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>trunnion mount: CWKXXXXX23788S</td>
<td></td>
</tr>
<tr>
<td>grease</td>
<td>Buzzy’s Slick Honey</td>
<td>as required</td>
</tr>
<tr>
<td></td>
<td>4.7 dl: 40341000AD02000001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20 ml: TZZZZXXNSLICKS</td>
<td></td>
</tr>
</tbody>
</table>

### NOTE

**RISK OF DAMAGING THE SHOCK!**

To avoid damages, always clamp the shock or parts of the shock into ground clamping jaws, aluminum clamping jaws or plastic clamping jaws.
RELEASING THE AIR

⚠️ DANGER

RISK OF INJURY FROM PRESSURIZED COMPONENTS!

During the disassembly of the shock, compressed air can escape uncontrolled or pressurized components can be ejected.

- Release the air before carrying out any work on the shock.

⚠️ DANGER

SHOCK OIL MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS!

Oil mist might escape through the valve while releasing the air from the air chamber.

- If the air is released without using a shock pump, place a cloth over the valve while the air is being released.
- The valve must face down, away from your body while releasing the air.
- Immediately call a doctor if shock oil was swallowed or entered airways.

1. Set the shock to “OPEN” mode.
2. Unscrew the valve cap on the shock.
3. If the air is released without using a shock pump, place a cloth over the valve.
4. GRADUALLY press the valve insert with the back of the valve cap.
   or
   Screw on the shock pump and GRADUALLY reduce the air pressure by pressing the release valve on the shock pump.

The shock can compress up to the point at which the equalization of the positive and negative air chambers occurs.
REMVOING THE AIR CHAMBER

1. Remove the SAG O-ring from the oil chamber.

2. Clamp the shock into a vice vertically.

3. Unscrew the air chamber by hand.

4. If the air chamber can not be loosened by hand, unscrew the air chamber using a strap wrench.

5. Slide off the air chamber.
REPLACING THE O-RING OF THE AIR CHAMBER, QUAD-RING AND SUPPORT RING

Only shock with trunnion mount:
1. Remove the O-ring from the air chamber.
2. Clean the seat of the O-ring on the air chamber.
3. Slightly grease the new O-ring and fit it onto the air chamber.

Only shock with standard mount:
1. Remove the O-ring from the air chamber cap.
2. Clean the seat of the O-ring on the air chamber cap.
3. Check the air chamber cap for damages in the area of the O-ring.
4. Slightly grease the new O-ring and fit it onto the air chamber cap.
5. Remove both support rings from the oil chamber tap.
6. Remove the quad-ring from the oil chamber tap.
7. Clean the seat of the quad-ring and the support ring.
8. Slightly grease the new quad-ring and fit it onto the oil chamber tap.
   → Ensure that the quad-ring is not twisted.
9. Put both support rings on both sides of the quad ring onto the oil chamber tap.

10. Slightly grease the oil chamber.
REPLACING THE WIPER SEAL

1. Carefully remove the wiper seal from the air chamber using plastic forceps.
   → Do not damages the air chamber housing!
   → Do not re-use the wiper seal!

2. Remove the support ring from the air chamber housing by hand.
   → Do not re-use the support ring!

3. Remove the quad-ring from the air chamber housing by hand.
   → Do not re-use the quad-ring!

4. Clean the air chamber housing with a clean, lint-free and dry cloth.
   There must be no lint and no residuals of grease after cleaning!

NOTE

RISK OF DAMAGE DUE TO WRONG CLEANERS!

Aggressive cleaners can cause damages to the wiper seal. A damaged wiper seal is the reason for air leakages of the shock.

- Only use cleaners mentioned in section „Cleaning“, page 6.
5. Slightly grease the new quad-ring and put it into the inner groove of the air chamber [see figure].
   → Ensure that the quad-ring is not twisted.

6. Put a new support-ring onto the web between both grooves of the air chamber [see figure].

7. Slightly grease the new wiper seal and put it into the outer groove of the air chamber [see figure].
   → Ensure, the wiper seal lays evenly all around the groove.
8. Slightly grease the inner surface of the air chamber housing and the thread. Grease the wiper seal generously.
   → Required grease, see table on page 28.

9. Clamp the shock into the vice.

10. Slide on the air chamber and tighten it by hand.
    → Ensure, that the O-ring and the support ring does not get jammed.

11. Take the shock out of the vice.

12. Put the SAG O-ring onto the oil chamber.

Closing steps. | Link
---|---
Mount the shock hardware. |  
Mount the shock. |  

**DT SWISS**
5. REPLACING THE SPHERICAL BEARING

### Required Material

<table>
<thead>
<tr>
<th>Required Material</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>spherical bearing complete</td>
<td>CWDXXXXN08079S</td>
<td>as required</td>
</tr>
<tr>
<td>tool kit spherical bearings</td>
<td>CWXX1020914S</td>
<td>1</td>
</tr>
<tr>
<td>cleaner/degreaser</td>
<td>Motorex Rex, Motorex Swissclean, Motorex OPAL 2400, OPAL 3000, OPAL 5000</td>
<td>as required</td>
</tr>
<tr>
<td>thread locker</td>
<td>high-strength</td>
<td>as required</td>
</tr>
</tbody>
</table>

5.1 CHECKING THE SPHERICAL BEARINGS

1. Check the play of the spherical bearing by hand.
   → If the spherical bearing can be moved without resistance, the spherical bearing should be replaced.

5.2 REPLACING THE SPHERICAL BEARING

1. Put the pin of the disassembly tool from one side into the spherical bearing.
2. Push the counter sleeve of the disassembly tool on the other side of the spherical bearing onto the pin of the disassembly tool.
3. Press out the spherical bearing by compressing the disassembly tool.
   → A vice, a hand press or the like can be used for pressing.
4. Degrease the shock eye and apply high-strength threadlocker to the inner surface of the shock eye.
5. Push the new spherical bearing onto the pin of the assembly tool.

6. Position the spherical bearing in the shock eye so that the gap in the plastic ring is offset by 90° to the axis of motion of the shock.
   → The threadlocker must not touch the ball of the spherical bearing.

7. Press in the new spherical bearing using the assembly tool.
   → A vice, a hand press or the like can be used for pressing in.

8. Take the tools and the shock out of the vice.

9. Remove excess threadlocker with a degreaser.
   → The threadlocker must not touch the ball of the spherical bearing.

10. Check whether the spherical bearing is in the middle of the shock eye.

11. Check the spherical bearing again [see „5.1 Checking the spherical bearings“ on page 28].
<table>
<thead>
<tr>
<th>Issue</th>
<th>Reason</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air loss after long term storage or riding.</td>
<td>Normal effect (the shock loses about 1-2 bar per month).</td>
<td>Inflate the shock.</td>
</tr>
<tr>
<td>Air loss after short time.</td>
<td>Quad-ring, wiper seal or O-ring of the air chamber is worn.</td>
<td>Perform a small service [see “4.5” on page 20] or contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td></td>
<td>Air chamber is damaged.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td></td>
<td>The surface of the oil chamber is damaged.</td>
<td>Dismount the air chamber, clean and grease the inner surface of the air chamber with Slick Honey [see “4.5” on page 20].</td>
</tr>
<tr>
<td></td>
<td>Wrong grease used.</td>
<td>Dismount the air chamber, clean and grease the inner surface of the air chamber with Slick Honey [see “4.5” on page 20].</td>
</tr>
<tr>
<td>Tiny amounts of oil or grease on the outside.</td>
<td>Normal residue from installation or operation.</td>
<td>Clean the area.</td>
</tr>
<tr>
<td>Tiny amounts of oil on the rebound wheel or on the end cap.</td>
<td>Normal residue from installation.</td>
<td>Clean the area and check again after a while. If this area is oily again, a full service is necessary.</td>
</tr>
<tr>
<td>Shock loses oil in the area of the rebound wheel.</td>
<td>O-ring of the lockout pin is damaged.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>Shock makes slight flowing sound.</td>
<td>Normal effect (damping effect of oil and bores). Noise may vary depending on rebound setting.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>Shock makes “smacking” sound.</td>
<td>Air inside the oil chamber.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>The rebound does not work.</td>
<td>The rebound pin is stuck.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>The lockout does not work.</td>
<td>The remote cable is not adjusted correctly.</td>
<td>Adjust the remote cable via the knurled wheel.</td>
</tr>
<tr>
<td></td>
<td>The sealing of the damping piston is worn.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td></td>
<td>The lockout cap does not close completely.</td>
<td>Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>Issue</td>
<td>Reason</td>
<td>Solution</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The shock cannot be inflated [air escapes immediately when the pump is unscrewed].</td>
<td>Incorrect handling of the pump or pump defective.</td>
<td>Have the valve insert checked by your dealer. Tighten or replace the insert.</td>
</tr>
<tr>
<td></td>
<td>Valve or valve insert of the shock is damaged.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leakage.</td>
<td>Check in a water bath where the shock is leaking. Contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>Pressure rises quickly when inflating.</td>
<td>Pump is not screwed on correctly or defective.</td>
<td>Check pump position or replace pump [valve does not open].</td>
</tr>
<tr>
<td></td>
<td>Valve or valve insert of the shock is damaged.</td>
<td>Have the valve insert checked by your dealer. Tighten or replace the insert.</td>
</tr>
<tr>
<td>Shock has noticeable play at the spherical bearings while the shock is mounted in the bike.</td>
<td>Wrong mounting hardware.</td>
<td>Check if the correct mounting hardware is used.</td>
</tr>
<tr>
<td></td>
<td>Incorrect tightening torque of the shock fixing screws.</td>
<td>Check the tightening torque of the shock fixing screws.</td>
</tr>
<tr>
<td></td>
<td>Spherical bearings are worn.</td>
<td>Replace the spherical bearings (see &quot;5&quot; on page 28).</td>
</tr>
<tr>
<td>The remote lockout function works correctly, but the remote lever does not stay in the desired position.</td>
<td>The tension of the remote lockout cable is too high.</td>
<td>Turn the knurled cable adjusting screw clockwise, so that the cable tension is reduced. At the same time, check whether the lever now stays in the desired position.</td>
</tr>
<tr>
<td></td>
<td>The lever-index is worn out.</td>
<td>Replace the remote lever or contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>The remote lockout cable is defective.</td>
<td>This can have several causes {crashes, dirt, wear, etc.}.</td>
<td>Replace the remote lockout cable or contact your dealer or a DT Swiss Service Center to solve the problem.</td>
</tr>
<tr>
<td>Noise while compressing the shock after about 10 mm of the stroke.</td>
<td>Normal sound of the air balance between the positive and the negative air chamber.</td>
<td></td>
</tr>
<tr>
<td>Shock squeaks while riding.</td>
<td>Wiper seal is dry.</td>
<td>Perform a small service [see &quot;4.5&quot; on page 20]. A replacement of the wiper seal and the sealings is not absolutely necessary.</td>
</tr>
<tr>
<td>Shock gets hot while riding.</td>
<td>The shock can get very hot on long downhills. This does not affect the performance of the shock.</td>
<td></td>
</tr>
</tbody>
</table>

In case of further issues or questions, please contact your dealer or a DT Swiss service center.