

Ankylos®

# Repair Manual

Please read this manual carefully before using the system for the first time and always observe the clinical indications, directions and notes in the instructions for use of the system components and instruments. Furthermore, we recommend that all users attend a training course specific to the system prior to first using a new implant system.

Some products may not be available in all countries. Please contact your DENTSPLY Implants representative to obtain up to date information on the product range and on availability.

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## CONTENTS

### Pre-requisites

Warnings and precautions	4
Construction principles of abutments	5
Instruments	6
Fracture identification guide	8

### Step-by-step

Fractured straining screw and removal of remaining thread ring	10
Fracture of abutment with straining screw	12
Fracture at upper end of conical connection	12
Removal of a taper fragment from the implant	14
Removal of a screw fragment from the implant with screw removal instrument	16
Fracture of a Cercon® abutment	18
Fracture of a one-piece abutment	20
Drill-out abutment thread fragments from the implant	22
Rupture of the placement head's index	24
Drill out a fractured lateral screw M 1 x 0.2	25

## Warnings and precautions

These instructions for use must be read prior to using Ankylos components. The Ankylos components may only be used for their intended purpose according to the general rules for dental/surgical treatment, occupational safety and accident prevention. Ankylos components must only be used for medical/dental procedures, with the Ankylos implant system. If the indication and use are unclear, treatment should be suspended until these points have been clarified. The following instructions are not adequate to allow inexperienced clinicians to administer professional implant dentistry. We recommend that an experienced user provides proper use instructions. Ankylos components must only be used by dentists and surgeons with training and experience in oral surgery, prosthetics as well as diagnosis and preoperative planning. DENTSPLY Implants Manufacturing GmbH is not liable for damages resulting from use outside the intended use of the product.

The following complications have arisen occasionally when using these instruments:

- Components used in the patient's mouth have been aspirated or swallowed.
- Osseointegration has failed due to the implant being manipulated or implant loss.
- Necessity of explantation of the implant after breakage of instruments and associated damage to anatomical structures.
- Slipping of instruments which may damage the surrounding structures.
- Instruments becoming jammed.
- Breakage of instruments.

There are general residual risks in spite of correct use of the RepairSet:

- Restoration of the implant may not be possible and the implant has to be explanted.
- The connection taper of the implant is damaged, and it cannot be properly secured, the implant must be removed.
- If the internal straining screw has broken off at the same level as the abutment, the operational conditions are made considerably more difficult.
- The preparation of the thread may not be possible and therefore the prosthetic restoration cannot be preserved.

The following precautions are to be met prior to or during treatment:

- Prior to each procedure it must be ensured that all necessary components, instruments and materials are available in the required quantities and are fully operational.
- No product intended for single use may be reused. Noncompliance generally leads to the risk of complications due to a loss of accuracy and precision of the instruments through to fractures of the instruments!
- Always wear protective clothing for your own safety.
- Position the patient such that the danger of aspiration of components is minimized.
- All components that are used intraorally must be secured to prevent aspiration or swallowing.
- Schedule sufficient time for careful use of the repair instruments.
- Adequate space should be ensured around the implant to be repaired.
- Replace dull drills immediately.
- Where the repair is not successful (e.g. breakage of an instrument), a trephine drill adjusted to the diameter of the implant should be kept ready for explantation of the implant.
- Removal of remaining fracture fragments requires experience, time and patience.
- Always use water cooling and drill with a surgical unit
- Use 1800 rpm for drilling and a pressure that creates visible burs.
- Always drill in the direction of the screw/screw channel
- Prepare a flap to provide visibility to the implant shoulder, carefully expose the implant.
- Never get drills and taps wedged. These instruments are made from hardened steels and thus difficult to remove in case of fracture.
- A fracture of drills and taps might result in the necessity to remove the implant.

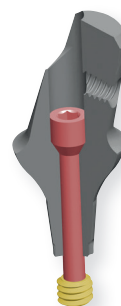
# Construction principles of abutments

## Abutments with straining screw

Many of the prosthetic abutments (e.g. Regular abutments) have an integrated straining screw. This straining screw is mobile but not removable. These abutments with straining screw consist of

- abutment body (grey)
- shaft of straining screw (red)
- thread ring (yellow)

The thread ring is laser-welded onto the bottom of the straining screw. Excessive torque might result in the failure of this attachment.



## One-piece abutments

One-piece abutments (e.g. straight standard abutments) are made in one piece from the abutment head into the taper connection and threads. These abutments do not have a screw channel.



## Repair instruments and accessories

**Ankylos  
Centering Aid**



Order no.

3103 4695

**Ankylos  
Taper Protection**



1.0 mm

3103 4620



1.4 mm

3103 4630

**Ankylos Holder  
for Taper Protection**



3103 4610

**Ankylos Crown Cutter**  
Rotation Counterclockwise



Order no.

3103 4640

**Ankylos End-cutting  
Drill for Individual  
Screw Retention**



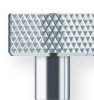
3103 4648

**Ankylos  
Twist Drill 1.4 mm**



3103 4650

**Ankylos Handle  
for Technical Taps**



Order no.

3103 3425

**Ankylos  
Handle for  
Screwdriver**  
standard  
Ø 12 mm



3103 3426

**Ankylos Un-  
screw  
Instrument,  
Repair Kit**



3103 4660

**Ankylos  
Tap M 1.8**



3103 4670

**Ankylos  
Tap M 1.2**



3103 4680

**Ankylos  
Thread Core Drill  
M 1.6**



**Ankylos  
Screw Tap M 1.6**



**Ankylos  
Extraction Bolt**



**Ankylos  
Screw fragment  
removal  
instrument**



- Check shipment of repair instruments for being complete
- Have surgical kit for ratchet and ratchet inserts at hand

Depending on the individual case the following instruments and accessories can be helpful:

- Diamond coated fine apex tongs
- Magnifying glasses or surgical microscope
- Crown remover
- Extension for rotating instruments
- Bone wax to protect surrounding tissues from drilling burs
- Petroleum jelly for lubricating the tap
- Diamond coated round drill in case of removal of broken tap

Order no.

3103 4690

3103 4691

3103 4692

3103 4694

**Ankylos  
Ratchet Insert  
for Extraction Bolt**



**Ankylos  
Handle for  
Ratchet Insert**



**Ankylos Ratchet Insert  
for Manual Instruments**  
for conical reamers and taps



short



medium



long

Order no.

3103 4693

3103 3040

3103 3070

3103 3080

3103 3090

**Surgical Ratchet  
with Torque Indication**



**Ankylos  
Open-end Wrench C/X**

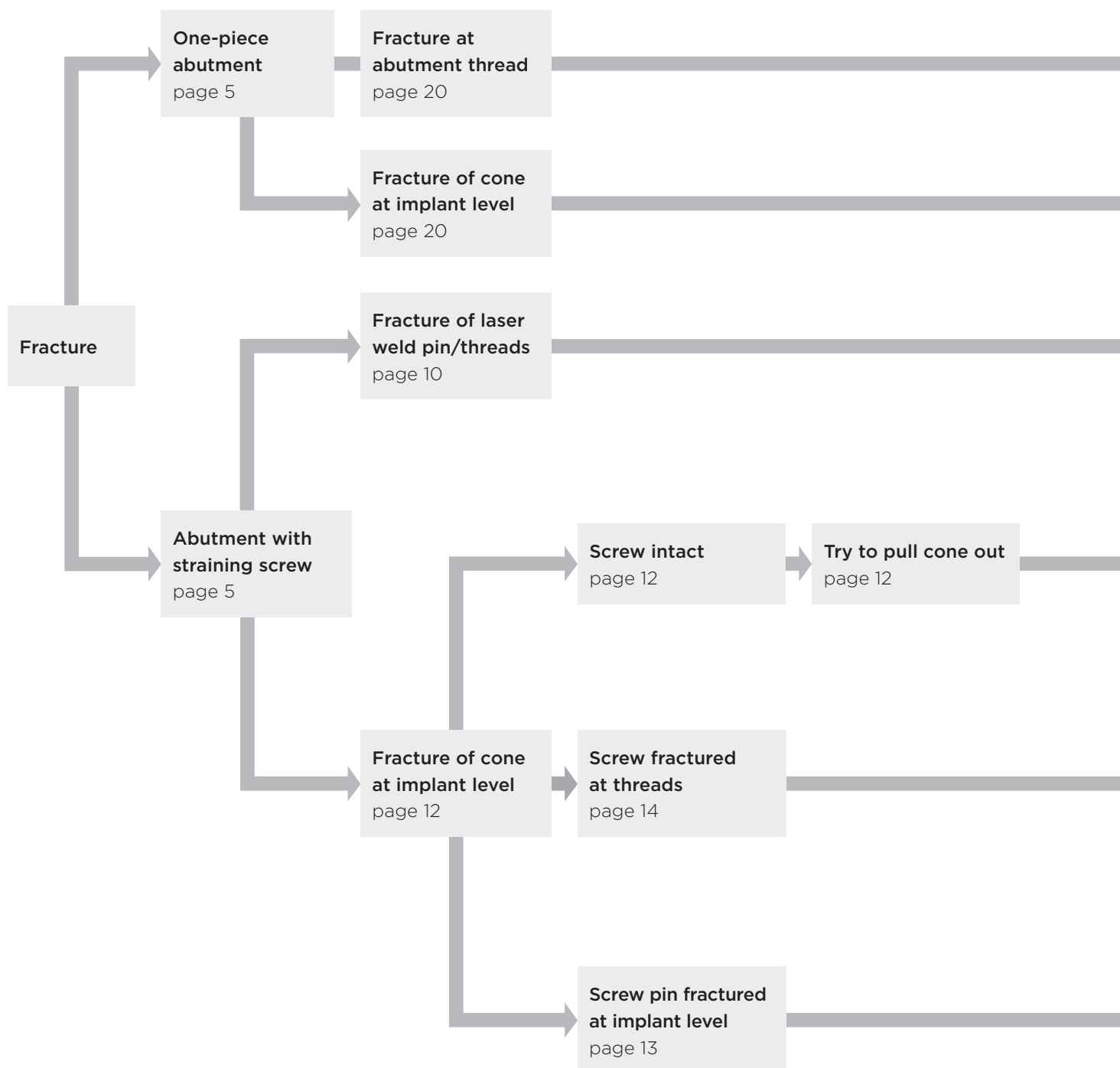


Order no.

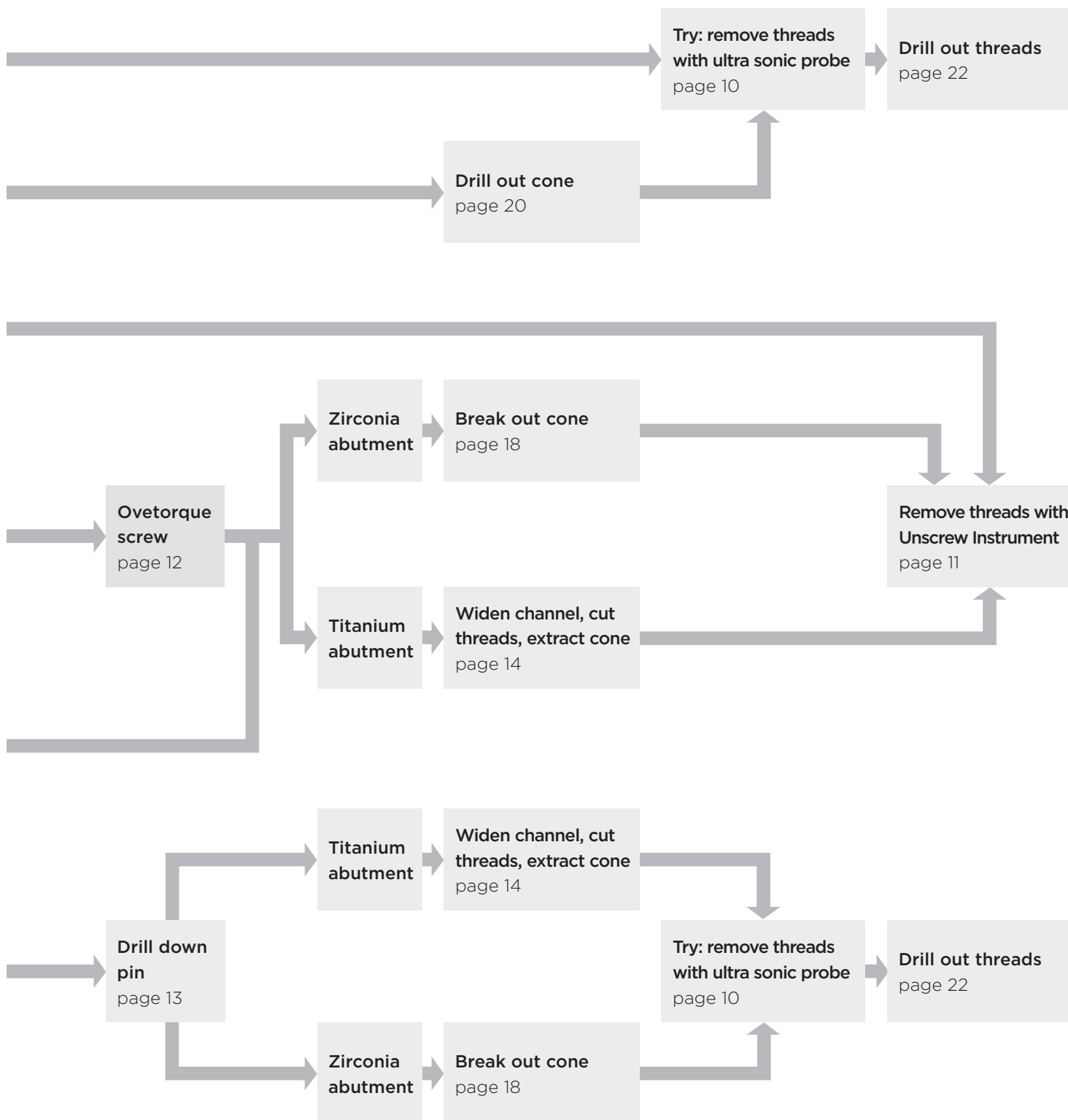
3103 7500

3103 7502

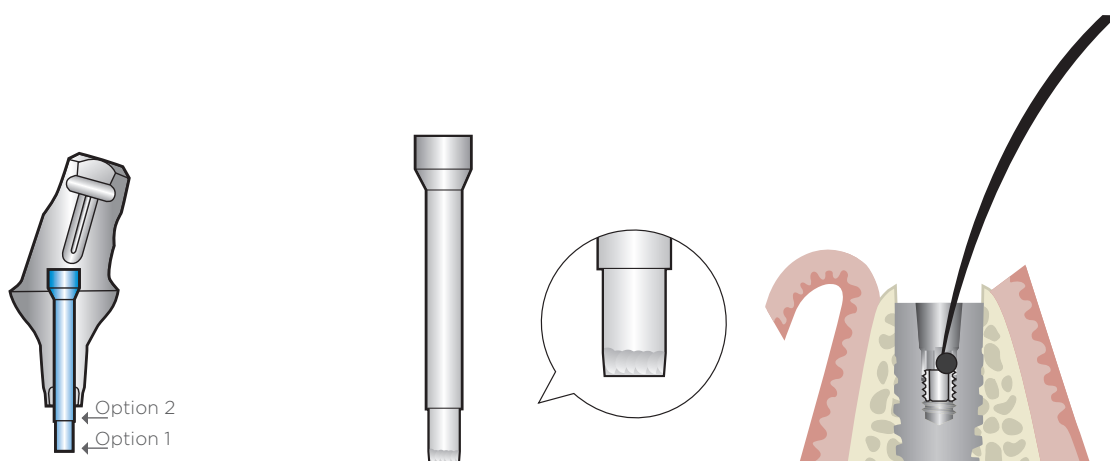
## Fracture identification guide







## Step-by-step: Fractured straining screw and removal of remaining thread ring



### Identify the situation

The abutment screw can be rotated clockwise without stopping. The abutment can be removed with the shaft of the straining screw inside the abutment. There is no thread attached to the shaft.

### Option 1 Laser weld between screw shaft and thread is broken

Check for a small offset approx. 1 mm to the end of the shaft of the straining screw. When this is the case, the thread ring remains without tension in the implant and shows a hole in the center.

Continue reading on the opposite page.

### Option 2 Screw shaft is broken above the thread ring

In case there is no offset at the end of the shaft the shaft is fractured above the thread and the complete thread without hole remains in the implant.

- removal with an ultra sonic scaler
- remove thread ring by drilling out and clean the thread with the taps (page 22)



### Removal of thread ring with Unscrew Instrument

Again, check the abutment for being intact and the small offset approx. 1 mm to the end of the shaft of the straining screw is present. Retrieve thread ring only when abutment and shaft are completely removed.

### Instruments:

Handle for Screwdriver standard, Ø 12 mm to rotate the unscrew instrument.

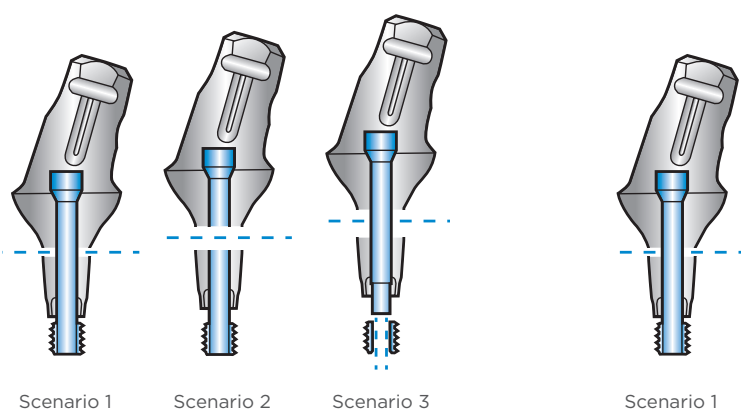
Unscrew Instrument, Repair Kit to retrieve thread ring.

Insert Unscrew Instrument repair kit into Handle for Screwdriver standard, Ø 12 mm.

Insert Unscrew Instrument into the implant's lumen and probe the hole of the thread ring.

Turn counter-clockwise until the Unscrew Instrument engages in the thread ring, continue counter-clockwise rotation and remove the thread ring.

## Step-by-step: Fracture of abutment with straining screw, fracture at upper end of conical connection



### Possible situations:

There is a fracture at the upper end of the conical connection.

1. The straining screw remains intact, the coronal part of the abutment is “connected” by the screw. Continue reading in the next column.
2. Abutment and screw shaft fractured on implant level. Continue reading on the opposing page.
3. Abutment fractured on implant level and screw shaft was torn out of the abutment. Continue reading on page 14.

### Identify the situation screw intact

Fracture at upper end of conical connection, the straining screw remains intact.

When the screw is intact, the coronal part of the abutment is “connected” to the implant by the screw. Open the screw completely and try to remove the abutment with a crown removal instrument. In case this is not successful, turn the screw clockwise to the very bottom and try to fracture the laser welding by applying excessive torque. Then remove all loose parts (i.e. the abutment and screw shaft).

The situation should be as such:

The cone fragment is wedged in the implant’s connection cone, the drill channel of the straining screw is empty, the thread ring remains in the implant.

**To Do:** Remove cone fragment with the Extraction Bolt.  
Remove the thread ring with the Unscrew Instrument Repair Kit.

Continue reading on page 14.

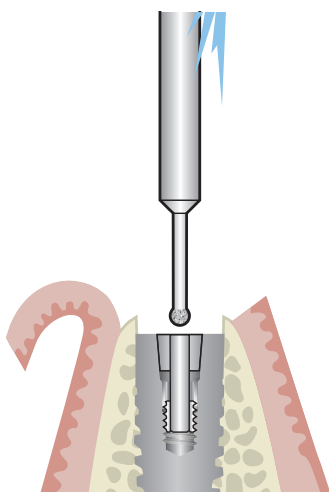
In case the laser welding cannot be fractured then drill away the screw head, remove the abutment head and cut down the screw pin to implant level (continue on page 13).

**Please note:**

In order to prepare for the use of the repair instruments, it is necessary to smooth the fracture surface where required. Then a hole can be accurately centered using a suitable round drill.



Scenario 2

**Identify the situation**

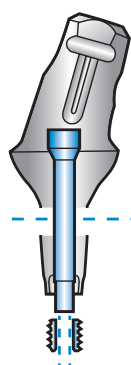
Abutment and screw shaft are fractured at implant level. The straining screw is fractured with the abutment. The cone fragment is wedged in the implant's connection cone, the screw channel of the straining screw is blocked with the remaining shaft of the straining screw.

**To Do:** Drill shaft of the straining screw out of the cone fragment, a short portion of the shaft remains on the thread ring. Remove cone fragment with extraction instruments. Turn out threads at the remaining portion of the shaft.

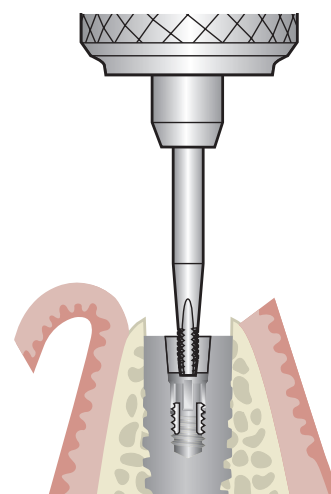
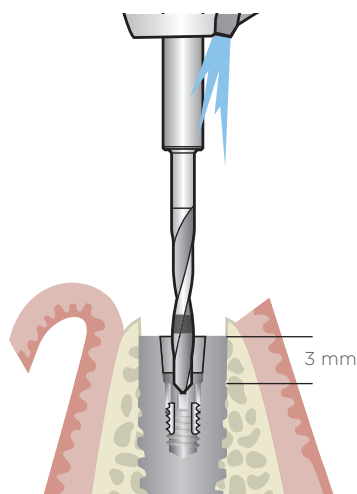
**Drill down screw shaft**

Prepare a flap to provide visibility to the implant shoulder. Before starting the procedure possibly drill plane the fracture surface. Apply a centering dimple with a round drill or diamond cutter.

## Step-by-step: Removal of a taper fragment from the implant



Scenario 3



### Identify the situation

Abutment fractured on implant level and screw shaft was torn out of the abutment or previously drilled out.

The cone fragment is wedged in the implant's connection cone, the screw channel of the straining screw is open, only the thread ring remains at below the taper fragment.

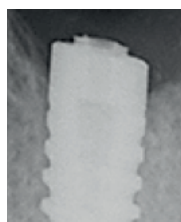


Photo: Dr. D. Thompson  
Denver, USA

### Thread Core Drill M 1.6

The 1.1 mm drill hole of the taper fragment is to be enlarged to 1.3 mm with the Thread Core Drill M 1.6 at a speed of 1800 rpm, making sure to apply sufficient pressure. The necessary drill depth of 3 mm has been reached once the lower end of ring marking on the drill is level with the implant shoulder.

**Note:** Ensure sufficient cooling. When drilling, ensure that the drill is not tilted or flexed. This would result in breaking the instrument and may render continuation impossible.

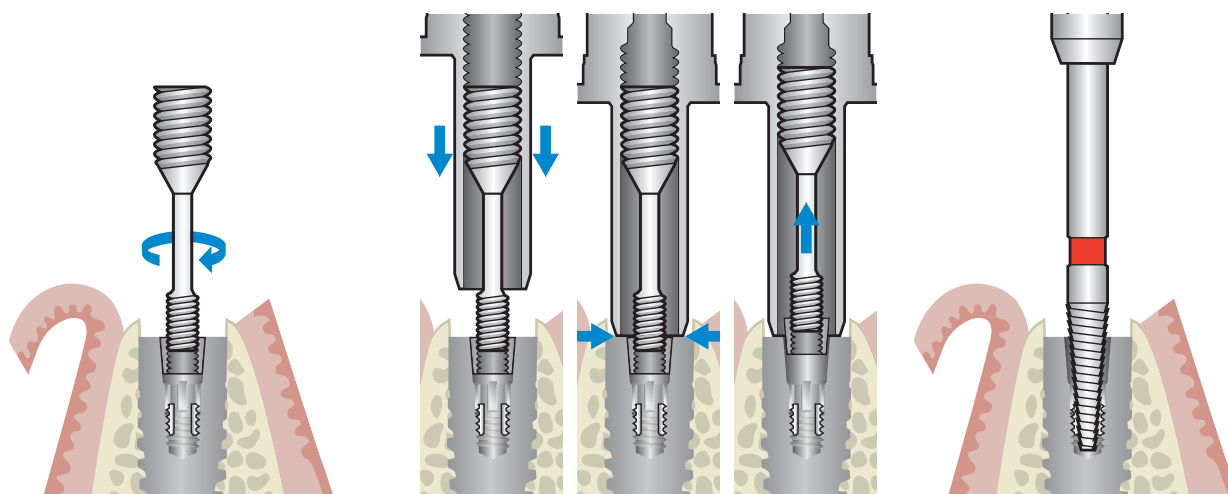
### Screw Tap M 1.6

Smear a little petroleum jelly on the screw tap prior to use. The thread is tapped clockwise using the ratchet insert for manual instruments in combination with the handle for ratchet insert or the ratchet. No fewer than three full turns must be made. Then, rinse the thread with sufficient water to remove shavings and other operational residues.

**Note:** Proceed with extreme care when using the screw tap. The screw tap is brittle and may break with improper strain (tilting/flexion). The process should be paused at intervals or where there is increased cutting resistance and the tap drill should be rotated a little counter-clockwise. This releases the screw tap and the cutting residues are broken up. Resume the drilling process after this. This strategy will reduce the risk of breaking the screw tap.

**Please note:**

The instruments described on this double page for removal of a taper fragment cannot be used in case of breakage of a Cercon or Atlantis Zirconia abutment.

**Extraction Bolt**

Screw the Extraction Bolt into the prepared thread hole using the smaller thread. The hexagon screwdriver 1.0 mm can be used for this. When screwing in the Extraction Bolt, check whether the required three full turns have been made. The Extraction Bolt should allow not less than three complete rotations while being screwed in. If this is not the case, check whether the thread hole will allow further tapping.

**Ratchet Insert for Extraction Bolt**

Wind the ratchet insert with clockwise rotation onto the Extraction Bolt until the edge of the instrument is seated in the implant shoulder. The taper fragment is extracted from the implant by screwing further with the aid of the ratchet and the open-end wrench.

**Remove thread ring from the implant**

**Scenario 1:** The straining screw broke at the laser weld between screw shaft and thread ring. This left the thread ring in place while the screw shaft can be removed. Now the thread ring shows a centric hole. Use Unscrew Instrument repair kit to remove the thread ring (page 11).

**Scenario 2:** The shaft of the straining screw was fractured on implant shoulder level, the thread ring now carries a residual portion of the screw shaft.

- Removal with an ultra sonic scaler
- Remove with screw fragment removal instrument (page 16)

Check for the uncompromised condition of the implant which now can be restored with a new abutment.

## Step-by-step: Removal of a screw fragment from the implant with screw removal instrument

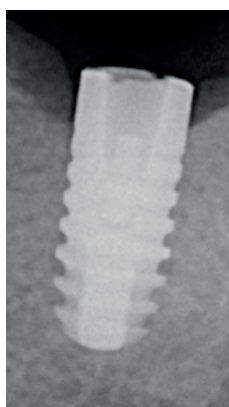
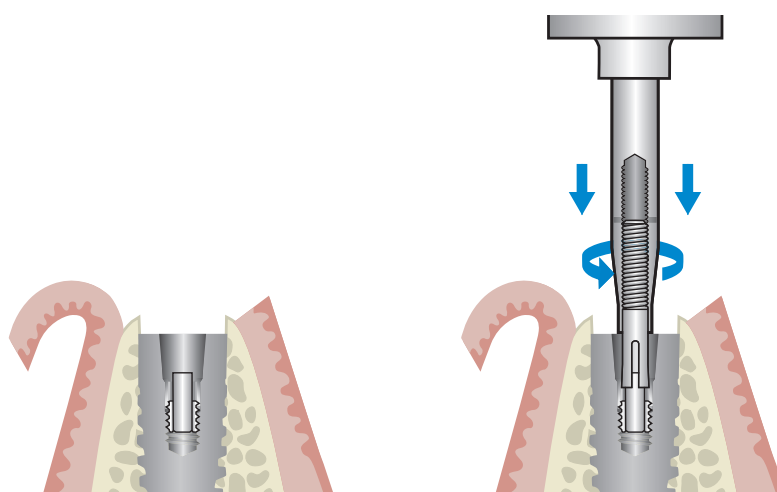


Photo: Dr. D. Thompson  
Denver, USA



### Removal of the screw fragment

If the weld seam of the straining screw is fractured, following extraction of the taper fragment the remaining thread ring in the implant's inner thread must be removed with the Unscrew Instrument, Repair Kit.

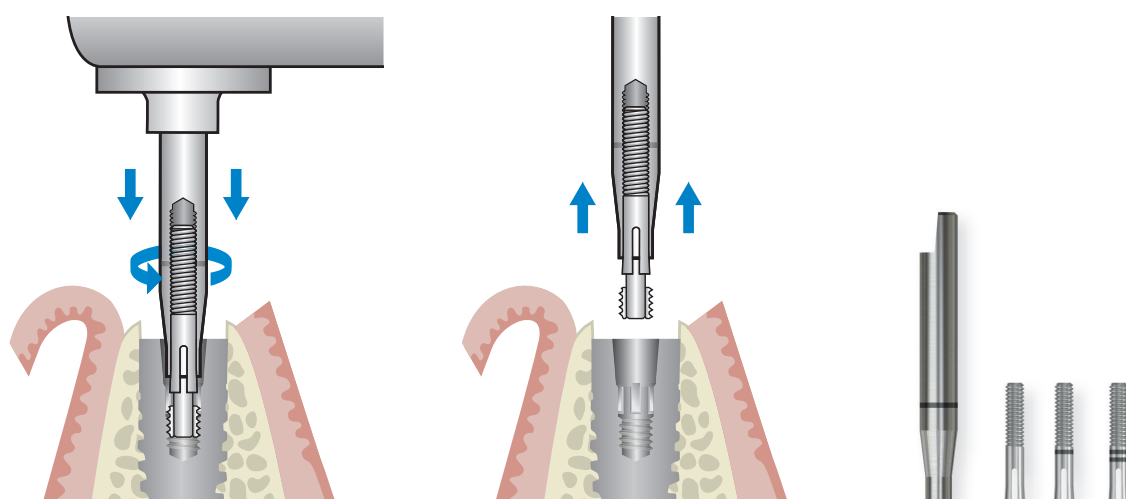
If the shaft of the straining screw is broken at implant shoulder level, following extraction of the abutment fragment a screw fragment remains in the implant. This screw fragment can be removed with the screw fragment removal instrument. Use the appropriate picking sleeve for the abutment straining screws:

Cercon Ø 0.9 mm (1 ring), placement head Ø 1.0 mm (2 rings), other abutments Ø 1.1 mm (without ring).

Screw the picking sleeve in a counterclockwise direction into the clamping sleeve so far that the slit is still completely free. Place the screw fragment removal instrument with the picking sleeve over the remaining screw shaft.

The screw fragment is removed in a counterclockwise direction using the ratchet insert for manual instruments in combination with the handle with the handle.

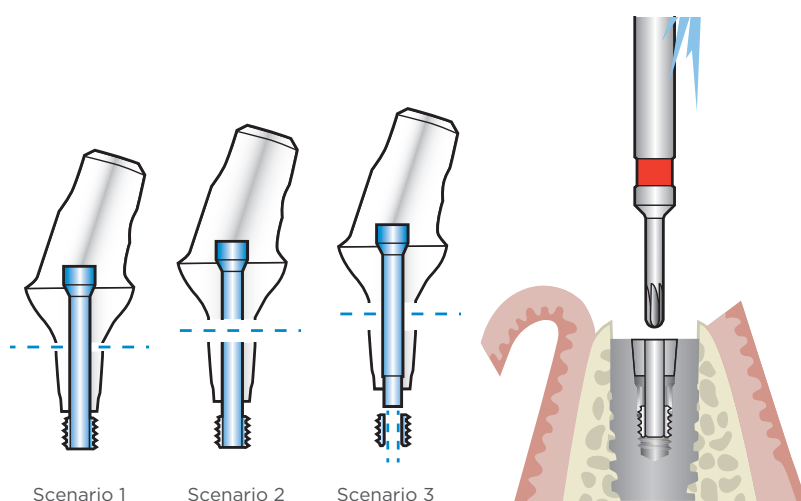




The screw fragment removal instrument firstly moves around in the implant until it engages with the screw fragment. The screw fragment is removed by continuing to turn in a counter-clockwise direction; in doing so the screw fragment removal instrument is twisted out of the implant. The up-and-down motion is visible via the ring marking on the screw fragment removal instrument.

If removal is not possible, turn back the screw fragment removal instrument in a clockwise direction no more than 6 times and then remove the screw fragment removal instrument from the screw fragment. If the screw fragment cannot be successfully removed, it must be drilled out of the implant using the Ankylos repair instruments. After removal of the screw fragment, the implant is inspected for damage and can be treated as usual.

## Step-by-step: Fracture of a Cercon® abutment



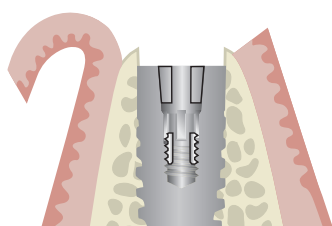
### Possible scenarios:

There is a fracture at the upper end of the conical connection.

**1.** The straining screw remains intact, the coronal part of the abutment is “connected” by the screw. Open the screw completely and try to remove the abutment with a crown removal instrument. In case it is not possible to remove the abutment by pulling, try by turning counter-clockwise to push out the fragment by the screw. In case this is not successful, turn the screw clockwise to the very bottom and try to fracture the laser welding by applying excessive torque. Then remove all loose parts (i.e. the abutment and screw shaft). Continue on page 19.

**2.** Fracture at upper end of conical connection. Straining screw fractures on same level. Drill down screw shaft for 3 mm, then continue on page 19. For removal of remaining threads see page 16.

**3.** Fracture at upper end of conical connection. Straining screw is pulled out from implant upon the fracture. Continue on page 19.



### Initial situation

The cone fragment is wedged in the implant's connection cone, the channel of the straining screw is empty, the thread ring remains in implant.

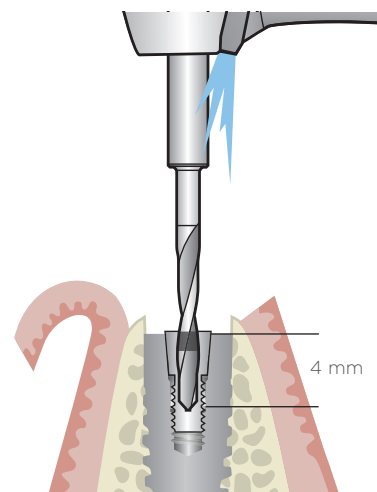
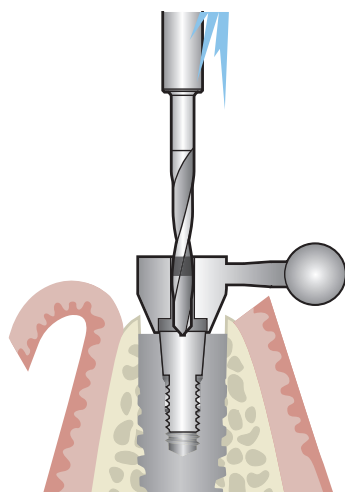
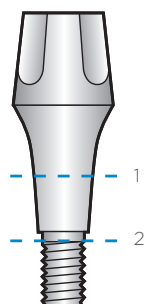
### Thin out the ceramic abutment cone

Use a flame shaped diamond cutter to cut into the abutment's connection cone in opposing direction until the titanium of the implant's connection cone shines through the ceramic.

**Note:** avoid cutting into the implant's connection cone.

When the ceramic is thin enough break out the fragments with root tip elevator or similar instrument. When the abutment's connection cone is removed turn out the thread ring with the Unscrew Instrument (see page 11).

## Step-by-step: Fracture of a one-piece abutment



### Identify the situation

**1.** The abutment fractured at the upper end of conical connection (level of im-plant shoulder). The residual connection cone is connected to the implant by the threads. There is no central access hole due to the one-piece abutment. Continue reading next column.

**2.** A fracture occurred between thread and connection cone: This possibly happened after previous abutment loosening. See page 22 for removal of the thread.

### Abutment fracture on implant level, apply a centering dimple

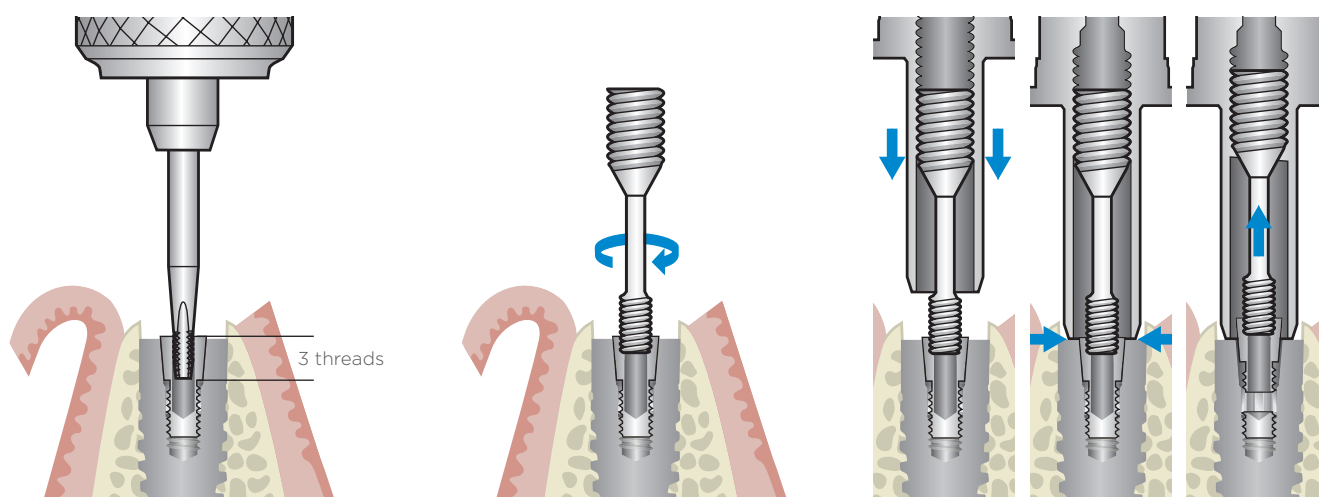
Prepare a flap to provide visibility to the implant shoulder. Before starting the procedure possibly drill plane the fracture surface. Apply a centering dimple with a round drill or diamond cutter.

**Option:** In case the implant shoulder is not covered with bone the centering aid can be used. Insert the centering aid into the ball joint of the handle for taper protection. Place the centering aid onto the implant. Remains of the fracture will center it. Fasten the ball joint in the desired position by distorting the handle. The centering aid must be placed secure and without play on the implant to provide a centric guidance.

### Drill into solid cone

When a centering dimple is applied use the Thread Core Drill M 1.6 to drill into the solid cone. Use 1600 – 1800 rpm for drilling, full cooling and apply sufficient pressure that creates visible burs. A drill depth of 4 mm is necessary. The upper end of the ring marking must level with the implant shoulder.

**Note:** Ensure sufficient cooling. When drilling, ensure that the drill is not tilted or flexed. This would result in breaking the instrument and may render continuation impossible.



### Screw Tap M 1.6

Smear a little petroleum jelly on the screw tap prior to use. The thread is tapped clockwise using the ratchet insert for manual instruments in combination with the handle for technical tap. No fewer than three full turns must be made. Then, rinse the thread with sufficient water to remove shavings and other operational residues.

**Note:** Proceed with extreme care when using the screw tap. The screw tap is brittle and may break with improper strain (tilting/flexion). The process should be paused at intervals or where there is increased cutting resistance and the screw tap should be rotated a little to the left. This releases the screw tap and the cutting residues are broken up. Resume the drilling process after this. This strategy will reduce the risk of breaking the screw tap.

### Extraction Bolt

Screw the Extraction Bolt into the prepared thread hole using the smaller thread. The hexagon screwdriver 1.0 mm can be used for this. When screwing in the Extraction Bolt, check whether the required three full turns have been made. The Extraction Bolt should allow not less than three complete rotations while being screwed in. If this is not the case, check whether the thread hole will allow further tapping.

### Ratchet Insert for Extraction Bolt

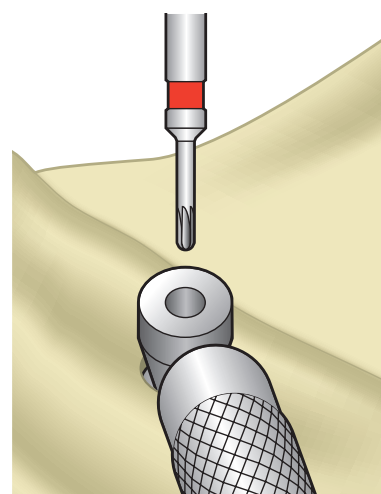
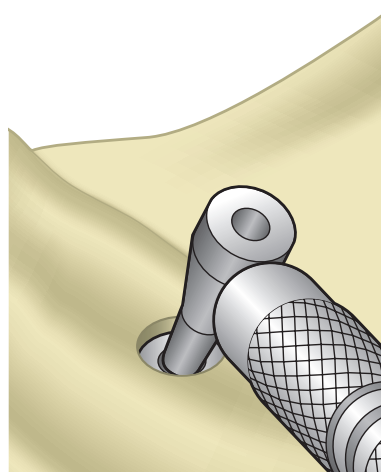
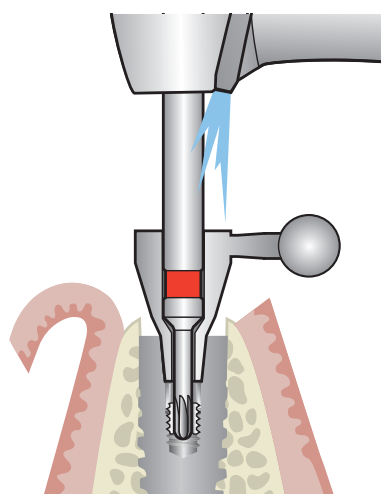
Wind the ratchet insert with clockwise rotation onto the Extraction Bolt until the edge of the instrument is seated in the implant shoulder. The taper fragment is extracted from the implant by screwing further with the aid of the ratchet and the open-end wrench. After extraction of the cone try to remove the remaining thread with a probe or an ultrasonic scaler. If the remaining thread cannot be loosened the thread has to be drilled out. Please see the following two pages for this procedure.

# Step-by-step: Drill-out abutment thread fragments from the implant

## Instruments and procedure

Only when previous attempts fail the thread will be drilled out completely and a new thread is cut. The connection cone of the implant will be protected from surface damage with the Taper Protection.

According to the drill diameter there are two versions of the Taper Protection. In a first step the fractured thread receives a centric drill hole using a drill cutting in counter-rotational direction.



### Options

- The counter-clockwise rotation of the drill turns out the thread. The implant should be able to receive a new abutment at this point.
- Once the first drilling is performed the thread is a ring. Use the Unscrew Instrument to remove the thread ring.

In case the previous fails the hole will be widened to the core hole of the implant thread. Remains of the abutment thread will be cleaned out of the implant thread with the 1.8 mm thread taps.

### Taper Protection

Insert the 1.0 mm Taper Protection into ball joint of the handle. Insert Taper Protection into connection cone of the implant. Fasten the ball joint in the desired position by distorting the handle.

The Taper Protection must be placed secure and without play in the connection cone to provide a centric guidance and depth stop for the drilling.

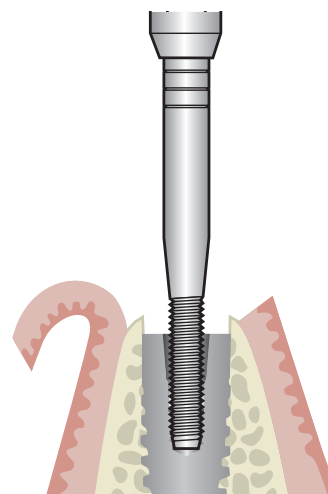
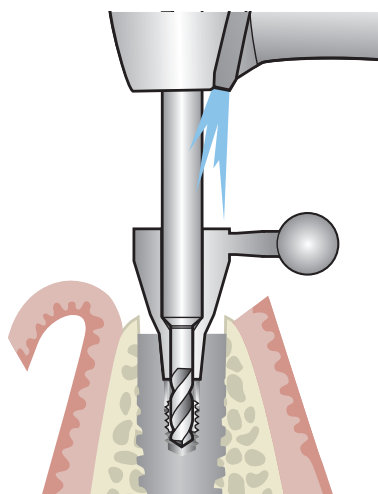
The Taper Protection has a depth stop to prevent the implant from being perforated.

### Crown Cutter (counter-clockwise cutting)

**Note:** The handpiece must run counter-clockwise! Use the Crown Cutter to spot drill the thread section of the jammed abutment and drill it open. Insert the Crown Cutter into Taper Protection 1 mm to the depth stop and mark the shank at this position for orientation. Remove the Crown Cutter. Insert Taper Protection into the implant and start drilling. The 1.0 mm Taper Protection guides and centers the drill. The Crown Cutter drills out the residual threads of the former abutment with counter-clockwise rotation. Use 1600 - 1800 rpm and pressure that creates visible burs. Either the thread fragment becomes loose with the counter-clockwise drilling procedure or it will be removed with the Unscrew Instrument (next column).



The set of thread Taps M 1.8 contains a pre-cutter (one ring on the shank), thread main cutter (two rings) and finisher (three rings). The Taps are used in this sequence.



### Unscrew Instrument

If the fragment cannot be removed with counter-clockwise rotating drill, use the handle with the Unscrew Instrument in counter-clockwise direction (page 11).

### Twist Drill

If the fragment cannot be removed, the 1.4 mm Taper Protection should be inserted into the implant with the handle. The 1.4 mm Twist Drill is used to drill out the thread fragment (1600 - 1800 rpm) and create the core for tapping the thread. The Taper Protection has a depth stop to prevent the implant from being perforated.

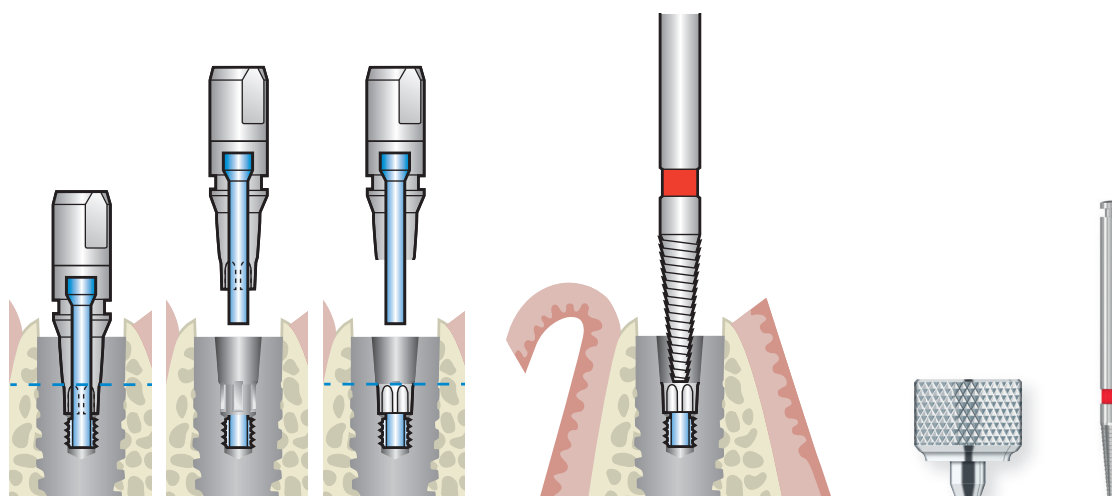
**Note:** When drilling the remains of an abutment thread out of an implant, ensure that the drill or tap does not break. The drills are made of tungsten carbide or hardened steel and drill fragments can be difficult or even impossible to remove. Should this occur, the implant must be removed.

### M 1.8 Thread Tap Set

After the thread fragment is drilled out from the implant, remains of the abutment thread will be cleaned out of the implant thread with the 1.8 mm Thread Tap Set. Tapping is done clockwise in three stages using the handle for technical taps and the taps. This handle has an internal hollow square to receive the shank of the thread taps and is used only with the related thread taps. The shavings are removed from the implant's tapered section. Then a new abutment can be seated.

**Note:** Tapping should be interrupted at regular intervals or if the tap binds. The tap should be rotated slightly counter-clockwise. This loosens the tap and breaks the shavings to allow the thread to be tapped further. This minimizes the risk of the tap breaking.

## Step-by-step: Rupture of the placement head's index



### Possible scenarios:

1. The straining screw remains intact, the placement head is “connected” by the screw. See page 12 for possible removal of the abutment.
2. The shaft of the straining screw is pulled out of the thread upon the fracture. The placement head can be removed completely. See page 11 for possible removal of the thread ring.
3. The index portion of the placement head is torn off the placement head. The index and the thread ring remain in the implant. Continue reading in the next column.

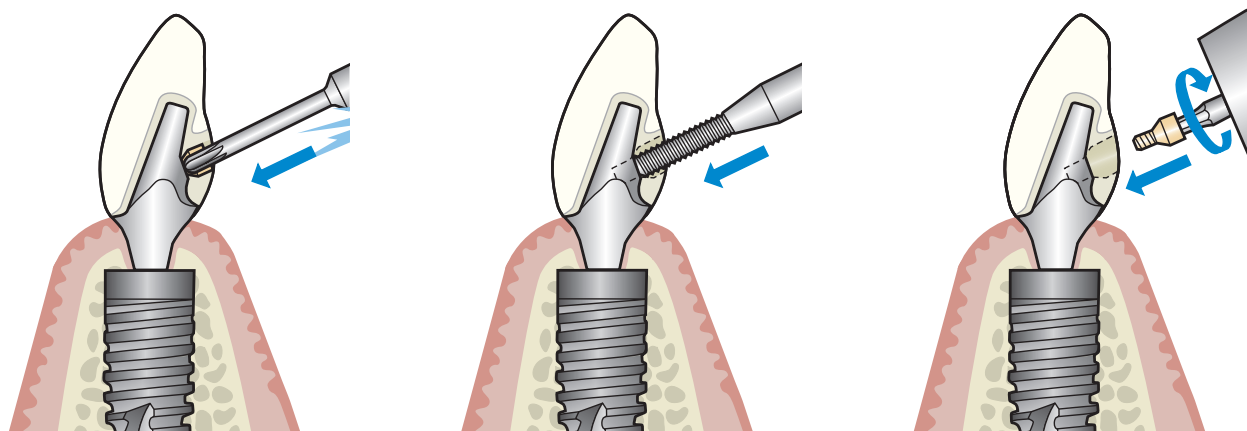
### Scenario 3:

The shaft of the straining screw is pulled out upon the fracture. Only the upper part of placement head can be removed. The index portion of the placement head and the thread ring remain in the implant. Insert the Unscrew Instrument counter-clockwise to engage in the index. Hold the Unscrew Instrument with needle holder or tongs. Use a hammer to tap to Unscrew Instrument in order to disengage and remove the index portion.

Then remove the thread ring as described on page 11.



## Step-by-step: Drill out a fractured lateral screw M 1 x 0.2



### 1.0 mm End-cutting Drill

Use a handpiece driven End-cutting Drill clockwise to drill the fractured thread section out of the abutment.

**Note:** When drilling the remains of a thread section out of the abutment, ensure that the drill or tap does not break. The drills are made of tungsten carbide or hardened steel and drill fragments can be difficult or even impossible to remove. Should this occur, the abutment must be replaced.

### M 1.2 Thread Tap

Smear a little petroleum jelly on the screw tap prior to use. The lateral thread is tapped clockwise in three stages using the handle and tap. The pre-cutter (one ring on the shank), thread main cutter (two rings on the shank) and finisher (three rings on the shank) are used in successively increasing order. The shavings are removed from the thread and a new M 1.2 screw wound in.

**Note:** Tapping should be interrupted at regular intervals or if the tap binds. The tap should be rotated slightly counter-clockwise. This loosens the tap and breaks the shavings to allow the thread to be tapped further. This minimizes the risk of the tap breaking.

### Replacement Screw M 1.2

When the new thread is cut the shavings are removed from the thread and a new M 1.2 screw is wound in.

## Notes



### About Dentsply Sirona Implants

Dentsply Sirona Implants offers comprehensive solutions for all phases of implant therapy, including Ankylos®, Astra Tech Implant System® and Xive® implant lines, digital technologies, such as Atlantis® patient-specific solutions and Siplant® guided surgery, Symbios® regenerative solutions, and professional and business development programs, such as STEPPS™. Dentsply Sirona Implants creates value for dental professionals and allows for predictable and lasting implant treatment outcomes, resulting in enhanced quality of life for patients.

### About Dentsply Sirona

Dentsply Sirona is the world's largest manufacturer of professional dental products and technologies, with a 130-year history of innovation and service to the dental industry and patients worldwide. Dentsply Sirona develops, manufactures, and markets a comprehensive solutions offering including dental and oral health products as well as other consumable medical devices under a strong portfolio of world class brands. As The Dental Solutions Company™, Dentsply Sirona's products provide innovative, high-quality and effective solutions to advance patient care and deliver better, safer and faster dentistry. Dentsply Sirona's global headquarters is located in York, Pennsylvania, and the international headquarters is based in Salzburg, Austria. The company's shares are listed in the United States on NASDAQ under the symbol XRAY.

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