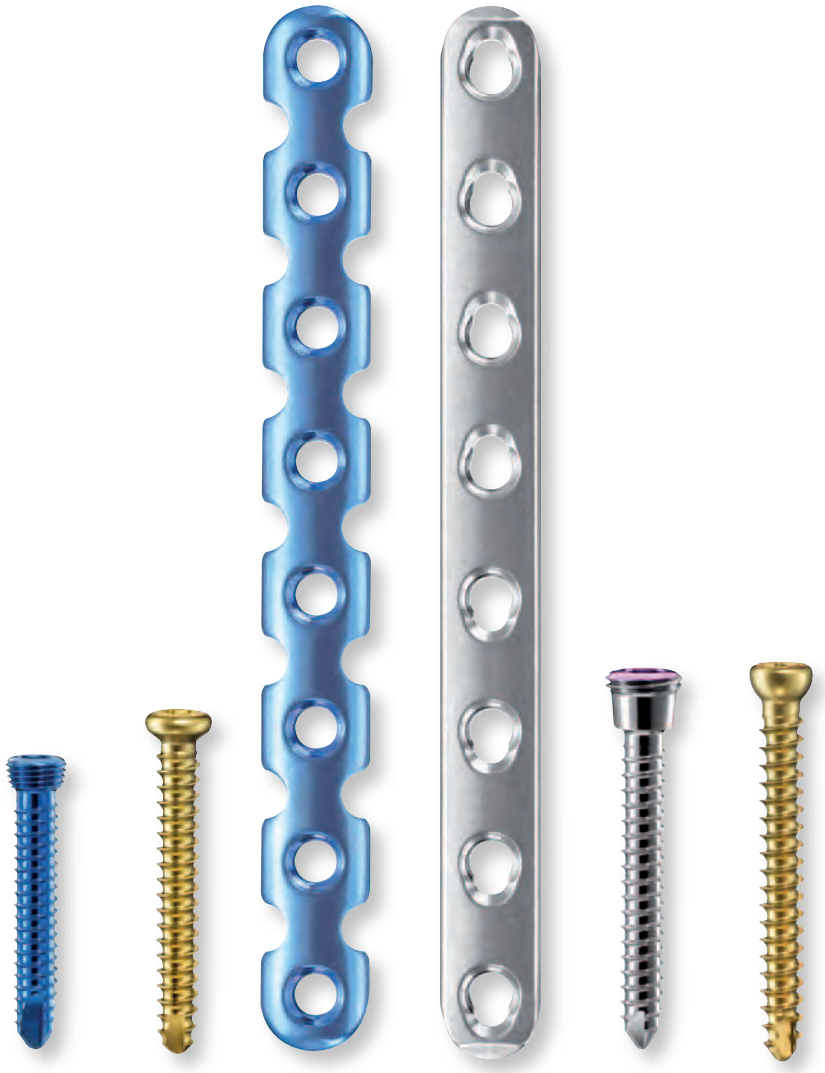
LOQTEQ®

Straight Plates 3.5 & 4.5
Surgical Technique



Locking Compression Technology by aap

Disclaimer

This surgical technique is exclusively intended for medical professionals, especially physicians, and therefore may not be regarded as a source of information for non-medical persons. The description of this surgical technique does not constitute medical advice or medical recommendations nor does it convey any diagnostic or therapeutic information on individual cases. Therefore, the attending physician is fully responsible for providing medical advice to the patient and obtaining the informed consent of the patient which this surgical technique does not supersede.

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Content

The LOQTEQ® Straight Plates 3.5 and 4.5 system comprises bone plates and screws as well as the necessary accessories for insertion. The flexibility of the system allows for safe reduction and stable fixation of various fracture patterns with respect to the indications mentioned in this technical guide. The design features of the implants in combination with standard surgical techniques and proven stability result in reliable constructs to support the bone during the healing process and allow for early mobilization of the patient.

Material

The LOQTEQ® implants and instruments are manufactured using high-quality materials, which have been proven to be successful in medical technology for decades. The plates are made of pure titanium and the screws of a titanium alloy.

All materials employed comply with national and international standards. They are characterized by good biocompatibility, a high degree of safety against allergic reactions and good mechanical properties. LOQTEQ® implants show an excellent, highly polished surface.

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Indications/Contraindications

Indications

LOQTEQ® Straight Plate 3.5
Fixation of fractures, osteotomies, and non-unions of the scapula, olecranon, humerus, radius, ulna, distal tibia, and fibula, particularly in osteoporotic bone.

LOQTEQ® Reconstruction Plate 3.5
Fixation of fractures, osteotomies, and non-unions of the scapula, olecranon, humerus, radius, ulna, distal tibia, and fibula, particularly in osteoporotic bone.

LOQTEQ® One Third Tubular Plate 3.5
Fixation of fractures, osteotomies, and non-unions of the scapula, olecranon, humerus, radius, ulna, distal tibia, and fibula, particularly in osteoporotic bone.

LOQTEQ® Narrow Plate 4.5 and LOQTEQ® Broad Plate 4.5
Fixation of various long bones, such as the humerus, femur and tibia. It is also for use in fixation of osteopenic bone and fixation of non-unions or malunions.

Contraindications

- Infection or inflammation (local or systemic)
- Allergies to the implant material
- Acute and chronic osteomyelitis at or close to the surgical field
- High anesthesia risk patients
- Severe soft tissue swelling impacting normal wound healing
- Insufficient soft tissue coverage
- Fractures in children and adolescents with epiphyseal plates not yet ossified

◆ **Caution:**
aap bone screws are neither designed nor approved for bolting or fixation of any elements (pediculi) of the cervical, thoracic or lumbar spine.

Detailed information on indications, contraindications and a complete list of adverse effects is included in the instructions for use.

Processing (Sterilization & Cleaning)

aap markets unsterilized products which are appropriately labeled and must be appropriately processed before use (see Instructions for Use, chapter "Processing of Medical Devices").
Never use damaged implants or implants from damaged packaging.

MRI Safety Information

The LOQTEQ® implant systems have not been evaluated for safety and compatibility in the MR environment. They have not been tested for heating, migration, or image artifact in the MR environment. The safety of LOQTEQ® implant systems in the MR environment is unknown.
Scanning a patient who has this medical device may result in patient injury.

Implantats Small Fragment 3.5

Straight Plate 3.5, locking-compression hole

Reconstruction Plate 3.5, round locking hole

1/3 Tubular Plate 3.5, round locking hole

LOQTEQ®
Cortical Screw 3.5

- locking
- self-tapping

- red
- T15

For use in locking-compression hole: with/without compression.

- Drill (blue/red): ø2.7

LOQTEQ®
Cortical Screw 3.5, small Head

- locking
- self-tapping

- blue
- T15

For use in round locking hole.
Small head – do not use in gliding-locking hole!

- Drill (blue/red): ø2.7

Cortical Screw 3.5

- non-locking
- self-tapping

- gold
- T15

For use in all plate holes: with/without compression and as lag screw.

- Drill (blue/red): ø2.7

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Implantats Large Fragment 4.5

Straight plate 4.5 narrow, locking-compression hole

Straight plate 4.5 broad, locking-compression hole

LOQTEQ®
Cortical Screw 4.5

- locking
- self-tapping

- red
- T25

Gliding-locking hole

For use in locking-compression hole: with/without compression.

- Drill (blue/red): ø3.8

Cortical Screw 4.5

- non-locking
- self-tapping

- gold
- T25

All plate holes

For use in all plate holes: with/without compression and as lag screw.

- Drill: ø3.2

The LOQTEQ® System includes many different plate types for use in the treatment of a wide number of fracture types. The primary focus of this surgical technique is the application of straight plates and does not deal with any specific fracture type. Please refer to special literature for more specific fracture treatment options.

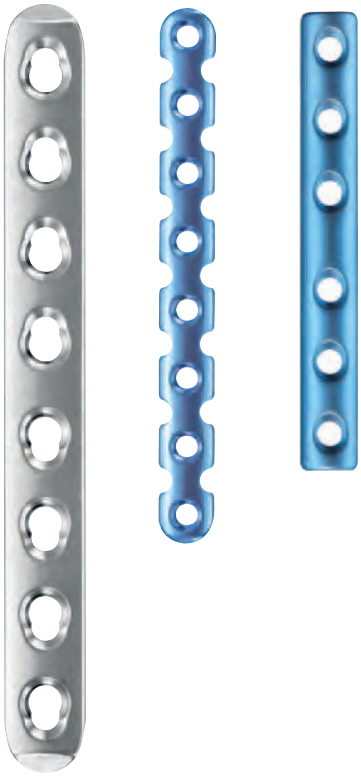
The combination of angular stability and fracture compression in the novel gliding hole offers the following options of screw fixation:

- Locked fracture compression with locking screw
- Fracture compression with non-locking screw
- Locking and non-locking screws in neutral position

Surgical Technique

INSTRUMENTS SMALL FRAGMENT	ART.-NO.
Bending iron 1 for small fragment plates, closed	IP 8405-00
Bending iron 2 for small fragment plates, closed	IP 8405-50
Drill guide for gliding hole LOQTEQ® 3.5, I-ø 2.8, red	IU 8166-10
Drill guide for round hole LOQTEQ® 3.5, I-ø 2.8, blue	IU 8166-20
Reduction sleeve for K-wire ø1.6	IU 8166-16
K-wire with trocar point, ø1.6, L 150	NK 0016-15

INSTRUMENTS LARGE FRAGMENT	ART.-NO.
Load Drill guide LOQTEQ® 3.5, adjustable up to 2mm	IU 8167-10
Reduction sleeve for K-wire ø2.0	IU 8167-15
K-wire with trocar point, ø2.0, L 250	NK 0020-25



Preoperative planning

- Evaluate the fracture situation and select the appropriate plate size and position with an X-ray. Consider the use of independent lag screws, if necessary.

Preparing the Plate

- Select the plate that fits the fracture pattern and patient's anatomy.

- **NOTE:**
  Anatomically pre-contoured plates minimize the need for intraoperative bending. If necessary, the plates may be contoured.

◆ **CAUTION:**
When contouring implants to the given shape of the bones, the implants should not be bent repeatedly as this may result in implant failure. Do not distort the implants or bend them within the confines of the plate holes and avoid any sharp-edged damage by instruments. Angle-stable plates are applied according to the concept of "internal fixation". The implants support bone healing through bone fixation but are not designed to withstand continuous loading without bone support and fracture healing. Since they are subject to material fatigue, medical devices applied in fracture fixation cannot be expected to withstand the same activities as normal healthy bone. Therefore, this support system for fracture healing is not as stable, strong and resilient as normal human bone.

Reduction and primary fixation

- Reduce and temporarily secure the fracture. Care must be taken when positioning K-wires or independent lag screws, that they do not interfere with the later plate position.

- Insert and position the plate over the fracture site. The plate is fixed to the bone with K-wires. Confirm anatomic reduction and plate position using fluoroscopy.

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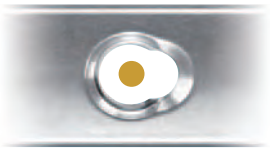
Insertion of cortical screws (gold)

INSTRUMENTS SMALL FRAGMENT	ART.-NO.
Double drill guide ø2.7/3.5, with spring aided centering	IU 8116-60
Twist drill ø2.7, L 150, coil 50, quick coupling, single use	IU 7427-15-1U
Twist drill ø2.7, L 150, coil 50, quick coupling, scaled, single use	IU 7427-16-1U
Twist drill ø3.5, L 110, coil 50, quick coupling, single use	IU 7435-00-1U
Depth gauge for screws ø3.5-4.0, up to L 90	IS 7904-20
Screwdriver Duo, T15, quick coupling	IU 7825-56
Large handle, cannulated, quick coupling	IU 7706-00

INSTRUMENTS LARGE FRAGMENT	ART.-NO.
Double drill guide ø3.2/4.5, with spring aided centering	IU 8117-50
Twist drill ø3.2, L 195, coil 50, quick coupling, single use	IU 7432-30-1U
Twist drill ø4.5, L 145, coil 50, quick coupling, single use	IU 7445-00-1U
Depth gauge for screws ø4.5 - 6.5, up to L 100	IS 7905-20
Screwdriver Duo, T25, quick coupling	IU 7835-56
Large handle, cannulated, quick coupling	IU 7706-00



◆ **Caution:**
Cortical screws are offered with different head diameters. Follow the instructions on page 15 for choosing the appropriate screw!

- **Note:**
If a combination of locking and non-locking screws is used, non-locking cortical screws must be inserted first.

- To insert a cortical screw (gold), place the double drill guide in the plate hole and press it down. Choose an appropriate drill and drill through both cortices. Determine the length of the screw using the depth gauge and insert a screw of appropriate length using the screwdriver.

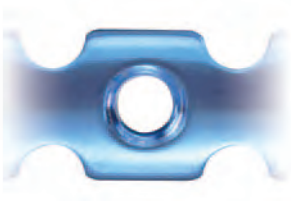
- **Note:**
Ensure proper alignment of the screwdriver and that the screwdriver tip is fully seated in the screw head.

- Check plate position using fluoroscopy and adjust if required.

- When using a cortical screw as a lag screw, start with the drill for the gliding hole and the appropriate side of the double drill guide. Drill through the near cortex or perforating the fracture line, center the other side of the drill guide in the gliding hole and drill the core hole with an appropriate diameter drill through the far cortex. Determine the screw length using the depth gauge and insert a non-locking coral screw of the appropriate length.

Insertion of cortical screws (blue)

INSTRUMENTS	ART.-NO.
Drill guide for round hole LOQTEQ® 3.5, I-ø 2.8, blue	IU 8166-20
Twist drill ø2.7, L 150, coil 50, quick coupling, single use	IU 7427-15-1U
Twist drill ø2.7, L 150, coil 50, quick coupling, scaled, single use	IU 7427-16-1U
Stop ring for depth measurement, SF	IU 8166-06
Depth gauge for screws ø3.5-4.0, up to L 90	IS 7904-20
Screwdriver Duo, T15, quick coupling	IU 7825-56
Handle with quick coupling, with torque limiter, 2.0Nm	IU 7707-20



3.5

- Insert a drill guide ø2.7 mm (blue) into any chosen round hole and drill to the desired depth using a drill (blue/red).

◆ **Caution:**
The screwdriver duo is not intended for screwing the drill guide into the plate.

- The screw length can be read off the calibration of the drill or determined using the depth gauge, after the drill guide has been removed.

- The stop ring facilitates reading off the calibration when attached to the drill. Push it down to the guide sleeve and remove the drill for reading the drilling depth in the gap of the ring.

- **Note:**
The screwdriver duo facilitates manual removal of the drill guide.

- Select a locking screw (blue) of the proper length. Loosely insert the screw using the screwdriver T15 manually or under power with a low speed. Stop insertion when the screw head approaches the plate surface.

- **Note:**
Ensure proper alignment of the screwdriver and that the screwdriver tip is fully seated in the screw head.

- Finish the screw manually using the screwdriver T15 with the torque limiting handle 2.0 Nm. Optimal locking should be achieved with an audible and tactile click of the torque limiter.

◆ **Caution:**
As soon as the head of the screw reaches the plate hole it is compulsory to switch to the torque limiter. In cases of uncommonly hard bone, it may be necessary to finish the screw without the torque limiter to ensure the screw head is flush with the plate and the screw is locked.

- Follow these instructions to insert further screws in the plate holes depending on the fracture pattern. Finally, confirm that all screw heads are flush with the plate surface. Check the result using fluoroscopy and adjust screw positioning or length as necessary.

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Insertion of locking compression screws (red)
without compression

INSTRUMENTS SMALL FRAGMENT	ART.-NO.
Drill guide for gliding hole LOQTEQ® 3.5, I-ø 2.8, red	IU 8166-10
Twist drill ø2.7, L 150, coil 50, quick coupling, single use	IU 7427-15-1U
Twist drill ø2.7, L 150, coil 50, quick coupling, scaled, single use	IU 7427-16-1U
Stop ring for depth measurement, SF	IU 8166-06
Depth gauge for screws ø3.5-4.0, up to L 90	IS 7904-20
Screwdriver Duo, T15, quick coupling	IU 7825-56
Handle with quick coupling, with torque limiter, 2.0Nm	IU 7707-20

INSTRUMENTS LARGE FRAGMENT	ART.-NO.
Drill guide for gliding hole LOQTEQ® 4.5, I-ø 3.9, red	IU 8167-10
Twist drill ø3.8, L 180, coil 50, quick coupling, single use	IU 7438-18-1U
Stop ring for depth measurement, LF	IU 8184-03
Depth gauge for screws ø4.5-6.5, up to L 100	IS 7905-20
Screwdriver Duo, T25, quick coupling	IU 7835-56
Handle with quick coupling, with torque limiter 3.5Nm	IU 7707-35

- Insert a drill guide (red) into any chosen gliding hole and drill to the desired depth using a drill (blue/red).

◆ **Caution:**
The screwdriver duo is not intended for screwing the drill guide into the plate.

- The screw length can be read off the calibration of the drill or determined using the depth gauge, after the drill guide has been removed.

- The stop ring facilitates reading off the calibration when attached to the drill. Push it down to the guide sleeve and remove the drill for reading the drilling depth in the gap of the ring.

- **Note:**
The screwdriver duo facilitates manual removal of the drill guide.

- Select a locking screw (rot) of the proper length. Loosely insert the screw using the screwdriver manually or under power with a low speed. Stop insertion when the screw head approaches the plate surface.

- **Note:**
Ensure proper alignment of the screwdriver and that the screwdriver tip is fully seated in the screw head.

- Finish the screw manually using the screwdriver bit with the torque limiting handle. Optimal locking should be achieved with an audible and tactile click of the torque limiter.

◆ **Caution:**
As soon as the head of the screw reaches the plate hole it is compulsory to switch to the torque limiter. In cases of uncommonly hard bone, it may be necessary to finish the screw without the torque limiter to ensure the screw head is flush with the plate and the screw is locked.

Insertion of locking compression screws (red) with compression

INSTRUMENTS SMALL FRAGMENT	ART.-NO.
Basic Insert for Load Drill Guide LOQTEQ® 3.5	IU 8166-05
Load Drill guide LOQTEQ® 3.5, compression 1mm	IU 8166-01
Load Drill guide LOQTEQ® 3.5, compression 2mm	IU 8166-02
Load Drill guide LOQTEQ® 3.5, adjustable up to 2mm	IU 8166-03

INSTRUMENTS LARGE FRAGMENT	ART.-NO.
Basic insert for load drill guide LOQTEQ® 4.5	IU 8167-05
Load Drill guide LOQTEQ® 4.5, compression 1mm	IU 8167-01
Load Drill guide LOQTEQ® 4.5, compression 2mm	IU 8167-02
Load drill guide LOQTEQ® 4.5, adjustable up to 2mm	IU 8167-03

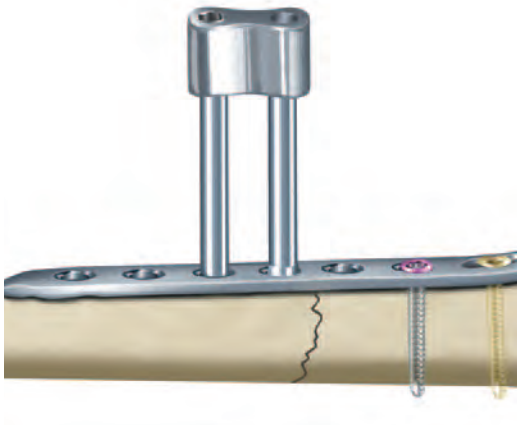
- LOQTEQ® gliding holes allow for fracture compression with subsequent locking fixation in one step. Load drill guides enable compressing fracture gaps of up to 2 mm.

- Screw the basic insert for load drill guides into a shaft hole near the fracture line or, if necessary, above the fracture line. Choose a load drill guide in accordance with the compression distance (1 mm or 2 mm), slide it on the basic insert and place the drill guide in the next plate hole, away from the fracture gap. Avoid pressure on the drill guide.

◆ **Caution:**
The screwdriver duo is not intended for screwing the basic insert into the plate.

- If available, use the adjustable load drill guide. The fracture gap serves as orientation in setting the compression distance (max. 2 mm) by turning the wheel of the load drill guide until an appropriate gap opens in the upper part of the instrument.

- **Note:**
Care should be taken when selecting the proper compression distance (1 mm or 2 mm). Avoid overcompression to ensure full locking of the screw, especially in hard bone.



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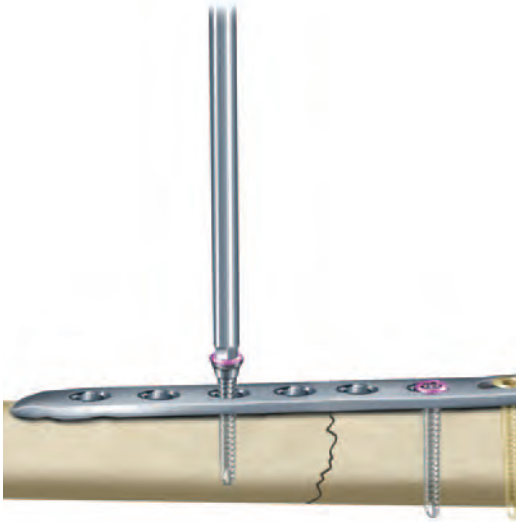
INSTRUMENTS SMALL FRAGMENT	ART.-NO.
Twist drill ø2.7, L 150, coil 50, quick coupling, single use	IU 7427-15-1U
Twist drill ø2.7, L 150, coil 50, quick coupling, scaled, single use	IU 7427-16-1U
Depth gauge for screws ø3.5-4.0, up to L 90	IS 7904-20
Screwdriver Duo, T15, quick coupling	IU 7825-56
Handle with quick coupling, with torque limiter, 2.0 Nm	IU 7707-20
Large handle, cannulated, quick coupling	IU 7706-00

INSTRUMENTS LARGE FRAGMENT	ART.-NO.
Twist drill ø3.8, L 250, coil 50, quick coupling, single use	IU 7438-25-1U
Depth gauge for screws ø4.5-6.5, up to L 100	IS 7905-20
Screwdriver Duo, T25, quick coupling	IU 7835-56
Handle with quick coupling, with torque limiter 3.5Nm	IU 7707-35
Large handle, cannulated, quick coupling	IU 7706-00

- Drill to the desired depth using a drill (blue/red) and remove the basic insert. The screw length can be read off the calibration of the drill or determined using the depth gauge, after the drill guide has been removed.

- **Note:**
  The screwdriver duo facilitates manual removal of the basic insert.

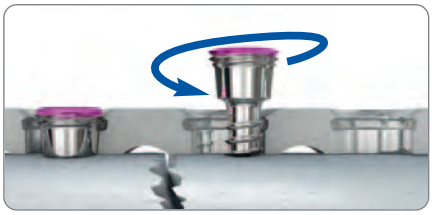


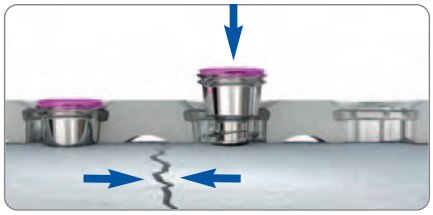
- Select a locking screw (red) of the proper length. Loosely insert the screw using the screwdriver manually or under power with a low speed. Stop insertion when the screw head approaches the plate surface. Finish the screw manually using the screwdriver bit with the torque limiting handle. Optimal locking should be achieved with an audible and tactile click of the torque limiter.

◆ **Caution:**
As soon as the head of the screw reaches the plate hole it is compulsory to switch to the torque limiter. In cases of uncommonly hard bone, it may be necessary to finish the screw without the torque limiter to ensure the screw head is flush with the plate and the screw is locked.

- Alternatively, insert a non-locking cortical screw (gold) as a compression screw by placing the double drill guide without pressure in an off-center position in the plate hole. For insertion of the screw, follow the instructions on page 7.

- Follow these instructions to insert further screws in the plate holes depending on the fracture pattern. Finally, confirm that all screw heads are flush with the plate surface. Check the result using fluoroscopy and adjust screw positioning or length as necessary.





INSTRUMENTS	ART.-NO.
Explantation screwdriver T15, round handle	IU 7811-15
Explantation screwdriver T25, round handle	IU 7811-25

- **Note:**
  The screwdrivers T15 (IU 7825-56) and T25 (IU 7835-56) in the set are self-retaining and should not be used for screw explantation.

- Use the corresponding explantation screwdriver for safe removal of a screw. Explantation screwdrivers are not self-retaining, penetrate further into the screw head and thus permit a higher torque when removing screws. They are not included in the set as standard and must be ordered separately.

- Place an incision on the old scar. Manually undo all screws and sequentially remove them. After manually unlocking all screws, removal may be performed using a power tool.

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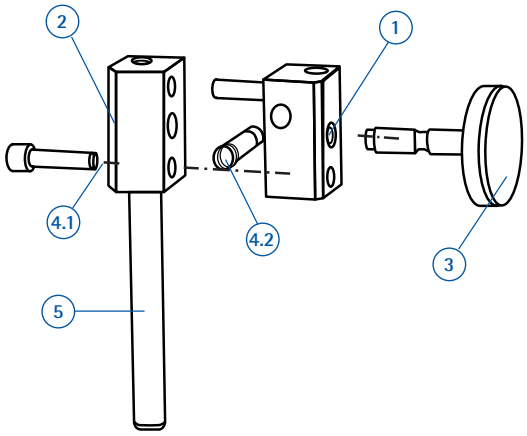
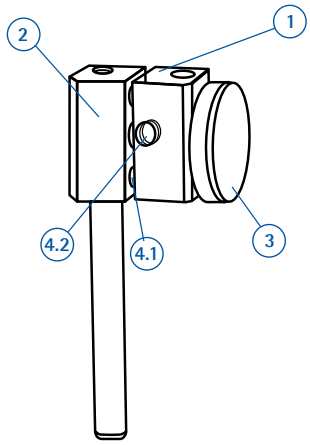
Disassembly



Adjustable load drill guide (IU 8166-03 / IU 8167-03)

- Remove screws (item 4.1 and 4.2) using a hexagonal screwdriver 2.5
- Unscrew the set screw (item 3)
- Pull the compression block apart (items 1 and 2)

Assembly



- Fit together the compression block (items 1 and 2)
- Insert the set screw (item 3) into the compression block, middle hole
- Insert the retaining screws (items 4.1 and 4.2) using a hexagonal screwdriver 2.5

LOQTEQ® Straight Plate 3.5

HOLES	LENGTH (mm)	ART.-NO.
4	60	PG 3555-04-2
5	73	PG 3555-05-2
6	86	PG 3555-06-2
7	99	PG 3555-07-2
8	112	PG 3555-08-2
9	125	PG 3555-09-2
10	138	PG 3555-10-2
11	151	PG 3555-11-2
12	164	PG 3555-12-2
14	190	PG 3555-14-2

LOQTEQ® Reconstruction Plate 3.5

HOLES	LENGTH (mm)	ART.-NO.
5	58	PR 3550-05-2
6	70	PR 3550-06-2
7	82	PR 3550-07-2
8	94	PR 3550-08-2
9	106	PR 3550-09-2
10	118	PR 3550-10-2
12	142	PR 3550-12-2
14	166	PR 3550-14-2
16	190	PR 3550-16-2
18	214	PR 3550-18-2

LOQTEQ® 1/3 Tubular Plate 3.5

HOLES	LENGTH (mm)	ART.-NO.
3	40	PG 3553-03-2
4	52	PG 3553-04-2
5	64	PG 3553-05-2
6	76	PG 3553-06-2
7	88	PG 3553-07-2
8	100	PG 3553-08-2
9	112	PG 3553-09-2
10	124	PG 3553-10-2
11	136	PG 3553-11-2
12	148	PG 3553-12-2

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LOQTEQ® Cortical Screw 3.5, T15, self-tapping

L 12	SK 3525-12-2
L 14	SK 3525-14-2
L 16	SK 3525-16-2
L 18	SK 3525-18-2
L 20	SK 3525-20-2
L 22	SK 3525-22-2
L 24	SK 3525-24-2
L 26	SK 3525-26-2
L 28	SK 3525-28-2
L 30	SK 3525-30-2
L 32	SK 3525-32-2
L 34	SK 3525-34-2
L 36	SK 3525-36-2
L 38	SK 3525-38-2
L 40	SK 3525-40-2
L 42	SK 3525-42-2
L 44	SK 3525-44-2
L 45	SK 3525-45-2
L 50	SK 3525-50-2
L 55	SK 3525-55-2
L 60	SK 3525-60-2
L 65	SK 3525-65-2
L 70	SK 3525-70-2

LOQTEQ® Cortical Screw 3.5, small head, T15, self-tapping

L 10	SK 3526-10-2
L 12	SK 3526-12-2
L 14	SK 3526-14-2
L 16	SK 3526-16-2
L 18	SK 3526-18-2
L 20	SK 3526-20-2
L 22	SK 3526-22-2
L 24	SK 3526-24-2
L 26	SK 3526-26-2
L 28	SK 3526-28-2
L 30	SK 3526-30-2
L 32	SK 3526-32-2
L 34	SK 3526-34-2
L 36	SK 3526-36-2
L 38	SK 3526-38-2
L 40	SK 3526-40-2
L 42	SK 3526-42-2
L 45	SK 3526-45-2
L 50	SK 3526-50-2
L 55	SK 3526-55-2
L 60	SK 3526-60-2
L 65	SK 3526-65-2
L 70	SK 3526-70-2
L 75	SK 3526-75-2
L 80	SK 3526-80-2
L 85	SK 3526-85-2
L 90	SK 3526-90-2

Cortical Screw 3.5, T15, self-tapping

L 10	SK 3514-10-2
L 12	SK 3514-12-2
L 14	SK 3514-14-2
L 16	SK 3514-16-2
L 18	SK 3514-18-2
L 20	SK 3514-20-2
L 22	SK 3514-22-2
L 24	SK 3514-24-2
L 26	SK 3514-26-2
L 28	SK 3514-28-2
L 30	SK 3514-30-2
L 32	SK 3514-32-2
L 34	SK 3514-34-2
L 36	SK 3514-36-2
L 38	SK 3514-38-2
L 40	SK 3514-40-2
L 42	SK 3514-42-2
L 45	SK 3514-45-2
L 50	SK 3514-50-2
L 55	SK 3514-55-2
L 60	SK 3514-60-2
L 65	SK 3514-65-2
L 70	SK 3514-70-2
L 75	SK 3514-75-2
L 80	SK 3514-80-2
L 85	SK 3514-85-2
L 90	SK 3514-90-2

Cancellous Screw 4.0, small head, T15

L 10	TL 5	SP 4030-10-2
L 12	TL 5	SP 4030-12-2
L 14	TL 5	SP 4030-14-2
L 16	TL 6	SP 4030-16-2
L 18	TL 7	SP 4030-18-2
L 20	TL 8	SP 4030-20-2
L 22	TL 9	SP 4030-22-2
L 24	TL 10	SP 4030-24-2
L 26	TL 12	SP 4030-26-2
L 28	TL 14	SP 4030-28-2
L 30	TL 14	SP 4030-30-2
L 32	TL 14	SP 4030-32-2
L 34	TL 14	SP 4030-34-2
L 36	TL 14	SP 4030-36-2
L 38	TL 14	SP 4030-38-2
L 40	TL 14	SP 4030-40-2
L 42	TL 15	SP 4030-42-2
L 45	TL 15	SP 4030-45-2
L 50	TL 15	SP 4030-50-2
L 55	TL 16	SP 4030-55-2
L 60	TL 16	SP 4030-60-2
L 65	TL 16	SP 4030-65-2
L 70	TL 16	SP 4030-70-2
L 75	TL 16	SP 4030-75-2
L 80	TL 16	SP 4030-80-2
L 85	TL 16	SP 4030-85-2
L 90	TL 16	SP 4030-90-2

Cancellous Screw 4.0, kl. Kopf, T15, full thread

L 10	SP 4035-10-2
L 12	SP 4035-12-2
L 14	SP 4035-14-2
L 16	SP 4035-16-2
L 18	SP 4035-18-2
L 20	SP 4035-20-2
L 22	SP 4035-22-2
L 24	SP 4035-24-2
L 26	SP 4035-26-2
L 28	SP 4035-28-2
L 30	SP 4035-30-2
L 32	SP 4035-32-2
L 34	SP 4035-34-2
L 36	SP 4035-36-2
L 38	SP 4035-38-2
L 40	SP 4035-40-2
L 42	SP 4035-42-2
L 45	SP 4035-45-2
L 50	SP 4035-50-2
L 55	SP 4035-55-2
L 60	SP 4035-60-2
L 65	SP 4035-65-2
L 70	SP 4035-70-2
L 75	SP 4035-75-2
L 80	SP 4035-80-2
L 85	SP 4035-85-2

Washer
l-ø 4.4 mm, A-ø 8.0 mm, Titanium

SU 0448-00-2

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Bending iron 1 for small fragment plates, closed	IP 8405-00
Bending iron 2 for small fragment plates, closed	IP 8405-50

Depth gauge for screws ø3.5 - 4.0, up to L 90	IS 7904-20

Twist drill ø2.7, L 150, coil 50, quick coupling, single use	IU 7427-15-1U
Twist drill ø2.7, L 150, coil 50, quick coupling, scaled, single use	IU 7427-16-1U
Twist drill ø2.7, L 220, coil 50, quick coupling, single use	IU 7427-22-1U
Twist drill ø2.7, L 220, coil 50, quick coupling, scaled, single use	IU 7427-23-1U
Twist drill ø3.5, L 110, coil 50, quick coupling, single use	IU 7435-00-1U

Large handle, cannulated, quick coupling	IU 7706-00

Handle with quick coupling, with torque limiter 2.0Nm	IU 7707-20

Screwdriver Duo, T15, quick coupling	IU 7825-56 ✱

Double drill guide ø2.7/3.5, with spring aided centering	IU 8116-60 ✱

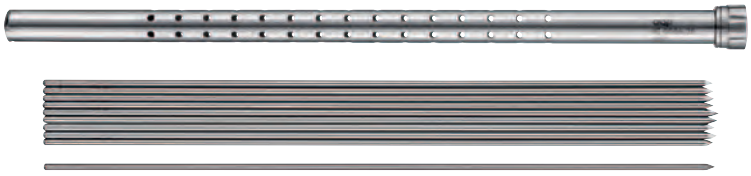
Load Drill guide LOQTEQ® 3.5, compression 1mm	IU 8166-01
Load Drill guide LOQTEQ® 3.5, compression 2mm	IU 8166-02
Load Drill guide LOQTEQ® 3.5, adjustable up to 2mm	IU 8166-03
Basic insert for load drill guide LOQTEQ® 3.5	IU 8166-05

Stop ring for depth measurement, SF	IU 8166-06

Drill guide for gliding hole LOQTEQ® 3.5, I-ø 2.8, red	IU 8166-10

Reduction sleeve for K-wire ø1.6	IU 8166-16

Drill guide for round hole LOQTEQ® 3.5, I-ø 2.8, blue	IU 8166-20



Caddy for K-wire L 150	IC 0006-15
K-wire with trocar point, ø1.6, L 150	NK 0016-15

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LOQTEQ® Narrow Plate 4.5

HOLES	LENGTH (mm)	ART.-NO.
4	72	PG 4555-04-2
5	90	PG 4555-05-2
6	108	PG 4555-06-2
7	126	PG 4555-07-2
8	144	PG 4555-08-2
9	162	PG 4555-09-2
10	180	PG 4555-10-2
11	198	PG 4555-11-2
12	216	PG 4555-12-2
14	252	PG 4555-14-2
16	288	PG 4555-16-2

LOQTEQ® Broad Plate 4.5

HOLES	LENGTH (mm)	ART.-NO.
6	115	PG 4556-06-2
7	133	PG 4556-07-2
8	150	PG 4556-08-2
9	168	PG 4556-09-2
10	186	PG 4556-10-2
11	204	PG 4556-11-2
12	222	PG 4556-12-2
14	257	PG 4556-14-2
16	293	PG 4556-16-2
18	328	PG 4556-18-2

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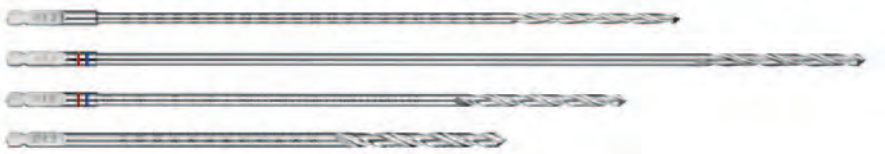
LOQTEQ® Cortical Screw 4.5, T25, self-tapping

L 14	SK 4525-14-2
L 16	SK 4525-16-2
L 18	SK 4525-18-2
L 20	SK 4525-20-2
L 22	SK 4525-22-2
L 24	SK 4525-24-2
L 26	SK 4525-26-2
L 28	SK 4525-28-2
L 30	SK 4525-30-2
L 32	SK 4525-32-2
L 34	SK 4525-34-2
L 36	SK 4525-36-2
L 38	SK 4525-38-2
L 40	SK 4525-40-2
L 42	SK 4525-42-2
L 45	SK 4525-45-2
L 50	SK 4525-50-2
L 55	SK 4525-55-2
L 60	SK 4525-60-2
L 65	SK 4525-65-2
L 70	SK 4525-70-2
L 75	SK 4525-75-2
L 80	SK 4525-80-2
L 85	SK 4525-85-2
L 90	SK 4525-90-2

Cortical Screw 4.5, T25, self-tapping

L 20	SK 4514-20-2
L 22	SK 4514-22-2
L 24	SK 4514-24-2
L 26	SK 4514-26-2
L 28	SK 4514-28-2
L 30	SK 4514-30-2
L 32	SK 4514-32-2
L 34	SK 4514-34-2
L 36	SK 4514-36-2
L 38	SK 4514-38-2
L 40	SK 4514-40-2
L 42	SK 4514-42-2
L 45	SK 4514-45-2
L 50	SK 4514-50-2
L 55	SK 4514-55-2
L 60	SK 4514-60-2
L 65	SK 4514-65-2
L 70	SK 4514-70-2
L 75	SK 4514-75-2
L 80	SK 4514-80-2
L 85	SK 4514-85-2
L 90	SK 4514-90-2

Depth gauge for screws ø4.5 - 6.5, up to L 100 — IS 7905-20



Twist drill ø3.2, L 195, coil 50, quick coupling, single use	IU 7432-30-1U
Twist drill ø3.8, L 180, coil 50, quick coupling, single use	IU 7438-18-1U
Twist drill ø3.8, L 250, coil 50, quick coupling, single use	IU 7438-25-1U
Twist drill ø4.5, L 145, coil 50, quick coupling, single use	IU 7445-00-1U

Large handle, cannulated, quick coupling — IU 7706-00

Handle with quick coupling, with torque limiter 3.5Nm — IU 7707-35

Screwdriver Duo, T25, quick coupling — IU 7835-56 ✱

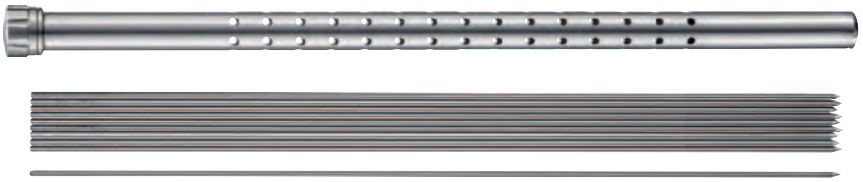
Double drill guide ø3.2/4.5, with spring aided centering — IU 8117-50

Load drill guide LOQTEQ® 4.5, compression 1mm	IU 8167-01
Load drill guide LOQTEQ® 4.5, compression 2mm	IU 8167-02
Load drill guide LOQTEQ® 4.5, adjustable up to 2mm	IU 8167-03
Basic insert for load drill guide LOQTEQ® 4.5	IU 8167-05

Drill guide for gliding hole LOQTEQ® 4.5, I-ø 3.9, red	IU 8167-10

Reduction sleeve for K-wire ø2.0	IU 8167-15

Stop ring for depth measurement, LF	IU 8184-03



Caddy for K-wire L 250	IC 0006-25
K-wire with trocar point, ø2.0, L 250	NK 0020-25

Clincal Case

Forearm fracture (AO 22-A3)

Preoperative

Postoperative

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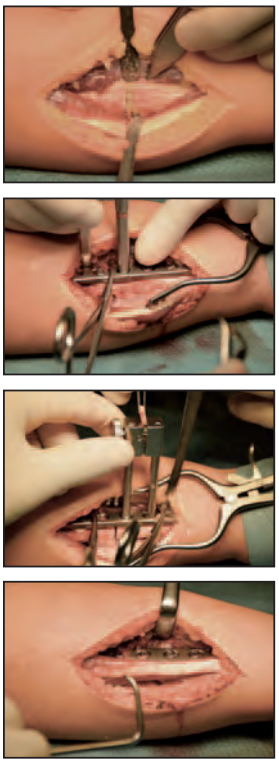
Asklepios Clinic Weißenfels, Germany

Ulna shortening osteotomy

Preoperative



Postoperative

Clinical case and
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