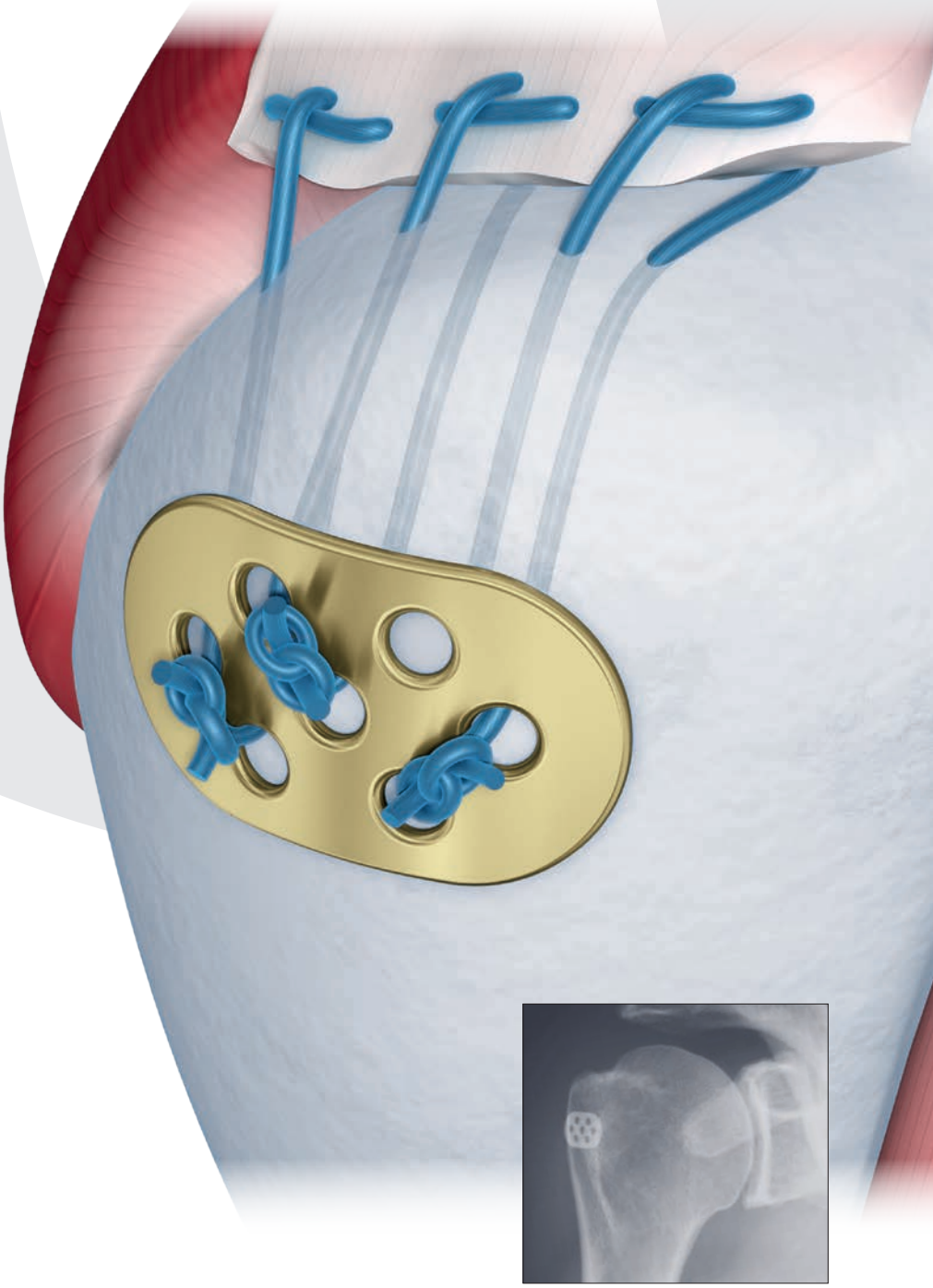
Reinforcement for transosseous fixations

Button Plate

Surgical Technique



DePuy Synthes

PART OF THE Johnson & Johnson FAMILY OF COMPANIES

AO approved by AO Technical Commission

Image intensifier control

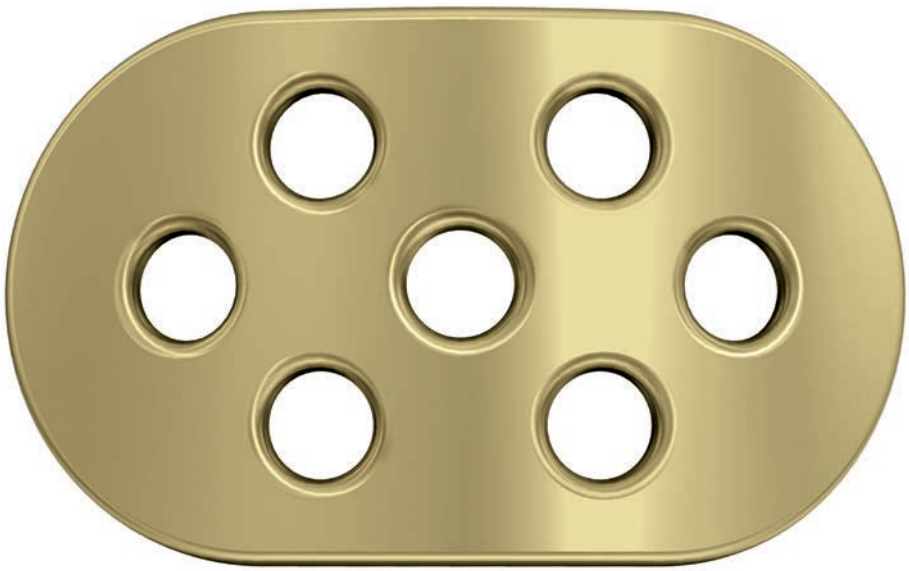
This description alone does not provide sufficient background for direct use of DePuy Synthes products. Instruction by a surgeon experienced in handling these products is highly recommended.

Processing, Reprocessing, Care and Maintenance
For general guidelines, function control and dismantling of multi-part instruments, as well as processing guidelines for implants, please contact your local sales representative or refer to:
http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance
For general information about reprocessing, care and maintenance of DePuy Synthes reusable devices, instrument trays and cases, as well as processing of DePuy Synthes non-sterile implants, please consult the Important Information leaflet (SE_023827) or refer to:
http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance

Table of Contents

Overview

The number and position of sutures can be placed in the 7 plate holes (∅ 1.9 mm) either between the holes or between one hole and the edge of the plate.



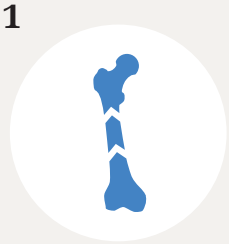
Intended Use, Indications and Contraindications can be found in the corresponding system Instructions for Use.

The AO Principles of Fracture Management

Mission
The AO's mission is promoting excellence in patient care and outcomes in trauma and musculoskeletal disorders.

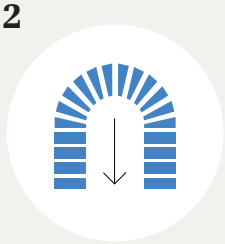
AO Principles [1,2]

1



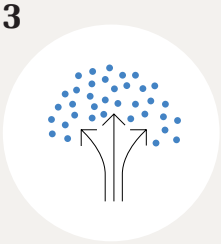
Fracture reduction and fixation to restore anatomical relationships.

2



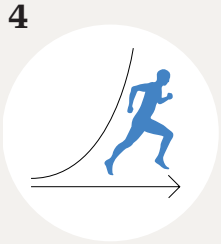
Fracture fixation providing absolute or relative stability, as required by the "personality" of the fracture, the patient, and the injury.

3



Preservation of the blood supply to soft-tissues and bone by gentle reduction techniques and careful handling.

4

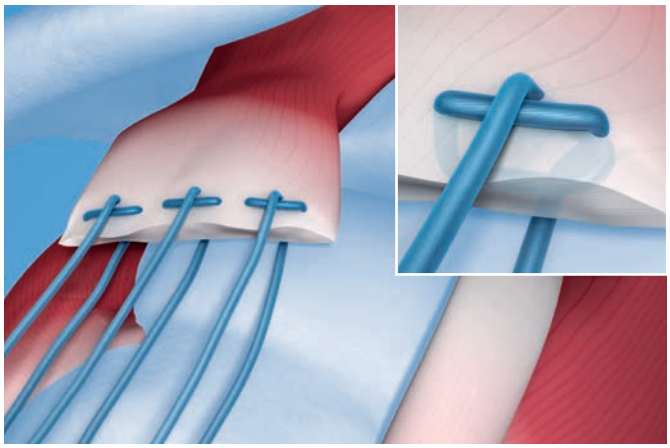


Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.

[1] Müller ME, M Allgöwer, R Schneider, H Willenegger. Manual of Internal Fixation. 3rd ed. Berlin, Heidelberg, New York: Springer. 1991
[2] Buckley RE, Moran CG, Apivatthakakul T. AO Principles of Fracture Management: 3rd ed. Vol. 1: Principles, Vol. 2: Specific fractures. Thieme; 2017.

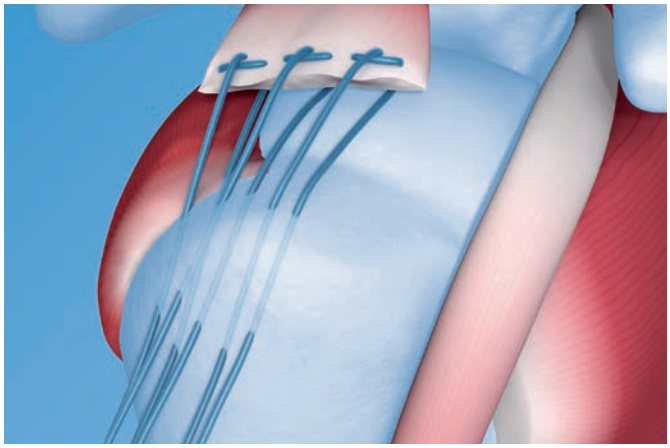
1. Step

Position the patient in a beach chair position and perform a superolateral or deltopectoral approach. Expose the rotator cuff and the proximal humerus using the general shoulder instruments. Grasp the ruptured tendons with sutures. (Recommendation: non-absorbable suture material, at least size 3 but no larger than size 7, using modified Mason-Allen technique).



2. Step

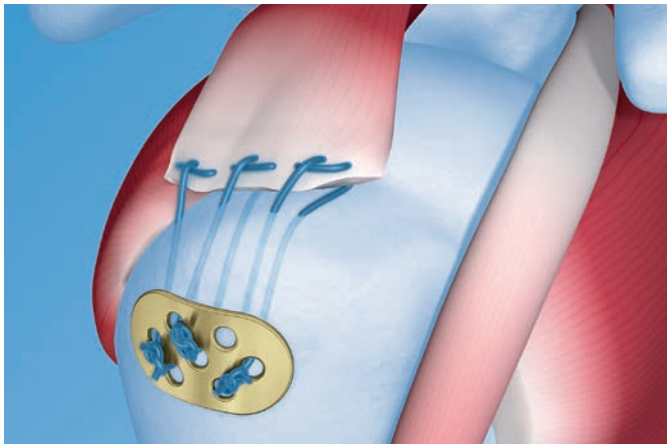
Prepare a minimal bone trough along the contact area of bone and cartilage at the level of the greater tuberosity using a chisel or Gouge Pliers. Predrill the cortex of the bone trough to establish transosseous channels (2.0 mm drill bit). Insert the needle (less than ∅ 1.85 mm) with sutures transosseously through the predrilled entry point, exiting below the greater tuberosity.



3. Step

Pull the sutures through the corresponding holes of the button plate (concave curvature of the plate against the humeral head). Tie the sutures over the button plate.

Note: Do not bend the button plate.



Implant Removal

In case the physician decides to remove the implants, implants can be removed by using general surgical instruments.

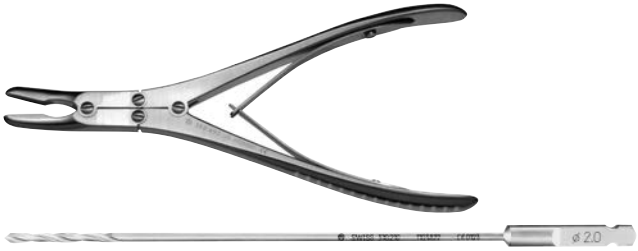
Implants, Instruments, Set

Implants

482.823	Button Plate, 7 holes, Pure Titanium
482.823S	Button Plate, 7 holes, Pure Titanium, sterile

Instruments

389.493	Gouge Pliers, curved, length 190 mm
310.210	Drill Bit ∅ 2.0 mm, length 125/100 mm, 2-flute, for Quick Coupling



Set

01.401.039	General Shoulder Instrument Set

MRI Information

Torque, Displacement and Image Artifacts according to ASTM F 2213-06, ASTM F 2052-14 and ASTM F2119-07
Non-clinical testing of worst case scenario in a 3 T MRI system did not reveal any relevant torque or displacement of the construct for an experimentally measured local spatial gradient of the magnetic field of 3.69 T/m. The largest image artifact extended approximately 169 mm from the construct when scanned using the Gradient Echo (GE). Testing was conducted on a 3 T MRI system.

Radio-Frequency-(RF-)induced heating according to ASTM F2182-11a
Non-clinical electromagnetic and thermal testing of worst case scenario lead to peak temperature rise of 9.5 °C with an average temperature rise of 6.6 °C (1.5 T) and a peak temperature rise of 5.9 °C (3 T) under MRI Conditions using RF Coils [whole body averaged specific absorption rate (SAR) of 2 W/kg for 6 minutes (1.5 T) and for 15 minutes (3 T)].

Precautions: The above mentioned test relies on non-clinical testing. The actual temperature rise in the patient will depend on a variety of factors beyond the SAR and time of RF application. Thus, it is recommended to pay particular attention to the following points:
- **It is recommended to thoroughly monitor patients undergoing MR scanning for perceived temperature and/or pain sensations.**
- **Patients with impaired thermo regulation or temperature sensation should be excluded from MR scanning procedures.**
- **Generally it is recommended to use a MR system with low field strength in the presence of conductive implants. The employed specific absorption rate (SAR) should be reduced as far as possible.**
- **Using the ventilation system may further contribute to reduce temperature increase in the body.**

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Not all products are currently available in all markets.

This publication is not intended for distribution in the USA.

All surgical techniques are available as PDF files at
www.depuysynthes.com/ifu

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