



BRM VR Screws

**BREAK-OFF
SCREWS**



SURGICAL TECHNIQUE

CE 0426

CLINICAL INDICATIONS

Fixation of small and medium-sized bone fragments:

- epiphyseal detachments
- **Weil osteotomy**
- distal osteotomy of the second, third or fourth metatarsal for painful plantar calluses





SURGICAL TECHNIQUE GUIDE

This document details the recommended surgical technique for the BRM VR screw, specifically designed for the correction of bone deformities of the forefoot.

It serves as an educational resource to support qualified surgeons in ensuring the safe and effective application of the system. The following guidelines are provided for reference purposes only.

It remains the sole responsibility of the operating surgeon to determine the appropriateness of each procedure based on their professional clinical judgment and experience.

For comprehensive information regarding indications, contraindications, warnings, and precautions, please consult the official Instructions for Use (IFU) provided with the device.

INSTRUMENTATION



SVRI2SD000

Break-off screws Handle



PATIENT PREPARATION AND INCISION

Based on the preoperative Xray images, position the patient according to the technique chosen by the surgeon to ensure appropriate operative access.

Proceed with a temporary fracture reduction or osteotomy and select the most appropriate screw diameter and length according to the type of surgery to be performed.

Make an incision in the skin and subcutaneous tissue creating an access route to the fracture area, or osteotomy, for implanting the screw.



WEIL OSTEOTOMY

Perform an osteotomy of the metatarsal head starting at the junction between the cartilage and the epiphysis of the metatarsal head. The oscillating saw blade is directed proximally while maintaining a horizontal orientation (parallel to the plantar support surface) in order to reach and interrupt the plantar cortex.



METATARSAL HEAD TRANSLATION

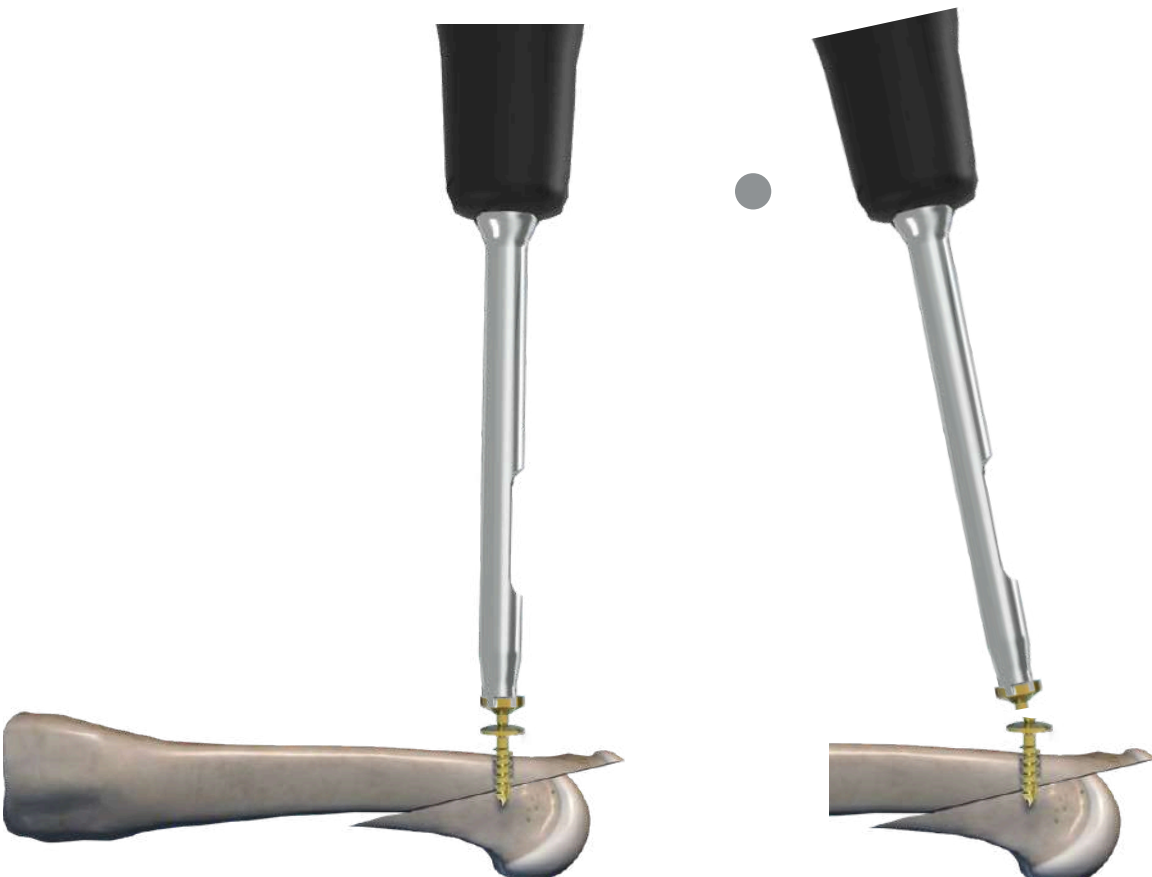
Slide the metatarsal head proximally before fixing the two fragments using a break-off screw.



SCREW INSERTION

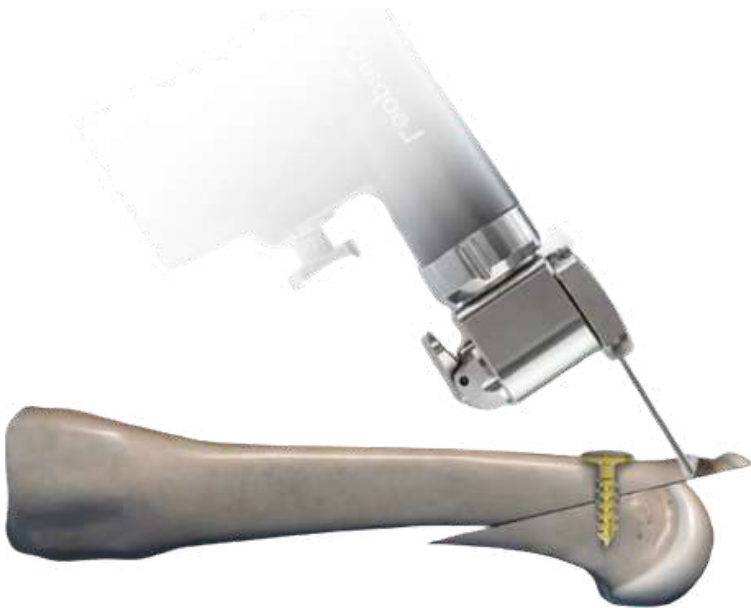
The screw can be inserted using either a powered drill or the manual screwdriver (SVRI2SD000). In both cases, insert the screw into the desired position. Once insertion is complete, the screw shaft is broken by the bending force concentrated at the pre-weakened fracture initiation point (if necessary, induce breakage by applying a wide alternating lateral movement to the shaft).

If the shaft breaks before the screw reaches the desired position, the screw can be further advanced using the manual screwdriver.



FINAL RESECTION

Resect the dorsal bone fragment remaining after proximal translation of the metatarsal head using an oscillating saw or a rongeur.



WOUND CLOSURE

Proceed with wound closure.



IMPLANT REMOVAL

Once bone consolidation has been achieved, the screws can be removed using the screwdriver . In specific cases where implant removal may pose a risk to the patient the surgeon may decide to leave the implanted devices in place.



D I S T R I B U T E D B Y :



**BRM VR Screws
Brochure**

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