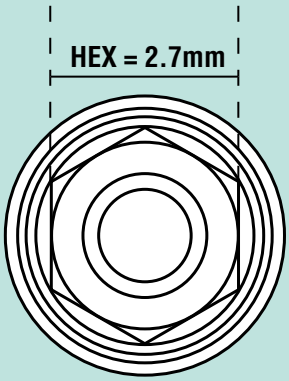
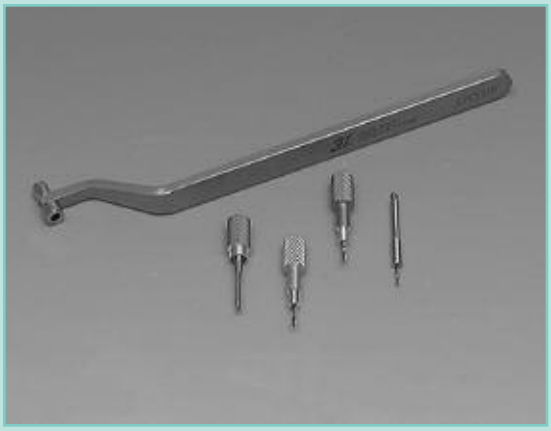
Information and Instructions



Hex –
Internal screw size 1.2mm



Screw Removing Instrument Kit
SKT10

Illustrations are representative and not to scale.

Screw Removing Instrument

Product Description

The Implant Innovations Screw Removing Instrument is designed to facilitate the removal of broken screws from dental implants with the additional benefit of not damaging the internal threads of the implant.

Contents

The instrument kit contains:

- Drill Guide and Handle
- 1.00 mm diameter Reverse Latch Drill to fit a handpiece
- 1.04 mm Diameter Left Hand Drill – Bronze Handle
- 1.18 mm Diameter Left Hand Drill – Silver Handle
- Hand Tap – Gold Handle

Indications

The SRT10 is used to retrieve screws that are broken below the occlusal surface of the implant and cannot be removed with other simpler techniques. The instrument would be used when a burr, metal shaving, or other defect on the broken surface of the screw prevents it from being easily removed.

Contra-Indications

There are no absolute contra-indications, however broken screws which protrude above the occlusal surface of the implant that can be gripped with a hemostat or slotted instrument, should be removed with such instruments. It also should be understood that a broken screw is a salvage situation and the SRT10 or any other instrument may not be 100% effective.

Caution: ***The drills and taps used in this kit are made of carbon steel. Should one be broken off inside the implant without being retrieved, removal of the implant may be necessary. Cold sterilization and careful drying will maintain instruments.***

Directions for Use

1. If not already removed, the abutment or any other restorative components must be removed from the implant containing the broken screw. There must be an opening in the tissue of adequate size and shape to allow seating of normal 4.5 mm diameter abutment on the implant. The drill guide used also is 4.5mm in diameter.
2. Place the reverse drill with latch type shank in a low speed handpiece capable of being regulated to approximately 200-400 rpm. MAKE SURE THE HANDPIECE MOTOR IS IN REVERSE SO THAT THE DRILL WILL ROTATE IN A COUNTER CLOCKWISE DIRECTION.
3. One end of the drill guide (on the end of the handle) has an internal hex which will fit over the male hex on the implant. Holding the handle in one hand, place this hexed end of the drill guide over the implant. With a light pressure on the handle, rotate the drill guide until it snaps over the hex on the implant and you are sure it is seated. Make sure the drill guide is held so that its longitudinal axis is parallel to that of the implant.

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4. Holding the drill guide firmly over the implant and using copious external irrigation, insert the reverse drill in the hole on the superior end of the drill guide and with the handpiece rotating in reverse at 200-400 rpm continue to insert the drill until it engages the broken screw. Apply light to medium pressure on the handpiece so the drill will begin to cut into the superior surface of the broken screw. Continue to apply irrigation during this step.
5. To avoid heat build up in the implant; do not drill more than 8 to 10 seconds at a time and apply irrigation between drilling intervals to aid in keeping the implant cool. This process may have to be repeated several times to prepare a hole in the screw.
6. In many cases, the cutting action of the drill will cause the screw to move and begin to thread itself out of the implant. If this happens, reduce pressure on the handle and drill guide and apply only light pressure on the handpiece, allowing the screw to thread itself completely out of the implant.
7. Should the screw remain lodged in the implant, repeat the drilling described in the above paragraphs. The object is to drill a hole in the center of the broken screw approximately 1mm deep. The drill guide has an internal stop which prevents over penetration of the drill.
8. If the screw remains in place after a hole has been drilled through the longitudinal axis of the broken screw, the hand drills are designed to provide additional torque for final removal. Use the 1.04mm hand drill (bronze colored handle) first. If it will not grip the screw due to the internal hole being too large, substitute the 1.18mm hand drill (silver colored handle).
9. Use the hand drills in the following manner. Insert the drill end into the internal implant thread, being careful to engage the hole previously drilled in the broken screw. Apply a light pressure in the apical direction and slowly rotate the handle counter clockwise. The drill should wedge itself into the previously generated hole and apply additional removal torque to the screw thus removing the screw from the implant. Note that the success of this step depends upon the drill entering the hole in the screw. If the 1.04mm drill fails to remove the screw and it appears to be too small to wedge into the drilled hole, the 1.18mm drill may be used.
10. Should both of the hand drills fail to remove the screw, other instruments may be tried. For example, a small round burr slightly larger than the drilled hole, has been used successfully.
11. Once the screw has been removed, it is important to examine the internal threads of the implant to determine if they have been damaged. The best method of performing this inspection is to thread an implant guide pin (WSK30) into the implant. The guide pin should thread into the implant with little or no resistance. Some resistance may occur because of minor damage to the threads.
12. If significant thread damage has occurred, a tap is included in the SRT10 kit for retapping the implant. The tap must be used very carefully since cross-threading it into the implant would permanently damage the threads, thus causing probable removal of implant.

SRT10 KIT CONTENTS

1 - Handle and drill guide
1 - Left hand latch type drill
1 - Left hand drill with handle, 1.04mm, (Bronze Handle)
1 - Left hand drill with handle, 1.18mm (Silver Handle)
1 - Hand tap (Gold Handle)

This instrument is not guaranteed to be capable of removing all broken abutment screws and the nature of its use requires that it be used with extreme care. The decision to use this instrument is entirely at the discretion of the practitioner.

For technical support or more information please contact ***3i*** at 800-342-5454.

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