SRT screw removal tool

As far as the SRT tool, the clinician will place the tip of it in the screw so it lines up into the screw hole opening. They will turn the tool slowly about ¼ of a turn clockwise, then immediately screw counterclockwise. As the doctor turns in a COUNTER-CLOCKWISE direction, the tip of the tool will burrow into the screw opening while at the same time unscrew it out of the implant.

Once the screw is out, to remove the tool from the removed screw, they will have to turn the tool CLOCKWISE.

Remember the SRT is for a stripped internal hex of the screw that the .050 hex tool will not engage.
Thread Tap (Ref. #0493 & 0494)

Use the thread tap to repair damaged internal threads. **Thread Tap 0493** is used to retap internal threads on the following implants: Integral 3.25mm, Omniloc 3.25mm, Omniloc 4.0mm. **Thread Tap 0494** is used to retap internal threads on the following implants: Integral 4.0mm.

**NOTE**: Extreme caution should be exercised while using the tap. Since the tap is very small in diameter and the metal is brittle, too much force can cause the tap to break off in the implant. Tapping will generate titanium particles; water irrigation and suction is advisable.

**Detailed Instruction**:

1. Expose the implant thread
2. Carefully start screwing in the tap – it must start without force to ensure that it has not started to cross-thread. Continue to gently turn (clockwise) until resistance is felt. Turn gently, approximately 1/8 turn, then completely, remove tap and flush-out-hole.
3. Screw in the abutment and see if it will now seat properly. If not, remove and go to step 4.
4. Using water irrigation and suction, begin tapping the hole again as outlined above. When resistance is felt, turn in 1/8 turn and back off one turn. Screw in 1/8 turn past the point of resistance and out one turn repeatedly.
5. Remove tap, flush and check depth with abutment. If not seated, go on step 6.
6. Continue steps 4 and 5 until sufficient thread is achieved. **DO NOT FORCE**
7. After ensuring the abutment seats properly, remove it and completely flush out the hole and continue with the standard procedure.

**Zimmer Dental Retriever Tools**
Retriever Drill P/N 2224 and Guide Sleeves P/Ns 2220, 2221, 2222, 2223

Guide sleeve and retriever drill to remove fractured abutment screw remnants from the implant body. When used properly, the system will remove a fractured screw without damaging internal screw threads and interface of an integrated implant.

2220 Retriever Drill and Sleeve P/N 2220: For use with Spline Twist and 3.25mm Spline RELIANCE Implants

2221 Retriever Drill and Sleeve P/N 2221: For use with 3.75mm and 5.0mm Spline Twist, 4.0 and 5.0mm Spline RELIANCE, and Taper Lock Implants

2222 Retriever Drill and Sleeve P/N 2222: For use with Advent, 6.0mm Tapered Screw Vent, SwissPlus standard and wide diameter (4.8mm platform), and 6.0 Micro Vent implants

2223 Retriever Drill and Sleeve P/N 2223: For use with 3.7 and 4.7mm Tapered Screw Vent, Screw Vent, SwissPlus mini (3.8mm platform), 3.25 Integral, Omniloc and 3.7 and 4.7mm Micro Vent Implants

Sterility: The retriever drill and guide sleeve are sold non-sterile. Follow sterilization guidelines below prior to use in patients

Sterilization/ Resterilization: Steam autoclave should be performed at 121°C/250°F, 15-20 psig for 30 min. Dry heat sterilization should be performed at 160°C/320°F for 2 hours.
Retriever Drill P/N 2224 and Guide Sleeves P/Ns 2220, 2221, 2222, 2223

Warning: Due to the very small diameter of the retriever drill, it is essential that no lateral forces be applied during its use.

Procedure:
A. Place the guide sleeve over the implant body, engaging the guide sleeve with the implant. The guide sleeve may be held in place with a hemostat. The guide sleeve will center the retriever drill over the fractured screw.

NOTE: The guide sleeve is used to ensure that the retriever drill starts the hole in the center of the fractured screw and away from the internal thread of the implant.

B. Insert the retriever drill into a reversible handpiece. Carefully place the retriever drill through the guide sleeve.

NOTE: Due to the very small diameter of the retriever drill, it is essential that no lateral forces be applied during its use.

C. Keeping the retriever drill straight, apply moderate pressure and begin rotating in a reverse direction at a speed between 35-50 rpm. Continue drilling until the drill grabs the broken screw and backs it out.

Warning: Due to the very small diameter of the retriever drill, it is essential that no lateral forces be applied during its use.
IRT removal tool for screw-type implants

As far as the IRT tool, the clinician will place the tip of it in the implant so it lines up into the screw hole opening. They will turn the tool slowly about ¼ of a turn clockwise, then immediately screw counterclockwise. As the doctor turns in a COUNTER-CLOCKWISE direction, the tip of the tool will engage into the screw opening while at the same time unscrew the implant. If more force is needed, place the Ratchet on top of the IRT.

Please remember this tool is intended for an implant that is loose in the bone, with little bone contact around it. If the implant is still firmly in bone contact, the IRT can break.

Once the implant is out, to remove the tool from the removed implant they will have to turn the tool CLOCKWISE.