



**OCO BIOMEDICAL**

# Protocol and Procedure for Placement of the OCO Biomedical TSI Two-Piece Implant System

## Indications

Mandibular or maxillary bridge, partial or full overdenture prosthesis, single or multiple tooth replacement. Healed and selected new extraction sites (when an implant with a diameter larger than the tooth removed can be placed). Federal law restricts the sale of this device to a licensed physician/dentist.

## Proper Drill Sequence

### TSI 3.25 mm Implant

- #8 High Speed Surgical Bur
- Pilot Drill 1.8 mm
- 3.25 mm Tissue Punch
- 3.25 mm Countersink Drill
- 2.8 mm Final Drill – Max.
- 3.0 mm Final Drill – Mand.
- Insert Tool/TSI Driver & Thumb Wrench
- For Dense Bone: Ratchet and/or Gear Reduced Hand-piece

### TSI 4.0 mm Implant

- #8 High Speed Surgical Bur
- Pilot Drill 1.8 mm
- 4.0 mm Tissue Punch
- 4.0 mm Countersink Drill
- 3.5 mm Final Drill – Max.
- 3.7 mm Final Drill – Mand.
- Insert Tool/TSI Driver & Thumb Wrench
- For Dense Bone: Ratchet and/or Gear Reduced Hand-Piece

### TSI 5.0 mm Implant

- #8 High Speed Surgical Bur
- Pilot Drill 1.8 mm
- 5.0 mm Tissue Punch
- 5.0 mm Countersink Drill
- 4.5 mm Final Drill – Max.
- 4.7 mm Final Drill – Mand.
- Insert Tool/TSI Driver & Thumb Wrench
- For Dense Bone: Ratchet and/or Gear Reduced Hand-Piece

## Warnings

Implant surgery is a procedure requiring special training. Practitioners should obtain training in dental implantology before using these implants. Improper technique can result in implant failure and loss of bone surrounding the implant.

### WARNING - VERY IMPORTANT

Implants should be absolutely stable after being placed. There must not be any mobility. If so, there is an error in placement. If the bone is dense enough and the body of the implant has not penetrated the cortical bone encasement, remove and use the next larger diameter implant.

## Laboratory

Study models are prepared for a diagnostic wax-up in the area of the desired final restoration. From the model, a vacuum formed clear tooth matrix is made. This will aid in placing the TSI implant(s) and in positioning them relative to adjacent natural teeth and the teeth to be replaced.

## Sterility

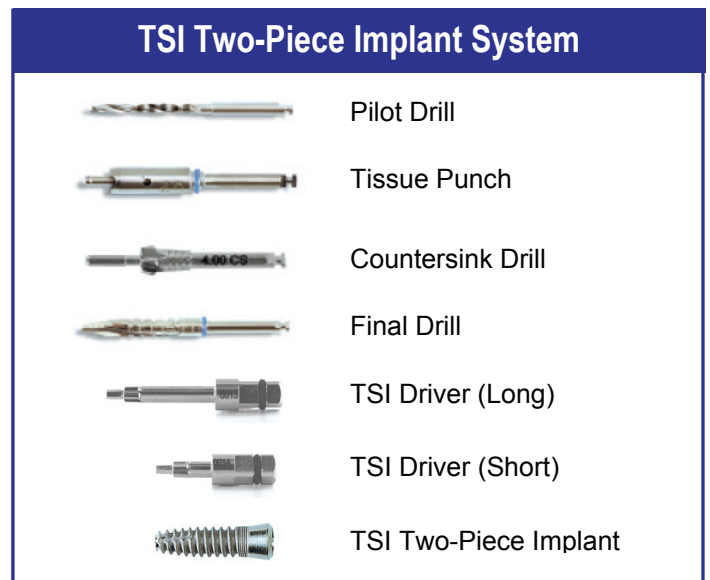
TSI Two-Piece Implants are supplied sterile and ready for use when enclosed & sealed in original packaging. Re-sterilization is not recommended by OCO Biomedical, Inc. If packaging is damaged or open upon receipt of product, please call OCO Biomedical at 800-228-0477 (or 505-293-0025) for a replacement product. Sterile products are sterilized using gamma irradiation.

## Contraindications

Patient's health history is extremely important for proper treatment planning. The patient must be willing to maintain good oral hygiene to ensure a successful outcome. Patients with the following health conditions are not good candidates for this procedure.

- Diabetes (uncontrolled)
- Chemotherapy / Radiation
- Smokers - averaging more than 10 cigarettes per day

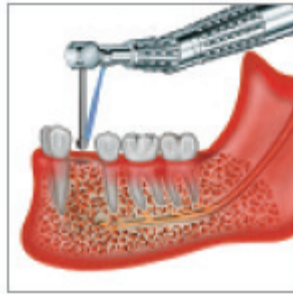
**NOTE:** For questions on TSI implant placement and restorative techniques please call 800-228-0477 (+505-293-0025 international) or email [sales@ocobiomedical.com](mailto:sales@ocobiomedical.com).



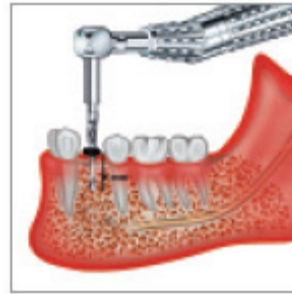
# Protocol and Procedure for Placement of the OCO Biomedical TSI Two-Piece Implant System



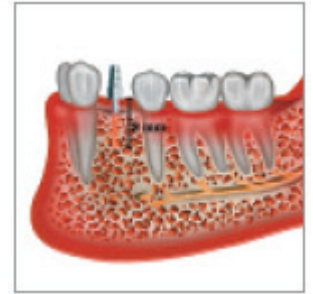
**1** - The good implant candidate must have a healthy pre-operative condition.



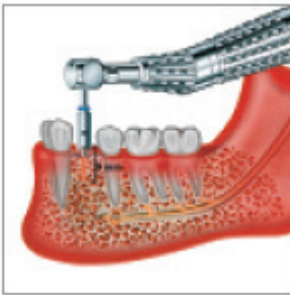
**2** - A #8 bur and highspeed handpiece mark the spot for placement and drills through into the cortical bone.



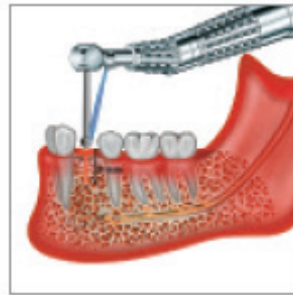
**3** - Use a lowspeed handpiece, pilot drill, and guide ring to penetrate 8-10 mm into soft tissue and bone.



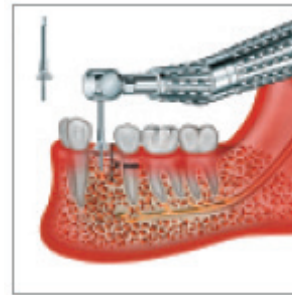
**4** - A paralleling pin checks alignment. Re-drill and recheck if misaligned.



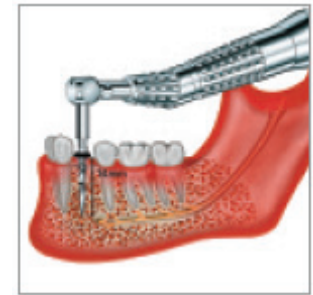
**5** - The tissue punch with center guide pin drill down through the gingiva and into the bone through the periosteum.



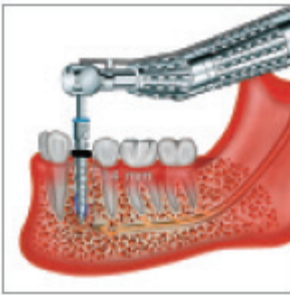
**6** - With a curette or irrigated highspeed drill and a #8 bur, remove the tissue plug and tags.



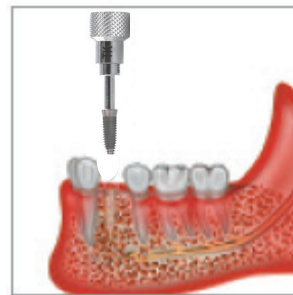
**7** - Use the countersink drill to countersink the implant collar if there is a thin band of attached gingiva.



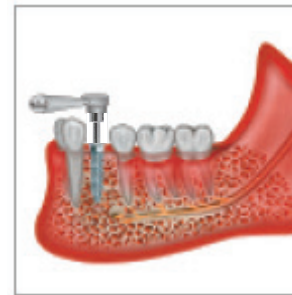
**8** - With the depth ring 2-mm higher than the implant length, drill down the pilot hole for the final depth.



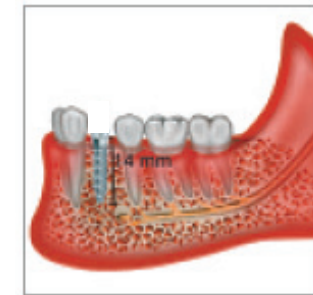
**9** - The final drill is designed to stop at the final depth established by the pilot drill.



**10** - A thumb wrench and TSI Driver are used to screw the implant to its final seating depth.



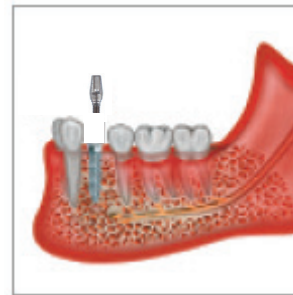
**11** - The ratchet-torque wrench and TSI driver firmly seats the implant.



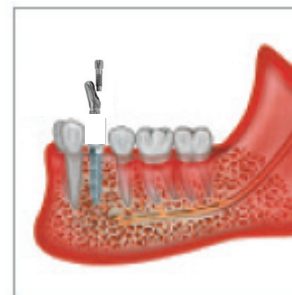
**12** - The TSI Two-Piece Implant is now fully seated.



**13** - The healing screw is removed from back of the nylon cap from the implant packaging, and placed with the TSI Driver and a thumb wrench.



**14** - When using a one-piece abutment, tighten to 30 k/cm. Wait 20 minutes for stress release of the metal, the re-tighten to the same torque.



**15** - When using the two-piece abutment, tighten fixation screw to 20 k/cm. Wait 20 minutes for stress release of the metal, the re-tighten to the same torque.