

250 TPA
250 TPA+8
360 TPA
360 TPA+8
CE 0123

TOPJET
Distalizer

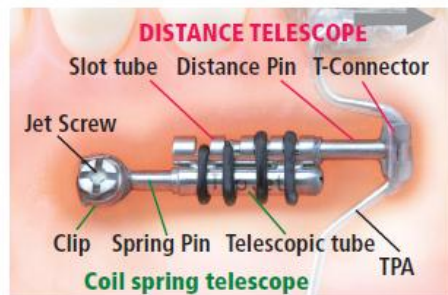
DIRECTIONS FOR USE

Product Description:

The TopJet is an encapsulated Nitinol pressure spring for molar distalization with integrated distance telescope for individual length adjustment. It starts an entirely new era of compliance free tooth distalization. No other appliance is so easy to place and homogeneous in its effect.

After fixing the clip around the head of the mini anchor screw, the distance pin for length adjustment to the TopJet transpalatal arch (TPA) is pulled out and anchored by the dropping into place of up to four alastics. Following the application of composite (Triade® Gel), a fixed-angle and fixed-torque connection between screw and tooth is created within seconds.

Two force levels, 250 and 360cN (TopJet 250, TopJet 360), plus an



extra long special version of the TopJet (plus 8 mm) are available to the practitioner (see last page).

With the spring fully taut, the smallest distance between mini anchor screw and TPA is 14 mm, the largest 28 mm. During the successful process of molar distalization, spring tension can be readjusted easily by further drawing out the distance pin in steps of 1.5 mm.

Safety has been treated as high priority in the design of the TopJet. A safety thread on a safety disc remains outside the mouth during the whole installation procedure. After the appliance has been placed, the cutting of the safety thread simultaneously activates the pressure spring inside the telescope.

Both spring telescope and distance telescope have stoppers preventing over-extension, thus ensuring a high level of safety. The device combines easy installation, taking no more than a few minutes, with invisibility and wear comfort once in place, thus satisfying both practitioner and patient.

As a result of its compact shape, the TopJet can be used even with small and narrow upper jaws. It has been successfully applied from the age of approximately 9 years upwards.

The TopJet makes the distalization of molars as easy as child's play. Mostly, the premolars automatically move with them to distal. A whole new dimension of molar distalization, without any kind of patient compliance, has thus been opened.

Indications:

1. Crowding of maxillary anterior teeth in sufficiently long jaws (possibly following removal of upper wisdom teeth)
2. Protruded maxillary anterior teeth
3. Lack of space in maxillary buccal teeth area (e.g. missing or too narrow primary teeth, retained premolars)
4. Molar K.I.II occlusion as a result of moved up molars.

The TopJet can be applied **on one side or on both sides** without difficulty.

Contraindications:

1. Palatally displaced cuspids, as these would make the positioning of the mini anchor screw unsafe.
2. Periodontally reduced molars (pressure too high).
3. Short maxilla with distally oriented second molars.

System requirements:

- Bands 16/26 with fenestrated Goshgarion locks
- TopJet transpalatal arch (corresponding to bending template or pre-manufactured)
- Dual Top mini anchor screw (Jet screw) 2,0mm x 11 mm in region M4 (in shallow palates Jet screw 2,0mm x 10 mm)



The M4 Position

The M4 position lies half-way between the line of the palatal cusps of the first premolar and its point of intersection with the median line. Please refer to the Dual Top manual for general information relating to the placement of the Dual Top screw.

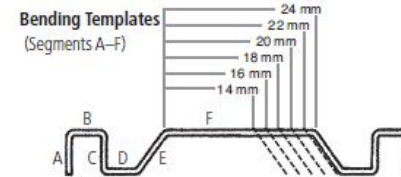


Insertion of the Jet screw (2,0 mm x 11 mm)

In position M4 initially approximately 45° to buccal/cranial approximately 4-5 turns. The end of the screw passes through mucous membrane and creates a little kerf in the bone for itself. During the next two turns the screw is slowly straightened up and then screwed in further in a strictly vertical direction (i.e. the direction to the patient's hairline).

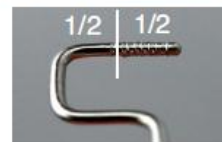
Goshgarion lock and TPA

A lock with side window and wings is ideal. Please bend several TPAs according to the template supplied from .36" Blue Elgiloy® or SS-wire and use depending on size.



Retentions for TPA

A Goshgarion plier is ideal for bending the TJ-TPA, as the distances of 5mm correlate with the thickness of the plier. The first half of the A segment is held with cutting tongs which are then turned 180° in each case. The second half should not be grooved, as the TPA could break at this point under strain. Polish slightly on the side.



Insertion of the TPA

Adjust transpalatal arch in width and with regard to tooth rotations correctly and without pressure. Leave sufficient distance between the D-segment and the palatal gingiva for the T-Connector.

Cement the TPA by injection of Triade®Gel through the Goshgarion window and the front and back opening (light curing). Check: try pulling out TPA with moderate force.



Preparations for installing TopJet

Grip the TopJet with self-locking forceps. The double clip on the T-Connector and the double wire on the T-Clip should be turned towards the tongue.



Clipping in the TopJet

The C-Clip is pushed onto the screw neck between hexagonal top and gingival disc with the help of a WEINGART plier. The TopJet is now in a firm position, whilst also still being secured by the safety thread.



Pull out the T-Connector towards distal with the fork probe and clip it onto the D-section of the TPA. If the distance pin has been pulled out too far, push back by lifting the appropriate rubber alastics acting as stoppers.



Drawing out the distance pin

When the distance pin is elongated, the rubber alastics fall into the slots of the distance tube (arrows), thus preventing the distance pin from sliding back (**automatic distance control**).



With the help of a TWEED plier, the **upper clip on the T-Connector is closed**. (The picture shows slightly modified TWEED plier with notches for better grip.)



Triade® Gel is applied over the screw head and the clip with the application syringe and hardened by light. No gel should touch the gingiva! This creates a **fixed angle and fixed torque connection** between TopJet and screw.



Activating the TopJet

Now the safety thread between the pellet and the spring telescope is cut, which in the same movement activates the TopJet.



After the safety thread and the golden pearl have been removed, the **lower clip on the T-Connector can also be closed**.



Finally, the T-Connector on the TPA is encased in **Triade® Gel**. This creates a **hinge-like connection**, allowing guided movement of the molar without tilting.



Completely installed TopJet with a distalizing force of 250 cN



Subsequent readjustment of the TopJet

Molar distalization is caused by the gradual elongation of the open Niti coil spring inside the spring telescope by up to 5 mm. In order to reactivate the TopJet coil spring and thus increase the spring force again, the fork probe is placed on the distance pin and pushed in the direction of the screw (green arrow). At the same time, the spring pin is pushed back into the telescope tube and the open coil spring compressed again. This results in the distance pin becoming longer and one or more rubber alastics (yellow arrow) falling into their groove, which automatically locks the distance pin. This subsequent re-activation of the TopJet is accomplished within seconds and does not require any further measures.



Manual activation when an alastic has been lost

If one or more alastics have been lost, the distance can also be adjusted manually. For this, the fork probe is again placed on the distance pin and pushed forward. With the help of a TWEED plier, the bridge between two respective slots is then pushed down a little, preventing the distance pin from sliding forward again.



Lifting the alastic to shorten the distance pin

With the help of the fork probe, individual rubber alastics can also be lifted up. This enables the distance pin to slide back into the slot tube. There is more distance between the TPA and T-Connector.



Removal of the TPA

A transpalatal arch cemented via the procedure described above is held very firmly within the Goshgarian lock. In order to remove this transpalatal arch again, the "two plier method" is ideal. For this, ideally a ligature cutter and a WEINGART plier are used. These are shored up against each other at their front and the handles then brought together. This moves the points of the pliers apart, and through the great leverage achieved that way even a well-cemented piece of wire can be forced out of the Goshgarian lock.



Removing the TopClip from the screw

As a rule, this can only be done with the TopJet plier. One jaw of it is placed on the screw head, the other two ends press the C-Clip of the Jet at the neck of the screw. This also prises apart any possible composite adhesive. Another possibility is to remove the composite from the screw head first via a ligature cutter and then use a WEINGART plier. One arm is placed against the screw head and the other is pressing onto one side of the C-Clip. This also enables the clip to be pushed off the screw head. In order to release the C-Clip fully, the fork probe can be inserted between the clip and the screw head and then moved away from the screw head.



Removing the T-Connector

After the TopJet has been released from the screw head, the distance pin can be grasped with a WEINGART plier. This is then pivoted by 45°, which results in the T-Connector clips opening and this breaking out of the adhesive bond. The T-Connector can then be removed without difficulty. In case this is not possible (pressure mark in this area or gingival ulcer), it is recommended to clamp the small diamond disc into a (blue) contra angle piece and carefully to cut the transpalatal arch, cooled by water. During this procedure the transpalatal arch should always be secured using mosquito forceps or a needle holder.



These usage and installation instructions provide hints and recommendations, but do not release the medical practitioner from personal liability!



Tool-Box

- TopJet plier** for unclipping the TopJet
- Fork probe** for reactivating the TopJet and placing the T-Connector
- Self-locking forceps** to hold the TopJet during installation
- Scissors** with rounded tips for severing the safety thread
- Diamond disc** for cutting the TopJet – transpalatal arch in two.
- Triade®-Applikator** for encasing screw and T-Connector

Notes

In accordance with medical products laws, only medical practitioners skilled in orthodontics are allowed to install the TopJet. Users are expressly advised that medical products laws and all other relevant laws and regulations of their country must be observed in working with this product. Each user is personally responsible for compliance with laws and regulations.

Patients with an allergy against nickel or chrome should NOT use this product. In the case of irritations, the medical practitioner should be consulted immediately with a view to interrupting the treatment. The TopJet in its packaging is clean, but not sterile and may only be used (installed) once.

General Information

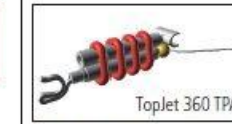
Available TopJet Versions



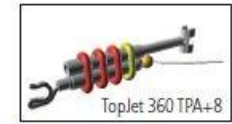
TopJet 250 TPA



TopJet 250 TPA+8



TopJet 360 TPA

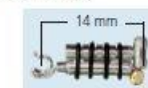


TopJet 360 TPA+8

Warning! The TopJet 360 TPA may NEVER be used to start treatment. For reasons of bone strength, a switch to the TopJet 360 TPA may only be made after having used the TopJet 250 TPA for a period of at least 10 weeks.

Technical data

Installation size:



Spring force at 1 mm or 5 mm spring pin extension:

TopJet 250 TPA: 250cN-1 mm, 50cN-5 mm

TopJet 360 TPA: 360cN-1 mm, 100 cN-5 mm

Total spring distance: 5,6 mm

Before



After 11 weeks

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