

INSTALLATION

EXTRAORAL INSTALLATION

Closed Channel Attachment Nut

1. Engage magnetic sleeve onto the driver by holding the Hex Head Driver over the magnet, conical chamfer slot facing up. As the driver nears the opening, the magnetic sleeve will seat itself on driver tip. **(Figure D)**
2. Prior to installation, the use of a thread adhesive is recommended to address any concerns of screw loosening or backout.
3. Remove left alternative nut from packaging and slide on patient left side of maxillary rectangular stainless steel arch wire. Repeat for patient right. NOTE: Closed channel attachment nuts are labeled with an "L" (Patient Left) and "R" (Patient Right) facing mesially. **(Figure H)**.

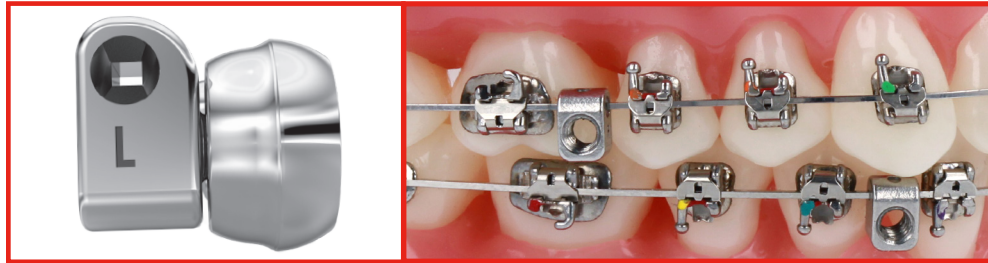


Figure H

Figure I

4. Size and cut distal ends of stainless steel arch wire after installing alternative nuts.
5. Feed wire into upper molar tubes of patient and ligate the maxillary brackets on the wire, making sure the closed wire channel nuts are located mesial to the first molar. **(Figure I)**
6. On mandibular rectangular stainless steel arch wire, repeat steps #3-5, making sure closed wire channel nuts are located distal to the canine. NOTE: If utilizing open channel nuts on the anteriors, follow steps #4-5 in Intraoral Installation Instructions.
7. Remove a patient left PowerScope 2 arm from packaging and completely remove posterior and anterior open channel nuts by turning screw mesially. Attach PowerScope 2 arm to posterior closed channel nut by turning screw distally until tight. Repeat process for Patient Right. **See Suggestions #1*
8. Once installed, continue to properly activate appliance. (See Activating PowerScope 2 Appliance)

Suggestions

1. Always turn screw distally to tighten (clockwise for left nuts and counter-clockwise for right nuts). Turn mesially to loosen (counter-clockwise for left nuts and clockwise for right nuts).
2. The use of stainless steel arch wire, preferably a 17x25 (.018 slot) or a 19x25 (.022 slot) cross section is recommended
3. The PowerScope 2 Appliance can be used both bilaterally and unilaterally
4. It is doctor preference to utilize closed channel or open channel nuts, or any combination (ex. closed in posterior, open in anterior)
5. Use of upper non-convertible 1st molar tubes
6. The lower dentition should be stabilized by one of the following methods to prevent increases of the axial inclination of lower anterior teeth or the opening of spaces distal to the canines:
 - **Cinching of the lower arch wire**
 - **Full lower arch elastic chain**
 - **Arch locks/stops posteriorly**
7. Significant negative torque brackets (-6° to -10°) are suggested for lower anterior teeth
8. Steel ligatures are advised for lower canines to prevent rotation during treatment

PowerScope 2 Removal

- For Open Channel attachment nut (intraoral installation), unscrew lower mandibular screw by turning it **mesially** until attachment nut disengages from wire and repeat process for upper maxillary screw; remove appliance. (NOTE: be careful not to fully remove screw from Attachment Nut).
- For Closed Channel attachment nut (extraoral installation), remove ligatures from mandibular arch and slide anterior nut attachments from wire. Repeat for maxillary arch and remove entire assembly from patient.

Activating PowerScope 2 Appliance

Crimpable shims can be used for activation of appliance during treatment. **(Figure J)**. Once installed, depending on the severity of the Class II or the size of the dentition, it may be necessary to immediately activate PowerScope2. Also, as the patients come back for regular appointments, it is important to check to see if more activation is necessary. Three activation lines spaced 2mm apart reference the level of none, partial, or full activation. **(Figure K)**.

1. Have patient bite down into maximum intercuspation.
2. With a utility plier or similar, pull back on push tube (middle tube) to visually estimate how much space is needed for activation. (Note: There is approximately 5mm of space between full activation and no activation.)

3. After determining approximate shim size(s) needed, (1mm, 2mm, or 3mm), grab appropriate shim with a utility plier or similar instrument, have patient open mouth to expose push tube, and slightly crimp the necessary shims on to the lower rod next to the anterior nut. **(Figure J)** Once activated, there should be slight compression movement of the spring when squeezed between two fingers. Be careful not to "overactivate" as this will result in impact force rather than spring compression force during treatment.
4. Repeat this process on the opposite side. Keep in mind that it is possible that two different size shims are necessary for activation on patient right compared to left.



Figure J

Figure K

Three activation lines spaced 2mm apart reference the level of activation ranging from no activation to partial activation to full activation.

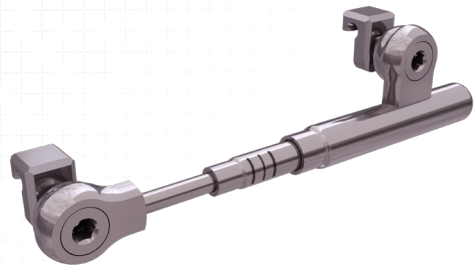
CORRECT APPLIANCE PLACEMENT



"OPEN" with directional arrow for loosening direction (reverse thread).

INSTALLATION

power
SCOPE[®] 2
CLASS II CORRECTOR

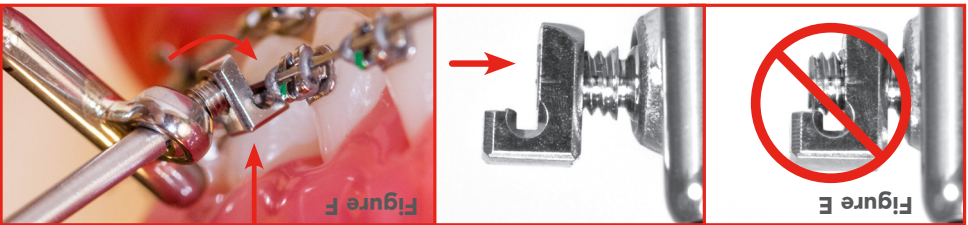


Kit Contents
5 Left PowerScope with Nuts
5 Right PowerScope with Nuts
1 Hex Head Driver Tool
5 Driver Magnets
10 - 1mm Crimpable Shims
10 - 2mm Crimpable Shims
10 - 3mm Crimpable Shims
10 Left Closed Channel Nuts
10 Right Closed Channe1 Nuts

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PowerScope 2 is delivered as a one-size-fits-all appliance with two options for installation. Intraoral installation, which uses an open channel attachment nut (pre-assembled) (**Figure A**) or extraoral installation, which uses a closed channel attachment nut (packaged separately) (**Figure B**). The PowerScope2 appliance is a wire-to-wire installation with the attachments placed mesial to the first molar in the maxillary arch and distal to the canine of the mandibular arch. (**Figure C**).



1. Engage magnetic sleeve onto the driver by holding the Hex Head Driver over the magnet, conical chamfer slot facing up.
As the driver nears the opening, the magnetic sleeve will seat itself on driver tip. (**Figure D**)
2. Use driver to slightly back out screws on PowerScope 2 arm to ensure screw tip does not extend past attachment nut before engaging wire. (**Figure E**).
*See Suggestions #1
3. Prior to installation, the use of a thread adhesive is recommended to address any concerns of screw loosening or backout.

INTRAORAL INSTALLATION Open Channel Attachment Nut



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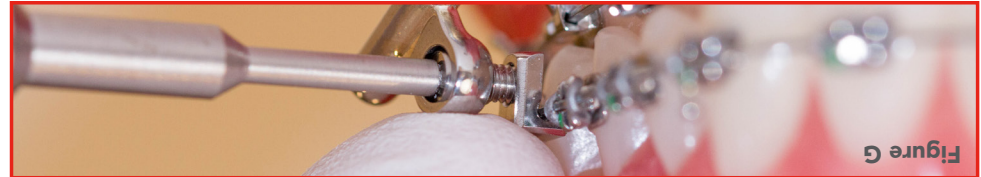
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4. Approach wire at 45 degree angle with attachment nut using the driver provided and place mesial to the first molar on the maxillary rectangular stainless steel arch wire. (**Figure F**) *See Suggestions #2 for wire size
5. Apply downward force on attachment, then rotate onto wire until you feel it "snap" into place.
6. Once attachment nut is properly seated on wire, tighten distally to engage screw. Placing a finger on top of the attachment nut will help stabilize. (**Figure G**) but rather act as a fourth wall to capture wire when tightened.
7. Engage mandibular attachment nut using driver and place distal to the canine onto mandibular rectangular stainless steel arch wire then tighten screw, turning distally.
8. Repeat steps #3-7 on opposite side. Once installed, continue to properly activate appliance. (See Activating PowerScope 2 Appliance)

REORDER PARTS

PowerScope Kits

852-016537 1 Patient Kit

(Includes: 1 Right/1 Left with open channel nuts – does not include Shims, Driver or magnets)

852-016538 5 Patient Kit

(Includes: 5 Right/5 Left with nuts, 10 each 1 mm, 2 mm & 3 mm Crimpable Shims, 5 Right/5 Left Closed Channel Nuts, 5 Driver Magnets and 1 Hex Head Driver)

PowerScope Accessories

852-016539 PowerScope Right Arm

(18 mm with open channel nuts)

852-016540 PowerScope Left Arm

(18 mm with open channel nuts)

852-016541 Open Channel Attachment Nuts - 10 pack

(5 right and 5 left)

852-030576 Closed Channel Attachment Nuts - 10 pack

(5 right and 5 left)

852-026533 Driver Magnets - 5 pack

855-733 Crimpable Shims 1mm

10 pack

855-728 Crimpable Shims 2mm

10 pack

855-738 Crimpable Shims 3mm

10 pack

855-515 Hex Head Driver