



# **BIOHORIZONS®**

# why choose BioHorizons prosthetics?

Using authentic BioHorizons parts will ensure a precision fit connection between the prosthetic component and implant, avoiding costly component failures that may occur from using third-party prosthetics. Authentic BioHorizons parts are color-coded for easy identification to match the mating implant.

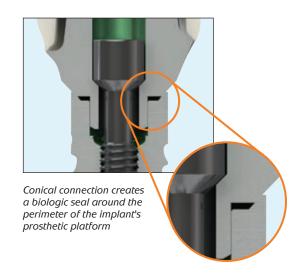




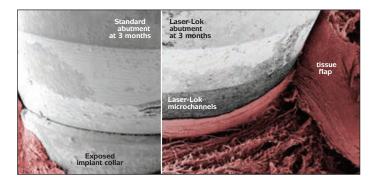
# engineering better prosthetics

BioHorizons prosthetics are engineered and manufactured to seat precisely every time. The conical connection includes a small space between the components to guarantee contact of the abutment and implant around the entire perimeter of the prosthetic platform. This design creates a biologic seal and achieves optimal stress transmission, that protects the abutment screw from fracture and loosening.

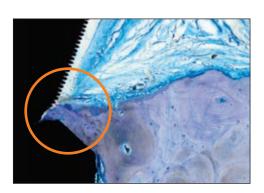
# Laser-Lok® technology



Laser-Lok microchannels is a proprietary surface treatment developed from over 25 years of research initiated to create the optimal implant surface. The establishment of a physical, connective tissue attachment to the Laser-Lok surface has generated an entirely new area of research and development: Laser-Lok applied to abutments. Through this research, the unique Laser-Lok surface has been shown to elicit a biologic response that includes the inhibition of epithelial downgrowth and the attachment of connective tissue. 1-9 Laser-Lok abutments can support peri-implant health around implants without Laser-Lok. Multiple pre-clinical and clinical studies support both of these concepts. 4-9



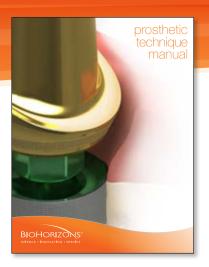
Comparative SEM images show the variation in tissue attachment strength on standard and Laser-Lok abutments when a tissue flap is incised vertically and manually lifted using forceps.<sup>5</sup>



Histology of a Laser-Lok abutment on an RBT implant with a machined collar showing exceptional bone growth at 3 months.<sup>5</sup>

# **BIOHORIZONS®**

# interactive prosthetic technique manual







The prosthetic technique manual provides fully illustrated step-by-step instruction for the use of BioHorizons prosthetics. The manual is intended to educate both clinicians and labs about the prosthetic options available. It is separated into technique modules that are updated frequently to describe the most current protocols used in implant dentistry.

The PDF versions of these modules are further enhanced by new animated sequences of the procedures providing multiple methods of learning the content.

The manual and animations are available online at www.biohorizons.com/prosthetic-techniques.aspx or on the BioHorizons app in the Prosthetics section.



This icon indicates a step-by-step technique module is available.



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# Laser-Lok Healing Abutments

		abutment diameter	3mm height	5mm height
>	3.5mm platform, Laser-Lok	4.0mm	PYNHA3L	PYNHA5L
Narrow	4.5mm platform, Laser-Lok	5.0mm	PGNHA3L	PGNHA5L
Na	5.7mm platform, Laser-Lok	6.0mm	PBNHA3L	PBNHA5L
	3.0mm platform, Laser-Lok	3.5mm	TP3HA3L	TP3HA5L
ılar	3.5mm platform, Laser-Lok	4.5mm	PYRHA3L	PYRHA5L
Regular	4.5mm platform, Laser-Lok	5.5mm	PGRHA3L	PGRHA5L
"	5.7mm platform, Laser-Lok	6.5mm	PBRHA3L	PBRHA5L
4)	3.0mm platform, Laser-Lok	4.0mm	TP3WHA3L	TP3WHA5L
Wide	3.5mm platform, Laser-Lok	6.0mm	PYWHA3L	PYWHA5L
>	4.5mm platform, Laser-Lok	7.0mm	PGWHA3L	PGWHA5L



Y = Yellow (3.5mm) platform

G = Green (4.5mm) platform

B = Blue (5.7mm) platform

N, R or W = Narrow, Regular or Wide emergence 3 or 5 = 3mm or 5mm abutment height

L = Laser-Lok

3.0 healing abutments are not laser marked due to their small size.

Use Laser-Lok healing abutments when a Laser-Lok abutment restoration is planned to inhibit epithelial downgrowth, establish a soft tissue seal and protect the bone. When a Laser-Lok component is used and temporarily removed for impression making or other restorative procedures, keep the removed Laser-Lok component in sterile saline until reinserting into the site. Hand-tighten with the .050" (1.25mm) Hex Driver. Titanium Alloy.



L02015-003 Handling of Laser-Lok abutments module

# **Standard Healing Abutments**

		abutment diameter	1mm height	2mm height	3mm height	5mm height
	3.0mm platform	3.0mm	-	TP3NHA2	TP3NHA3	TP3NHA5
row	3.5mm platform	4.0mm	PYNHA1	PYNHA2	PYNHA3	PYNHA5
Narrow	4.5mm platform	5.0mm	PGNHA1	PGNHA2	PGNHA3	PGNHA5
	5.7mm platform	6.0mm	PBNHA1	PBNHA2	PBNHA3	PBNHA5
	3.0mm platform	3.5mm	-	TP3HA2	TP3HA3	TP3HA5
Regular	3.5mm platform	4.5mm	-	PYRHA2	PYRHA3	PYRHA5
Reg	4.5mm platform	5.5mm	-	PGRHA2	PGRHA3	PGRHA5
	5.7mm platform	6.5mm	-	PBRHA2	PBRHA3	PBRHA5
۵)	3.0mm platform	4.0mm	-	-	TP3WHA3	TP3WHA5
Wide	3.5mm platform	6.0mm	-	-	PYWHA3	PYWHA5
	4.5mm platform	7.0mm	-	-	PGWHA3	PGWHA5

Hand-tighten with the .050" (1.25mm) Hex Driver. Titanium Alloy.

The 3.5mm, 4.5mm and 5.7mm healing abutments are laser marked for easy intraoral identification of the prosthetic platform, emergence and height:

Y = Yellow (3.5mm) platform

G = Green (4.5mm) platform

B = Blue (5.7mm) platform

N, R or W = Narrow, Regular or Wide emergence

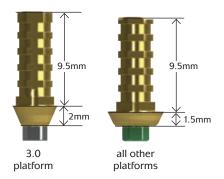
1, 2, 3 or 5 = 1 mm, 2mm, 3mm or 5mm abutment height

3.0 healing abutments are not laser marked due to their small size.



# Laser-Lok Easy Ti Abutments

	hexed	non-hexed
3.0mm platform	TP3ETHL	TP3ETNL
3.5mm platform	TP3ETHL	PYETNL
4.5mm platform	PGETHL	PGETNL
5.7mm platform	PBETHL	PBETNL



Use hexed for single-unit, screw retained, long term temporary restorations that require superior esthetics. Use non-hexed for multiple-unit, screw retained, long term temporary restorations. When a Laser-Lok component is used and temporarily removed for impression making or other restorative procedures, keep the removed Laser-Lok component in sterile saline until reinserting into the site. Packaged with an abutment screw (PXAS). Titanium Alloy for strength. TiN coated for esthetics. Final torque: 30Ncm.

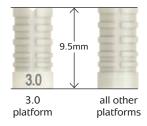


**L02015-037** Screw-retained crown using the Laser-Lok Easy Ti abutment module

TP3ETPS 3.0mm platform (pack of 3), PEEK

**PXETPS** 3.5mm, 4.5mm & 5.7mm platform (pack of 3), PEEK

Use for fabrication of cement-retained provisional restorations (up to 30 days). Packaged in packs of three. PEEK (PolyEtherEtherKetone) material.





L02015-039 Cement-retained crown using the Laser-Lok Easy Ti abutment and PEEK plastic sleeves module

# **Two-piece Custom Temporary Abutments**

	Laser-Lok		stan	dard
	1mm collar	1mm collar 3mm collar		3mm collar
3.0mm platform	TP3CTA1L	TP3CTA3L	TP3CTA1	ТР3СТА3
3.5mm platform	PYCTA1L	PYCTA3L	PYCTA1	РҮСТАЗ
4.5mm platform	PGCTA1L	PGCTA3L	PGCTA1	PGCTA3



Use to create an immediate temporary abutment for sculpting the soft tissue.

Two-piece Custom Temporary Abutments are offered with Laser-Lok microchannels on the collar to inhibit epithelial downgrowth and establish a biologic soft tissue seal around the abutment. When a Laser-Lok component is used and temporarily removed for impression making or other restorative procedures, keep the removed Laser-Lok component in sterile saline until reinserting into the site. Use included PEEK sleeve to support a temporary prosthesis. Final torque: 30Ncm.

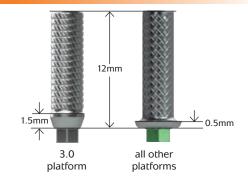


L02015-019 Immediate restoration with two-piece custom temporary abutment module

L02015-020 Immediate restoration with Laser-Lok two-piece custom temporary module

#### **Titanium Temporary Abutments**

	hexed	non-hexed
3.0mm platform	ТР3ТТН	TP3TTN
3.5mm platform	PYTTH	PYTTN
4.5mm platform	PGTTH	PGTTN
5.7mm platform	PBTTH	PBTTN



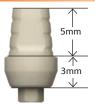
Use hexed for single-unit, screw-retained, long term temporary restorations (>30 days). Use non-hexed for multiple-unit, screw-retained, long term temporary restorations (>30 days). Packaged with an abutment screw (PXAS). Titanium Alloy. Final torque: 30Ncm.



L02015-022 Screw-retained bridge using titanium temporary abutments module

#### PEEK Temporary Abutments (Regular Emergence)

TP3TA 3.0mm platform
PYRTA 3.5mm platform
PGRTA 4.5mm platform
PBRTA 5.7mm platform



Use for fabrication of cement- or screw-retained provisional restorations (up to 30 days). A direct coping screw (PXDCS, purchased separately) may be used to maintain screw access hole during fabrication of screw-retained provisional prostheses. Packaged with an abutment screw (PXAS). PEEK (PolyEtherEtherKetone) material. Final torque: 30Ncm.



L02015-017 Cement-retained crown using the PEEK temporary abutment moduleL02015-018 Screw-retained crown using the PEEK temporary abutment module

# Angled PEEK Temporary Abutments (Regular Emergence)

TP3RATA 3.0mm platform
PYRATA 3.5mm platform
PGRATA 4.5mm platform

Use for fabrication of cement-retained provisional restorations (up to 30 days). Packaged with an abutment screw (PXAS). PEEK (PolyEtherEtherKetone) material. Final torque: 30Ncm.



## PEEK Temporary Cylinder Abutments

	hexed	non-hexed
3.0mm platform	TP3PTC*	TP3PTCN*
3.5mm platform	PYPTC*	PYPTCN*
4.5mm platform	PGPTC*	PGPTCN*
5.7mm platform	PBPTC*	PBPTCN*



Use for fabrication of cement- or screw-retained provisional restorations (up to 30 days). A direct coping screw (PXDCS, purchased separately) may be used to maintain screw access hole during fabrication of screw-retained provisional prostheses. Packaged with an abutment screw (PXAS). PEEK (PolyEtherEtherKetone) material. Final torque: 30Ncm.

#### IMPRESSION COMPONENTS

# **Snap Copings**

TP3RSC 3.0mm platform (Regular Emergence) TP3WSC 3.0mm platform (Wide Emergence)

**PYNSC** 3.5mm platform (Narrow Emergence) **PYRSC** 3.5mm platform (Regular Emergence) **PYWSC** 3.5mm platform (Wide Emergence)

4.5mm platform (Narrow Emergence) **PGNSC PGRSC** 4.5mm platform (Regular Emergence) **PGWSC** 4.5mm platform (Wide Emergence)

**PBNSC** 5.7mm platform (Narrow Emergence) **PBRSC** 5.7mm platform (Regular Emergence)

Use to make a closed-tray, direct pick-up, implant-level impression. PEEK (PolyEtherEtherKetone) and Titanium Alloy material.



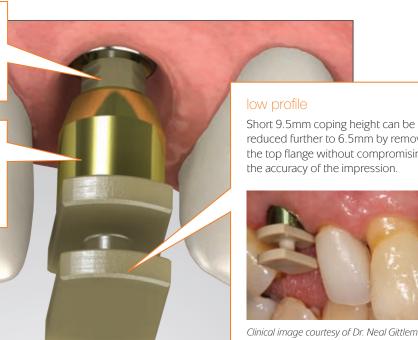
L02015-034 Closed tray pick-up technique using the snap coping module

#### one-piece design

Coping easily snaps into prosthetic platform by hand, without the need for additional instruments.

#### radiopaque ring

Color-coded titanium ring used to verify seating on a radiograph. Emergence matches the emergence of the corresponding healing abutment.



reduced further to 6.5mm by removing the top flange without compromising the accuracy of the impression.



Clinical image courtesy of Dr. Neal Gittleman

#### Indirect Scoop Copings (Closed Tray)

TP3ISC 3.0mm platform (Regular Emergence)
TP3WISC 3.0mm platform (Wide Emergence)

PYNISC 3.5mm platform (Narrow Emergence)
PYRISC 3.5mm platform (Regular Emergence)
PYWISC 3.5mm platform (Wide Emergence)

PGNISC 4.5mm platform (Narrow Emergence)
PGRISC 4.5mm platform (Regular Emergence)
PGWISC 4.5mm platform (Wide Emergence)

PBNISC 5.7mm platform (Narrow Emergence)
PBRISC 5.7mm platform (Regular Emergence)



 $Use to \ make \ a \ closed-tray, implant-level, hexed-timed impression. \ Pre-assembled \ with \ a \ coping \ screw \ (PXSS). \ Titanium \ Alloy.$ 



L02015-007 Closed tray technique using the indirect transfer coping module

L02015-008 Fabricating a custom impression coping using the closed tray technique module

#### Direct Pick-up Copings (Open Tray)

TP3DC 3.0mm platform, hexed (Regular Emergence)
TP3DCN 3.0mm platform, non-hexed (Regular Emergence)
TP3DCL 3.0mm platform, hexed, long (Regular Emergence)

PYNDC 3.5mm platform, hexed (Narrow Emergence)
PYNDCN 3.5mm platform, non-hexed (Narrow Emergence)
PYRDC 3.5mm platform, hexed (Regular Emergence)
PYWDC 3.5mm platform, hexed (Wide Emergence)

PGNDC 4.5mm platform, hexed (Narrow Emergence)
PGNDCN 4.5mm platform, non-hexed (Narrow Emergence)
PGRDC 4.5mm platform, hexed (Regular Emergence)
PGWDC 4.5mm platform, hexed (Wide Emergence)

PBNDC 5.7mm platform, hexed (Narrow Emergence)
PBNDCN 5.7mm platform, non-hexed (Narrow Emergence)
PBRDC 5.7mm platform, hexed (Regular Emergence)



Use to make an open-tray, implant-level impression. Packaged with the direct coping screw, shallow hex (PXDCSS). Non-hexed versions may also be used to fabricate multiple-unit bars. Titanium Alloy. Hand-tighten.

Note: TP3DCL is packaged with the direct coping screw, long (PXDCSL).



L02015-005 Open tray technique using the direct pick-up coping moduleL02015-006 Fabricating a custom impression coping using the open tray technique module

#### **Direct Coping Screws**

#### PXDCSS Direct Coping Screw, Shallow Hex

Packaged with all Direct Pick-up Copings, except 3.0mm platform, hexed, long (TP3DCL). Short hex depth for easy removal of impression material. May also be used to maintain the screw access hole during fabrication of a screw-retained provisional prostheses. Utilizes the .050" (1.25mm) Hex Driver. Hand-tighten or torque to 30 Ncm depending on application. Titanium Alloy.

#### PXDCS Direct Coping Screw

Includes a deeper hex that allows up to 7mm to be prepped without losing the hex engagement. May also be used in place of an abutment screw (PXAS) when extra length is needed, or to maintain the screw access hole during fabrication of a screw-retained provisional prostheses. Utilizes the .050" (1.25mm) Hex Driver. Hand-tighten or torque to 30 Ncm depending on application. Titanium Alloy.

#### PXDCSL Direct Coping Screw, Long

Packaged with 3.0mm platform, hexed, long (TP3DCL). PXDCSL has the same deep hex as the PXDCS and is 5mm longer than the PXDCS and the PXDCSS. May also be used in place of an abutment screw (PXAS) when extra length is needed, or to maintain the screw access hole during fabrication of a screw-retained provisional prostheses. Utilizes the .050" (1.25mm) Hex Driver. Hand-tighten or torque to 30 Ncm depending on application. Titanium Alloy.



#### **Implant Analogs**

TP3IA	3.0mm platform	TP3IA25	3.0mm platform (pack of 25)
PYIA	3.5mm platform	PYIA25	3.5mm platform (pack of 25)
PGIA	4.5mm platform	PGIA25	4.5mm platform (pack of 25)
PBIA	5.7mm platform	PBIA25	5.7mm platform (pack of 25)

Use in the lab to represent the implant in the working cast. Not intended for use with Simple Solutions components or tissue-level implants. Titanium Alloy.



#### Ball-top Screw for Indirect (Closed Tray) Transfer

#### PXBT Ball-top Screw for Indirect Transfer

Use with the 3inOne Abutment to form an impression coping for closed-tray, hexed-timed transfers. Hand-tighten. Titanium Alloy.



#### **Abutment Screw**

PXAS Abutment Screw

PXAS25 Abutment Screw (pack of 25)

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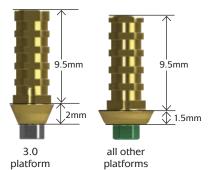
Fits all implant prosthetic platforms. Low profile screw head. Packaged with all two-piece abutments, except 3.0mm Custom Ti abutment and Angled Multi-unit abutments that are packaged with the PXMUAS. Utilizes the .050" (1.25mm) Hex Driver. Titanium Alloy. Final torque: 30 Ncm.

#### CUSTOM & CAD/CAM ABUTMENTS

# Laser-Lok Easy Ti Abutments

TP3ETHL 3.0mm platform, hexed
PYETHL 3.5mm platform, hexed
PGETHL 4.5mm platform, hexed
PBETHL 5.7mm platform, hexed

TP3ETNL 3.0mm platform, non-hexed
PYETNL 3.5mm platform, non-hexed
PGETNL 4.5mm platform, non-hexed
PBETNL 5.7mm platform, non-hexed



Use hexed abutments for single-unit, screw-retained or cement-retained, custom abutment restorations. Use non-hexed abutments for multiple unit, screw-retained restorations. When a Laser-Lok component is used and temporarily removed for impression making or other restorative procedures, keep the removed Laser-Lok component in sterile saline until reinserting into the site. Packaged with an abutment screw (PXAS). Titanium Alloy for strength. TiN coated for esthetics. Final torque: 30Ncm.

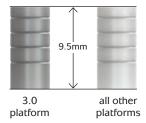


L02015-037 Screw-retained crown using the Laser-Lok Easy Ti abutment module

TP3ETS 3.0mm platform (pack of 3)

PXETS 3.5mm, 4.5mm & 5.7mm platform (pack of 3)

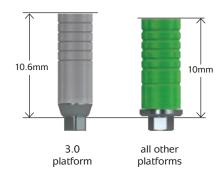
Use as a foundation to create a full contour wax-up for a lithium disilicate glass-ceramic pressed crown. Packaged in packs of three. Acetal resin (Delrin® or Pomalux®) sleeve.



# Custom Castable (UCLA) Abutments

TP3CAH 3.0mm platform, hexed
PYCAH 3.5mm platform, hexed
PGCAH 4.5mm platform, hexed
PBCAH 5.7mm platform, hexed

TP3CAN 3.0mm platform, non-hexed PYCAN 3.5mm platform, non-hexed PGCAN 4.5mm platform, non-hexed 5.7mm platform, non-hexed



Use hexed abutments for single-unit, screw-retained or cement-retained, custom abutment restorations. Use non-hexed abutments for multiple-unit, screw-retained restorations. Packaged with an abutment screw (PXAS). Gold Alloy base with acetal resin (Delrin® or Pomalux®) sleeve. Color-coded by platform. Final torque: 30Ncm.

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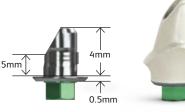
L02015-026 Screw-retained single crowns using custom-cast abutments moduleL02015-027 Screw-retained bridge using custom-cast abutments module

#### CUSTOM & CAD/CAM ABUTMENTS

#### **Hybrid Base Abutments**

TP3HYB 3.0mm platform, hexed **PYHYB** 3.5mm platform, hexed **PGHYB** 4.5mm platform, hexed **PBHYB** 5.7mm platform, hexed

TP3HYBN 3.0mm platform, non-hexed **PYHYBN** 3.5mm platform, non-hexed **PGHYBN** 4.5mm platform, non-hexed **PBHYBN** 5.7mm platform, non-hexed









Use hexed abutments for single-unit, screw-retained or cement-retained, CAD/CAM hybrid zirconia restorations. Use non-hexed abutments for multiple unit, screw-retained CAD/CAM hybrid zirconia restorations. Packaged with an abutment screw (PXMUAS). Titanium Alloy for strength. Final torque: 30Ncm.

#### Hybrid Abutment Waxing Sleeves

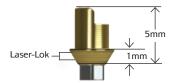
PHYBWSS\* 3.0mm & 3.5mm platform (Pack of 3) PHYBWSL\* 4.5mm & 5.7mm platform (Pack of 3)

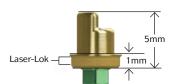
Use as a foundation to create a full contour wax-up for a lithium disilicate glass-ceramic pressed crown. Packaged in packs of three. Acetal resin (Delrin® or Pomalux®) sleeve.



#### Laser-Lok Titanium Base Abutments

TP3TBL 3.0mm platform, Laser-Lok **PYTBL** 3.5mm platform, Laser-Lok PGTBL. 4.5mm platform, Laser-Lok **PBTBL** 5.7mm platform, Laser-Lok





Use for anterior cases that require a durable, highly esthetic solution. For single-unit, screw-retained or cement-retained, CAD/CAM hybrid zirconia restorations. When a Laser-Lok component is used and temporarily removed, keep the component in sterile saline until reinserting into the site. Packaged with an abutment screw (PXAS). Titanium Alloy for strength. TiN coated for esthetics. Final torque: 30Ncm. Note: TP3TBL and TP3TB have 3.0mm platform connections, but the margins flare to 3.5mm.



provided by the lab

# Laser-Lok Titanium Base Waxing Sleeves



L02015-003 Handling of Laser-Lok abutments module

**PYTBWSI** 3.0/3.5mm platform, indexed (pack of 3) **PGTBWSI** 4.5mm platform, indexed (pack of 3) **PBTBWSI** 5.7mm platform, indexed (pack of 3)

Use as a foundation to create a full contour wax-up for a lithium disilicate glass-ceramic pressed crown. Packaged in packs of three. Acetal resin (Delrin® or Pomalux®) sleeve.



#### Laser-Lok Protective Sleeves

TP3TBLS 3.0mm platform, Laser-Lok
PYTBLS 3.5mm platform, Laser-Lok
PGTBLS 4.5mm platform, Laser-Lok
PBTBLS 5.7mm platform, Laser-Lok



Use to protect the Laser-Lok zone of Titanium Base Abutments and Custom Ti Abutments from possible contamination and damage during lab processing.

#### **PEEK Scan Abutments**

TP3PSA 3.0mm platform
PYPSA 3.5mm platform
PGPSA 4.5mm platform
PBPSA 5.7mm platform



Use for table top or intra-oral scanning. May also be used for fabrication of cement- or screw-retained provisional restorations (up to 30 days). Packaged with an abutment screw (PXAS). PEEK (PolyEtherEtherKetone) material. Final torque: 30Ncm.

Note: Prior to scanning, verify that the scan abutment is available in the library of the design software that will be used to design the abutment. Design libraries can be downloaded from www.vulcandental.com.



L02015-038 Custom (CAD/CAM) prosthetics overview module

#### Snap Scan Body

TP3SSB 3.0mm platform
PYSSB 3.5mm platform
PGSSB 4.5mm platform
PBSSB 5.7mm platform



Note: Prior to scanning, verify that the scan abutment is available in the library of the design software that will be used to design the abutment. Design libraries can be downloaded from www.vulcandental.com.



L02015-038 Custom (CAD/CAM) prosthetics overview module



# Custom Zirconia & Titanium Abutments for BioHorizons Implant Systems

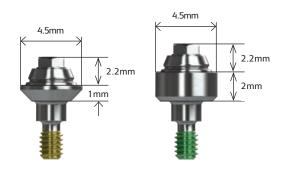
- Titanium & hybrid zirconia abutments
- Custom implant abutment design
- Comprehensive services for traditional impressions & intra-oral scans
- Complete digital workflow solutions



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#### Straight Multi-unit Abutments

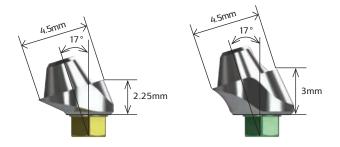
	1mm collar	2mm collar	3mm collar	4mm collar	5mm collar
3.0mm platform	TP3MU1	TP3MU2	TP3MU3	-	-
3.5mm platform	PYMU1	PYMU2	PYMU3	PYMU4	PYMU5
4.5mm platform	PGMU1	PGMU2	PGMU3	PGMU4	PGMU5
5.7mm platform	PBMU1	PBMU2	PBMU3	-	-



Straight Multi-unit abutments may be used for multiple-unit restorations including: screw-retained restorations at the abutment level, cast alloy bars for overdentures and fixed/detachable (hybrid) restorations. Comes with a cover cap (PXMUCC). Final torque: 30 Ncm using a Multi-unit Hex Adapter. Titanium alloy.

#### 17° Angled Multi-unit Abutments

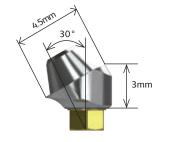
	2.25mm collar	3mm collar	4mm collar
3.0mm platform	TP3MU172	TP3MU173	-
3.5mm platform	PYMU172	PYMU173	PYMU174
4.5mm platform	PGMU172	PGMU173	PGMU174

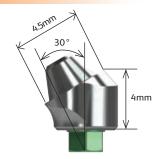


 $17^{\circ}$  Angled Multi-unit abutments may be used to angle-correct divergent implants. Use for multiple-unit restorations including: screw-retained restorations at the abutment level, cast alloy bars for overdentures and fixed/detachable (hybrid) restorations. Comes with a cover cap (PXMUCC) and abutment screw (PXMUAS). Final torque: 30 Ncm. Titanium alloy. Conveniently deliver abutment one-handed using an .050 hex or Unigrip<sup>TM</sup> driver or two-handed using an angled Multi-unit carrier (MUCA).

# 30° Angled Multi-unit Abutments

	3mm collar	4mm collar	5mm collar
3.0mm platform	TP3MU303	TP3MU304	-
3.5mm platform	PYMU303	PYMU304	PYMU305
4.5mm platform	PGMU303	PGMU304	PGMU305





30° Angled Multi-unit abutments may be used to angle-correct divergent implants. Use for multiple-unit restorations including: screw-retained restorations at the abutment level, cast alloy bars for overdentures and fixed/detachable (hybrid) restorations. Comes with a cover cap (PXMUCC) and abutment screw (PXMUAS). Final torque: 30 Ncm. Titanium alloy. Conveniently deliver abutment one-handed using an .050 hex or Unigrip<sup>TM</sup> driver or two-handed using an angled Multi-unit carrier (MUCA).



L02015-028 Multi-unit abutment hybrid or fixed-detachable-screw-retained restoration module L02015-029 Multi-unit abutment bar overdenture - screw-retained restoration module

L02015-031 Correcting a non-passive framework module

#### Laser-Lok Straight Multi-unit Abutments

	2mm collar	3mm collar
3.0mm platform	TP3MU2L	TP3MU3L
3.5mm platform	PYMU2L	PYMU3L
4.5mm platform	PGMU2L	PGMU3L





Laser-Lok Straight Multi-unit abutments may be used for multiple-unit restorations including: screw-retained restorations at the abutment level, cast alloy bars for overdentures and fixed/detachable (hybrid) restorations. When a Laser-Lok component is used and temporarily removed, keep the removed Laser-Lok component in sterile saline until reinserting into the site. Comes with a cover cap (PXMUCC). Final torque: 30 Ncm using a Multi-unit Hex Adapter. Titanium alloy.



L02015-003 Handling of Laser-Lok abutments module

# Multi-unit Copings

#### **PXMUTC**

#### Titanium

Use for fabricating acrylic temporary and final prostheses. May be trimmed for height. Packaged with prosthetic screw (PXMUPSR). Titanium alloy.



#### **PXMUGC**

#### **Gold Custom Castable**

Use for fabricating metal-reinforced acrylic prostheses or bar overdentures. May be trimmed for height Packaged with prosthetic screw (PXMUPSR). Coping has a gold alloy base with acetal resin (Delrin® or Pomalux®) sleeve.



#### **PXMUPC**

#### Plastic Custom Castable

Use for fabricating metal-reinforced acrylic prostheses or bar overdentures. May be trimmed for height Packaged with prosthetic screw (PXMUPSR). Acetal resin (Delrin® or Pomalux®)



#### **PXMUPFC**

#### Passive Fit

Use for fabricating metal-reinforced acrylic prostheses or bar overdentures, cemented using the passive-fit technique. May be trimmed for height Packaged with regular and long prosthetic screws (PXMUPSR, PXMUPSL). Coping has a titanium alloy base with acetal resin (Delrin® or Pomalux®) sleeve.



#### Multi-unit Locators®

LMUTC-2 Locator Multi-unit Abutment w/ Ti Collar (2 pack)

LMUTC-10 Locator Multi-unit Abutment w/ Ti Collar (10 pack)

Use Male Processing Package for these collars (LMPP-2 or LMPP-10).

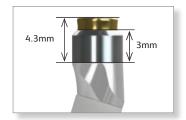
LMUDC-2 Locator Multi-unit Abutment w/ Delrin® Collar (2 pack)

LMUDC-10 Locator Multi-unit Abutment w/ Delrin® Collar (10 pack)

Use Locator Multi-unit Bar Processing Package listed below for these collars.



butment w/ Abutment w/
Ti Collar Delrin® Collar



LMUBPP-10 Locator Multi-unit Bar Processing Package (2 pack)

LMUBPP-10 Locator Multi-unit Bar Processing Package (10 pack)



Locator attachments for multi-unit abutments have been designed as a free-standing option (LMUTC) for the angled multi-unit posterior sites and for castable bar-splinted applications (LMUDC). The Locator Multi-unit Bar Processing Package includes Denture Cap with Yellow Bar Processing Male, Dual Retentive Replacement Males: Clear, Pink, Blue, and Block-Out Spacer. Offered in 2 packs and 10 packs. For complete instructions, visit the Zest Anchors web site.

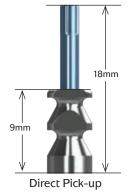
# Multi-unit Impression Copings

#### PXMUDC Direct Pick-up Coping, Multi-unit

Use to make a direct pick-up impression (open-tray) at the abutment level. Packaged with a prosthetic screw, long (PXMUPSL). Titanium alloy. Hand tighten.

#### PXMUIC Indirect Transfer Coping, Multi-unit

Use to make an indirect transfer (closed-tray) impression at the abutment level. Titanium alloy. Hand tighten.





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L02015-010 Multi-unit abutment impression technique - direct open tray module
 L02015-011 Multi-unit abutment impression technique - closed tray module
 L02015-030 Verification jig fabrication module

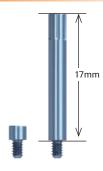
# Multi-unit Coping Screws

PXMUPSR Prosthetic Screw, Multi-unit, Regular (pack of 5)

PXMUPSL Prosthetic Screw, Multi-unit, Long (pack of 5)

PXMUPSR25 Prosthetic Screw, Multi-unit, Regular (pack of 25)

For attaching copings to the Multi-unit abutments. Hand-tighten or torque to 15 Ncm with .050" (1.25mm) Hex Driver or Unigrip™ screw driver, depending on application. Titanium alloy. Included with copings where indicated but can also be ordered separately.



# Multi-unit Angled Abutment Screw & Abutment Carrier

PXMUAS Abutment Screw, Multi-unit

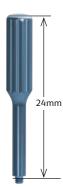
PXMUAS25 Abutment Screw, Multi-unit (pack of 25)

For angled Multi-unit abutments only. Final torque: 30 Ncm with .050" (1.25mm) Hex Driver or Unigrip  $^{\rm M}$  screw driver. Titanium alloy. Included with abutment but can also be ordered separately.



#### MUCA Angled Multi-unit Abutment Carrier (pack of 3)

Use to deliver angled Multi-unit abutments to the surgical site. Titanium alloy.



#### Multi-unit Cover Cap

PXMUCC Cover Cap, Multi-unit

Packaged with all Multi-unit abutments. Hand-tighten with .050" (1.25mm) Hex Driver or Unigrip™ screw driver. Titanium alloy.



#### Multi-unit Abutment Replica & Protection Analog

PXMUAR Abutment Replica, Multi-unit

Use at lab to represent the Multi-unit/Implant assembly in the working cast. Not for use with implant-level impressions. Titanium alloy.



PXMUPA Protection Analog, Multi-unit (pack of 5)

Use to protect abutment-coping interface when polishing the metal framework. Titanium alloy.



#### MULTI-UNIT COMPONENTS

#### Multi-unit Try-in Abutments

TRYPYMU
3.0mm Multi-unit Try-in Straight Abutment
3.5mm Multi-unit Try-in Straight Abutment
4.5mm Multi-unit Try-in Straight Abutment
TRYPBMU
5.7mm Multi-unit Try-in Straight Abutment

Multi-unit Try-in Abutments may be used to measure tissue thickness and verify proper prosthetic seating prior to final abutment seating.

Each Try-in is laser marked from 1 mm to 5 mm to correspond with the Straight Multi-unit Abutment collar heights and can also be used as a measuring tool for OD Secure, Locator, Locator R-Tx and Ball abutment systems. Try-in is carried to the site by the handle and snaps into the implant.

TRYTP3MU17 3.0mm Multi-unit Try-in 17° Angled Abutment
TRYPYMU17 3.5mm Multi-unit Try-in 17° Angled Abutment
TRYPGMU17 4.5mm Multi-unit Try-in 17° Angled Abutment

TRYPYMU30 3.0mm Multi-unit Try-in 30° Angled Abutment
TRYPYMU30 3.5mm Multi-unit Try-in 30° Angled Abutment
TRYPGMU30 4.5mm Multi-unit Try-in 30° Angled Abutment

Each Try-in is laser marked to correspond with the Angled Multi-unit Abutment collar heights. Try-in is carried to the site by the handle and snaps into the implant.







17° Angled Abutment Laser marking

30° Angled Abutment Laser marking

# Multi-unit Hex Adapters for Straight Abutments

#### PXMUHAM Manual Multi-unit Hex Adapter

Use to hand tighten straight Multi-unit abutments.

#### PXMUHAH Handpiece Multi-unit Hex Adapter

#### PXMUHAR 4mm Square Multi-unit Hex Adapter

Use to torque straight Multi-unit abutments. Driven by 4mm square drive handwrench, ratchet, or torque wrench. Do not exceed 30 Ncm.







Manual

Handpiece

4mm Square

# Paralleling Pins

144-100 Straight Parallel Pins
144-200 20° Angled Parallel Pin
144-230 30° Angled Parallel Pin

Use parallel pins to assess implant angulation and estimate which angled abutment is appropriate for the restoration.



# Laser-Lok Simple Solutions Healing Abutments

	abutment diameter	2mm height (0.8mm collar)	3mm height (1.8mm collar)	3.5mm height (2.8mm collar)
3.5mm platform, Laser-Lok	5.0mm	PYHA08L	PYHA18L	PYHA28L
4.5mm platform, Laser-Lok	6.0mm	PGHA08L	PGHA18L	PGHA28L
5.7mm platform, Laser-Lok	7.0mm	PBHA08L	PBHA18L	PBHA28L



Use Laser-Lok Simple Solutions healing abutments when a Simple Solutions abutment restoration is planned to inhibit epithelial downgrowth, establish a soft tissue seal and protect the bone. A Simple Solutions restoration avoids having to remove and replace the abutment to take an impression. The snap cap, closed tray impression transfer, connects to the final abutment See L01017 or L02007 for more information. Hand-tighten with the .050" (1.25mm) Hex Driver. Titanium Alloy.

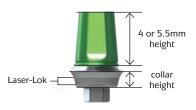


Laser marked for easy intraoral identification; for example: GS1.8L = Green (4.5mm) platform / Simple Solutions / 1.8mm collar / Laser-Lok

#### Laser-Lok Simple Solutions Abutment Packs

	0.8mm collar	1.8mm collar	2.8mm collar
3.5mm platform, 4mm height	PY4008L	PY4018L	PY4028L
3.5mm platform, 5.5mm height	PY5508L	PY5518L	PY5528L
4.5mm platform, 4mm height	PG4008L	PG4018L	PG4028L
4.5mm platform, 5.5mm height	PG5508L	PG5518L	PG5528L
5.7mm platform, 4mm height	PB4008L	PB4018L	PB4028L
5.7mm platform, 5.5mm height	PB5508L	PB5518L	PB5528L





Designed primarily for posterior restorations when abutment modification is not required. Packaged with an abutment screw (PXAS) and Healing Cap that can serve as a temporary. Titanium Alloy. Final torque: 30Ncm.

#### Simple Solutions Restorative Packs

SYRP40	3.5mm platform, 4mm height
SYRP55	3.5mm platform, 5.5mm height
SGRP40	4.5mm platform, 4mm height
SGRP55	4.5mm platform, 5.5mm height
SBRP40	5.7mm platform, 4mm height
SBRP55	5.7mm platform, 5.5mm height



Conveniently includes the impression and lab components needed to restore a Simple Solutions abutment. Includes a snap cap impression transfer, one crown waxing sleeve, one bridge waxing sleeve and an implant/abutment replica for the working cast.



L02015-012 Simple Solutions snap-cap impression technique module

#### SIMPLE SOLUTIONS LAB COMPONENTS

#### Simple Solutions Impression/Scan Body Cap

SYPIC40	3.5mm platform, 4mm height
SYPIC55	3.5mm platform, 5.5mm height
SGPIC40	4.5mm platform, 4mm height
SGPIC55	4.5mm platform, 5.5mm height
SBPIC40	5.7mm platform, 4mm height
SBPIC55	5.7mm platform, 5.5mm height



Use for traditional or digital impression taking.

Note: Prior to scanning, verify that the scan cap is available in the library of the design software that will be used to design the restoration. Design libraries can be downloaded from www.vulcandental.com.

#### Simple Solutions Replicas

SYR40	3.5mm platform, 4mm height
SYR55	3.5mm platform, 5.5mm height
SGR40 SGR55	4.5mm platform, 4mm height 4.5mm platform, 5.5mm height
SBR40	5.7mm platform, 4mm height
SBR55	5.7mm platform, 5.5mm height





#### Simple Solutions Waxing Sleeves

SYPWSC	3.5mm platform, Crown (single unit)
SGPWSC	4.5mm platform, Crown (single unit)
SBPWSC	5.7mm platform, Crown (single unit)
SYPWSB	3.5mm platform, Bridge (multi-unit)
SGPWSB	4.5mm platform, Bridge (multi-unit)
SBPWSB	5.7mm platform, Bridge (multi-unit)





single-unit

The Waxing Sleeve for Crown has internal anti-rotation flats to engage the abutment/replica flats. The Waxing Sleeve for Bridge has no anti-rotational feature and may only be used for multi-units. Order by platform diameter. Sleeve is 5.5mm in height and can be trimmed as needed. Acetal resin (Delrin® or Pomalux®) sleeve. Included in Simple Solutions Restorative Packs but can also be ordered separately.

# Simple Solutions Replica Lab Tools

SYRLT 3.5mm platform
SGRLT 4.5mm platform
SBRLT 5.7mm platform

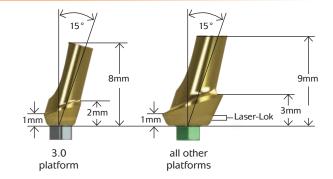


Use to create burn-out copings without use of the Waxing Sleeves. The double-ended tools (4.0mm / 5.5mm abutment height) mimic the geometry of Simple Solutions Replicas including the anti-rotation flats, but WITHOUT the retentive snap feature. Castings made from copings fabricated on the Replica Lab Tools do not require use of the Casting Reamers.

# **ESTHETIC & CEMENTABLE ABUTMENTS**

# **Angled Esthetic Abutments**

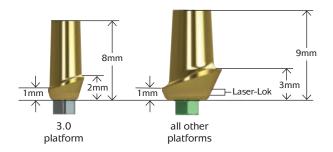
	Laser-Lok	standard
3.0mm platform	TP3AEAL	TP3AEA
3.5mm platform	PYAEAL	PYAEA
4.5mm platform	PGAEAL	PGAEA
5.7mm platform	PBAEAL	PBAEA



Use to create a cement-retained, single- or multiple-unit prostheses. When a Laser-Lok component is used and temporarily removed, keep the component in sterile saline until reinserting into the site. Packaged with an abutment screw (PXAS). Titanium Alloy. TiN coated for esthetics. Final torque: 30Ncm.

# Straight Esthetic Abutments

	Laser-Lok	standard
3.0mm platform	TP3SEAL	TP3SEA
3.5mm platform	PYSEAL	PYSEA
4.5mm platform	PGSEAL	PGSEA
5.7mm platform	PBSEAL	PBSEA



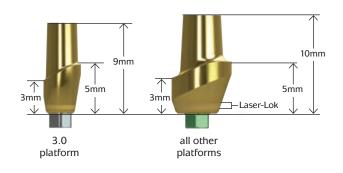
Use to fabricate cement-retained, single- or multiple-unit prostheses. When a Laser-Lok component is used and temporarily removed, keep the component in sterile saline until reinserting into the site. Packaged with an abutment screw (PXAS). Titanium Alloy. TiN coated for esthetics. Final torque: 30Ncm.



L02015-023 Cement-retained single crowns using cementable abutments module L02015-025 Chairside modification of cement-retained abutments module

# Straight Esthetic Abutments (3mm buccal height)

	Laser-Lok	standard
3.0mm platform	TP3SEA3L	TP3SEA3
3.0mm platform	TP3WSEA3L (wide)	TP3WSEA3 (wide)
3.5mm platform	PYSEA3L	PYSEA3
4.5mm platform	PGSEA3L	PGSEA3
5.7mm platform	PBSEA3L	PBSEA3



Use to fabricate cement-retained, single- or multiple-unit prostheses when a deep gingival sulcus is present. When a Laser-Lok component is used and temporarily removed, keep the component in sterile saline until reinserting into the site. Packaged with an abutment screw (PXAS). Titanium Alloy. TiN coated for esthetics. Final torque: 30Ncm.

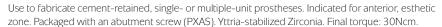


L02015-023 Cement-retained single crowns using cementable abutments module L02015-025 Chairside modification of cement-retained abutments module

#### **ESTHETIC & CEMENTABLE ABUTMENTS**

# Ceramic Abutments (Regular Emergence)

PYRCA 3.5mm platform
PGRCA 4.5mm platform
PBRCA 5.7mm platform

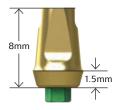




# 3inOne Abutments (Regular Emergence)

PYREA 3.5mm platform
PGREA 4.5mm platform
PBREA 5.7mm platform

Use to fabricate cement-retained, single- or multiple-unit prostheses. Also used with a Ball-top Screw for a closed-tray, hex-timed transfer. Packaged with an abutment screw (PXAS). Titanium Alloy. TiN coated for esthetics. Final torque: 30Ncm.



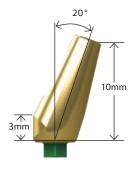


L02015-024 Cement-retained bridge using cementable abutments module

## Angled Abutments (Regular Emergence)

PYRAA 3.5mm platform
PGRAA 4.5mm platform
PBRAA 5.7mm platform

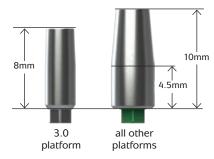
Use to fabricate cement-retained, single- or multiple-unit prostheses. Packaged with an abutment screw (PXAS). Titanium Alloy. TiN coated for esthetics. Final torque: 30Ncm.



## Narrow Emergence Abutments

TP3SA 3.0mm platform
PYNEA 3.5mm platform
PGNEA 4.5mm platform
PBNEA 5.7mm platform

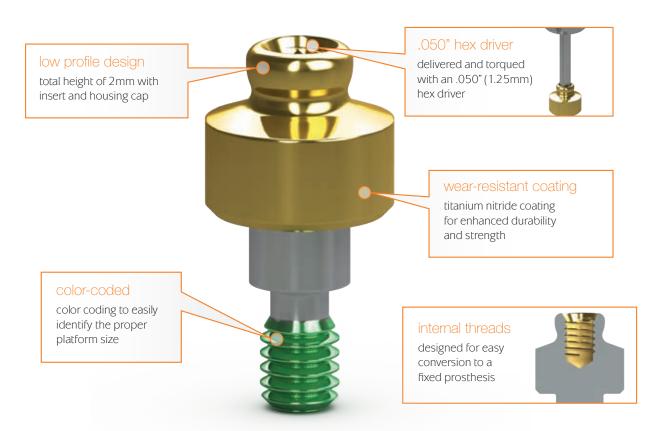
Use to fabricate cement-retained, single- or multiple-unit prostheses. Packaged with an abutment screw (PXAS). Titanium Alloy. Final torque: 30Ncm.



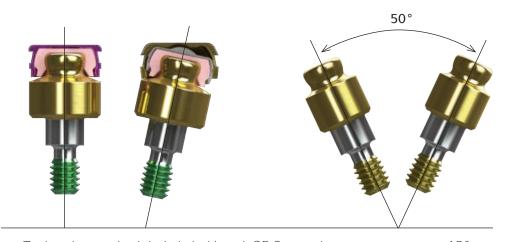




The OD Secure abutment uses the industry's lowest profile connection to attach dentures and partial dentures to dental implants. The abutment is designed for easy delivery using an .050" hex driver and is color-coded to ensure that the abutment matches the implant platform every time.



With cuff heights ranging from 0.5mm to 6mm, the OD Secure provides attachment solutions for even the most challenging cases.



The housing cap that is included with each OD Secure abutment corrects up to  $15^{\circ}$  of divergence. The new Xtend housing cap corrects up to  $25^{\circ}$  of divergence and is compatible with the retention caps included in the OD Secure abutment kit.

# OD SECURE ABUTMENTS & COMPONENTS

# OD Secure Abutment System

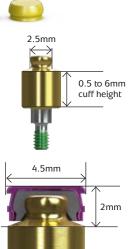
The OD Secure comes packaged with the abutment, metal housing, four retentive inserts, a lab processing insert and a protection disk.



L02015-040 OD Secure impression technique module
L02015-041 OD Secure shall in the control of th

L02015-041 OD Secure chairside pick-up using existing denture module

	3.0mm platform	3.5mm platform	4.5mm platform	5.7mm platform
0.5mm cuff height	TP3ODSK0	PYODSK0	PGODSK0	PBODSK0
1mm cuff height	TP3ODSK1	PYODSK1	PGODSK1	PBODSK1
2mm cuff height	TP3ODSK2	PYODSK2	PGODSK2	PBODSK2
3mm cuff height	TP3ODSK3	PYODSK3	PGODSK3	PBODSK3
4mm cuff height	TP3ODSK4	PYODSK4	PGODSK4	PBODSK4
5mm cuff height	TP3ODSK5	PYODSK5	PGODSK5	PBODSK5
6mm cuff height	TP3ODSK6	PYODSK6	PGODSK6	PBODSK6



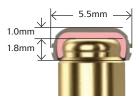
# OD Secure Abutment Components

-	Xtend Housing Cap (2pack)  g Cap assembled with Lab Processing sed to correct up to 50° of divergence.	ODS-HCPM Housing Cap (2pack)  New pink Housing Cap comes assembled with Lab Processing Insert	
ODSRC-V	Retention Cap Insert (4pack) Retention: 6lbs - Hard	ODSRC-P Retention Cap Insert (4pack) Retention: 2.5lbs - Soft	
ODSRC-C	Retention Cap Insert (4pack) Retention: 4lbs - Medium	ODSRC-Y Retention Cap Insert (4pack) Retention: 1.5lbs - Extra Soft	
ODS-PM	Lab Processing Insert (4pack)	ODS-CAK Cap Assortment Kit (2 pack)	
ODS-BS	Block-out Spacer (4pack)	ODSA OD Secure Analog (2pack)	
ODSIC	Impression Coping (2pack)	ODSCM Castable Male (2pack)	
ODSCT	Cap Insert/Extractor Tool		

#### **Locator Abutments**

	3.0mm platform	3.5mm platform	4.5mm platform	5.7mm platform
0mm cuff height	not available	PYLA0	PGLA0	not available
1mm cuff height	TP3LA1	PYLA1	PGLA1	PBLA1
2mm cuff height	TP3LA2	PYLA2 (2.5mm)	PGLA2	PBLA2
3mm cuff height	TP3LA3	PYLA3 (3.5mm)	PGLA3	PBLA3
4mm cuff height	TP3LA4	PYLA4 (4.5mm)	PGLA4	PBLA4
5mm cuff height	TP3LA5	PYLA5 (5.5mm)	PGLA5	PBLA5
6mm cuff height	TP3LA6	PYLA6 (6.5mm)	PGLA6	PBLA6





Locator Implant Attachments are designed for use with overdentures or partial dentures retained in whole or in part by dental implants in the mandible or maxilla. Order by cuff height to match the height of the gingival tissue. The abutment will extend above the tissue by 1.8mm to allow the Locator Male to seat completely. Order one Locator Male Processing Set for each Locator Abutment (sold in packs of 2 or 10). Can also be used with tissue-level implants. Titanium Alloy.

The Male Processing Package provides 3 choices of retention. The Replacement Males (clear, pink and blue) are used to restore implants with up to 10° of divergence (20° between implants). The Extended Range Replacement Males (green and red) accommodate divergences from 10° and 20° (40° between implants), and may be purchased separately.



LO2015-013 Locator® abutment impression technique module LO2015-032 Locator® abutment overdenture: chairside pickup using existing denture

#### **Locator Components**

#### LCT Core Tool

Multi-purpose tool serves as hand driver for seating Locator Abutments onto the implants, seating tool for nylon male inserts and insert removal tool. Note: now packaged with one Locator Abutment Holder Sleeve.



#### Locator Abutment Holder Sleeve (4 pack)

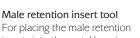
Use to retain and deliver the Locator Abutment using the driver portion of the Core Tool.



#### Locator core tool instructions









Hand driver For hand tightening the Locator abutment

Locator abutment holder For retaining and delivering the Locator abutment using the hand driver portion of the core tool.

Male retention insert removal tool

For removing the male retention inserts

#### **Locator Components**

#### LMPP-2 Male Processing Package (2 pack)

Includes: (2) Denture Caps assembled with Black Processing Males; (2) White Block-out Spacers; (2) Clear, (2) Pink and (2) Blue Nylon Males.

#### LMPP-10 Male Processing Package (10 pack)

Includes: (10) Denture Caps assembled with Black Processing Males; (10) White Block-out Spacers; (10) Clear, (10) Pink and (10) Blue Nylon Males.

#### LMPPER-2 Male Processing Package, Extended Range (2 pack)

Includes: (2) Denture Caps assembled with Black Processing Males; (2) White Block-out Spacers; (2) Green, (2) Orange and (2) Red Nylon Males.

#### LMPPER-10 Male Processing Package, Extended Range (10 pack)

Includes: (10) Denture Caps assembled with Black Processing Males; (10) White Block-out Spacers; (10) Green, (10) Orange and (10) Red Nylon Males.



LRM-G Extended Range

Replacement Male (green)

Retention: 4lbs, 4 pack

LRM-C

Replacement Male (clear) Retention: 5lb, 4 pack

LRM-O Extended Range

Replacement Male (orange)

Retention: 2lbs, 4 pack

LRM-P

Replacement Male (pink)

Retention: 3lb, 4 pack



LRM-R **Extended Range Retention** 

Replacement Male (red)

Retention: 1lbs, 4 pack

LRM-B

Replacement Male (blue)

Retention: 1.5lb, 4 pack



LRM-Z **Extended Range** 

Replacement Male (gray)

Retention: 0lb, 4 pack

**LBPRM** 

**Black Processing** Replacement Male



LFA-4MM Female Analog 4mm (4 pack)

Use for 3.0, 3.5 and 4.5 platforms



LSDT-15MM

Square Drive Tool (15mm length)

Use with a torque wrench to seat Locator Abutments.



LFA-5MM Female Analog 5mm (4 pack)

Use for 5.7 platform

LSDT-21MM

Square Drive Tool (21mm length)

Use with a torque wrench to seat Locator Abutments.



LIC Impression Coping (4 pack)



LPP Parallel Post (4 pack)



LAMG Angle Measurement Guide



# Locator R-Tx Abutments

Locator R-Tx is a better, simpler and stronger system that relies on the same restorative techniques as the original Locator. Now available with the housing cap, spacer and retentive inserts for a convenient all-in-one package.

Each Assembly includes: (1) Abutment, (1) Denture Attachment Housing with Black Processing Insert, (4) Nylon Retention Inserts, and (1) Block-out Spacer.





	3.0mm platform	3.5mm platform	4.5mm platform	5.7mm platform
0.5mm cuff height	not available	PYLRTX0	PGLRTX0	not available
1mm cuff height	TP3LRTX1	PYLRTX1	PGLRTX1	PBLRTX1
2mm cuff height	TP3LRTX2	PYLRTX2	PGLRTX2	PBLRTX2
3mm cuff height	TP3LRTX3	PYLRTX3	PGLRTX3	PBLRTX3
4mm cuff height	TP3LRTX4	PYLRTX4	PGLRTX4	PBLRTX4
5mm cuff height	TP3LRTX5	PYLRTX5	PGLRTX5	PBLRTX5
6mm cuff height	TP3LRTX6	PYLRTX6	PGLRTX6	PBLRTX6

# **Locator R-Tx Components**

LRTX-GY	Zero Retention Insert Replacement (4pack)		LRTX-PM	Processing Insert Replacement (4pack)	
LRTX-B	Low Retention Insert Replacement (4pack)	700	LRTX-PS	Processing Spacer Replacement (4pack)	
LRTX-P	Medium Retention Insert Replacement (4pack)		LRTX-IC	Impression Coping (4pack)	8
LRTX-C	High Retention Insert Replacement (4pack)		LRTX-A3	3.5mm Abutment Analog (4pack)	
LRTX-BS	Block-Out Spacer Replacement (20pack)	0	LRTX-A4	4mm Abutment Analog (4pack)	1 1 1
LRTX-DC	Denture Attachment Processing Assembly (4pack)		LRTX-A5	5mm Abutment Analog (4pack)	

LRTX-TL Locator R-Tx

Insertion/Removal Tool



#### **Ball Abutments**

TP3BA1

<ul><li>3.0mm platform, 3mm collar height</li><li>3.0mm platform, 5mm collar height</li><li>3.5mm platform, 1mm collar height</li><li>3.5mm platform, 3mm collar height</li><li>3.5mm platform, 5mm collar height</li></ul>		. ,
3.5mm platform, 1mm collar height 3.5mm platform, 3mm collar height	TP3BA3	3.0mm platform, 3mm collar height
3.5mm platform, 3mm collar height	TP3BA5	3.0mm platform, 5mm collar height
3.5mm platform, 3mm collar height		
	PYBA1	3.5mm platform, 1mm collar height
3.5mm platform, 5mm collar height	PYBA3	3.5mm platform, 3mm collar height
	PYBA5	3.5mm platform, 5mm collar height
	PYBA3	3.5mm platform, 3mm collar height

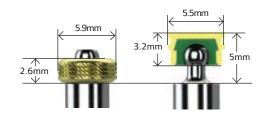
3.0mm platform, 1mm collar height

PGBA1	4.5mm platform, 1mm collar height
PGBA3	4.5mm platform, 3mm collar height
PGBA5	4.5mm platform, 5mm collar height

PBBA1	$5.7mm\ platform,\ 1mm\ collar\ height$
PBBA3	5.7mm platform, 3mm collar height

Use for retention of tissue-supported overdentures. Ball Abutments may be used for indirect transfer impressions. Ball Abutment Analogs on facing page are used for producing a working cast. Can also be used with tissuelevel implants. Titanium Alloy.





Sizing comparison of O-ring Attachment and Ball Attachment



L02015-014 Ball abutment impression technique

L02015-033 Ball abutment overdenture: chairside pickup using existing denture

# O-ring Attachment Set

#### 260-100 O-ring Attachment Set

Standard O-ring attachment for processing into denture. Includes: (1) O-ring encapsulator, (2) Processing O-rings and (2) Clinical O-rings. Recommended for relatively parallel implants (5° of divergence or 10° between implants).



# O-ring Individual Components

#### 260-300 O-ring Encapsulator

Female receptacle processed into denture. Titanium. 2 per package.



#### 260-220 Processing O-ring

Use for lab processing applications. Buna. 12 per package.



#### 260-210 Clinical O-ring

Use for clinical applications. Silicone. 12 per package.



#### **Ball Attachment Set**

#### BCAS Ball Attachment Set

Includes: (1) Titanium Housing, (3) Female Nylon Inserts - white (more retention), pink (less retention), black (lab processing) and (1) Protective Disk (BCPD, protects tissue during impression making or denture pick-up)

The Ball Attachment system offers several advantages over traditional O-ring attachments:

- Greater abutment angulation (14° of divergence or 28° between implants)
- 0.4mm of less mesial/distal/buccal/lingual space
- Four different levels of retention instead of one



#### **Ball Abutment Components**

<b>BCAHT</b>	Attachment Housings - Titanium
	For Resin pickup or Soldering.

2 per package.



BCIY Yellow Nylon Insert

Clinical use. 2 per package. Very elastic retention: 500-550g



BCIB Black Nylon Insert

Lab Processing and Chair-side Denture Pick-up. 2 per package.



BCIP Pink Nylon Insert

Clinical use. 2 per package. Elastic retention: 800-950g



BCIW White Nylon Insert

Clinical use. 2 per package.

Slightly elastic retention: 1200-1300g



BCIG Green Nylon Insert

Clinical use. 2 per package. Extremely elastic retention.



BCDR Directional Rings

Use for obtaining parallelism. 0°  $7^{\circ}$  and  $14^{\circ}$  rings. Set of 3.



BCIST Insert Seating Tool

Use to seat nylon inserts in attachment housings.



Reame

**BCR** 

Use to adjust retention of nylon inserts.





#### **Ball Abutment Analogs**

TP3BAA 3.0mm Ball Abutment Analog
PYGBAA 3.5/4.5mm Ball Abutment Analog
PBBAA 5.7mm Ball Abutment Analog





#### Prosthetic Kit

#### PROS3000

#### **Enhanced Prosthetic Instrumentation Kit**

Includes:

- .050 (1.25mm) Manual Hex Driver
- .050 (1.25mm) Manual Hex Driver, Long
- .050 (1.25mm) Handpiece Hex Driver
- .050 (1.25mm) Handpiece Hex Driver, Long
- .050 (1.25mm) 4mm Square Hex Driver
- .050 (1.25mm) 4mm Square Hex Driver, Long
- Hand Wrench
- 4mm Square Drive Extender
- 4mm Square Multi-unit Hex Adapter
- 12 Try-in Abutment Slots
- 8 Optional Instrument Slots
- Space for Torque Wrenches & AS123 Hand Unit

Multi-unit Try-in Abutments, 300-100 and ATW are sold separately.



#### PROS2500

#### Prosthetic Instrumentation Tray (not shown)

Tray without instruments (included with PROS3000)

#### 300-100\* AS123 Hand Unit

Provides improved vision and easy access to prosthetic components in posterior regions of the mouth. Hand Wrench and Drivers are sold separately.



#### 300-400\* Hand Wrench

Use on drive end of AS123 Hand Unit. Also fits individual Hex Drivers/Adapters and Bone Taps



#### 300-206\* 4mm Square Drive Extender

Replaced 300-205 starting in June 2010. Includes PEEK C-ring for durable retention in Ratchet. Cannot be used with bone taps.



#### **Torque Wrenches**

#### ATW ITL Precise Adjustable Torque Wrench

Place both implants and abutments with 9 distinct torque settings (15, 20, 25, 30, 35, 40, 45, 50 and 60 Ncm). A simple twist of the handle locks in precision-engineered torque values and guarantees accuracy and repeatability.



#### EL-C12374 Elos Adjustable Torque Wrench

Lightweight titanium design is easy to use as an adjustable torque wrench or a ratchet. Quickly disassembles for cleaning. No calibration required.

EL-C8521 Elos Replacement Bit, 4mm Square Adapter

EL-C8381 Elos Replacement Bit, Handpiece



#### 300-430 30 Ncm Torque Wrench

Use break-style design to deliver 30 Ncm of torque to prosthetic components.



#### AGYR-15500 Torque Control 15500

Ergonomic design is the ideal solution for access to screws placed in the posterior. The 7 predetermined torque values (10, 15, 20, 25, 30, 32 and 35 Ncm) make it a tool of extreme precision.



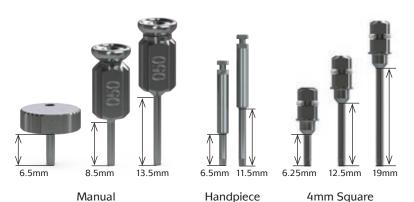
<sup>\*</sup> Instrument o-rings & c-rings wear out over time. If an instrument is no longer held securely by its associated driver, order a replacement ring through Customer Care.

#### PROSTHETIC INSTRUMENTATION

#### .050" (1.25mm) Hex Drivers

135-251 Manual Hex Driver, Short 135-351 Manual Hex Driver 135-451 Manual Hex Driver, Long 134-350 Handpiece Hex Driver 134-450 Handpiece Hex Driver, Long 300-350\* 4mm Square Hex Driver 300-351\* 4mm Square Hex Driver, Long 300-354\* 4mm Square Hex Driver, Extra Long

For installation and removal of cover caps, prosthetic and abutment screws.



#### **Abutment Prepping Handles**

TP3AH 3.0mm platform Analog Handle
PYGAH 3.5/4.5mm platform Analog Handle
PBAH 5.7mm platform Analog Handle



Use to comfortably hold abutments for chairside or laboratory preparation. Abutments are secured to the handle with a standard abutment screw (PXAS). Comes in three sizes: 3.0, 3.5/4.5 and 5.7mm.

#### Laser-lok Tissue Groomer

TP3TG 3.0mm platform
PYTG 3.5mm platform
PGTG 4.5mm platform
PBTG 5.7mm platform

Used to lightly abrade soft tissue prior to placement of a Laser-Lok abutment, if a Laser-Lok abutment has not been used before.



L02015-003 Handling of Laser-Lok abutment



# Clean-out Tap Tools

PXCT \* Implant Clean-out Tap Tool

122-170\* Abutment for Screw Clean-out Tap Tool

Use PXCT to re-thread internal connection implants (Tapered Internal, Internal, Laser-Lok 3.0, Tapered Tissue Level and Single-stage), and 122-170 to re-thread Abutment for Screw abutments where the internal threads have become damaged. Requires a standard surgical Ratchet (130-000) or Hand Wrench (300-400) as a drive mechanism.



<sup>\*</sup> Instrument o-rings & c-rings wear out over time. If an instrument is no longer held securely by its associated driver, order a replacement ring through Customer Care.

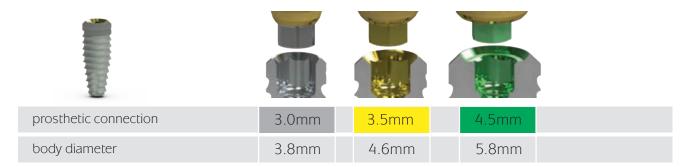
#### PROSTHETIC PLATFORM IDENTIFICATION

# Prosthetic Platform Color Coding

BioHorizons prosthetic components are color-coded to match BioHorizons implant prosthetic platforms. To ensure compatibility:

- (1) determine the BioHorizons implant system from the patient's record (e.g. Tapered, Tapered Plus, Tapered Tissue Level)
- (2) verify that the prosthetic component is intended for that system
- (3) match the restorative component color with the implant prosthetic platform.

#### Tapered Internal Plus Implant System



#### **Tapered Internal Implant System**



# Tapered Tissue Level Implant System



Note: BioHorizons Internal prosthetic components are indicated for use with Zimmer Screw-Vent\* and Tapered Screw-Vent\* implant systems.

#### SUPPORT MATERIAL & REFERENCES

#### **Restorative Support Material**

L02015	Prosthetic Technique Manual (Interactive PDF)
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ML0161 Tapered Family Prosthetic Reference
ML0206 Impression Technique Guide (PDF only)

L01022 Multi-unit Catalog and Manual
L01021 TeethXpress Technique Guide

EP-TXMOD TeethXpress Patient Education Model

L02007 Simple Solutions Abutments with Laser-Lok Catalog and Manual (PDF only)

L01016 Restoring BioHorizons or Zimmer Implants with Simple Solutions Abutments (PDF only)

ML0155 BioHorizons Ceramic Abutments (PDF only)

ML0103 Dental Implants - Patient Education Brochure, 50 pk

ML0131 Dental Implants - Patient Education Flipbook
ML0114 Overdenture Patient Education Brochure, 50 pk

ML0615 Laser-Lok Abutment Study by Myron Nevins, DDS (PDF only)

ML0159 Connective Tissue Attachment to Laser - Microgrooved Abutments

ML0160 Reattachment of Connective Tissue Fibers to a Laser - Microgrooved Abutment Surface

SPMP14235 Electronic Dental Implant Patient Record (PDF only)

#### References

- Human histologic evidence of a connective tissue attachment to a dental implant. M Nevins, ML Nevins, M Camelo, JL Boyesen, DM Kim. International Journal of Periodontics & Restorative Dentistry. Vol. 28, No. 2, 2008.
- 2. The effects of laser microtextured collars upon crestal bone levels of dental implants. S Weiner, J Simon, DS Ehrenberg, B Zweig, JL Ricci. *Implant Dentistry*. Volume 17, Number 2, 2008. p. 217–228.
- 3. Influence of a microgrooved collar design on soft and hard tissue healing of immediate implantation in fresh extraction sites in dogs. SY Shin, DH Han. Clin. Oral Impl. Res. 21, 2010; 804–814.
- Maintaining inter-implant crestal bone height via a combined platform-switched, Laser-Lok® implant/abutment system: A proof-of-principle canine study. M Nevins, ML Nevins, L Gobbato, HJ Lee, CW Wang, DM Kim. Int J Periodontics Restorative Dent. Volume 33, Number 3, 2013.
- Histologic evidence of a connective tissue attachment to laser microgrooved abutments: A canine study. M Nevins, DM Kim, SH Jun, K Guze, P Schupbach, ML Nevins. International Journal of Periodontics & Restorative Dentistry. Vol. 30, No. 3, 2010.
- 6. Histologic evidence of connective tissue integration on laser microgrooved abutments in humans. NC Geurs, PJ Vassilopoulos, MS Reddy. Clinical Advances in Periodontics. Vol. 1, No. 1, May 2011.
- 7. Connective tissue attachment to laser microgrooved abutments: A human histologic case report. M Nevins, M Camelo, ML Nevins, P Schupbach, DM Kim. *Int J Periodontics Restorative Dent*. Volume 32, Number 4, 2012. p. 384–392.
- 8. Reattachment of the connective tissue fibers to the laser microgrooved abutment surface. M Nevins, M Camelo, ML Nevins, P Schupbach, DM Kim. Int J Periodontics Restorative Dent. Volume 32, Number 4, 2012. e131–134.
- 9. The impact of dis-/reconnection of laser microgrooved and machined implant abutments on soft- and hard-tissue healing. Iglhaut G, Becker K, Golubovic V, Schliephake H, Mihatovic I. Clin Oral Implants Res. 2013 Apr;24(4):391-7.
- Heat production by 3 implant drill systems after repeated drilling and sterilization. Chacon GE, Bower DL, Larsen PE, McGlumphy EA, Beck FM. J Oral Maxillofac Surg. 2006 Feb;64(2):265-9.

#### ORDERING & WARRANTY INFORMATION

Territory Manager:	r:	
cell phone:		
email and/or fax:		

**BioHorizons Lifetime Warranty on Implants and Prosthetics:** All BioHorizons implants and prosthetic components include a Lifetime Warranty. BioHorizons implant or prosthetic components will be replaced if removal of that product is due to failure (excluding normal wear to overdenture attachments).

Additional Warranties: BioHorizons warranties surgical drills, taps and other surgical and restorative instruments.

- (1) Surgical Drills and Taps: Surgical drills and taps include a warranty period of ninety (90) days from the date of initial invoice. Surgical instruments should be replaced when they become worn, dull, corroded or in any way compromised. Surgical drills should be replaced after 12 to 20 osteotomies.<sup>10</sup>
- **(2) Instruments:** The BioHorizons manufactured instrument warranty extends for a period of one (1) year from the date of initial invoice. Instruments include drivers, implant site dilators and BioHorizons tools used in the placement or restoration of BioHorizons implants.

**Return Policy:** Product returns require a Return Authorization Form, which may be acquired by contacting Customer Care. The completed Return Authorization Form must be included with the returned product. For more information, please see the reverse side of the invoice that was shipped with the product.

**Disclaimer of Liability:** BioHorizons products may only be used in conjunction with the associated original components and instruments according to the Instructions for Use (IFU). Use of any non-BioHorizons products in conjunction with BioHorizons products will void any warranty or any other obligation, expressed or implied.

Treatment planning and clinical application of BioHorizons products are the responsibility of each individual clinician. BioHorizons strongly recommends completion of postgraduate dental implant education and adherence to the IFU that accompany each product. BioHorizons is not responsible for incidental or consequential damages or liability relating to use of our products alone or in combination with other products other than replacement or repair under our warranties.

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