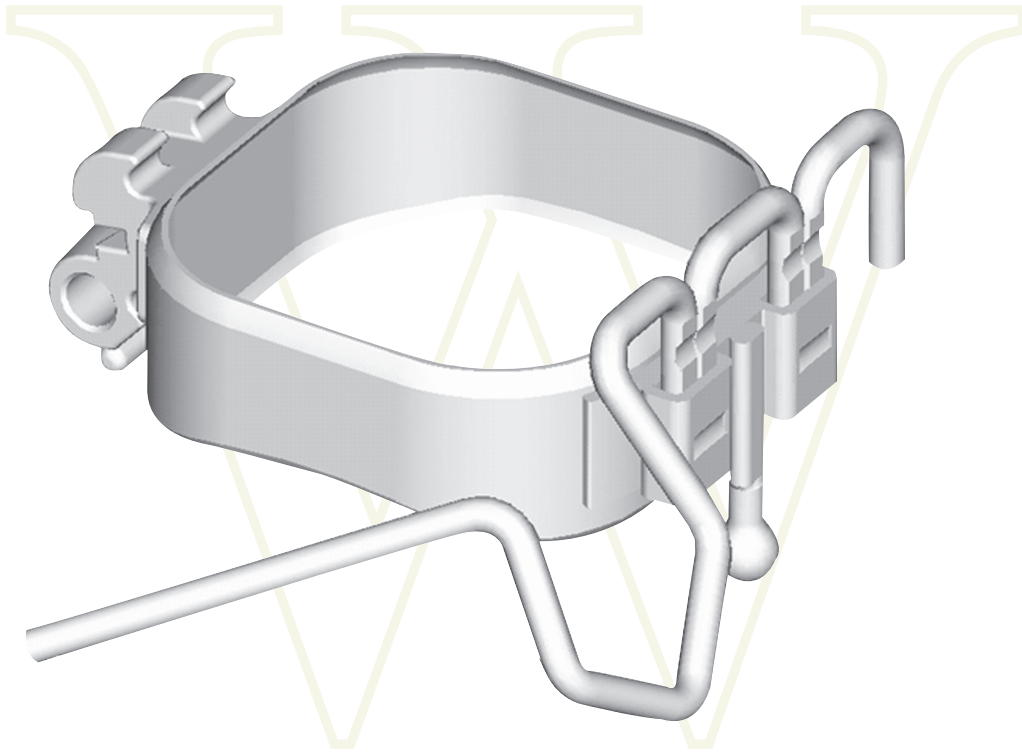


# WILSON® 3D®



## **Complete Guide to** RM® 3D® First Phase Fixed/ Removable® Modular Orthodontics™



## THE ORTHODONTIC “TOOL BOX”

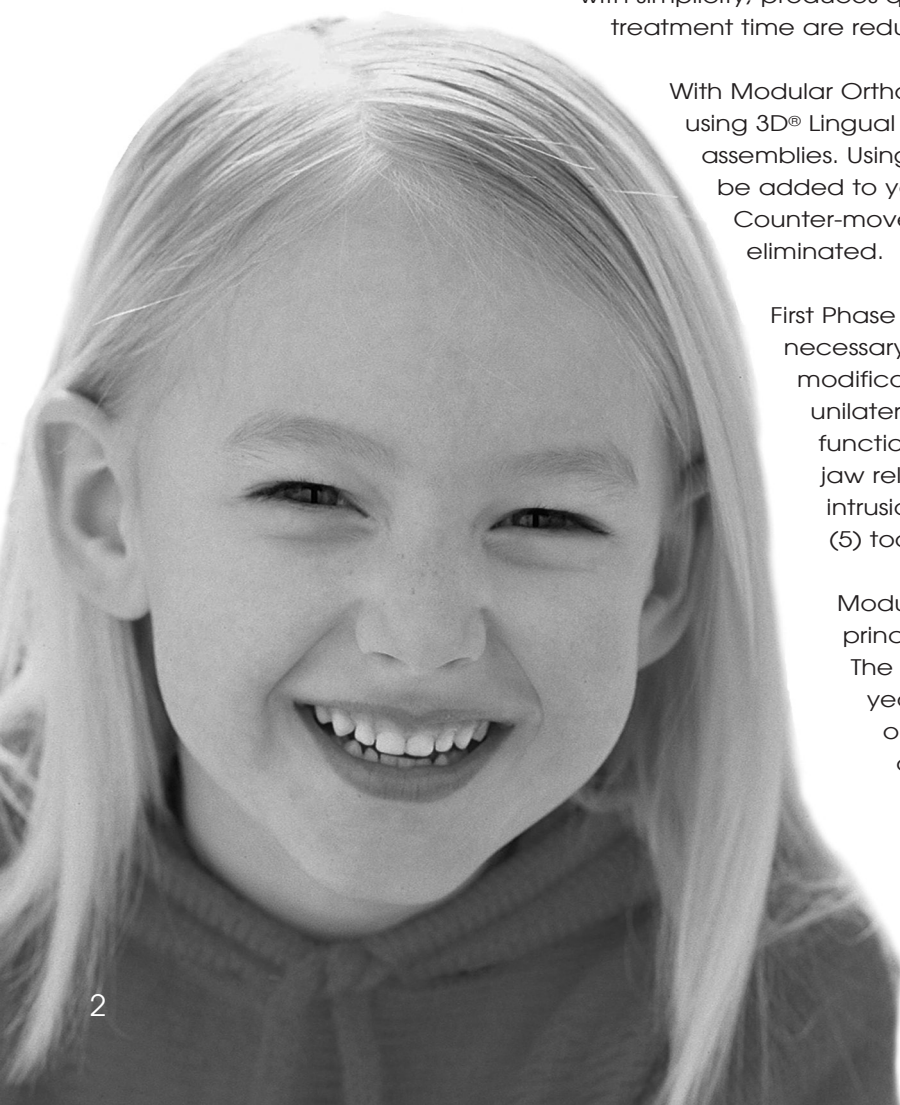
The 3D<sup>®</sup> Fixed/Removable<sup>®</sup> System (Wilson<sup>®</sup>) should be considered as a comprehensive appliance supplementing system; it is a “tool box” of options. The numerous 3D<sup>®</sup> options help you add to the effectivity of the appliances you have chosen to deal within your diagnosis and treatment plan. Also, it is important to note that each 3D<sup>®</sup> module is a subsystem by itself. That is, each has specific areas for use and each has numerous supplementing options.

Whatever your appliance, it now becomes multi-directional and capable of fulfilling a variety of sequential treatment objectives. Friction factors, extractions and headgear use are dramatically reduced. Visibility and discomfort are also reduced. It is truly the most advanced lingual arch system available. Treatment efficiency, with simplicity, produces quality results not previously possible. Chairtime and treatment time are reduced and patient acceptance is high.

With Modular Orthodontics<sup>™</sup> you continue with your present technique, using 3D<sup>®</sup> Lingual Tubes welded to molar band/buccal tube assemblies. Using various plug-in 3D<sup>®</sup> modules, new dimensions can be added to your treatment. Problem areas can be bypassed. Counter-movements can be controlled and “round trips” can be eliminated.

First Phase treatment can generally be classified as the necessary gross movements. Examples are: (1) arch length modification—which includes molar distalization—bilateral or unilateral without headgear; (2) arch width modification—functional mechanical movement (Class II corrections of jaw relationships, of tooth relationships); (3) bite opening—intrusion; (4) pseudo-Class III maxillary advancement; and (5) tooth position and arch form modifications.

Modular Orthodontics<sup>™</sup> is based on certain reliable principles, applied to 1st phase orthodontic movements. The principles have been clinically proven over many years. There is nothing new about the mechanical and orthodontic principles that are applied. What is new and unique is the way in which they have been engineered into a sophisticated, versatile system of a very few specially designed components, that can be used with any orthodontic technique.



# SON®

## KEY REASONS TO USE

### RM® 3D® FIRST PHASE FIXED REMOVABLE® MODULAR ORTHODONTICS™

- If you would like to offer patients comfortable, nearly invisible, rapid 1st phase treatment movement, before going on to 2nd phase treatment.
- If you would like to distally drive molars or buccal segments more rapidly, with greater acceptance by patients, without headgear.
- If you would like to intrude incisors rapidly, without high-pull headgear.
- If you would like to modify arch length more easily and more quickly, with little discomfort to the patient.
- If you would like to retract incisors more rapidly without headgear.
- If you would like to advance incisors rapidly.
- If you would like to use all of the mandibular arch management possibilities of the 3D® Lingual Arch and/or the removable 3D® Nance Holding Arch for the maxillary arch.
- If you would like to employ any of over 100 possibilities of the total Modular System.
- If you would like to take greater advantage of mixed dentition treatment with your fixed appliance.
- If you would like to incorporate the many benefits of functional treatment with your full-banded appliances.
- If you are involved with full functional treatment with removable appliances and would like to incorporate many benefits of Modular Orthodontics™.
- If you would like to consider a simplified 3D® Fixed/Removable® appliance as an alternative to several appliances.
- If you would like to translate a uni-directional appliance into a multi-directional appliance to enable you to better meet the requirements of your individual diagnosis and treatment plan.

By using Modular Orthodontics™ to maximize all multi-directional possibilities, it is possible to minimize damage to cortical bone and reduce root resorption. Efficient multi-directional 3D® maxillary arch treatment will minimize mandibular restriction—thus eliminating an important source of TMJ problems.

Most importantly, by using all multi-directional possibilities, teeth can be moved into areas where there is more positive readaptation of supporting tissues, thus improving the critical factor of stability and retention.

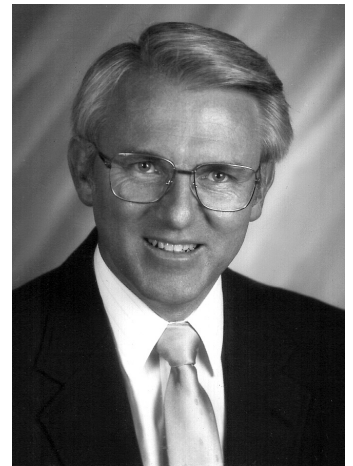
### ROBERT C. WILSON, D.D.S.

Dr. Robert C. Wilson brings to 3D® Modular Orthodontics™ a broad background of clinical experience and investigative examination of different orthodontic appliance systems. For many years, “comparative orthodontics” has been a primary interest of his.

Through his studies, he has become well aware of the strengths and problem areas of different appliances. Over a period of time, he and his father, Dr. William Wilson, have developed a series of interrelated Fixed / Removable Modules to simplify and improve First Phase treatment.

The Modules reflect orthodontic movement principles that have been used and proven for many years. What is unique is the way in which these principles have been incorporated into a simple Fixed/ Removable® System that can be used to supplement all existing orthodontic techniques.

As a lecturer, Dr. Wilson is widely known for the practical content, careful organization and distinctive clarity of his presentation. Dr. Wilson is a clinical instructor of the Edgewise Technique at the Tufts School of Dental Medicine. He is a much sought-after visiting lecturer, presenting comprehensive seminar/workshops at numerous dental schools around the world.



# 3D® LINGUAL TUBE

The key element of the system is a 3D® Lingual Tube welded to molar band/buccal tube assemblies. (Buccal tube is dependent upon the technique being used.)

The 3D® Lingual Tube is designed with a wide base, which provides a better attachment to the band, easy vertical insertion (plug-in/plug-out), and a vertical twin tube that provides stability for solid anchorage and better control of rotation, torquing and tipping. The vertical twin tube permits a friction-lock security of the arch wire, with no free-play or movement.

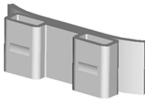
A new friction-lock mechanism has been developed to improve the fixation of lingual appliances. The new design improves the effectiveness of Fixed/Removable® lingual appliances by reducing breakage and dislodgement, thus increasing operator control.

The friction-lock attachment uses twin vertical posts located in the new lingual preformed arches. Fixation is improved by the addition of a horizontal groove in

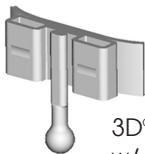
the posts with a corresponding ridge in the twin vertical lingual tube to achieve a “click-fit” as the posts are engaged in the lingual tubes.

Whatever the technique, order all 1st molar bands with 3D® Lingual Tubes with or without gingival hooks prewelded. Quick plug-in of 3D® modules permits a wide range of time-saving movements. Also, order buccal tubes prewelded.

The 3D® Lingual Tube is designed to accept the 3D® Lingual Arch, 3D® Lingual Sectional, 3D® Multi-Purpose Adapter, 3D® D.Y.S. Module, 3D® Quad Helix, 3D® Quad-Action Mandibular Appliance, 3D® Palatal Appliance, 3D® Multi-Action Palatal Appliance, 3D® Space Maintainer, and 3D® Wilson/Dillehay lingual arches.



3D® LINGUAL TUBE (A04315)



3D® LINGUAL TUBE W/ GINGIVAL HOOK (A04314)

# 3D® LINGUAL ARCH

Easy Vertical insertion (plug-in/plug-out), with a friction-lock produces maximum anchorage and permits multiple auxiliary functions not possible with horizontal insertion.



Twin vertical posts for positive molar control, torque and rotations that are geometrically predictable.

The diamond loop design of the 3D® Activator has dynamic three-dimensional force mechanics and multi-directional movement possibilities with predictable forces. It has a lingual offset to avoid mucosa compression. There are five angles in the Activator that can be adjusted slightly to give geometrically predictable force vectors. Force is dissipated 100%, resulting in a rapid controlled movement. The resilience of the Activator produces the force. Measurement is from mesial post to mesial post.

## LOWER FIRST MOLAR FUNCTIONS

- Expansion • Contraction • Rotation • Buccal Crown Tip • Lingual Crown Tip • Buccal Root Torque • Lingual Root Torque

## LOWER ARCH FUNCTIONS

- First Molar Distal Uprighting • Second Molar Distal Uprighting • Third Molar Distal Uprighting
- Intrusion Anti-tipback Control

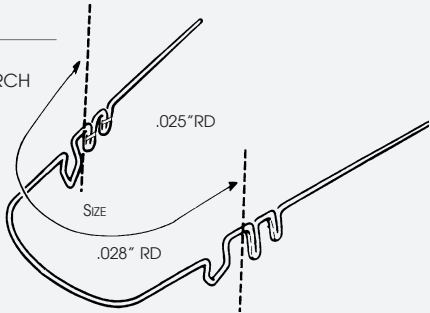
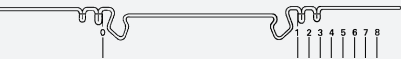
## OTHER FUNCTIONS:

- Lingual Arch Retainer • Nance Holding Arch
- Anterior Root Torque Assister • Arch Length Modifier
- Impacted Bicuspid Corrector, Unilateral
- Impacted Bicuspid Corrector, Bilateral
- Mandibular Anchorage for Rapid Molar Distalizing
- Holding Arch for Extraction Cases
- Holding Arch for Nonextraction Cases
- Incisor Advancement • Bilateral Expansion
- Unilateral Expansion

Size	Order#	Package Contains
1 - 51mm	A04300	3
2 - 54mm	A04301	3
3 - 57mm	A04302	3
4 - 60mm	A04303	3
5 - 63mm	A04304	3
6 - 66mm	A04305	3
7 - 69mm	A04306	3
8 - 72mm	A04307	3
9 - 75mm	A04318	3
10 - 78mm	A04319	3
Assorted	K00760	30
Lingual arch selector	I00505	1

3D® LINGUAL ARCH

LINGUAL ARCH SELECTOR



## 3D® MAXILLARY BIMETRIC DISTALIZING ARCH



The main purpose of the 3D® Maxillary Bimetric Distalizing Arch is to predictably distalize the upper molar without the use of a headgear. This is a multi-purpose unit, combining two sections. The anterior (.022") provides a balance

of formability, low deformation and resilience for multiple functions. The posterior (.040") section, with intermaxillary hooks, has Omega Adjustable Stops

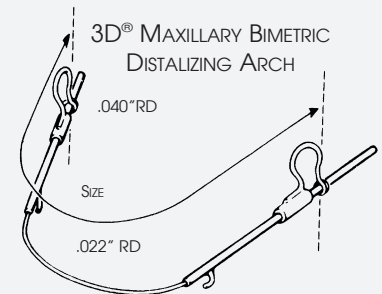
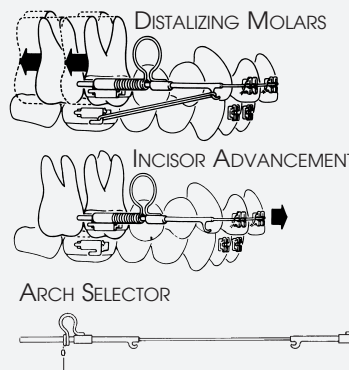
attached. This combination unit inserts into a .045" gingival headgear tube, without interfering with bracketing, and acts as both an arch length control and a multi-directional arch modifier, for controlled distal movement of the molar or incisor advancement when mandibular anchorage is properly used. Omega loops are fastened in position. Eliminates headgear for distalization. Measurement is from mesial of buccal tube to mesial of buccal tube.

### 3D® MAXILLARY BIMETRIC DISTALIZING ARCH

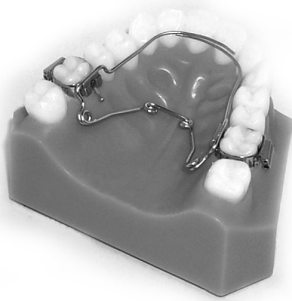
#### FUNCTIONS

- Rapid Molar Distalizing • Rapid Bicuspid Distalizing
- Palatal Expansion • Rapid Maxillary Anterior Retraction
- Rapid Anterior Intrusion • Rapid Anterior Advancement
- Arch Length Modification • Functional Arch Increase
- Release of Postlocked Mandible to allow Forward Growth

Size	Order#	Package Contains
1 - 80mm	<b>A04155</b>	3
2 - 83mm	<b>A04156</b>	3
3 - 86mm	<b>A04157</b>	3
4 - 89mm	<b>A04158</b>	3
5 - 92mm	<b>A04159</b>	3
6 - 95mm	<b>A04160</b>	3
7 - 98mm	<b>A04161</b>	3
Assorted	<b>K00678</b>	14
3D Maxillary Bimetric Distalizing Arch Selector	<b>I00507</b>	1



## 3D® QUAD HELIX



The function of the 3D® Quad helix is to expand the upper arch without the use of RPE (rapid palatal expansion). The 3D® Quad Helix appliance is made from resilient, heavier .038 Blue Elgiloy®. It has been designed with more efficient location of the distal helices and by resizing the palatal section.

Designed to be fixed/removable®, it is interchangeable for easy plug-in into the 3D® Lingual Tubes. It is easily adjusted, with flexible .029" extenders providing many treatment movements and functions.

### 3D® QUAD HELIX APPLIANCE FUNCTIONS

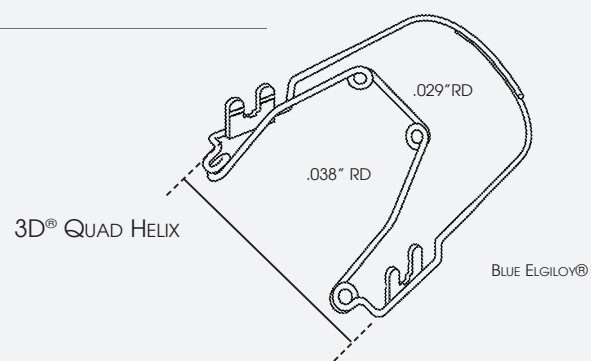
#### MOLAR FUNCTIONS

- Control • Bilateral Expansion • Unilateral Expansion
- Rotation • Buccal Crown Tip • Lingual Crown Tip
- Buccal Root Torque • Lingual Root Torque

#### OTHER FUNCTIONS

- Sutural Expansion • Unilateral Quadrant Expansion
- Bilateral Quadrant Expansion • Lateral Advancer
- Selective Cuspid or Bicuspid Expansion

Size	Order#	Package Contains
1 - 25mm	<b>A04308</b>	3
2 - 27mm	<b>A04309</b>	3
3 - 31mm	<b>A04310</b>	3
4 - 34mm	<b>A04311</b>	3
5 - 37mm	<b>A04312</b>	3
6 - 40mm	<b>A04313</b>	3
Assorted	<b>K00770</b>	6



## 3D<sup>®</sup> MULTI-ACTION MANDIBULAR APPLIANCE



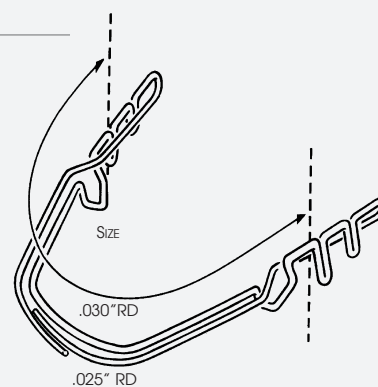
Designed to effectively expand the lower arch, it is used as an alternative to sagittal and expansion appliances. Designed to be fixed/removable<sup>®</sup> and is interchangeable for each plug-in into the 3D<sup>®</sup> Lingual Tubes. It is easily adjusted, with flexible .025" extenders providing many treatment movements and functions.

## 3D<sup>®</sup> MULTI-ACTION MANDIBULAR APPLIANCE FUNCTIONS

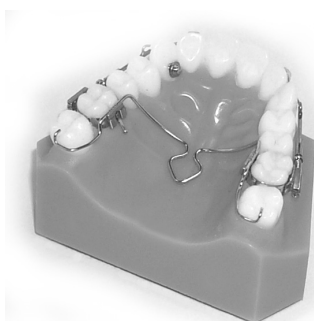
- Every Action of a Lower Quad Helix • Fixed/Removable<sup>®</sup> Alternative to Sagittal and Expansion Appliances • A Lingual Arch with Finger Spring Action, Requiring No Soldering • Incisor Advancement • Molar Distalizing • Bilateral Expansion • Unilateral Expansion • Incisor Retraction • Molar Distal Uprighting • Selective Expansion • Molar Expansion • Bicuspid Expansion • Second Bicuspid Space Regainer • Cuspid Expansion • Molar Rotation • Molar Bilateral Contraction • Molar Unilateral Contraction • Cuspid Rotation • Bicuspid Rotation • Molar Buccal Tip • Molar Lingual Tip • Molar Lingual Torque • Molar Buccal Torque

Size	Order#	Package Contains
1 - 51mm	<b>A04340</b>	3
2 - 54mm	<b>A04341</b>	3
3 - 57mm	<b>A04342</b>	3
4 - 60mm	<b>A04343</b>	3
Assorted	<b>K00795</b>	4

3D<sup>®</sup> MULTI-ACTION  
MANDIBULAR APPLIANCE



## 3D<sup>®</sup> PALATAL APPLIANCE



The 3D<sup>®</sup> Palatal Appliance is designed for quick adaptation and easy plug-in and removal from the 3D<sup>®</sup> Lingual Tubes. It is extremely responsive to adjustment in the activator of the palatal bridge.

Measurement is from molar to molar along vault of palate. Allow for a 3-4mm palate clearance (or your preference).

## 3D<sup>®</sup> PALATAL APPLIANCE FUNCTIONS

### Molar Functions:

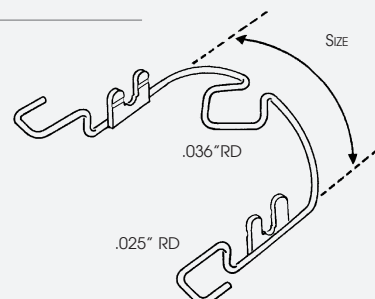
- Rotation • Contraction • Bilateral and Unilateral Expansion • Second Molar Intrusion • Buccal Crown Tip • Tipback Resistor • Lingual Crown Tip • Lingual Root Tip

### OTHER FUNCTIONS:

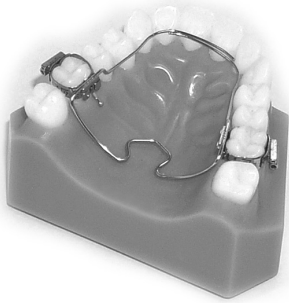
- Trans-Palatal Arch • High Pull Headgear Control • Palatal Cups Intrusion • Selective Cuspid and Bicuspid Expansion

Size	Order#	Package Contains
1 - 32mm	<b>A04330</b>	3
2 - 36mm	<b>A04331</b>	3
3 - 40mm	<b>A04332</b>	3
4 - 44mm	<b>A04333</b>	3
5 - 50mm	<b>A04334</b>	3
6 - 56mm	<b>A04335</b>	3
Assorted	<b>K00790</b>	6

3D<sup>®</sup> PALATAL APPLIANCE



## 3D® MULTI-ACTION PALATAL APPLIANCE



The 3D® Multi-Action Palatal Appliance is designed for quick adaptation and easy plug-in and removal from the 3D® Lingual Tubes. It is extremely responsive to adjustment in the activator or palatal bridge, with the added feature of .025" extenders to produce many new movements and functions not

available with earlier palatal arches. Measurement is from molar to molar along vault of palate. Allow a close adaptation to the palate.

## 3D® MULTI-ACTION PALATAL APPLIANCE FUNCTIONS

### MOLAR FUNCTIONS

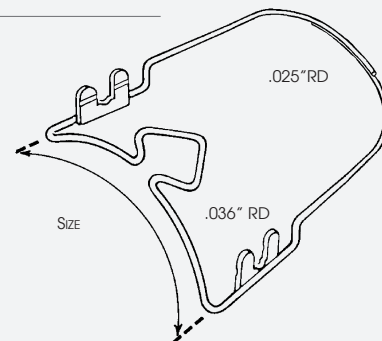
• Rotation • Contraction • Buccal Crown Tip • Lingual Crown Tip • Buccal Root Torque • Lingual Root Torque

### OTHER FUNCTIONS

• Trans-palatal Arch • Total Arch Expansion • Selective Cuspid and Bicuspid Expansion • Lateral Incisor Advancement • Rapid Palatal Expansion • Unilateral Expansion • Second Bicuspid Space Regainer • Second Bicuspid Buccal Uprighter

Size	Order#	Package Contains
1 - 32mm	<b>A04320</b>	3
2 - 36mm	<b>A04321</b>	3
3 - 40mm	<b>A04322</b>	3
4 - 44mm	<b>A04323</b>	3
5 - 50mm	<b>A04324</b>	3
6 - 56mm	<b>A04325</b>	3
Assorted	<b>K00780</b>	6

3D® MULTI-ACTION PALATAL APPLIANCE



## 3D® SECTIONAL



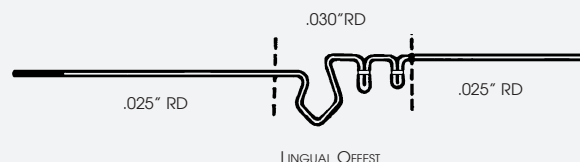
The 3D® Lingual Sectional is engineered to insert into the 3D® Lingual Tube. Upper or lower, right or left.

## 3D® SECTIONAL FUNCTIONS

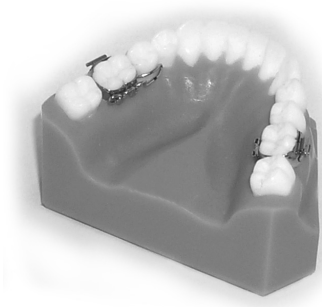
• Mesial Cross Elastic Hook • Second Molar Depressor • Second Molar Uprighter • Impacted Second Molar Distalizer • First Bicuspid Retractor • Second Molar Intruder • Second Bicuspid Space Opener • Second Bicuspid Buccal Uprighter • Additional Individualized Applications • Bicuspid Rotator • Simple Expander • Stationary Expander • Posterior Anchorage • Cantilever Resistor • Impacted Cuspid Control • Space Maintainer • Space Regainer

Size	Order#	Package Contains
MAX Right/MAN Left	<b>A04345</b>	5
MAX Left/MAN Right	<b>A04346</b>	5

3D® SECTIONAL



# 3D® MULTI-PURPOSE ADAPTER



Another in the family of Modular components, designed for quick adaptation for multiple treatment uses, designed to plug into the 3D® Lingual Tubes on upper or lower molars, right or left. The extender is marked for programmed adjustment, converting the unit to many different uses.

## 3D® MULTI-PURPOSE ADAPTER FUNCTIONS

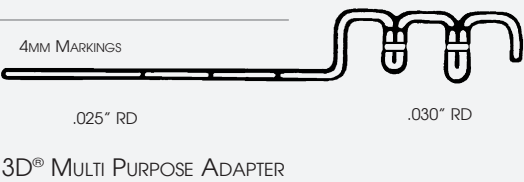
### MAXILLARY AND MANDIBULAR

- Molar Tipback Resistor • Lateral Advancer • Buccal Expander • Second Bicuspid Uprighter • Second Molar Expander

### OTHER FUNCTIONS

- Mesial and Distal Cross Elastic Hook

Size	Order#	Package Contains
MAX Right/MAN Left	<b>A04347</b>	5
MAX Left/MAN Right	<b>A04348</b>	5



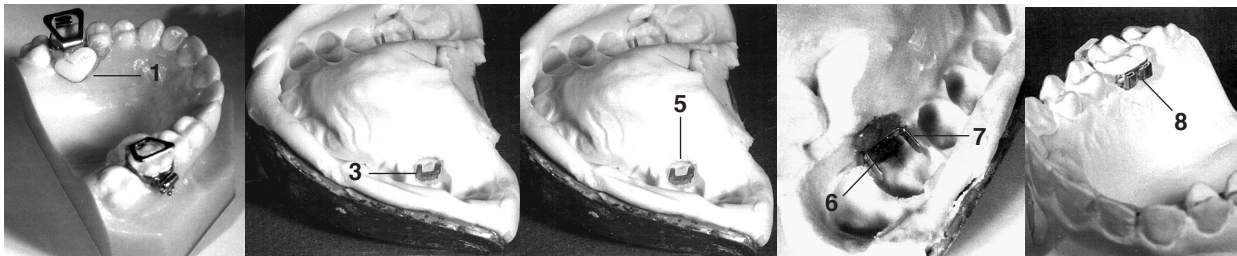
## 3D® TRANSFER SYSTEM

- Reduces time-consuming laboratory related procedures.
- Laboratory impression can be taken during active treatment. (No need to stop treatment.)
- Laboratory can produce very accurate Fixed/Removable® appliances.
- A time/cost saver. Excellent for in-practice and outside 3D® laboratory appliance fabrication procedures.

### OFFICE PROCEDURES

RMO® TruForm Molar Bands, prewelded with buccal tubes and 3D® Lingual Tubes have been cemented in place on the patient.

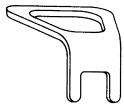
1. The 3D® Lingual Tubes are covered with wax.
2. Insert the 3D® Transfer Inserts into the 3D® Lingual Tubes. The posts are designed as loose-positioning posts for the 3D® Transfer System, and not as the friction-fit posts in the 3D® appliances.
3. Take a soft colloid impression and remove after setting. Note how the insert posts are protruding through the impression.
4. The impression is now sent to the laboratory for 3D® appliance fabrication.



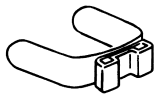
### LABORATORY PROCEDURES

Doctor sends in an impression with 3D® Transfer Inserts already in position.

5. With scalpel, remove 3mm of colloid, lingual to the posts, for seating clearance.
6. Seat the 3D® Transfer Lingual Tubes on the protruding posts. If necessary, contour the retaining tabs of the 3D® Transfer Tube to insure retention in the stone model.
7. Add sticky wax over the 3D® Lingual Tubes and fill the space between the tubes and colloid.
8. Pour with stone and separate. The 3D® Transfer Lingual Tubes will be accurately positioned and securely attached to the stone model.
9. Proceed to fabricate the 3D® appliance on the stone model.
10. With knife, remove the 3D® Transfer Inserts from the colloid. Also, remove the 3D® Transfer Lingual Tubes from the stone formed for future reuse or retain in stone model for future 3D® modular components.
11. For commercial laboratories, send the finished 3D® appliance to the doctor on the stone model for reference. If the doctor does not wish to retain the model, remove the 3D® Transfer Lingual Tube for future reuse.



3D® TRANSFER INSERT (A04198)



3D® TRANSFER LINGUAL TUBE (A04199)

## 3D® FIXED/REMOVABLE® ACCESSORIES

### 3D® SPACE MAINTAINER

Offers easy vertical placement and removal. Is a second bicuspid space regainer and is used temporarily as a fixed/removable® functional space maintainer/bridge

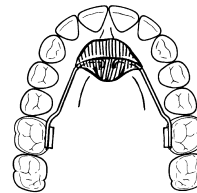


Size	Order#	Package Contains
MAX right / MAN left	<b>C00131</b>	5
MAX left / MAN right	<b>C00132</b>	5

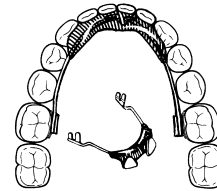
### 3D® D.Y.S. MODULE

- The 3D® D.Y.S. (Do-It-Yourself) Module (Wilson®) rounds out the selection of 3D® components. It provides a basic module from which a variety of individual upper and lower fixed/removables® can be fabricated. One unit is for upper right and lower left. The other unit is for upper left and lower right. The 3D® D.Y.S. Module is available in .036" and .040" Tru-Chrome® Stainless Steel. All wire sizes are laser welded to the 3D® Posts, which plug into the 3D® Lingual Tubes. The many creative ways this 3D® Module can be used in individualized Fixed/Removable® appliance construction are limited only by one's imagination.

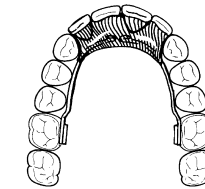
- Easy vertical placement
- Universal lingual attachment
- Multiple Fixed/Removable® laboratory fabricated appliances to suit numerous individual needs.



NANCE HOLDING ARCH

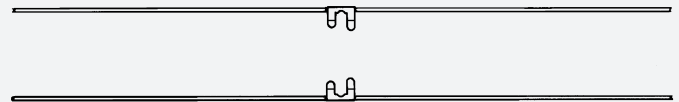


TEMPORARY PROSTHESIS



FUNCTIONAL INCLINE PLANE

Size	Wire Size	Order#	Package Contains
MAX right / MAN left	.036	<b>A04350</b>	5
MAX left / MAN right	.036	<b>A04351</b>	5
MAX right / MAN left	.040	<b>A04352</b>	5
MAX left / MAN right	.040	<b>A04353</b>	5



### OMEGA ADJUSTABLE STOP



Order#	Package Contains
<b>A04124</b>	10

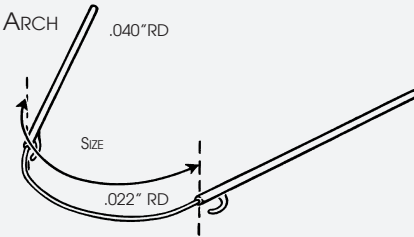
## 3D<sup>®</sup> FIXED/REMOVABLE<sup>®</sup> ACCESSORIES

### 3D<sup>®</sup> BIMETRIC ARCH (BASIC)

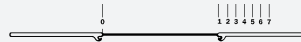
- For making a 3D<sup>®</sup> Maxillary Bimetric Distalizing Arch
- Same as 3D<sup>®</sup> Maxillary Bimetric Distalizing Arch plus special applications in unilateral distalization.

Size	Order#	Package Contains
1 - 40mm	<b>A04127</b>	3
2 - 43mm	<b>A04128</b>	3
3 - 46mm	<b>A04129</b>	3
4 - 49mm	<b>A04150</b>	3
5 - 52mm	<b>A04151</b>	3
6 - 55mm	<b>A04152</b>	3
7 - 58mm	<b>A04153</b>	3
8 - 58mm	<b>A04154</b>	3
with extended section (6mm) each side		
Assorted	<b>K00688</b>	<b>15</b>
<b>3D<sup>®</sup> Bimetric Arch Selector</b>	<b>i00506</b>	<b>1</b>

3D<sup>®</sup> BIMETRIC ARCH  
(BASIC)



3D<sup>®</sup> BIMETRIC ARCH SELECTOR



### 5MM COIL SPRINGS

Open Elgiloy<sup>®</sup> coil spring. Does not require heat treatment.

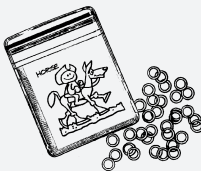


Size	Order#	Package Contains
.010" x .045" x 5mm	<b>F00125</b>	50

Open Orthonol<sup>®</sup> Coil Spring, constant force gradient of nickel titanium when distalizing (Schedule II elastics only).

Size	Order#	Package Contains
.012" x .045" x 5mm	<b>F00126</b>	10

### ENERGY PAK<sup>™</sup> ELASTICS



#### Non-Extraction Cases

Size	Order#	Package Contains
5/16" 2 oz.	<b>J01103</b>	2,000
5/16" 3 oz.	<b>J01113</b>	2,000

#### Extraction Cases

Size	Order#	Package Contains
1/4" 2 oz.	<b>J01102</b>	2,000
1/4" 3 oz.	<b>J01112</b>	2,000

## 3D® WILSON/DILLEHAY LINGUAL ARCH VARIATIONS

### 3D® WILSON/DILLEHAY LINGUAL ARCH (STRAIGHT LENGTH)

- .036" Diameter Blue Elgiloy® (not heat treated)
- Laser welded posts
- Step down bends for proper positioning at cingulum

Size	Order#	Package Contains
3 - 57mm	<b>A04265</b>	5
4 - 60mm	<b>A04266</b>	5
5 - 63mm	<b>A04267</b>	5
6 - 66mm	<b>A04268</b>	5
7 - 69mm	<b>A04269</b>	5
8 - 72mm	<b>A04270</b>	5
9 - 75mm	<b>A04271</b>	5
10 - 78mm	<b>A04272</b>	5



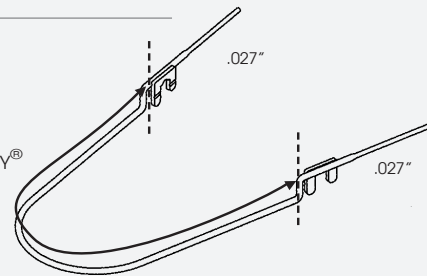
.036" RD BLUE ELGILOY®

### 3D® WILSON/DILLEHAY PREFORMED LINGUAL ARCH (WITH DISTAL EXTENSION)

- .036" Diameter Blue Elgiloy® (not heat treated)
- Easy vertical placement and removal
- Distal extension for molar uprighting

Size	Order#	Package Contains
3 - 57mm	<b>A04278</b>	3
4 - 60mm	<b>A04279</b>	3
5 - 63mm	<b>A04280</b>	3
6 - 66mm	<b>A04281</b>	3
7 - 69mm	<b>A04282</b>	3
8 - 72mm	<b>A04283</b>	3
9 - 75mm	<b>A04284</b>	3
10 - 78mm	<b>A04285</b>	3

.036" RD BLUE ELGILOY®

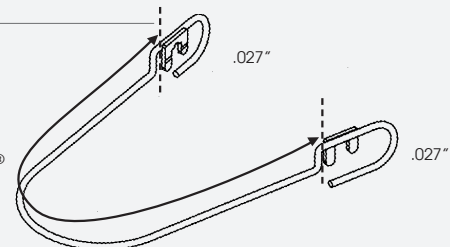


### 3D® WILSON/DILLEHAY PREFORMED LINGUAL ARCH (WITH DISTAL BEND)

- .036" Diameter Blue Elgiloy® (not heat treated)
- Easy vertical placement and removal
- Holding arch for extraction and non-extraction cases
- Lower molar rotation, torquing and tipping

Size	Order#	Package Contains
3 - 57mm	<b>A04252</b>	3
4 - 60mm	<b>A04253</b>	3
5 - 63mm	<b>A04254</b>	3
6 - 66mm	<b>A04255</b>	3
7 - 69mm	<b>A04256</b>	3
8 - 72mm	<b>A04257</b>	3
9 - 75mm	<b>A04258</b>	3
10 - 78mm	<b>A04259</b>	3

.036" RD BLUE ELGILOY®



## RECOMMENDED INSTRUMENTS

THE FOLLOWING RMO® INSTRUMENTS ARE RECOMMENDED FOR USE WITH THE 3D® COMPONENTS



### HOW PLIER, STRAIGHT

- For carrying all 3D® appliances to the arch.
- For final seating of precision-solid posts of the 3D® Action appliances into the 3D® Lingual Tubes.
- For rotating, tipping and torquing of the 3D® Lingual Arch and the 3D® Multi-Action Mandibular appliance.

Order #

Pkg. Contains

**i00110**

1



### ANGLE WIRE BENDING PLIER

- For adjusting and activating 3D® appliances. (Optional Plier)

**i00139**

1



### HEAVY WIRE CUTTER

- To crimp Omega stop and Tandem Yoke onto arch.
- For cutting excess wire from appliance.

**i00265**

1



### BAND PUSHER/SCALER

- For removing 3D® appliances from 3D® Lingual Tubes.

**i00358**

1



### LOOP PLIER (TWEED)

- For adjusting the expansion or contraction of the Omega loop on the 3D® Maxillary Bimetric Distalizing Arch. Use the tip to draw Omega Stop away from mucosa prior to adjustment. Option: Loop Forming Plier (Optical Type)

**i00548w**

1



### LIGHT WIRE PLIER

- For adjusting and activating 3D® appliances.
- For adjusting the .025" extenders on all 3D® appliances.

**i00140**

1



### 3 JAW PLIER

- For adjusting wire-formed 3D® posts for proper alignment in the 3D® Lingual Tube.
- For adjusting the .038" wire in the 3D® Quad Helix.
- For adjusting the 3D® Activator of the two 3D® Palatal appliances.

**i00200**

1



### LINGUAL ARCH FORMING PLIER (POST ADAPTATION)

- For holding the 3D® appliances with precision-solid posts during fabrication.
- For rotation and torquing of 3D® Quad Helix and the two 3D® Palatal appliances.

**i00420**

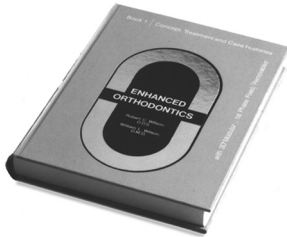
1

## 3D® FIXED/REMOVABLE® BOOKS/KITS

Without changing your chosen technique, RMO® cosmetic 3D® 1st Phase Fixed/Removable® Modular Orthodontics™ (Wilson®) can help your practice target treatment planning decisions to reduce treatment time and cost and improve patient comfort, cooperation and practice building.

All principles have been proven through successful usage for many decades. What is new and unique is the way the principles were engineered by Dr. William Wilson and Dr. Robert Wilson into an easy-to-

use plug-in, plug-out system of 12 modular options. Over 100 different 1st Phase treatment movements can be achieved with minimum appliances and maximum patient comfort and satisfaction. Like most things found in the dental profession, successful use depends upon understanding and development of skills. The following are educational materials and services. Basic Textbooks: By Dr. Robert and Dr. William Wilson.



### BOOK 1 - ENHANCED ORTHODONTICS

This book reviews basic concepts and describes how the different modules affect 100 different First Phase treatment movements. Twenty case histories are described and documented. 435 pages, 700 illustrations. **(P00040)**



### BOOK 2 - ENHANCED ORTHODONTICS: 3D MULTI-DIRECTIONAL FORCE SYSTEMS FABRICATION

This laboratory manual illustrates and describes step-by-step how the 3D Modules are adapted and used. It is a "How-To" book on making modular appliances. **(P00042)**



### INTRODUCTORY KIT WILSON® 3D® TOOLBOX

#### PACKAGE CONTAINS:

#### 12 Arches

*Lingual Arch, sizes 4, 5, 6 (1 each)*

*Maxillary Bimetric Distalizing Arch, sizes 3, 4, 5 (1 each)*

*Quad Helix, sizes 3, 4, 5 (1 each)*

*Multi Action Palatal Arch, sizes 3, 4, 5 (1 each)*

#### 2 Arch Selectors

*Lingual Arch Selector*

*Maxillary Bimetric Distalizing Arch Selector*

Elgiloy Coil Springs (10)

Orthonol Coil Springs (10)

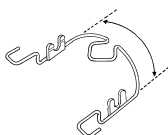
Lingual Tubes (20)

**(K00850)**

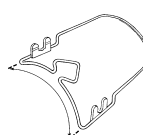
# 3D® FIXED/REMOVABLE® TREATMENT OPTIONS

## MAXILLARY

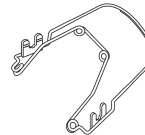
3D PALATAL APPLIANCE



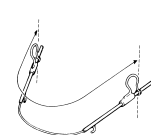
3D MULTI-ACTION  
PALATAL APPLIANCE



3D QUAD HELIX



3D MAXILLARY BIMETRIC  
DISTALIZING ARCH



### MISCELLANEOUS ARCH FUNCTIONS

Fixed/Removable Appliance	•	•	•	
Anchorage Appliance				
Trans-Palatal Appliance	•	•	•	
Nance Holding Arch				
Retainer Appliance		•	•	
Space Regainer Appliance				

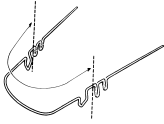
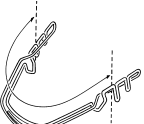



### ARCH LENGTH MODIFICATIONS

Expansion, Bilateral or Unilateral	•	•	•	•
Contraction, Bilateral or Unilateral	•	•	•	•
Advancing		•	•	•
Retraction		•	•	•

### UNRAVELING

<b>Molars</b>				
Expansion, Bilateral or Unilateral	•	•	•	•
Contraction, Bilateral or Unilateral	•	•	•	•
Distalizing				•
Anchorage				
Uprighting	•	•	•	
Tipping	•	•	•	
Rotation	•	•	•	•
Torquing	•	•	•	
Palatal Cusp Intrusion	•			
Cross Elastics				
<b>Bicuspid</b>				
Expansion		•	•	
Contraction		•	•	
Distalizing		•	•	•
Uprighting		•	•	
Tipping		•	•	
Rotation		•	•	
Impaction				
Space Maintaining				
<b>Cuspid</b>				
Expansion		•	•	•
Contraction		•	•	•
Uprighting				
Rotation				
Impaction		•	•	
<b>Centrals and Laterals</b>				
Advancement		•	•	•
Contraction		•	•	•

# 3D® FIXED/REMOVABLE® TREATMENT OPTIONS

	MANDIBULAR		MAXILLARY and/or MANDIBULAR		
	3D LINGUAL ARCH	3D MULTI-ACTION MANDIBULAR APPLIANCE	3D MULTI-PURPOSE ADAPTER	3D LINGUAL SECTIONAL	3D SPACE MAINTAINER
					
<b>MISCELLANEOUS ARCH FUNCTIONS</b>					
Fixed/Removable Appliance	•	•	•	•	•
Anchorage Appliance	•	•			
Trans-Palatal Appliance					
Nance Holding Arch	•				
Retainer Appliance	•	•			
Space Regainer Appliance	•	•	•	•	•
<b>ARCH LENGTH MODIFICATIONS</b>					
Expansion, Bilateral or Unilateral	•	•			
Contraction, Bilateral or Unilateral	•	•			
Advancing	•	•			
Retraction	•	•			
<b>UNRAVELING</b>					
<b>Molars</b>					
Expansion, Bilateral or Unilateral	•	•			
Contraction, Bilateral or Unilateral	•	•			
Distalizing	•	•			
Anchorage	•	•	•	•	
Uprighting	•	•	•	•	•
Tipping	•	•	•	•	•
Rotation	•	•			
Torquing	•	•			
Palatal Cusp Intrusion					
Cross Elastics			•	•	•
<b>Bicuspid</b>					
Expansion	•	•	•	•	
Contraction	•	•	•	•	
Distalizing	•	•	•	•	
Uprighting	•	•	•	•	
Tipping	•	•	•	•	
Rotation	•	•	•	•	
Impaction	•	•	•	•	
Space Maintaining			•	•	•
<b>Cuspid</b>					
Expansion	•	•			
Contraction	•	•			
Uprighting					
Rotation					
Impaction				•	
<b>Centrals and Laterals</b>					
Advancement	•	•			
Contraction	•	•			

## USER'S GUIDE

The RM®3D® 1st Phase Fixed/Removable® Modular Orthodontics™ (Wilson®) system is not a technique. It is a selection of modules which are used with almost any appliance technique to reduce treatment time and costs while controlling counter-moments and producing unequalled results.

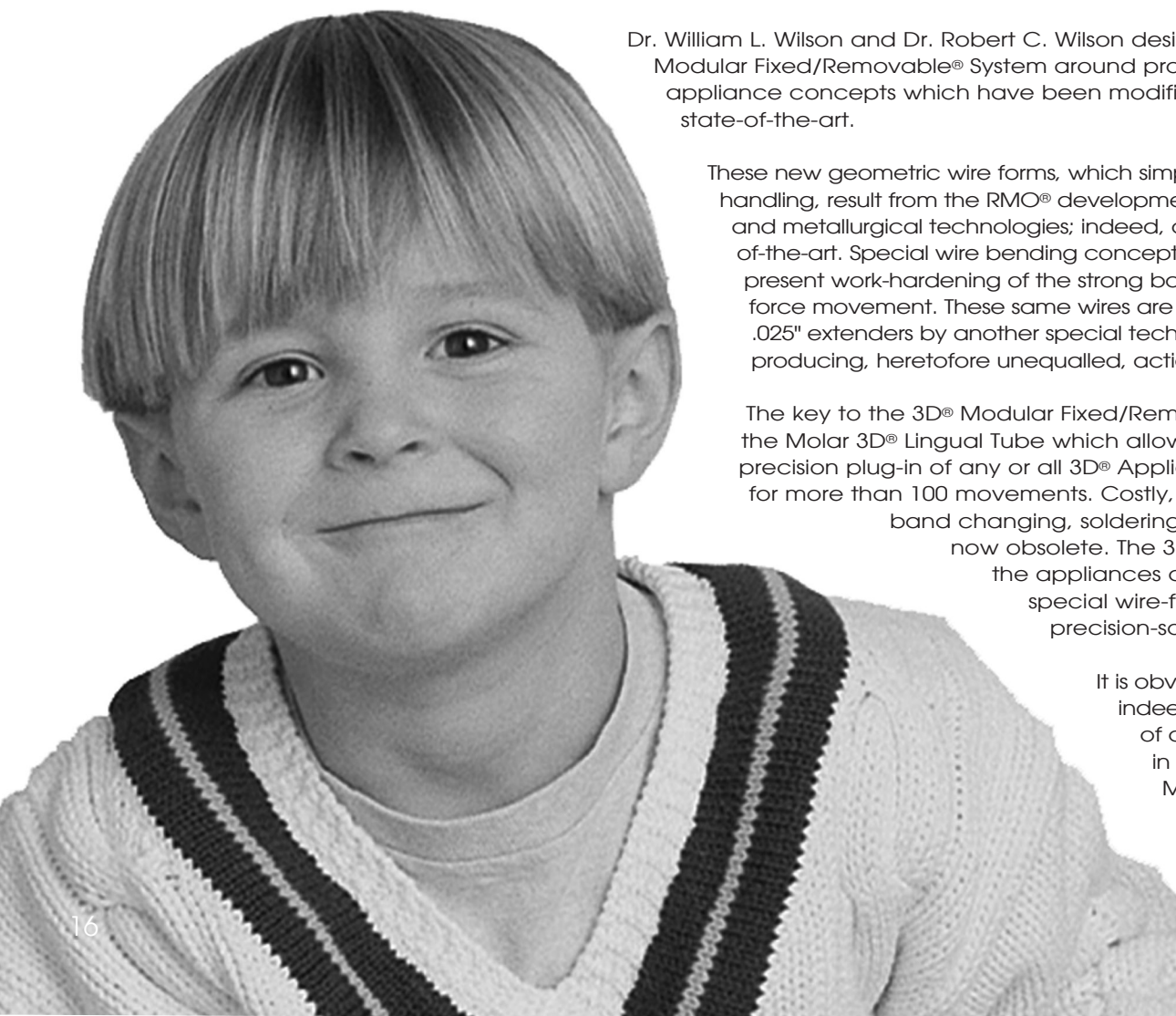
The purpose of this User's Guide is to assure the attainment of treatment plans and schedules with quality results. This guide will address particular questions that arise during treatment with the 3D® components. Specific procedures are suggested in several situations to facilitate trouble-free use of the system. We believe that these will be of special interest to both the experienced orthodontist and the new 3D® user.

Dr. William L. Wilson and Dr. Robert C. Wilson designed the 3D® Modular Fixed/Removable® System around proven, time-tested appliance concepts which have been modified to an advanced state-of-the-art.

These new geometric wire forms, which simplify orthodontic handling, result from the RMO® development of new engineering and metallurgical technologies; indeed, an advanced state-of-the-art. Special wire bending concepts reduce the ever-present work-hardening of the strong base wires used for high force movement. These same wires are reduced in size to .025" extenders by another special technology for flexibility-producing, heretofore unequalled, action.

The key to the 3D® Modular Fixed/Removable® System is the Molar 3D® Lingual Tube which allows interchangeable precision plug-in of any or all 3D® Appliances of various sizes for more than 100 movements. Costly, time-consuming band changing, soldering and resoldering are now obsolete. The 3D® posts used on the appliances are of two types—a special wire-formed type and a precision-solid type.

It is obvious that RMO is indeed at the cutting edge of advanced technology in producing these 3D® Modular Appliances, with unexcelled strength, flexibility and action.



# SON®

Yet, there can be isolated breakage. RMO® is well-known for its quality control and will continue to monitor any defect in the manufacturing process. Successful treatment should be free of interruptions with appliance breakage. The common cause of breakage lies in the selection of the wire bending plier and the manner of bending wires. The following pages have several important suggestions.

Another source of breakage relates to the patient. 3D® appliances are designed for light forces for comfort and have a high patient acceptance. They withstand normal use, but can be abused. No specialty of medicine or dentistry is free of the need for patient cooperation, whether it be headgear wearing or wearing of elastics. RMO® calls your attention to a Modified Elastic Load Reduction principle to further enhance distalizing without headgear.

## SUMMARY

This User's Guide will address particular wire handling questions that arise during treatment with the 3D® components. The wire handling that is required to fabricate the 3D® components to their precise specifications tends to subject them to a significant amount of stress during manufacture. Additional stress is placed on the arch wires as the appliances are adjusted for customized adaptation for each patient. A third set of stresses occurs intra-orally with mastication and tongue play. With each successive stress placed on the arch wires, they become increasingly work-hardened. Arch wires in such a work-hardened condition should be handled with special care in order to prevent their distortion or breakage. The purpose of this User's Guide is to recommend specific procedures to be followed when using the 3D® components in order to avoid appliance distortion or breakage.

## ANSWERS TO QUESTIONS ABOUT THE WILSON® SYSTEM

### WHICH INSTRUMENTS SHOULD BE USED WITH THE 3D® MODULAR COMPONENTS?

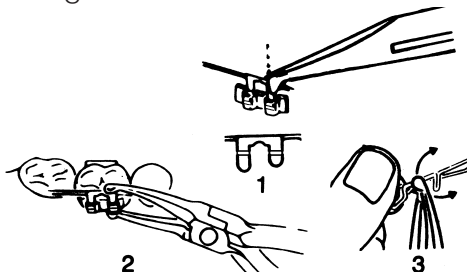
The following RMO® instruments are recommended for use with the 3D® components, in order to obtain the maximum treatment response and to avoid any unnecessary distortion or breakage of the appliances.



HOW PLIER (i00110 or i00111)

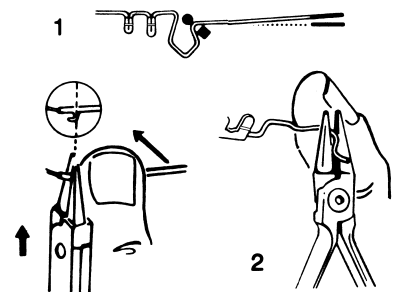
- For carrying all 3D® Appliances to the arch.
- For final seating of precision-solid posts of the 3D® Appliances in to the 3D® Lingual Tube
- For rotating, tipping, and torquing of the 3D® Lingual Arch and 3D® Quad-Action

Mandibular Appliance



LIGHT WIRE PLIER (i00140)

- For adjusting and activating 3D® Appliances
- For adjusting the .025" extenders on all 3D® Appliances



## WHICH INSTRUMENTS SHOULD BE USED WITH THE 3D<sup>®</sup> MODULAR COMPONENTS?

The following RMO instruments are recommended for use with the 3D<sup>®</sup> components, in order to obtain the maximum treatment response and to avoid any unnecessary distortion or breakage of the appliances.



ANGLE WIRE BENDING PLIER (i00139)

- For adjusting and activating 3D<sup>®</sup> Appliances (Optional Plier).



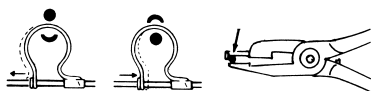
BAND PUSHER/SCALER (i00358)

- For removing 3D<sup>®</sup> Appliances from 3D<sup>®</sup> Lingual Tubes.



LOOP PLIER (TWEED)  
(i00548W or i00351 Optical Plier)

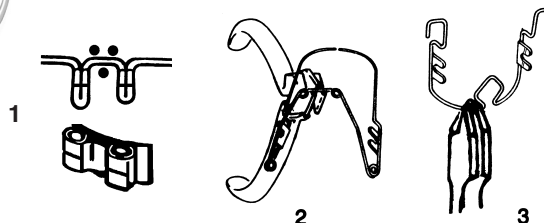
- For adjusting the expansion or contraction of the omega loop on the 3D<sup>®</sup> Maxillary Bimetric Distalizing Arch.
- Use tip to draw Omega Stop away from mucosa prior to the adjustment.



3-JAW PLIER (i00200)

- For tightening wire-formed 3D<sup>®</sup> posts for any loose fit.
- For adjusting the .038" wire in the 3D<sup>®</sup> Quad Helix Appliance.
- For adjusting the 3D<sup>®</sup> Activator in the two 3D<sup>®</sup> Palatal Appliances.

Note: Not to be used with .025" wire



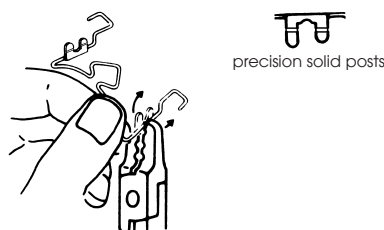
HEAVY WIRE CUTTER (i00265)

- To crimp Omega Stop and Tandem Yoke onto arch.
- For cutting excess wire from appliances.



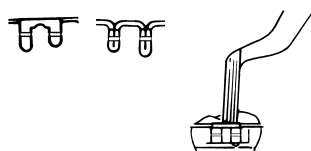
LINGUAL ARCH FORMING PLIER (i00420)

- For holding the 3D<sup>®</sup> Appliances with precision -solid posts during fabrication
- For rotation and torquing of 3D<sup>®</sup> Quad Helix and the two 3D<sup>®</sup> Palatal Appliances.



BAND PUSHER (i00300)

- For seating of 3D<sup>®</sup> Posts in 3D<sup>®</sup> Lingual Tubes



## WHAT SHOULD I KNOW ABOUT THE 3D® LINGUAL TUBE?

THE 3D® LINGUAL TUBE IS THE KEY ELEMENT OF THE MODULAR ORTHODONTICS™ (WILSON®) SYSTEM.

The twin tubes provide a quick, secure plug-in for all 3D® Modular Components which, in turn, can be converted to other appliance functions, satisfying over 100 lingual needs.



RMO® molar bands can be furnished with RMO® buccal tubes and 3D® Lingual Tubes, with or without special gingival hooks. The hook increases your options at any time during treatment. For instance, hooks can be used for cross-bite corrections and they will correct even the most severe cross-bites when used with any of the 3D® lingual expansion appliances. They can also be adjusted as mesial elastic hooks for intra-arch elastics.

The 3D® Lingual Tube, when prewelded on each first molar band, replaces the necessity for any other soldered or welded lingual attachments, brackets, hooks or buttons.



3-PRONG PLIER

### FRICTION LOCK DESIGN

The 3D® Lingual Tube is designed with a wide base which provides stability for solid anchorage and better control of rotation, torquing and tipping. The twin tube permits a friction-lock security of the appliance, with no free-play or movement and also eliminates the necessity for any extension lock. Fits all first molars, uppers, and lowers.

### CAUTION...FOR WIRE FORMED POST ONLY

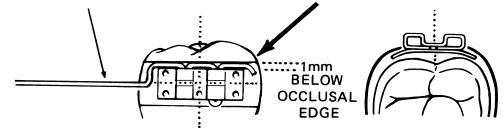
As with all chairside orthodontic treatment, care should be exercised to eliminate the possibility of a patient aspirating a 3D® Appliance. At each patient visit, check to assure that the friction lock-fit of the 3D® posts into the 3D® Lingual Tube is secure. Loss of friction is very rare, but, if detected, is quickly restored with a slight mesial/distal tipping adjustment to the posts. Use a 3-jaw plier, i00200 (RMO®), as shown.

## WHERE SHOULD THE 3D® LINGUAL TUBES BE WELDED?

The 3D® Multi-Purpose Adapter makes a handy holder for tube during spot welding.

### IMPORTANT:

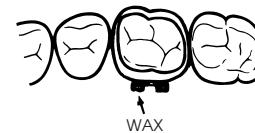
3D® Appliance must set level with occlusal edge of band.



3D® Lingual Tubes are spot welded in 5 places, positioned midline of the band and 1mm below the occlusal edge.

The placing of the 3D® Lingual Tube on the band is critical. Ample space should always be allowed so the 3D® Appliance will not occlude with the opposing tooth. If the 3D® Lingual Tube is welded too high, the 3D® Appliance, when seated in the tube, will position the wire too high, and come in contact with the occlusion. As you know, this will cause pressure, a very nervous patient, and possible loss of tooth control if not corrected.

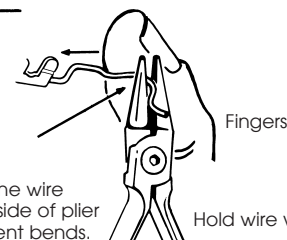
To assure consistency of welding position, and quality welds, we highly recommend that users purchase RMO®'s prefabricated molar bands with prewelded 3D® Lingual Tubes and the RMO® buccal tube of their choice.



Note: When molar bands with 3D® Lingual Tubes are initially seated on the tooth, the twin tubes should be filled with wax. Wax prevents cement from entering the tube openings, which will allow easier insertion of the 3D® posts and help eliminate post distortion and breakage.

## HOW SHOULD ADJUSTMENTS BE MADE IN THE 3D® COMPONENTS?

Wires should always be bent or formed with the fingers, using pliers to hold the wires as a vise. Hold wire firmly, but not too tightly, applying only enough pressure to hold wire securely without slipping. Avoid nicking the wire, by using the round tip of the plier. Nicking will occur if the wire is bent against the sharp edge of the plier beak. All bending should be done gradually, or the wire may become work-hardened and brittle. With 3D® wire adjustments, minimal adjustments produce the best action. Excessive adjustments, requiring unbending and rebending, can be abusive to any wire and breakage can result. The 3D® components will work-harden with use, just as any other wire applications.



With fingers, form the wire around the round side of plier with short intermittent bends.

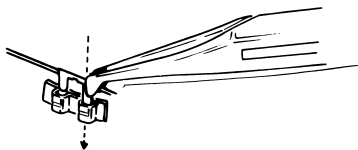
Hold wire with plier as a vise

## WHAT IS THE PROPER WAY TO SEAT 3D® POSTS AND REMOVE APPLIANCES?

Proper seating of the 3D® posts is necessary to assure that the appliances retain their feature of being both fixed and removable. The ideal fit is one that is snug so that the appliance remains in the 3D® Lingual Tube, yet removable, so the appliance can be adjusted or interchanged with another 3D® component.

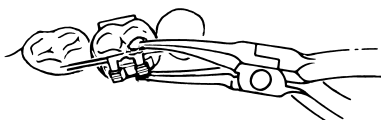
### SEATING THE 3D® APPLIANCE

The steps illustrated below should be followed when seating and removing the precision-solid post of the 3D® Palatal Appliance, 3D® Multi-Action Palatal Appliance, the 3D® Quad Helix and the D.Y.S. Module.



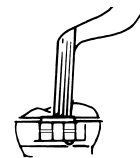
1. THE HOW PLIER IS USED TO CARRY THE APPLIANCE TO THE ARCH 3D® posts should always be aligned with the twin tubes during insertion and seating of the 3D® appliance. The longer post is always placed first in the twin tubes and is always mesial on the tooth.

2. THE APPLIANCE IS SEATED FURTHER WITH A HOW PLIER



Note: Place one tip of the How Plier under the mesial tube and one tip over the appliance at the mesial post. Squeeze the tips until the appliance is seated half-way. Remove appliance. Reinsert appliance and repeat squeezing to full seating. This conditions the tube for future easy insertions.

3. FINAL SEAT WITH AN i00300 BAND PUSHER



### REMOVING THE 3D® APPLIANCE

1. SCALER IS INSERTED BETWEEN POSTS WITH TIP OF SCALER RESTING ON EDGE OF BAND

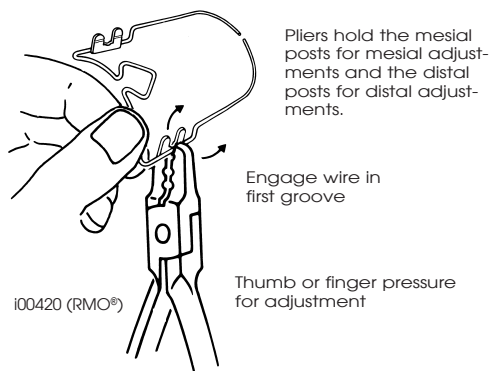


2. QUICK OCCLUSAL ROTATION OF SCALER LIFTS POSTS OUT OF TUBE



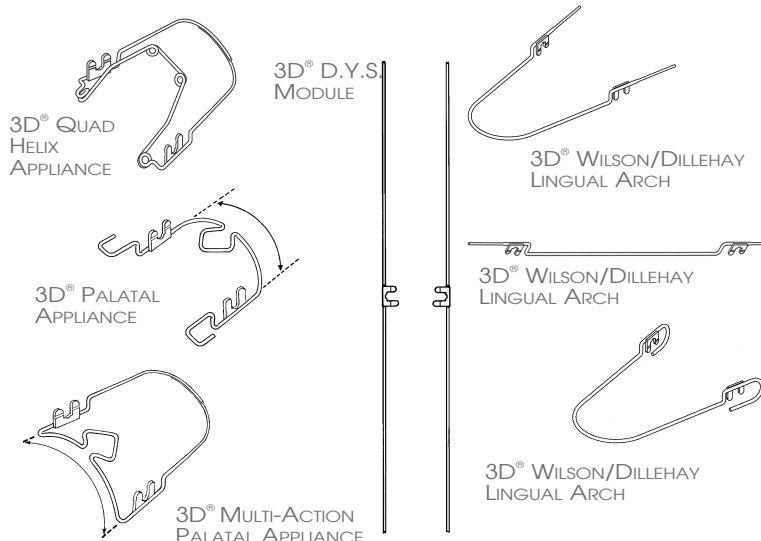
## HOW SHOULD ADJUSTMENTS BE MADE IN THE 3D® POSTS?

Lingual Arch Forming Plier (i00420) used on 3D® Appliances with precision-solid posts.



It is recommended that an i00420 plier be used for all leveling, torque and rotation adjustments made to the 3D® Appliances with precision-solid posts. Engage the appliance using the outermost grooves of the plier. Bends should be made using thumb or finger pressure while holding the appliance as shown in the illustration.

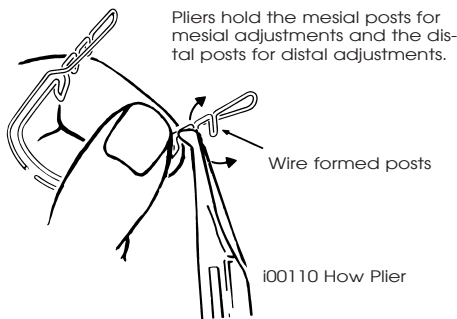
Note: Use the i00420 plier only on the the following Modular Orthodontic™ Wilson appliances in order to eliminate post distortion or breakage.



## HOW SHOULD THE ARCH WIRE AND EXTENDERS BE ADJUSTED?

HOW PLIER (i00110) (RMO®) used on 3D® Appliances with wire-formed posts.

Adjustment of appliances with wire-formed posts requires a How plier to hold the post nearest any bending. This assures that there will be no opening of the post which could cause breakage and no distortion of the parallel relationship (see illustration below). At the same time this assures positive insertion without difficulty.

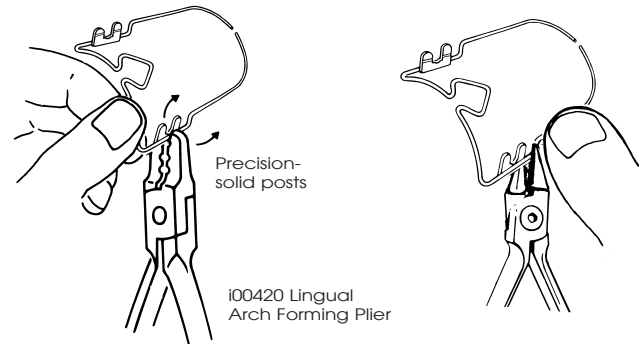


LIGHT WIRE PLIER (i00140) used for .025" extender adjustments.

Similarly, adjustment of .025" extenders requires holding the wire proximal to the nearest post with a light wire plier while the wire is bent with finger pressure.

LINGUAL ARCH FORMING PLIER (i00420) (RMO®) used on 3D® Appliances with precision-solid posts.

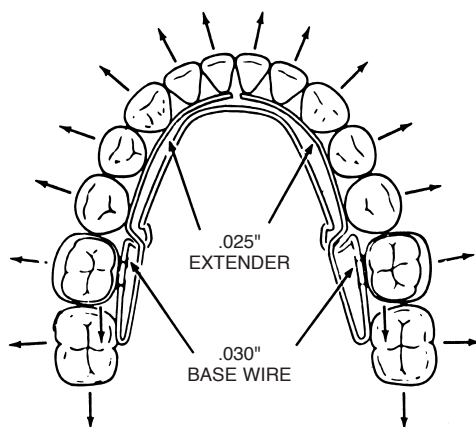
Appliances with precision-solid posts require the same protection of holding the post with an i00420 (RMO®) plier. Adjustment of .025" extenders requires holding the .025" wire proximal to the nearest post with a light wire plier while the wire is bent with finger pressure.



Pliers hold the mesial posts for mesial adjustments and the distal posts for distal adjustments.

Light Wire Plier is held close to post while wire is bent with the fingers.

## WHAT ADJUSTMENT CAN BE MADE IN THE 3D® QUAD-ACTION MANDIBULAR APPLIANCE?

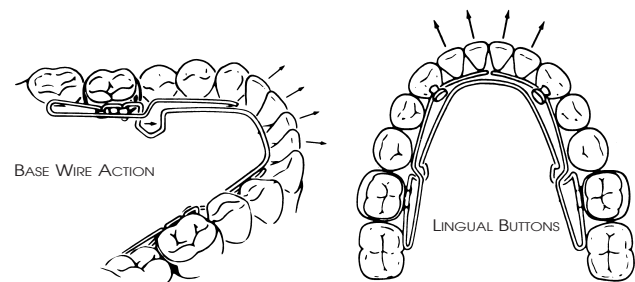
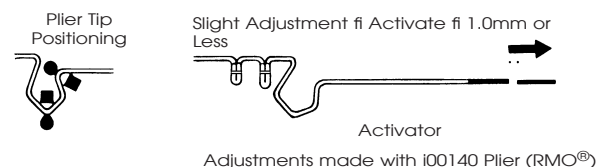


### ACTIVATION FOR TREATMENT

The two extenders and the two base wire activators provide quad-action for every sagittal and transverse moment.

The long extenders are shortened and adjusted for any specific treatment.

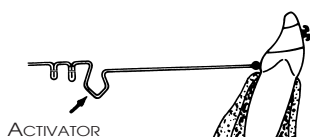
Sagittal treatment with the .030" base wire activators is with 1mm sequential adjusting.



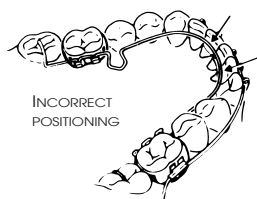
If irregular incisors are to be advanced by either extender action or base wire action, first adaptation is to the lingually in-standing incisors. As teeth are advanced, wire adaptation should engage all teeth. Lingual buttons on cuspids will assure gingival wire control and assure bodily movement of anteriors.

## WHERE SHOULD THE 3D® LINGUAL ARCH BE POSITIONED?

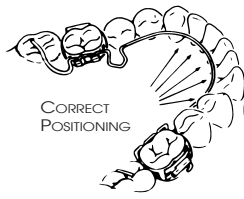
When adapting and fitting the 3D® Lingual Arch select the smaller size, if in doubt, to eliminate round-trips or unnecessary bending.



Final adjustment of the activator for correct gingival placement at the cingulum of the anterior teeth.



Arch is riding too high...the tongue will play with the wire. This may cause breakage mesial to the posts.



Arch is correctly placed at the cingulum of the anteriors.



Activator

Adjustments made with i00140 Plier (RMO®)

With irregular lower anterior teeth, the 3D® Lingual Arch should be adapted at the gingival border of the lingually in-standing anterior teeth. This provides a buttress of maximum anchorage. After Class II treatment, the incisors are unraveled by simply opening the activator bilaterally or unilaterally as indicated.

The 3D® Lingual Arch should be positioned at the cingulum and not be allowed to elevate along the lingual surface. This will avoid loss of anchorage, treatment inefficiency and tongue movements under the wire. It is recommended that, at each visit, the lingual arch wire be observed to assure that it is in the correct position and that there is no evidence of tongue movement under the wire.

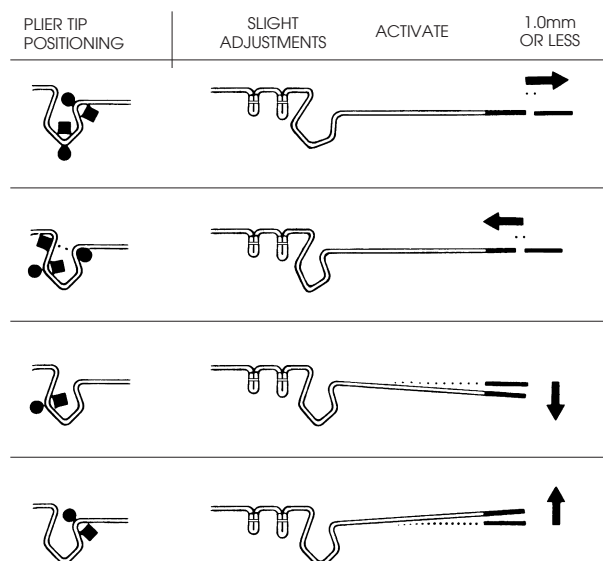
\* It is not recommended to bend the wire between the diamond activator and the wire form post. This would distort the post.

## HOW CAN THE 3D® ACTIVATOR BE ADJUSTED?

The 3D® Activator is designed in a diamond-loop shape, .028" in size. Its three-dimensional force mechanics have multiple directional movement possibilities with predictable forces. There are five angles in the 3D® Activator that can be adjusted slightly to give geometrically predictable force vectors.



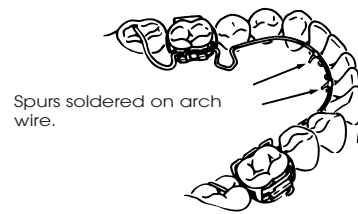
Following is a diagram indicating the four adjustment possibilities which should eliminate any unnecessary bending.



Avoid over-bending, which may require unbending. Rather, utilize minimal bending to degree needed.

## HOW CAN TONGUE MOVEMENT UNDER THE ARCH WIRE BE CONTROLLED?

When there is evidence of tongue movements under the wire, solder .018" spurs behind the incisors lying slightly over the lingual tissues. The tongue will be "reminded" only when there is a deliberate attempt to displace the wire.

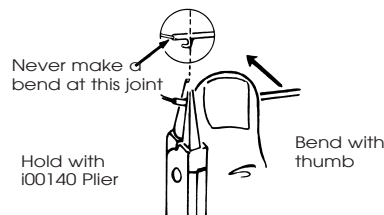
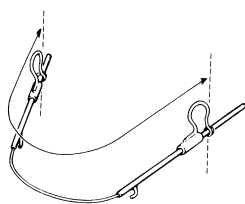


## HOW SHOULD THE 3D® MAXILLARY BIMETRIC DISTALIZING ARCH BE ADAPTED AND ACTIVATED?

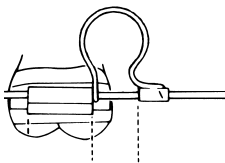
### FIRST APPLIANCE PLACEMENT APPOINTMENT

Adaptation of the 3D® Maxillary Bimetric Distalizing Arch for "cuspid wrap-around" should be 3mm mesial or distal to the joint of the .022" wire and the .040" sectional tube.

#### 3D® MAXILLARY BIMETRIC DISTALIZING ARCH



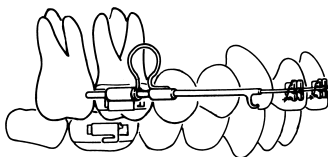
#### FINAL TEST



OMEGA LOOP

The Omega Stop is passive to the buccal tube with 3.0mm space in loop area.

The arch wire should be in a passive state, ligated to the anteriors and the patient dismissed.



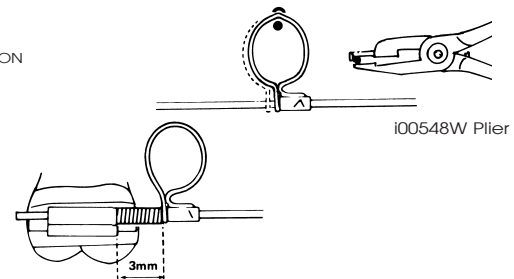
#### 5MM COIL SPRINGS

.010" x .045" x 5mm open Elgiloy® coil springs. Does not require heat treatment. (F00125 package of 50).

#### NEXT APPOINTMENT

The patient returns in 2 weeks. This trial period is to assure that the arch is passive and there is no tooth movement, mobility or discomfort.

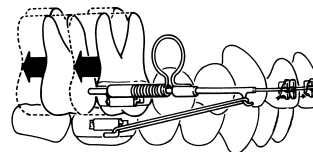
#### ACTIVATION



A. Close the loop of the Omega Stop, using the i00548W Plier, until the Omega helix is in contact with the distal end of the Omega Stop tube. There should be 3mm of space between Omega Stop and buccal tube.

B. Apply .010" x .045" open coil springs.

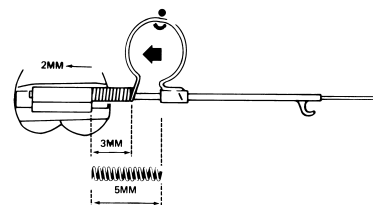
C. Insert arch wire back into the buccal tube and ligate the anterior section. Ligate into the .022" bracket



slot or gingival to any other size bracket slot.

D. Place elastics from Bimetric hook to lower molar tube to begin the Elastic Load Reduction Principle.

#### NEXT APPOINTMENT



A. Without removing Distalizing Arch, reactivate coil springs 2mm, by adjusting the Omega Stop.

B. Place elastics on appliance and continue with the Elastic Load Reduction Principle.

# WHAT IS WILSON®'S ELASTIC LOAD REDUCTION PRINCIPLE?

The Elastic Load Reduction Principle has been modified from its original version to permit increased elastic forces for more rapid results in the cases listed. It is important that the Wilson® Elastic Load Reduction

Principle be incorporated in the treatment plan, in order to have continuous forces while controlling counter moments and to preserve anchorage. Other elastic principles should not be substituted.

## SCHEDULE #1 (2 oz. ELASTICS)

USED WITH:

- Flaring lower incisors
- Small mandibular roots

**First  
5 days of  
treatment  
use:**  
3 - 2 oz.  
elastics

**Second  
5 days of  
treatment  
use:**  
2 - 2 oz.  
elastics

**Last  
11 days or  
until next  
visit use:**  
1 - 2 oz.  
elastics

Using 2 oz. elastics, three elastics should be used during the first five days, two during the second five days and one during the final eleven days of the treatment plan. Fresh elastics are applied daily. Elastics must be worn 24 hours each day between appointments, including during meals.

Use RMO® 5/16" 2 oz. elastics for non-extraction cases. (J01103)

Use RMO® 1/4" 2 oz. elastics for extraction cases. (J01102)

## SCHEDULE #2 (3 oz. ELASTICS)

MOST COMMON USAGE:

- Class II Div. 2
- Class II Div. 1 with closed bite
- Cases with steep cusps
- Adult cases

**First 10 days of  
treatment use:**  
2 - 3 oz. elastics

**Until next  
visit use:**  
1 - 3 oz. elastics

Two RMO® 3 oz. elastics are used during the first 10 days. Then, one 3 oz. elastic is worn until next adjustment. Fresh elastics are applied each 12 hours and are worn 24 hours daily, including during meals.

Use RMO® 5/16" 3 oz. elastics for nonextraction cases. (J01113)

Use RMO® 1/4" 3 oz. elastics for extraction cases. (J01112)

# WHAT ABOUT COMMERCIAL LABORATORIES TO HELP IN MAKING 3D® APPLIANCES?

In some practices, it is not cost-effective to inventory all 3D® Modules. Hence, RMO® has formed a network of RM® Certified 3D® Laboratories in the U.S.A. and Canada. These laboratories have invested in courses, workshops, and inventories. They can provide all types of 3D® 1st Phase

Fixed/Removable® Appliance services, and they can help you with information. Contact your RMO® representative or call direct to Denver, 1-800-525-6375, for information about the RM® Certified 3D® Laboratory near you.

# WHAT EDUCATIONAL MATERIAL IS AVAILABLE ABOUT THE 3D® COMPONENTS?

## TEXTBOOK & LABORATORY MANUAL

*Concept, Treatment and Case Histories* volume on 3D® Modular 1st Phase Fixed/Removable® Orthodontics, Book 1. This book contains in-depth theory, case histories, concepts and applications. This important reference is a must for understanding the principles and adaptation of the 3D® System. Over 700 photographs and illustrations in 436 pages (P00040).

*Force Systems Mechanotherapy*, Book 2 is a 175-page laboratory manual. This manual provides practical, step-by-step procedures for using the 3D® components (P00042).

## CONTINUING EDUCATION

RMO® has long recognized the importance of education in communicating new ideas and concepts. It has been RMO®'s experience that clinicians participating in workshop clinics learn more about and see why certain materials produce better treatment results with less effort, time and money, as well as greater self-satisfaction. Seminars are offered by Dr. Robert Wilson in various areas of the U.S. There is a fee for the course and the workshop materials. Attendees pay for their transportation and living expenses.



**PRODUCT DESCRIPTION**
**ORDER NUMBER**

3D® Lingual Tube		A04315
3D® Lingual Tube with Hook		A04314
3D® Lingual Arch	Size 1	A04300
	Size 2	A04301
	Size 3	A04302
	Size 4	A04303
	Size 5	A04304
	Size 6	A04305
	Size 7	A04306
	Size 8	A04307
	Size 9	A04318
	Size 10	A04319
	Assorted Kit	K00760
3D® Maxillary Bimetric Distalizing Arch	Size 1	A04155
	Size 2	A04156
	Size 3	A04157
	Size 4	A04158
	Size 5	A04159
	Size 6	A04160
	Size 7	A04161
	Assorted Kit	K00678
	Arch Selector	i00507
3D® Quad Helix	Size 1	A04308
	Size 2	A04309
	Size 3	A04310
	Size 4	A04311
	Size 5	A04312
	Size 6	A04313
	Assorted Kit	K00770
3D® Multi-Palatal	Size 1	A04320
	Size 2	A04321
	Size 3	A04322
	Size 4	A04323
	Size 5	A04324
	Size 6	A04325
	Assorted Kit	K00780
3D® Palatal Appliance	Size 1	A04330
	Size 2	A04331
	Size 3	A04332
	Size 4	A04333
	Size 5	A04334
	Size 6	A04335
	Assorted Kit	K00790
3D® Multi-Action	Size 1	A04340
	Size 2	A04341
	Size 3	A04342
	Size 4	A04343
	Assorted Kit	K00795
3D® Sectional UR/LL		A04345
3D® Sectional UR/LL		A04346
3D® Adapter UR/LL		A04347
3D® Adapter UR/LL		A04348
3D® Space Maintainer UR/LL		C00131
3D® Space Maintainer UL/UR		C00132
3D® DYS Module .036 UR/LL (qty=5)		A04350
3D® DYS Module .036 UL/LR (qty=5)		A04351
3D® DYS Module .040 UR/LL (qty=5)		A04352
3D® DYS Module .040 UL/LR (qty=5)		A04353
3D® Bimetric Arch (Basic)	Size 1	A04127
	Size 2	A04128
	Size 3	A04129
	Size 4	A04150
	Size 5	A04151
	Size 6	A04152
	Size 7	A04153
	Size 8	A04154
	Assorted Size	K00688
	Arch Selector	i00506

**PRODUCT DESCRIPTION**
**ORDER NUMBER**

3D® Wilson/Dillehay Lingual Arch - Straight length	Size 3	A04265
	Size 4	A04266
	Size 5	A04267
	Size 6	A04268
	Size 7	A04269
	Size 8	A04270
	Size 9	A04271
	Size 10	A04272
	Size 3	A04278
	Size 4	A04279
3D® Wilson/Dillehay Lingual Arch - distal extension	Size 5	A04280
	Size 6	A04281
	Size 7	A04282
	Size 8	A04283
	Size 9	A04284
	Size 10	A04285
	Size 3	A04252
	Size 4	A04253
	Size 5	A04254
	Size 6	A04255
3D® Wilson/Dillehay Lingual Arch - distal bend	Size 7	A04256
	Size 8	A04257
	Size 9	A04258
	Size 10	A04259

P00704 Rev. A



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