

Sentalloy® Coil Spring Kits

Two kits with an assortment of springs and force values are available for your convenience.



.018 Sentalloy Coil Springs Kit Ref# 10-001-00 .018 KIT

| Ref # | Description | PCS | Name | GMS | Color |
|-----------|------------------------|----------|-------------|-------|--------|
| 10-000-03 | Closed Coil w/eyelets | (4) 3mm | Light | 100 g | Blue |
| 10-000-02 | Closed Coil w/eyelets | (4) 3mm | Medium | 150 g | Yellow |
| 10-000-01 | Closed Coil w/eyelets | (4) 3mm | Heavy | 200 g | Red |
| 10-000-06 | Closed Coil w/lig wire | (4) 3mm | Light | 100 g | Blue |
| 10-000-05 | Closed Coil w/lig wire | (4) 3mm | Medium | 150 g | Yellow |
| 10-000-04 | Closed Coil w/lig wire | (4) 3mm | Heavy | 200 g | Red |
| 10-000-09 | Open Coil | (4) 15mm | Light | 100 g | Blue |
| 10-000-08 | Open Coil | (4) 15mm | Medium | 150 g | Yellow |
| 10-000-07 | Open Coil | (4) 15mm | Heavy | 200 g | Red |
| | Crimpable Sliding Hook | (10) | .018 x .028 | | |
| | Crimpable Stop Tube | (10) | .018 x .028 | | |

.022 Sentalloy Coil Springs Kit Ref# 10-002-00 .022 KIT



| Ref # | Description | PCS | Name | GMS | Color |
|-----------|------------------------|----------|-------------|-------|--------|
| 10-000-03 | Closed Coil w/eyelets | (4) 3mm | Light | 100 g | Blue |
| 10-000-02 | Closed Coil w/eyelets | (4) 3mm | Medium | 150 g | Yellow |
| 10-000-01 | Closed Coil w/eyelets | (4) 3mm | Heavy | 200 g | Red |
| 10-000-06 | Closed Coil w/lig wire | (4) 3mm | Light | 100 g | Blue |
| 10-000-05 | Closed Coil w/lig wire | (4) 3mm | Medium | 150 g | Yellow |
| 10-000-04 | Closed Coil w/lig wire | (4) 3mm | Heavy | 200 g | Red |
| 10-000-09 | Open Coil | (4) 15mm | Light | 100 g | Blue |
| 10-000-08 | Open Coil | (4) 15mm | Medium | 150 g | Yellow |
| 10-000-07 | Open Coil | (4) 15mm | Heavy | 200 g | Red |
| | Crimpable Sliding Hook | (10) | .022 x .028 | | |
| | Crimpable Stop Tube | (10) | .022 x .028 | | |

References

1. Miura F., Mogi M., Ohura Y., Hamanaka H. The Super-Elastic Property of the Japanese NiTi Alloy Wire for use in Orthodontics, AMJ ORTHO DENTOFAC ORTHOP 1986; 90: 1-10.
2. Miura F., Mogi M., Ohura Y., Karibe M., The Super-Elastic Japanese NiTi Alloy Wire for use in Orthodontics Part III Studies on the Japances NiTi Alloy Coil Springs, AMJ ORTHO DENTOFAC ORTHOP 1988; 94: 89-96.
3. Gianelly A., Badnar J., Dietz V. Japanese NiTi Coils Used To Move Molars Distally, AMJ ORTHO DENTOFAC ORTHOP 1991: 99; 564-566.

U.S. Patent #4,849,032 U.S. Patent #5,046,948

Warning

- Device contains nickel and chromium which may cause allergic reactions.
- Ce produit contient du nickel et du chrom pouvant provoquer des allergies.
- Das produkt enthält nickel und chrom, die allergische reaktionen hervorrufen können.
- Este aparato contiene níquel y cromo metales.
- Il dispositivo contiene nichel e cromo che possono causare reazioni allergiche.
- Dit produkt bevat nikkel en chroom. Dit kan allergische reacties veroorzaken.



Sentalloy® Coil Springs



Body heat activated so the force remains the same.

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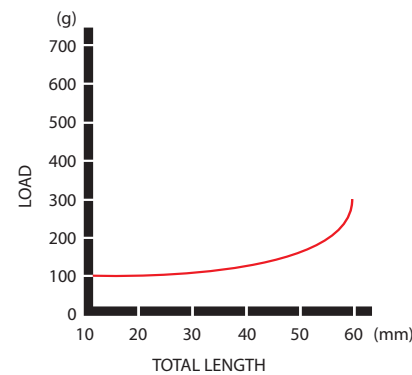
For more information, contact your GAC representative at 800.645.5530 or visit www.gacintl.com

Sentalloy®
A leader in superelastic wires

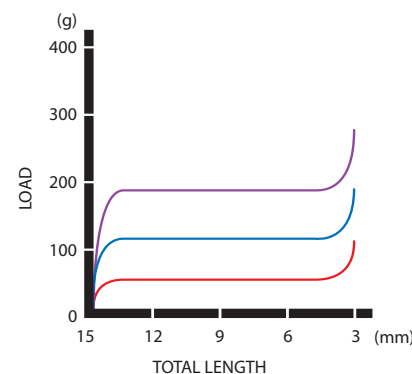
Body Heat Activated So the Force Remains the Same. The Sentalloy® Difference.

GAC's Sentalloy Coil Springs, the first super-elastic coil, deliver a gentle, continuous force to move teeth without periodontal stress. All that is needed to realize treatment objectives with Sentalloy is normal body heat, which activates the Martensitic Reaction. At other than body temperatures, the coils appear ordinary and, therefore, cannot be "bench tested." When warmed to body temperature, however, the light, continuous force and shape memory are activated. Because of Sentalloy's superelasticity, the constant force will be exerted when activated within normal orthodontic ranges regardless of deformation.

For the orthodontist, Sentalloy provides the ideal physiological tooth movement without patient cooperation or "round tripping." Sentalloy also allows for fewer wire changes and office visits. For the patient, the light constant force offers greater comfort and superior treatment results.



Load Deflection Curve
Closed Coil Sentalloy Springs

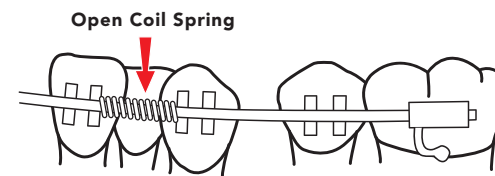


Load Deflection Curve
Open Coil Sentalloy Springs

Sentalloy® Open Coil Springs

Open, or compression, coils are 15 mm. in length when passive and may be compressed to 3 mm. Between these points, the coil will exert 50 (extra light), 100 (light), 150 (medium), 200 (heavy), or 250 (extra heavy) , and 300 (XX Heavy) grams of force until 14 mm., and then the force falls to 0 as it becomes passive again. No distortion will occur during movement. These low forces limit patient discomfort and ensure good circulation in the periodontal pocket during movement. Typically, you will see 4 mm. of space opened in three months (this varies depending on the age and health of the patient).

To engage the open coils, mark the arch wire where the mesial and distal tooth destinations are located. Crimp on the mesial stop and ligate the arch wire up to the point where the spring is to be placed. Slide the coil over the arch wire and crimp on the distal stops. Ligate the balance of the wire. Since the Sentalloy coil needs about 1/10 as much wire as steel, good hygiene is much easier, but do advise the patient to rinse and brush around the coil. No other adjustment is needed.

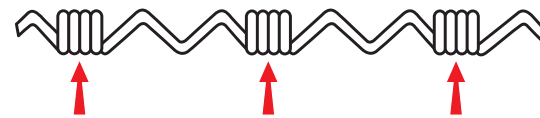


| Ref # | PCS | Name | GMS | Color |
|-----------|-----------|-------------|-------|--------|
| 10-000-24 | (10) 15mm | Extra Light | 50 g | Black |
| 10-000-09 | (10) 15mm | Light | 100 g | Blue |
| 10-000-08 | (10) 15mm | Medium | 150 g | Yellow |
| 10-000-07 | (10) 15mm | Heavy | 200 g | Red |
| 10-000-17 | (10) 15mm | Extra Heavy | 250 g | Green |
| 10-000-19 | (10) 15mm | XX Heavy | 300 g | White |

Sentalloy® Stop Wound™ Open Coil Springs Cutting Instructions

Sentalloy Stop Wound Open Coil Springs are packaged individually or in three 7" lengths to a tube. Each length is quadruple wound every 4 mm. After determining the length of coil needed, simply cut the wire at the center of the tight spiral as indicated below:

The quadruple wind can be cut by having one person stretch the wind while another person makes the cut; or by using a separating plier to stretch the wind and a hard wire cutter to make the cut.

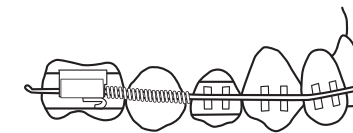


Sentalloy Stop Wound Open Coils with a standard lumen of .035" are available in forces of 50, 100, 150 and 200 grams. .045" compatible coils are available in 150 grams of force only.

| Ref # | PCS | Name | GMS | Color | Lumen |
|---------------|--------|-------------|-------|--------|-------|
| KIT 10-000-27 | (3) 7" | Extra Light | 50 g | Black | .035 |
| KIT 10-000-21 | (3) 7" | Light | 100 g | Blue | .035 |
| KIT 10-000-22 | (3) 7" | Medium | 150 g | Yellow | .035 |
| KIT 10-000-45 | (3) 7" | Medium | 150 g | Yellow | .045 |
| KIT 10-000-23 | (3) 7" | Heavy | 200 g | Red | .035 |

Molar Distalization Coils

Maxillary molars can be moved distally in 4-7 months without patient cooperation using our 100 gram Stop Wound Open Coil Springs. A modified Nance of A.C.C.O. may be used as an anchorage device initially. The coils are placed between the 1st bicuspid and the 1st molar – by passing the 2nd bicuspid. The coils are then activated against the molar using an arch wire lock or our special crimpable stop. Cut the Stop Wound Open Coils so that they extend to the end of the buccal tube. Ligate the arch wire to the first bicuspid, set the stop, then slide the coil onto the arch wire. Next, feed the arch wire into the tube, ensuring that the arch wire is fully inserted with 2 mm. of wire extending beyond the tube. Uprighting springs may be used from the 1st bicuspid to the distal of the laterals to control any anterior movement. Using this system, you will see 1 mm. per month in space gained, with any anchorage loss well within clinically acceptable limits.



10-000-21 100 g Blue

Molar Movement Kit

Ref# KIT 10-000-99- Molar Mover Kit

| Ref # | PCS | Name | GMS | Color |
|-----------|------|-------------|-------|-------|
| 10-000-21 | (10) | Molar Mover | 100 g | Black |
| 10-000-09 | (10) | Molar Mover | 100 g | Blue |
| 10-000-08 | (25) | Eyelets | 150 g | |

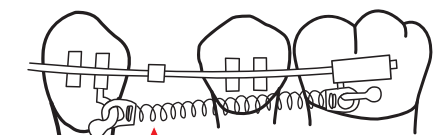
Sentalloy® Closed Coil Springs

Closing spaces with closed Sentalloy coil springs brings unprecedented results. Two designs are available:

1. Two eyelets: The initial length is 3 mm. unactivated (this does not include the eyelet lengths). These can be activated to 15 mm. without any deformation or change in force. No change in force will be seen as the coil contracts, reducing the space. To engage, slide over a molar hook and slowly stretch to the post on the cuspid bracket or a sliding hook on the arch wire. Use a locking Mathieu plier on the widened platform of the eyelet. If you do not use the cuspid post, tie the arch wire to the tooth you wish to move, slide on the sliding hook, then tie in the balance of the wire. Now engage the spring as above.



2. For an eyelet with ligature wire, you have the option of hooking the eyelet on the molar, then activating the spring and tying it to the cuspid bracket with the .008" ligature wire. Should you wish to span an area greater than 15 mm., measure the span first. Then place the coil on the molar hook and activate the coil 10 mm. Tie the ligature wire to the bracket.



Closed Coil Spring

Closed Coil Spring With Eyelet

| Ref # | PCS | Name | GMS | Color |
|-----------|----------|---------------------|-------|--------|
| 10-000-26 | (10) 3mm | Ultra Light | 25 g | Purple |
| 10-000-25 | (10) 3mm | Extra Light | 50 g | Black |
| 10-000-03 | (10) 3mm | Light | 100 g | Blue |
| 10-000-02 | (10) 3mm | Medium | 150 g | Yellow |
| 10-000-01 | (10) 3mm | Heavy | 200 g | Red |
| 10-000-18 | (10) 3mm | Extra Heavy | 250 g | Green |
| 10-000-20 | (10) 3mm | Anterior Retraction | 300 g | White |

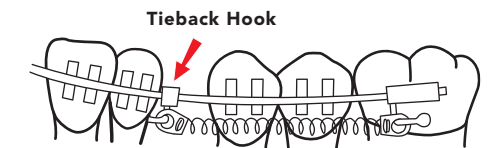
Closed Coil Spring With Ligature Wire

| Ref # | PCS | Name | GMS | Color |
|-----------|----------|--------|-------|--------|
| 10-000-06 | (10) 3mm | Light | 100 g | Blue |
| 10-000-05 | (10) 3mm | Medium | 150 g | Yellow |
| 10-000-04 | (10) 3mm | Heavy | 200 g | Red |

Anterior Retracting Springs

Anterior Retracting Springs are available for segmented retraction of the maxillary four incisors. The increased force in these springs was designed to overcome the resistance of the roots and the rectangular arch wire.

Stops may be set on the arch wire to ensure the proper destination. The eyelets are engaged from our crimped hook or an arch wire lock to the molar hook. Expect 1 mm. of movement per month of activation.



10-000-20 Anterior Retraction 300 g White