The Rapid Molar Intruder’s major indication is in the treatment of vertical excess during growth. Patients with excessive vertical growth or “long face syndrome” are among the most difficult to treat successfully. In general, the dominant morphological feature is a downward overgrowth of the posterior maxilla, or vertical maxillary excess.

The RMI intrudes both the upper molars and the lower molars, but the upper molar experiences more vertical intrusion than the lower molar. The RMI not only interferes with growth, but it effectively closes the skeletal vertical dimension of the lower third of the face.

Before placing the RMI spring modules on the upper arch, prepare the arch with two bands on the molars and a soldered palatal bar. A tongue crib could also be beneficial to the upper arch, but is not essential. The lower arch is prepared with two bands on the molars and a soldered lingual arch. If the upper arch needs to be expanded, the RMI may be coupled with a fixed rapid palatal expander or Spring Jet. It is essential that the upper and lower appliances be held rigidly in place in order to avoid undesired buccal tipping of the crowns of the molars.

Patients wearing Size M spring modules should be seen at four-week intervals. The deciduous teeth could interfere with treatment. During maxillary and mandibular intrusion of first molars, deciduous molars remain in place and may create unwanted occlusal contact with the opposing deciduous molar (open bite). Serial extractions of deciduous teeth that may create unwanted occlusal contact is preferred to enamel grinding because of the speed of molar intrusion that the RMI delivers. To eliminate potential occlusal contact of deciduous teeth, extractions need only be performed on one of the two dental arches. Extractions may be modulated according to other general dental indications.

After four to five months the orthodontic and orthopedic correction is usually achieved; the modules of the RMI are removed and the palatal and lingual arches are maintained for retention. After suitable eruption of permanent teeth, the case is then finished with brackets.

There are cases in which molar intrusion is a very important treatment objective to improve the prognosis of a partially edentulous dentition and to facilitate eventual prosthetic reconstruction. In general, these are the cases in which the first or second maxillary molar needs to be intruded either monolaterally or bilaterally. In these cases, the lower arch provides stable anchorage using a soldered lingual arch on four bands—two on the mandibular first molars and two on the mandibular first bicuspids.

Incorporate a mesio-distal vector in Class II or Class III cases if necessary.

Ensure that the ball stop of the L-Pin does not touch the gingiva.

Schedule patients at four weeks intervals.

Eliminate all potential occlusal contacts of opposing teeth during first molar intrusion (i.e. extraction of deciduous teeth, leveling of the occlusal plane with fixed appliances, extraction of maxillary second molars in difficult adult cases).

Adjust the soldered lingual arch every two months. During molar intrusion, the lingual arch may tend to impinge on the gingival tissue. Place step up bends with three prong pliers if necessary.

After molar intrusion is completed, leave the soldered palatal and lingual arch in place for retention.
The Rapid Molar Intruder (RMI) is an innovative appliance that utilizes the force module technology of the Jasper Jumper (Fig. 1), but is directed toward the vertical dimension. The RMI uses fixed, flexible springs to deliver light, continuous intrusive forces.

The Rapid Molar Intruder is easy to place, activate, and remove. It does not interfere with space consolidation, extraction or non-extraction treatment, and it enhances mandibular leveling.

Patient acceptance is excellent because the appliance is fixed. The RMI’s flexibility makes oral hygiene easy, and because the appliance curves away from the occlusal table on closing, it does not interfere with chewing.

For proper use and control of the Rapid Molar Intruder, the upper and lower first molars must be stabilized by a palatal and lingual soldered arch. Molar bands should be welded with attachments for extrarotal traction: headgear tubes on upper bands and Lip Bumper tubes on lower bands.

The Rapid Molar Intruder is available in two different sizes and force levels:
- **Size M** for mixed dentition cases—800 gms of intrusive force
- **Size A** for adult cases—1000 gms of intrusive force

For a Class II malocclusion, the spring modules may be oriented as follows: the spring modules are inserted with mesio-distal inclination between the maxillary and mandibular first molars, then a sagittal vector may be introduced into the appliance. This makes oral hygiene easy, and because the appliance curves away from the occlusal table on closing, it does not interfere with chewing.

The reverse (Fig. 5) is true for Class III corrections: orient the spring modules from the distal of the mandibular buccal tubes to the mesial of the maxillary molar tubes (Fig. 6). The L-shape of the spring module and the angle of the spring module help the appliance to be bent under the lower Lip Bumper tube on the same plane as the mesial end of the Ball Pin Connector.

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The RMI uses fixed, flexible springs to deliver light, continuous intrusive forces.

The Ball Pin Connector is bent in an L-shape with a 2.5 - 3 mm stem into the lower angulated hole of the RMI module.

For a Class III malocclusion, orient the spring modules from the distal of the maxillary molar tubes to the mesial of the mandibular buccal tubes.

The reverse orientation is true for Class III corrections.

The RMI is not specifically designed for sagittal correction of the malocclusion because the forces generated by the appliance have a predominant vertical force of 800-1000gms on each side of the arch when flexed.

For proper use and control of the Rapid Molar Intruder, the upper and lower first molars must be stabilized by a palatal and lingual soldered arch. Molar bands should be welded with attachments for extrarotal traction: headgear tubes on upper bands and Lip Bumper tubes on lower bands.

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For proper use and control of the Rapid Molar Intruder, the upper and lower first molars must be stabilized by a palatal and lingual soldered arch. Molar bands should be welded with attachments for extrarotal traction: headgear tubes on upper bands and Lip Bumper tubes on lower bands.

The Rapid Molar Intruder is available in two different sizes and force levels:
- **Size M** for mixed dentition cases—800 gms of intrusive force
- **Size A** for adult cases—1000 gms of intrusive force

For a Class II malocclusion, the spring modules may be oriented as follows: the spring modules are inserted with mesio-distal inclination between the maxillary and mandibular first molars, then a sagittal vector may be introduced into the appliance. This makes oral hygiene easy, and because the appliance curves away from the occlusal table on closing, it does not interfere with chewing.

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For a Class III malocclusion, orient the spring modules from the distal of the maxillary molar tubes to the mesial of the mandibular buccal tubes.

The reverse orientation is true for Class III corrections. For an adult dentition, the spring modules may be oriented as follows: the spring modules are inserted with mesio-distal inclination between the maxillary and mandibular first molars, then a sagittal vector may be introduced into the appliance. This makes oral hygiene easy, and because the appliance curves away from the occlusal table on closing, it does not interfere with chewing.

The RMI uses fixed, flexible springs to deliver light, continuous intrusive forces.

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