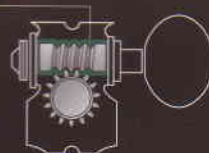


**GOTOH**<sup>®</sup> technical innovation



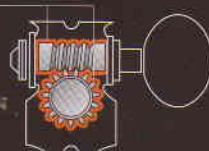
### LUBRI-COAT™

With a "Solid Lubrication Coat", regular oil has been eliminated keeping the lubrication where it is needed for the life of the tuning machine heads. It is now enhanced with a GOTOH original anti-transformable lubrication oil and this reduces the friction between the gears resulting an ultra smooth feel minimal back lash and unrivalled tuning stability.



### LUBRI-PLATE™

Taking the concept of solid lubrication to an even higher-level Gotoh have developed a new process of application for their exclusive "510" and "X" series gears. By creating a "Complex lubricating plating layer", surface of all the moving gears have been coated through an Electro Plating process and are now enhanced with GSP that is a GOTOH original polymer compound specifically formulated to work with Gotohs LUBRI-COAT. With a "Solid Lubrication Coat", oil has been eliminated keeping the lubrication where it is needed for the life of the tuning machine heads.



### ROCK-SOLID™ STRING POST

Next time you change your strings, before you put on your new set, take a look at your tuning machine head posts. See how they move from rock side to side! This has been a problem with tuning machine heads since they were invented. Now GOTOH introduce "Rock-Solid"™ String posts.

Usual string post



ROCK-SOLID



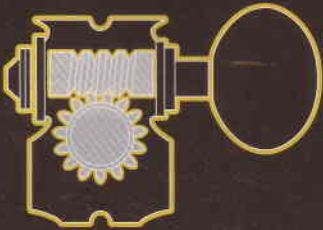




After developing the revolutionary "Lubri-Plate" lubrication process, further experimenting revealed other assets of this unique application. Gotoh have used this to create "X-Finish"™. Due to its' natural properties "X-Finish"™ will keep your chosen instrument performing better for longer. Please note: Color may be subject to change after a long period of use. This does not affect its performance and can result in a very pleasing "Aged / Vintage" appearance.

It's the ultimate finish !  
It can result in an unique appearance for life no matter what your instrument is subject to water or any dirt.

Gotoh's "X-finish" combined with "Lubri-Plate" is designed to reduce this to a minimum keeping your instrument looking like new and performing better for longer.



X-Series gears finished in "X" FINISH

"X" series (finish: XN/XC/XG)

- Guitar Machine Heads  
SG-510Series • SE-510series • SE-700Series • SD-510Series
- Planetary Banjo Tuners  
SPBJ-4 • SPBJ-5
- Bass Guitar Machine Heads  
RES-O-LITE Series  
GB350 • GB640 • GBR640 • GB528 • GB528S
- Tremolo Units  
EV510T • EV510TS
- Guitar Bridges  
GTC510 • 510FA • 510FB • 510UB
- Bass Bridges  
J510SJ/BO/AO • 404SJ/BO/AO • 303SJ/BO/AO





# GOTOH®

Gotoh SG-Series, SE-Series and SD-Series feature Rock-Solid™ string post (except for a few models) and have 5 kinds of post variation, Standard, Magnum Lock (MG)®, H.A.P.®, H.A.P.A. and H.A.P.M. which you can choose. It gives unrivalled tuning stability for Vibrato equipped guitars. Gotohs advanced technology and developing spirit have greatly won the confidence of many guitar builders in the world.

For more detail on Rock-Solid™ see explanation on page 1



Standard string post



## H.A.P.® [Height Adjustable Post] PAT.

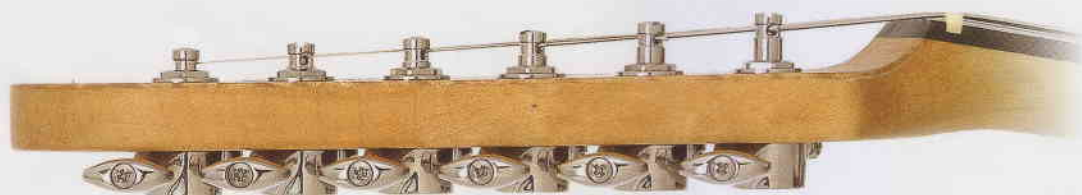
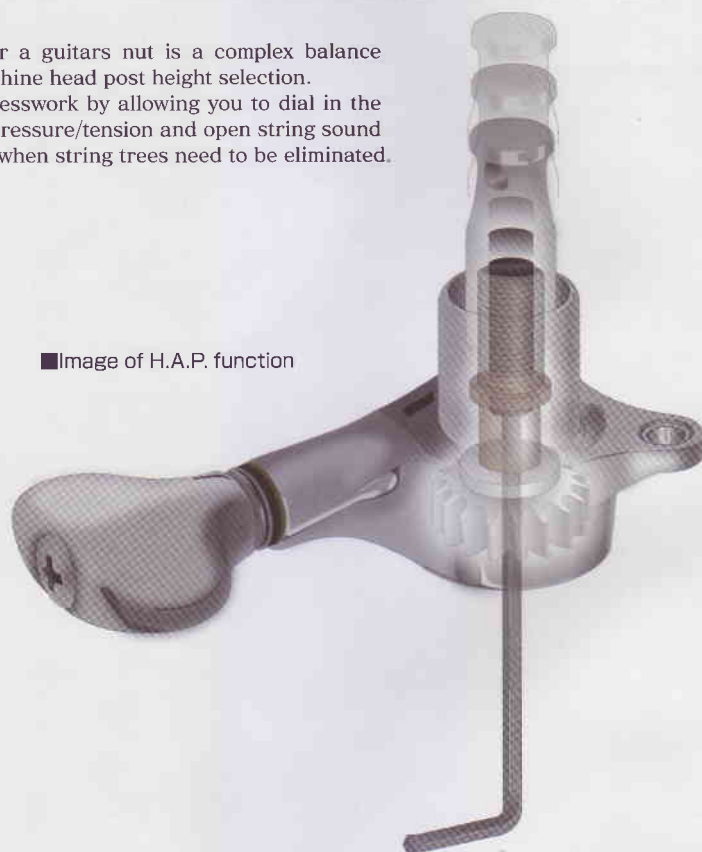
Gotoh H.A.P is the world first system that enables you to adjust string post height as you like.

Creating the perfect down pressure over a guitars nut is a complex balance between Headstock angle and Tuning machine head post height selection. Height adjustable posts take away the guesswork by allowing you to dial in the exact angle you need for, friction, string pressure/tension and open string sound and sustain. Ideal for flat style peg heads when string trees need to be eliminated.



H.A.P. String post

■ Image of H.A.P. function



Always follow the instructions in the instruction manual/leaflet.



**MG [MAGNUM LOCK] PAT.**

**Gotoh Magnum Lock is the ultimate string locking system with simple and steady mechanism.**

Eliminating the "string wraps" around tuning machine head posts is a great asset when keeping vibrato-equipped guitars in tune without the use of troublesome clamps and fine tuners. By locking the string on the post, only half a turn is required to bring most strings up to pitch, allowing the string to return to its' original position after bending or slackening off during dive bombing. The device is self-locking(string is clamped in place by the simple act of tuning to pitch). Tuning stability is taken to a new level with the introduction of the "Rock-Solid"™ String posts on selected Tuning machine heads with Magnum-lock feature.



Magnum-Lock string post



**H.A.P.® -A PAT.**

Guitars with angle back peg-heads can sometimes benefit from slightly less pressure at the nut. HAP-A tuning machine heads are designed to adjust the string anchor point away from the face of the headstock allowing you to select the perfect angle and feel.



H.A.P.-A String post



**H.A.P.® -M PAT.**

Combining the ability of post height adjustment with the Magnum lock feature gives a machine head that is the perfect choice for flat peg-head style guitars equipped with a Vibrato. Removing the string tree on this type of guitar is essential for tuning stability, couple this with the advantage of a locking string post(eliminating string wraps)and you have the ultimate set up.



H.A.P.-M String post

X-Finish	2
Guitar Machine Heads SG-510 Series / SG Series	5 - 7
Guitar Machine Heads SE510 / SE Series, SD510 / SD Series	8 - 11
Planetary Banjo Tuners	12
Classic Guitar Machine Heads	13 - 15
Mandolin Machine Heads Ukulele Peg	16 - 17
Violin Tuner	18
Bass Machine Heads	19 - 21
Two-way Truss Rod / Arms	22
Tremolo Units - 510 Series	23 - 24
Tremolo Units & Lock Nuts	25
Guitar Bridges & Tailpieces	26 - 28
Bass Bridges	29 - 31
Saddle Sets / Side Adjuster	32
Free Lock / Strap Pin / Jack Cover String Bushing / Neck Joint Plate	33
Control Panel / Tension Bar GOTOH Original control knob of Artificial Material Dome Knob	34
Battery Box / String Retainer Wrench Holder / Spring Holder Spring / Power Spring	35
Wilkinson by GOTOH Tremolo Units Guitar Bridges / Bass Bridges	36 - 38

- Guitar** ▶ L3+R3 L6 for Right Hand R6 for Left Hand
- Bass** ▶ L2+R2 L4 for Right Hand R4 for Left Hand