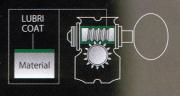






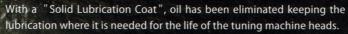
With a "Solid Lubrication Coat", regular oil has been eliminated keeping the lubrication where it is needed for the life of the tuning machine heads. It is now enhanced with a GOTOH original anti-transformable lubrication oil and this reduces the friction between the gears resulting an ultra smooth feel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







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.







It can result in an unique appeara for life no matter what your instruis subject to water or any dirts.

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.

Cotoh's "X-finish" combined with "Lubri-Plate" is designed to reduce poor performance of the worm gears by lubrication with oil or grease to a minimum keeping your instrument looking like new and performing better for



X-Series gears finished in "X" FINISH

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

Guitar Machine Heads

SG-510Series · SE-510seris · 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



G 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





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 tha 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.



■Image of H.A.P. function





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 selflocking(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.





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.°-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.





Always follow the instructions in the instruction manual/leaflet.

Guitar ► 1 L3+R3 L6 for Right Hand R6 for Left Hand

Bass ► L2+R2 L4 for Right Hand R4 for Left Hand

Contents	
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
Mandofin 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 & Tallpleces	26-28
Bass Bridges	29-31
Saddle Sets / Side Adjuster	
Free Lock / Strap Pin / Jack Cover String Bushing / Neck Joint Plate	33
Control Panel / Tension Bar GOTOH Crighal control knob of Artificial Material Dome Knob	34
Battery Box / String Retainer	

Electric and Acoustic Guitar Machine Heads

SG-510 Series



Featuring "Rock-Solid "posts and "Lubri-Plate" (now enhanced with G.S.P). G.S.P is polymer compound specifically formulated to work with Gotohs. LUBRI-PLATE process creating even less friction between the gears giving ultra smooth feel and longer life to the gears. This reduces the friction between the Gears resulting in an ultra smooth feel minimal back lash and unrivalled tuning stability for Vibrato equipped guitars.

For more detail on "Lubri-Plate" and "Rock-Solid" see explanation on page 1

ETATE NOCK-SOLD MAGNUM N.A.T

SGS510

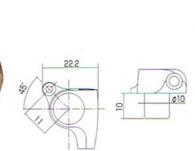


SGS510 SGS510MG SGS510H.A.P SGS510H.A.P.A SGS510H.A.P.M



Finishes	C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SGS510-S5-L HAPM SGS510-B07-R HAP SGS510-L5





SGS510Z

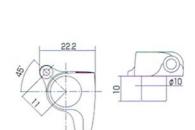


SGS510Z SGS510ZMG SGS510ZH.A.P SGS510ZH.A.P.A SGS510ZH.A.P.M



Finishes	C.GG.CK.XN.XC.XG	
Gear ratio	1:18	
e.g.	SGS510Z-EN07 SGS510Z-BS5-L HAP	
	SGS510Z-P7-L MG	





SGL510



SGL510 SGL510MG SGL510H.A.P SGL510H.A.P.A SGL510H.A.P.M



Finishes	C.GG.CK.XN.XC.XG
Gear ratio	1:18
e.g.	SGL510-P2
	SGL510-L5 HAPA
	SGI 510-I 5 MG





ENON

LOW

208

89

Ld

ENOJ

807

ENON

LOW

SG503



SG503/SG503MG SG503H.A.P SG503H.A.P.A SG503H.A.P.M

Finishes	C.GG.CK
Gear ratio	1:15
e.g.	SG503-07-L SG503-01 MG SG503-05P2-L HAP

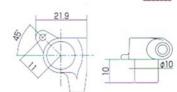












SG301



SG301/SG301MG SG301H.A.P SG301H.A.P.A SG301H.A.P.M

Finishes	C.GG.CK
Gear ratio	1:18
e.g.	SG301-20 SG301-M01 HAPA SG301-04 MG

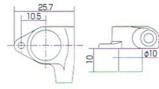












SG360



SG360/SG360MG SG360H.A.P SG360H.A.P.A SG360H.A.P.M

Finishes	C.GG.CK
Gear ratio	1:14
e.g.	SG360-EN07-R SG360-01 SG360-P8-L HAPM



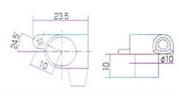












SG381



SG381/SG381MG SG381H.A.P SG381H.A.P.A SG381H.A.P.M

Finishes	C.GG.CK
Gear ratio	1:16
e.g.	SG381-P1 SG381-05-L MG SG381-B20 HAPA

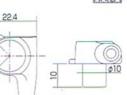












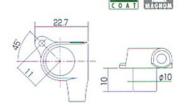
SGM

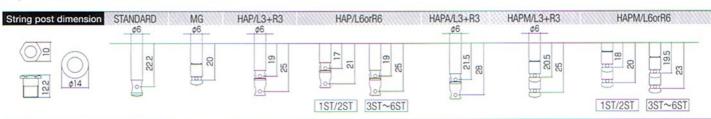


SGM SGMMG

Finish	С
Gear ratio	1:16
e.g.	SGM-05P1-L SGM-07-L MG SGM-20







SG Series BUTTON OPTION

Choose the button from listed below when order for machine head is placed.(actual size ratio: about 50%)

























05P2



























05P1



M07







Electric and Acoustic Guitar Machine Heads

SE510 Series · SD510 Series

Open backed tuners have sometimes been criticized for not having the same smooth performance has sealed gear tuners due to the fact that their post can sometimes bind on the bushings that guide the post through the headstock face. "Gotoh have eliminated this problem by combining the post collar found on enclosed gears onto the base plate of the open gear allowing the post to perfectly align itself with the bushing that attaches the gear to the headstock. Combining Rock-solid technology with this new method of attachment has created the ultimate open back tuners.



SE510



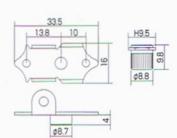
SE510 SE510MG SE510H.A.P SE510H.A.P.A







Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SE510-06M
	SE510-P5W HAPA



SE510M



SE510M SE510MMG SE510MH.A.P SE510MH.A.P.A



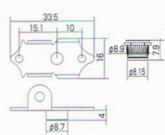






Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SE510M-05M MG SE510M-M5





SE510W



SE510W SE510WMG SE510WH.A.P SE510WH.A.P.A



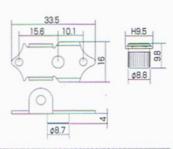






Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SE510W-SL HAP
	SE510W-06M







SES510 SES510MG SES510H.A.P

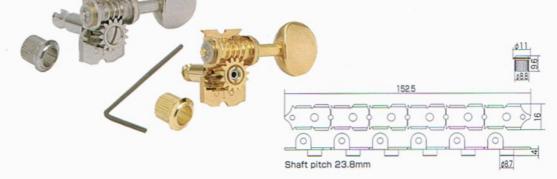


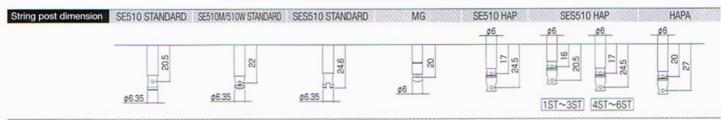






Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SES510-05M-L MG
	SES510-B5-R





SE700

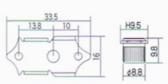


SE700 SE700MG



Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SE700-06M SE700-SL MG





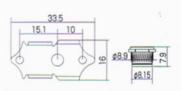
SE770





Finishes	N.C.GG.CK.XN.XC.XC
Gear ratio	1:15
e.g.	SE770-05M
	SE770-M5





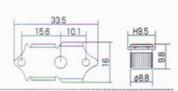
SE780





Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SE780-SLB SE780-06M





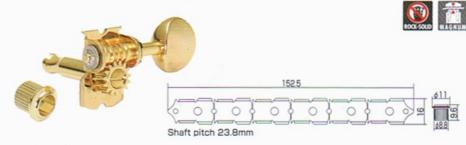
SE701



SE701 SE701MG



Finishes	N.C.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SE701-05MA-L



String post dimension	SE700 STANDARD	SE770/780 STANDARD	SE701 STANDARD	SE700/701MG
	φ7.5	φ7.5	φ7.5 1	φ7.5
	50.5	20 20	24.6	8
	φ6.35	φ6.35	φ6.35	φ6

SE-510/SE Series BUTTON OPTION

Choose the button from listed below when order for machine head is placed.(actual size ratio: about 50%)



















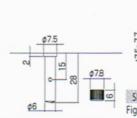


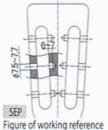


for Slotted Head

SEP700 SEP770 SEP780













SD510 SD510MG SD510H.A.P SD510H.A.P.A SD510H.A.P.M





SDS510



SDS510 SDS510MG SDS510H.A.P SDS510H.A.P.M

Finishes	N.GG.CK.XN.XC.XG
Gear ratio	1:15
e.g.	SDS510-05M-L SDS510-B5-L MG



String post dimension	SD510 STANDARD	SDS510 STANDARD	MG	SD510 HAP	SDS51	O HAP	HAPA	SD510 HAPM	SDS510 HAPM
	φ6.35	ø6.35			φ6	φ6	φ6	φ6	
	19.5	24.6	88	17 24.5	16 205	17 24.5	20 27	18.5	22 22
				_	1ST~3ST	4ST~6ST	203		1ST~3ST 4ST~6ST

SD Series

SD90



SD90 SD90MG SD90H.A.P SD90H.A.P.A SD90H.A.P.M

Finishes	N.GG.CK
Gear ratio	1:15
e.g.	SD90-SL
	SD90-SLB HAP





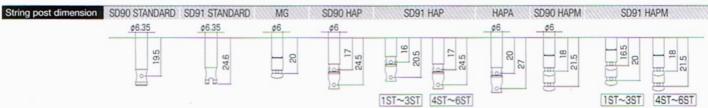
SD91



SD91 SD91MG SD91H.A.P SD91H.A.P.M

Finishes	N.GG.CK
Gear ratio	1:15
e.g.	SD91-05M-L MG SD91-M5-R





SD-510/SD Series BUTTON OPTION

Choose the button from listed below when order for machine head is placed.(actual size ratio: about 50























Finishes: N-Nickel, C-Chrome, GG-Gold, CK-Cosmo Black, XN-Excellent Nickel, XC-Excellent Chrome, XG-Excellent Gold

Two-way Truss Rod PAT.P



Arms A1 A2 **B1 B2** A₅ A7 For GE1017, 1027 Finishes/C.GG.CK FOI GEIDIT, 102T FOT ENSION, 510T, VS100N L FORGETOTTS NC300, NSA01 FOI GEIDITS Finishes/CGG.CK FOT STOATIFTI-1 510ATIFT)-2 φ5 $\phi 5.5$ φ5 φ4.8 φ4.8 φ5.5 **A8** F3 AW-2 AW-1 For OGE 1088T, 1099T FinishIC FOLNSNO'NSNOO NSNADOP, NSADON FORGE 1988T FOINS100G Finishes/C.GG FinishesIC.HG Finishes I C.G.G.C.K $\phi 5.5$ $\phi 5$ $\phi 5.5$