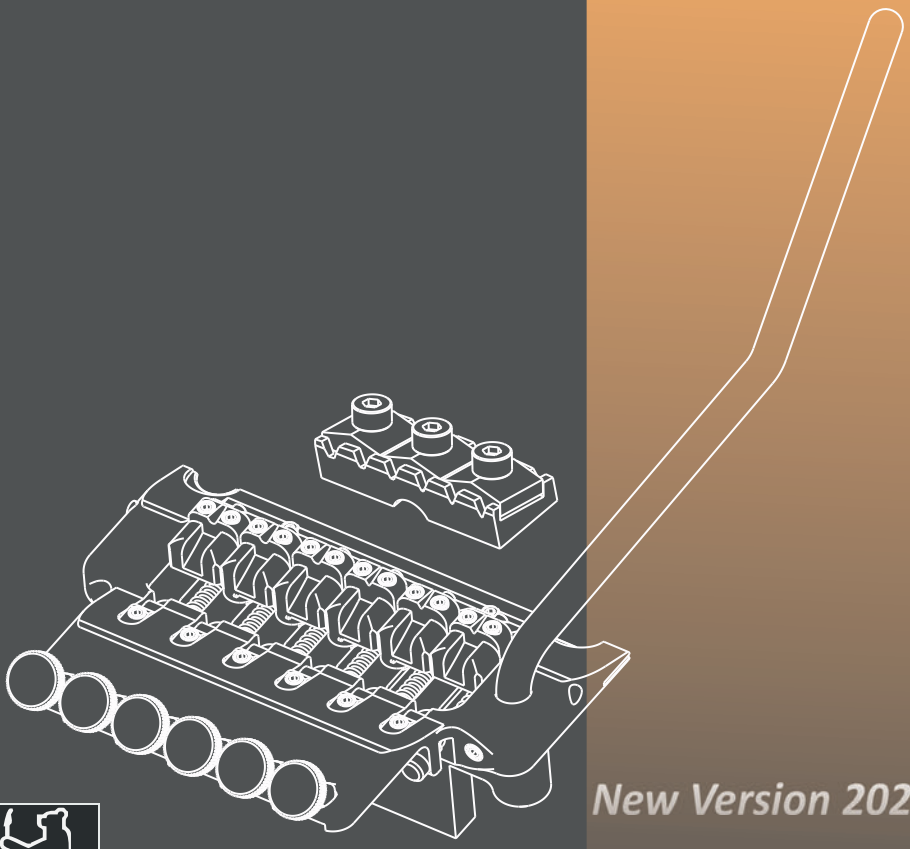
High Quality German Guitar Parts

5400

Fine-Tuning Tremolo

Katana



New Version 2023

Guide

ABM

5400 SAFETY INSTRUCTIONS

ABM

It is always a pleasure to install new hardware. Please take a little time for the safety instructions and the ABM 5400 Guide before you start with the installation. If you do not have the necessary assembly and woodwork skills, please hire an experienced guitar technician or luthier to do the job.

SAFETY INSTRUCTIONS:

- Please take care about your fingertips. String ends are really sharp.

- A soft cover between strings and guitar body protects the varnish while maintenance.

- A pair of nippers belong to each guitar case. Do not use scissors for cutting strings.

- Please protect your eyes with safety glasses, especially while changing strings.

- Do not use the guitar machine heads once the locking screws of the locking nut are tightened. Otherwise the strings may snap suddenly.

- Please tighten all locking screws softly for a long use. After first resistance while screwing a „10 minutes turn" clockwise is normally enough.

- If woodwork is required to install the hardware, we assume that the work has been carried out professionally and that there is knowledge of the tools required.

- If you suffer from a nickel allergy, please ask us before purchasing an item how we can help you in this regard.

- Spare Parts: All parts of the ABM 5400 tremolo are exchangable, like the knife edge or the tremolo arm socket. Please ask us for the course of action before you remove parts. Maybe special tools are required (knife edge).

This symbol, wherever it appears, alerts you to important operation and maintenance instructions in the accompanying literature. Please read the manual and the safety instructions before mounting and operating the tremolo!

Guide

ABM

INTRODUCTION

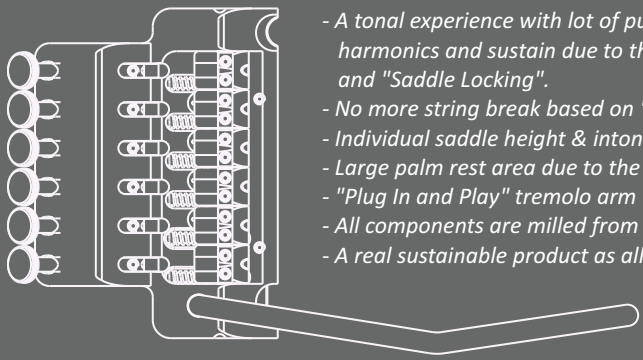
Welcome to the new ABM 5400 Guide!

Learn more about this outstanding product.

If you have further questions or suggestions please contact us by email: info@abm-guitarparts.de

We wish you a pleasant time reading!

ABM 5400 ADVANTAGES



- *A tonal experience with lot of punch, but clarity, singing harmonics and sustain due to the "One Block Design" and "Saddle Locking".*
- *No more string break based on "Flat string Locking"*
- *Individual saddle height & intonation adjustment*
- *Large palm rest area due to the low profile design*
- *"Plug In and Play" tremolo arm*
- *All components are milled from solid brass and steel*
- *A real sustainable product as all parts are exchangable.*

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100%

5400 TREMOLUTION

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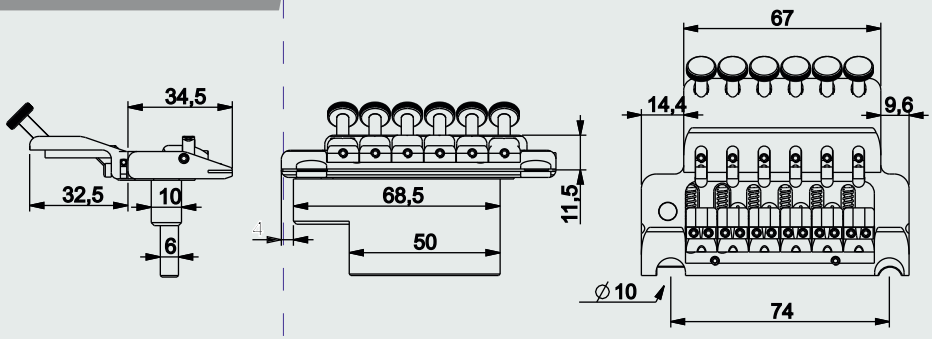

Type:	*Fine-Tuning-Tremolo, compatible to „Floyd Rose Original“ dimensions*/** Any kind of neck radius can be used by independent saddle height adjustment!*
String-Spacing:	*10,7mm / overall 53,50mm*
Stud-Spacing:	*74mm to 74,5mm*
Studs:	*Fine threaded metric M7x0,75m Stud with 25,50mm length Bushings M7x 0,75mm Thread, outline diameter 10mm, length 20,75mm*
Finishes:	*c= Chrome, b= Black-Chrome, g= Gold*
Tremolo-Block:	*ABM5400 comes with a 37mm steel block to arrange a wide compatibility.*
Packing Unit:	*Tremolo, pair of posts & anchors, tremolo arm, 5 high tension tremolo springs, one spring claw with mounting screws, 2 allen keys. Please note that the locking nut is not included. Please choose model 7050-R2 or 7050-R3.*
Accessories:	*Blocks: 32mm height: TBblock5400-32 St (Steel), TBblock5400-32 (Brass), 42mm heigth: TBblock5400-32 St (Steel), TBblock5400-32 (Brass).* *Nuts: 7050-R2 locking nut, (Brass), 41,3mm, 10" Radius* *7050-R3 locking nut, (Brass), 42,8mm wide, 12" Radius*
****Important Note:**	*The ABM 5400 Tremolo is directly compatible to the „Floyd Rose Original“ routing diagram which represents the needed cut outs of the guitar body including the spring cavity for a standard guitar body depth of 44,45mm. Beside the standard guitar body depth you may need a different block height (32 or 42mm). The standard block height of ABM 5400 is*

7050-R2 DURABLE & SONIC EXPERIENCE

ABM

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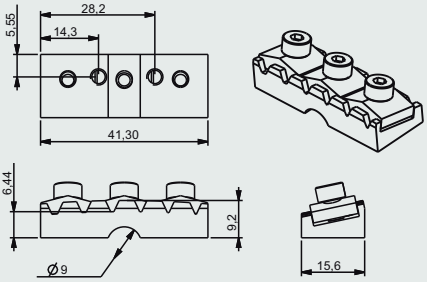


ABM 7050-R2

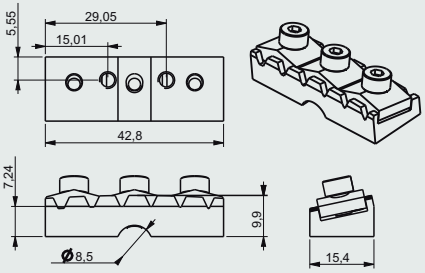
Type/Radius:	*Locking-Nut, compatible to SCHALLER* R2 outiline dimensions ABM Lock-Nuts are milled from Bell Brass, not from weak diecast! Advantages: Great tone and long lasting action without rust.*
Radius:	*9,5" = 241,30mm*
Width:	*1,58" = 41,30mm*
Truss Rod Cavity:	*Yes, compatible to „FENDER Bullet“ truss rod nuts too.*
Finishes:	*Chrome, Black-Chrome, Gold*
Packing Unit:	*Two M4 threaded mounting screws, two mounting woodscrews, S3 and S2,5 Allen keys.*
Accessories:	*SRB1, String Retainer Bar, for guitars with a low headstock angle, Length 1-7/8" = 47,67mm, Screw-Spacing 1-1/8" = 28,58mm*
Hints:	*We recommend to tigthten the string lock screws softly for a long life. Please imagine a clock face. A „10 minutes turn“ clockwise is enough. You may also damage the strings with too much torque. Mounting: We recommend to use the metric screws for clamping the nut to the neck perfectly. If you just use the woodscrews from above we recommend to glue the nut body in place additionally.*

* *We hereby declare that ABM Guitar Parts has got no relationships with Floyd D.Rose, or the companies and trademarks like Floyd Rose, Schaller or Fender.*

7050-R3 DURABLE & SONIC EXPERIENCE

ABM

NEW



ABM 7050-R3

Type/Radius:	*Locking-Nut, compatible to SCHALLER* R3 outiline dimensions ABM Lock-Nuts are milled from Bell Brass, not from weak diecast! Advantages: Great tone and long lasting action without rust.*
Radius:	*12,0" = 304,80mm*
Width:	*1-11/16" = 42,80mm*
Truss Rod Cavity:	*Yes, compatible to „FENDER Bullet“ truss rod nut too.*
Finishes:	*Chrome, Black-Chrome, Gold*
Packing Unit:	*Two M4 threaded Mounting Screws, two Mounting-Woodscrews, S3 and S2,5 Allen Keys.*
Accessories:	*SRB1, String Retainer Bar, for guitars with a low headstock angle, Length 1-7/8" = 47,67mm, Screw-Spacing 1-1/8" = 28,58mm*
Hints:	*We recommend to tigthten the string lock screws softly for a long life! Please imagine a clock face. A „10 minutes turn“ clockwise is enough. Mounting: We recommend to use the metric screws for clamping the nut to the neck perfectly. If you just use the woodscrews from above we recommend to glue the nut body in place additionally.*

5400 PLAYING & TUNING

ABM

For a better understanding we assigned the single components to functional groups like a traffic light. Please read the safety instructions of page 11 before you handle your tremolo!

- *Green: Parts could be used while playing or tuning*
- *Yellow: Parts are used for string replacement*
- *Red: Parts are used for saddle settings*

PLAYING/TUNING

Plug In the tremolo arm 14. You can adjust its mobility by the adjustment screw 15. For guitar tuning please use the tuner knobs 1.

If the tuner knob`s tuning range is used up, please untighten the string locking screw of the locking nut 20.

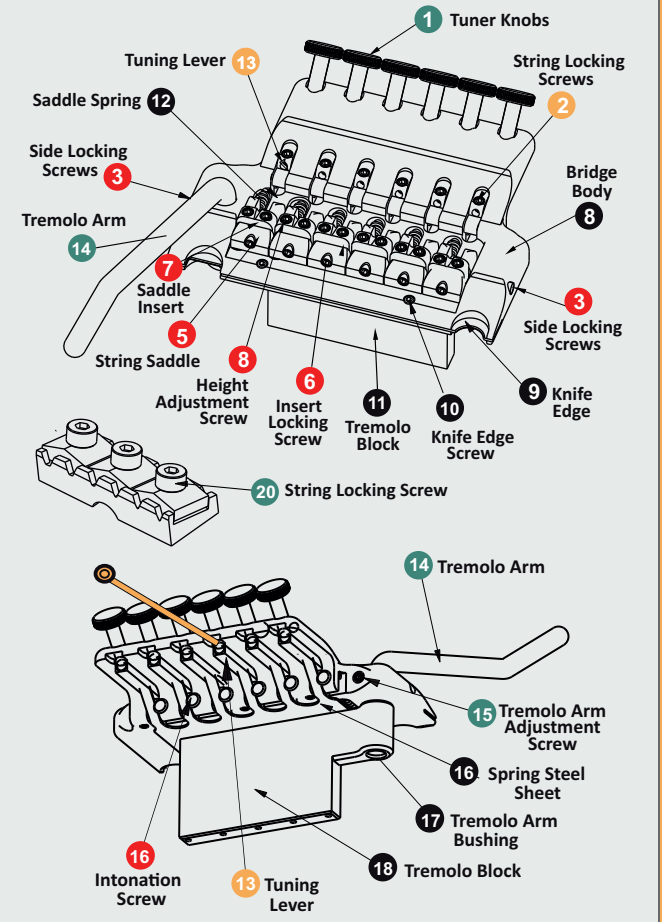
Please turn the tuner knob 1 upwards to an upper position to get enough adjustment range again.

Then tune the guitar by the machine heads based on the guitar`s head stock. Finally fix the strings with the string locking screws 20 of the locking nut again.

Worthwhile hints

To prevent sudden string break do not tighten the machine heads of the headstock without loosening the locking screws of the locking nut!

Please tighten all string lock screws softly for a long life. After the first resistance while screwing a „10 minutes turn“ clockwise is enough!



Quick Guide

5400 STRING REPLACEMENT

ABM

For a better understanding we assigned the single components to functional groups like a traffic light. Please read the safety instructions of page 11 before you handle your tremolo!

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- *Red: Parts are used for saddle settings*

STRING REPLACEMENT

A *Please declamp the string locking screw 20 of the locking nut to set the string free.*

B *Then remove the string from the machine head which is located on the guitar head plate.*

C *Please release the string locking screw 2 of the tremolo unit to set the string free.*

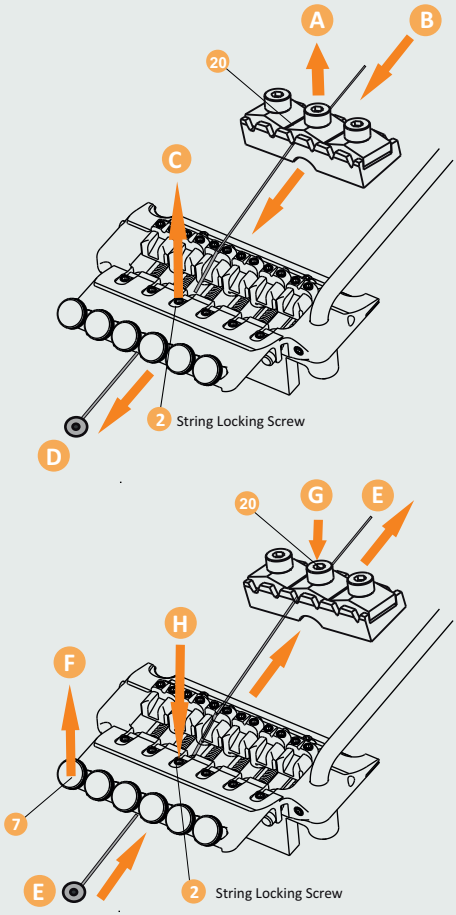
D *Pull or push the string out of the tuning lever. It works much better with a string that is cutted to a plain end.*

E *Set the new string to the tuning lever again and forward it over the tremolo saddle & locking nut to the machine head and wind and tune the string with it again.*

F *Please bring the tuner knob to a high position to assure enough tuning range.*

G *Tighten the locking screw of the locking nut again.*

H *Tighten the locking screw of the tremolo and tune the guitar by the tuner knob 7.*



5400 SADDLE SETTINGS

ABM

For a better understanding we assigned the single components to functional groups like a traffic light. Please read the safety instructions of page 4 before you handle your tremolo!

- Green: Parts could be used while playing or tuning
- Yellow: Parts are used for string replacement
- Red: Parts are used for saddle settings

SADDLE SETTINGS

The 5400 saddle contains the string saddle 5 with ist saddle insert 7.

Before any changes for intonation, height or string spread are made, please loosen both side locking screws 3.

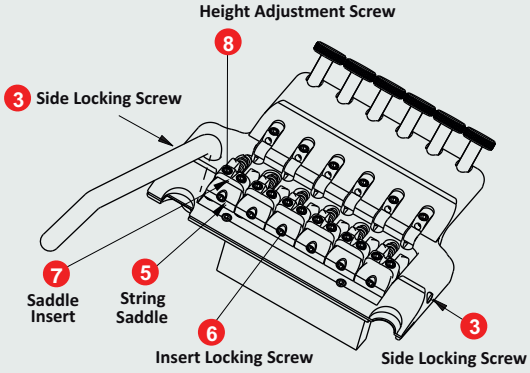
Please untighten the insert locking screw 6 for height or string spread adjustments.

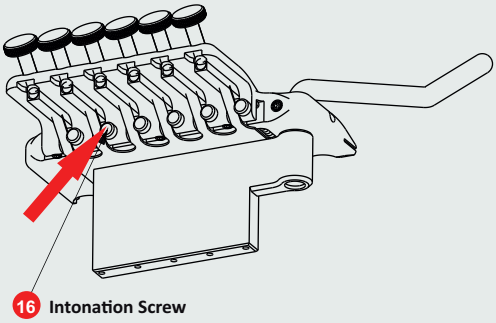
Then you can move the saddle Insert 7 up to +/- 0.35mm lateral for string spread or you use the Height Adjustment screws 8 to follow the neck radius properly. After this work you lock the insert locking screw 6 again.

Intonation Setting

Please loosen the side Locking screw 3 before you use the intonation screw 16 for moving the saddle back or forward to find the right position.

After changes are made please tighten the side locking screw 3 again for best tremolo action.





5400 MOUNTING TIPS & FAQ

ABM

MOUNTING TIPS & FAQ

If you are not familiar with a tremolo installation please consult a guitar tech or luthier for assembly. The installation requires knowledge and tools.

A tremolo spring installer assure a secure tremolo spring exchange. An underlay between tremolo plate and guitar body holds the tremolo in a floating position with loaded tremolo springs (for quick string or spring exchange, intonation settings, etc.).

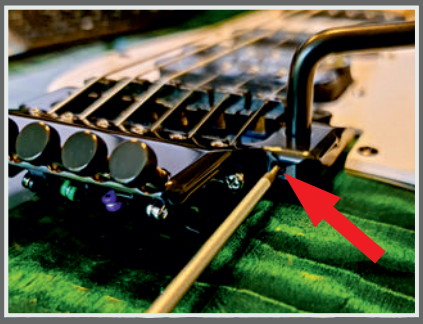
*The ABM 5400 is compatible to the **„Floyd Rose Original“** routing template. In other words: If your guitar has got a „Floyd Rose Original“ tremolo mounted, the ABM 5400 is a perfect retrofit.*

We deliver the tremolo with a 37mm high steel block. This standard is suitable for guitars with a body depth of 44,45mm with floating mount operation and tremolo pocket. If your instrument shows a „Floyd Rose Classic“ routing template without a tremolo undercut you may need the block with a height of 42mm. Guitars with a thinner body may need a block height of 33mm.

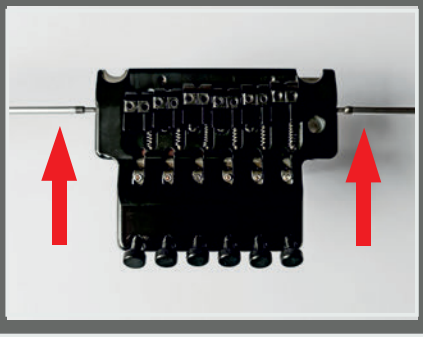
You can still order ABM 5400 with a 32 or 42mm block. In this case please leave a message while the ordering process.

All parts of the ABM 5400 tremolo are exchangable, like the knife edge or the tremolo arm socket.

Tremolo arm: The play of the arm can be adjusted as desired. The adjustment screw is located on the rear area of the tremolo plate next to the intonation screws. This lock screw adjusts the play between the arm and the DELRIN sleeve built into the tremolo block. This can also be replaced after wear.



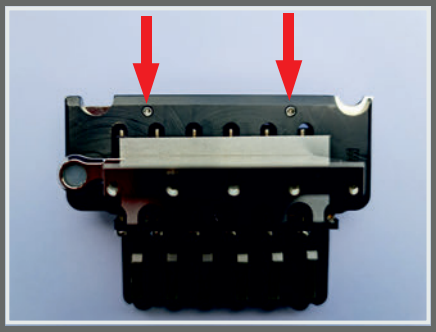
Saddle lock screws: You find them left and right beneath the saddles in both sidewalls of the tremolo. As soon all saddles adjustments are made, please tighen both lock screws parallel to lock the saddles equal from both sides.



MOUNTING TIPS & FAQ

We use a very sharp knife edge which adapts to the profile of the mounting bolt in the first few weeks. Please do not be surprised if semicircular notches appear on the bolt support area of the knife edge. That is the way to achieve a perfect joint.

*The **knife edge** itself is positioned and secured in the slot by two grub screws which are located on the underside of the tremolo plate.*

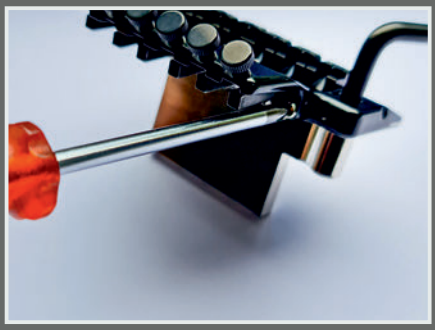


For this purpose, the screws have a conical tip which lateral surface presses the knife edge into the slot when the screw is screwed in.

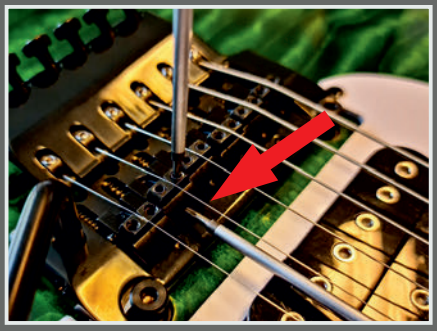
After the first resistance when tightening, continue turning for a max. of 5-10 minutes (compared with a clock face).

It is not about screwing the screws in over the entire height of the base plate. This is not even possible due to the mechanism.

When adjusting the intonation, it is best to use a long-bladed screwdriver so that we do not damage the varnish of the guitar. During this maintenance work, we recommend covering the area below the intonation screws with a cover for protection. Please always losen both saddle locking screws prior to intonation settings.



For saddle height adjustments please always loosen the frontsided saddle insert locking screw before, so that the saddle insert can be freely adjusted in height.



5400 MOUNTING TIPS & FAQ

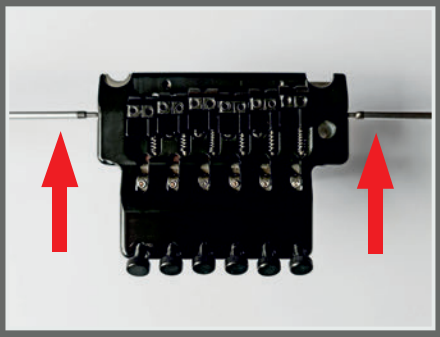
ABM

MOUNTING TIPS & FAQ

My guitar goes out of tune while using the tremolo:

1.Please check first whether the string lock screw is tightened, as with dive bombs the string moves in the tuning finger and may not return to their original position again.

2. Then please review whether the two saddle lock screws attached to the side of the tremolo base plate are tight. These prevent movement of the saddles.



3. Please check that all saddle insert screws are tightened too.

***4.** Other reasons that can affect tuning stability significant:*

The tuning stability of a guitar requires the combination of quality components and their professional adjustment.

Please always use the original ABM accesories like posts, sleeves, tremolo springs, spring claw and mounting screws. They are carefully matched for a perfect common function.

Are the locking screws of the Lock nut tight? Regarding standard nuts: Are the strings fixed at the machine heads well? Are the string notches of the nut ok? Or does the string stuck there?

In connection with a locking tremolo, either a locking nut should be used or a well notched quality nut in combination with high quality lock tuners.

Unfortunately, machine heads often contradict the goal of ensuring tuning stability, since the strings can loosen on the tuner axis during dive bombs or do not snap back into the exact former position.

You also find so many guitar tuners on electric guitars that have too much play in their axis, gear or knob, so that detuning is unavoidable, if you do not use a locking nut. It is always worth investing in good guitar machine heads.

MOUNTING TIPS & FAQ

Maybe, there are neck problems to be solved: Mounting screws have come loose on a bolt neck, so that the neck moves a bit while using the tremolo and do not come back to ist original position again.

Some instruments with screwed neck show a too large neck pocket, so the neck can move out of the string axis sidewards. This is a typical issue on 3 point neck assembly.

It has also happened that a standard non dual truss rod was not tightened, but with a loose nut and thus did not give the neck the necessary stability while dive bombs.

It is just as important that the sleeves for mounting bolt assembly are firmly seated in the guitar body. These holes in the guitar body normally have an undersize of approx. 0.2 to 0.3 mm regarding the outside diameter of the sleeve. It can also happen, that the original holes in instruments have widened due to the string tension. Then it helps to close and glue the hole with a wooden dowel and to drill it again with the correct size.

Electrical and magnetic issues:

Please always ground the tremolo system. This is done by soldering the ground wire to the ABM tremolo spring claw, which is tinned to accept the solder easily.

The distance between the string and the pickup should not be too small. But why? The magnetic field of the pickup is then too strong and the strings cannot vibrate freely. The tone with ist harmonics and the intonation either suffer as a result.

Valuable notes on changing strings:

After winding up they like to be stretched before they are ready to play. This is a standard procedure, especially important for tremolo guitars. You can do this by stretching the string between your thumb and your index and middle fingers. You do this multiple times, continuing the process down the length of the whole string. A practical tool can help you: The „String Stretcha“ from StewMac does this job.*

In between please tune the strings again and repeat the procedure above 3 to 4 times until the strings reliably hold the tension of the tremolo springs.

Please always make sure that the tremolo base plate is set parallel to the guitar body top. If necessary, you increase or decrease the tremolo spring tension, using the adjusting screws of the spring claw, so that the plate "floats" in a parallel position to the guitar top. So you get the best up and down bending action.

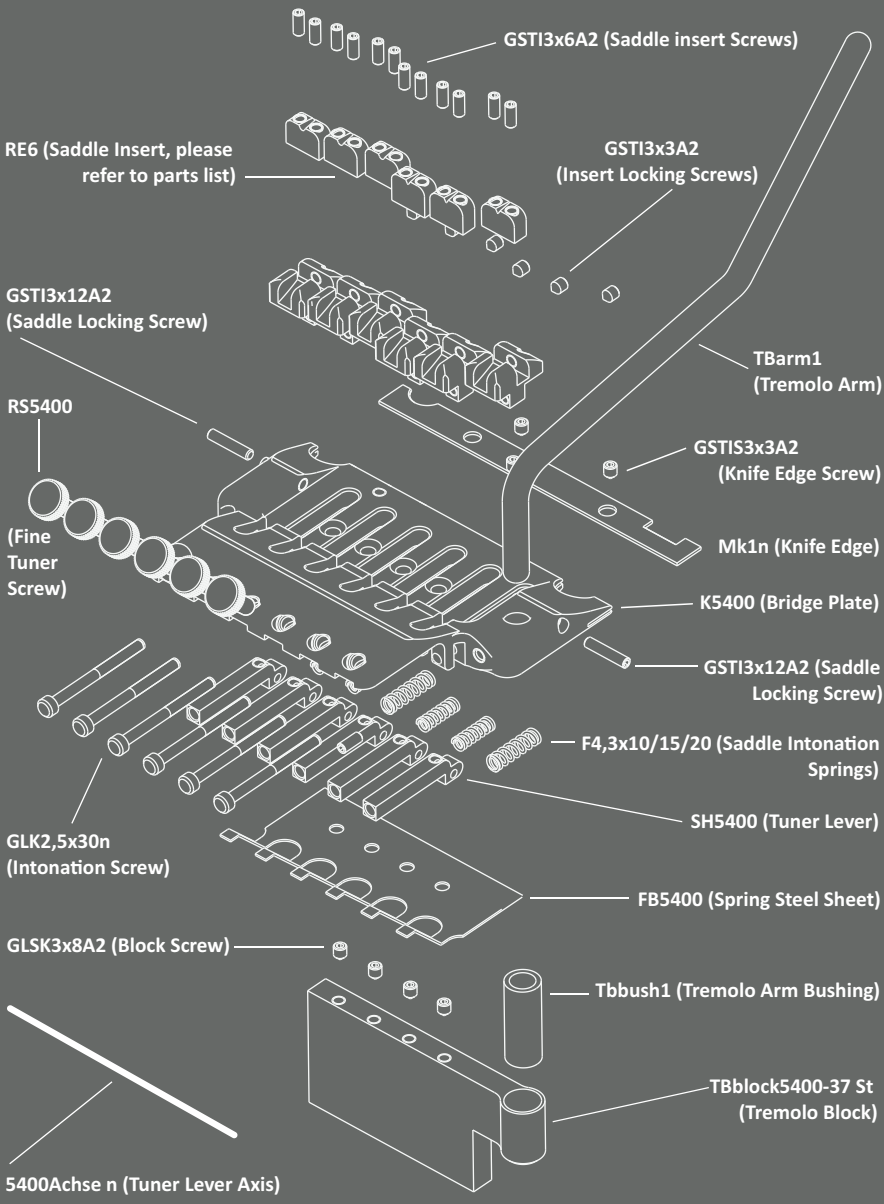
If you always play the same string gauge, the tremolo springs will adjust to the string tension and changing strings with the same gauge again will be much faster.

* *We hereby declare that ABM Guitar Parts has got no relationship with StewMac.*

5400

Exploded view with spare part numbers

ABM



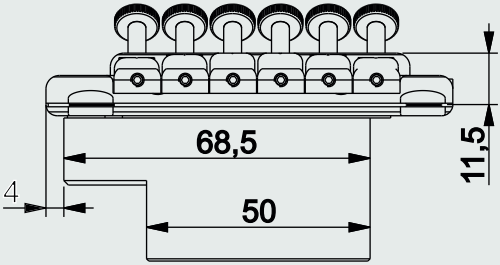
PARTS LIST ABM 5400

Tremolo Bridge Plate:	K5400
Tremolo Block:	TBblock5400-37 / TBblock5400-32
Tremolo Arm:	TBArm1
Stud Set for Mounting:	TSB (2 pieces including bushing)
Fine Tuner Screw:	RS5400
Saddle:	GR19
Saddle Insert:	RE6mdb - Insert for discant string, middle
	RE6mbb - Insert for bass string, middle
	RE6ldb - Insert for discant string, low
	RE6lbb - Insert for bass string, low
	RE6hdb - Insert for discant string, high
	RE6hbb - Insert for bass string, high
Spring Steel Sheet:	FB 5400
Tremolo Arm Bushing:	Tbbush1
Tremolo Spring:	7845h
Spring Claw:	7841
Knife Edge:	Mk1n
Tuner Lever:	SH5400
Tuner Lever Axis:	5400Achse n
Intonation Screw:	GLK2,5x30n
High Adjustment Screws:	GSTI3x6 (for low & med. Saddle Inserts)
	GSTI3x8 (for high Saddle Inserts)
Knife Edge Screw:	GSTIS3x3
Insert Locking Screw:	GSTI3x6
Side Locking Screw:	GSTI3x12
Tremolo Arm Adj. Screw:	GST3x6
String Locking Screws:	GSTI3x3
Tremolo Plate/Block Screw:	GLSK3x8
Saddle Intonation Springs:	F4,3x10 (2), F4,3x15 (2) F4,3x20 (4)
Allen Key (all M3 screws):	790015ST (SW 1,5 Swiss Tools)
Allen Key (Mounting Bolts):	790030 (SW 3mm)
Spring Claw Screw:	HLSK4,2x45z

PARTS LIST ABM 7050:

Locking Nut Corpus:	K7050-R3 or -R2
String Locking Plate:	P7050
String Locking Screw:	GZI4x8b (Hexagon Cylinder Head Screw)
Mounting Screw:	GLI4x18A2 (Hexagon Lens Head Screw
Allen Key (Lock Screws):	790030 (SW 3mm)

All items that are plated carry the following short cuts after the product code, like: b = black chrome, c= chrome or g = gold. An example: P7050b.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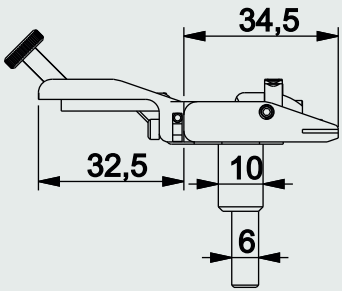
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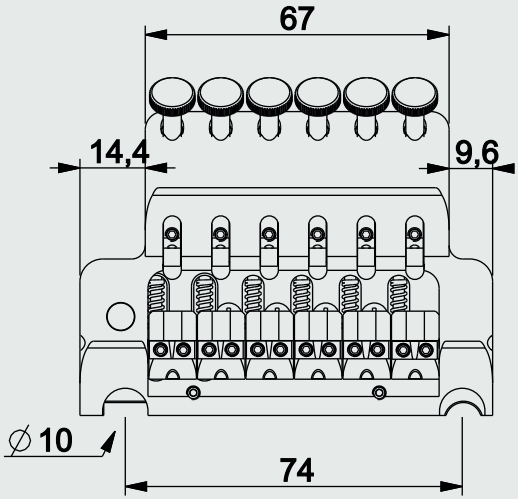
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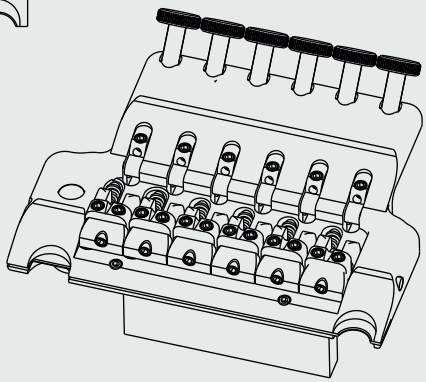

5400 THE 5400 KATANA STORY

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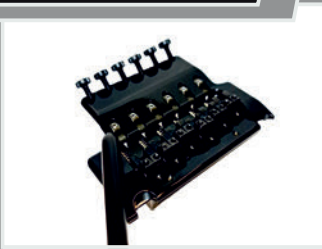

One day in 2010 we brainstormed about how to evolve the classic locking tremolo. Certainly, the Floyd Rose design is almost perfect and has remained almost unchanged since the late 1970s. But one thing we have learned at ABM over the last 74 years: Better is the enemy of good.

First we searched for a more musical material. It should combine a strong basic tone with a lively overtone structure and long-lasting sustain. We achieved this by milling the complex bridge body from a single piece of Bell Brass. The assumptions came true and the sustain even increased directly when playing the tremolo. It was a pleasure to hear how vividly the overtone behavior acted, with strong fundamental turning into harmonic overtones.

Many guitarists don't like the tremolo arm cap nut loosens so easily. So we designed a tremolo arm mount that reliably holds the arm with an adjustable DELRIN sleeve. Simply "plug in and play".

The string locking on the classic fine tuner tremolo is not ideal either. The strings tear, since they are bent almost to 90 degrees in the clamping device. That's why we developed a system which locks the string flat from above. The strings last much longer this way.

Furthermore, we integrated a height-adjustable saddle design into the ABM 5400. So we can emulate any desired neck radius easily. In addition, each saddle can be conveniently adjusted in intonation with a screwdriver.

It is a well-known issue that the adjustment screws of any tremolo tend to shift during play due to self-oscillation. The results are detuning and intonation problems. That's why we added two additional sideward mounted "Saddle Locking Screws" that lock the saddles firmly in place during play.

It is always important for us to produce sustainable products. Every single component of the ABM 5400 is exchangeable and available as spare part.

Spring 2023: The ABM 5400 Katana received a major update. An extended palm rest for even more playing comfort as low profile version. In addition, the new version includes a steel block, which offers more clarity for high-gain sounds. The brass blocks are still available as accessories too.

Of course, the current 5400 fits any guitar that has a Floyd Rose Original Routing.

All improvements show attention to detail and feature a high-end product at a very interesting price.

We hope you enjoy the new ABM 5400 Katana!