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Neck Bolt Upgrade Installation

The MGP Guitars Neck Bolt Upgrade consists of four domed head countersunk machine bolts used to replace the standard neck screws, and four threaded inserts which will be installed into the back of the neck. This ensures a consistent, worry free, tight connection between the neck and the guitar while also helping with tuning stability and potentially adding more sustain. It can be used to repair a neck with stripped screws, improve a neck or for new builds. The MGP Guitars Neck Bolt Upgrade is especially useful if you travel and frequently have to remove the neck of the guitar while in transit – no matter how many times you take the neck off and put it back on, the threads will not wear out and the neck will still tighten up to the body properly.



Important: If there is anything in these instructions that you don't understand or you feel uneasy about doing, **don't do it!** If the upgrade is installed incorrectly you may damage your neck, so if you're not confident with what you're doing it would probably be best if you took your guitar to a professional to get the upgrade installed...

If this is a new neck with no existing holes, first fit the neck to the body and mark the positions for the holes by inserting neck screws through the holes in the body so that the points mark the locations on the neck.

Note: the inserts are a larger diameter than standard neck screws so you need to check that the hole locations are not too close to the edge of the heel – the centres of the holes should be a minimum of 5mm from the edge of the neck

It is important that the holes for the inserts are drilled perpendicular to the heel of the neck. If they are drilled at an angle it may be difficult or in extreme cases impossible to thread a bolt into an angled insert – for this reason a drill press is recommended, although with care it is possible to use a hand held drill.

Secure the neck, face down making sure not to damage the frets and check that the surface of the heel is level. Mark the depth for the holes on the drill bits with pieces of tape. Make sure that the depth of the holes is at least 5mm less than the

thickness of the neck in the area you are drilling. For a new neck, start with a 2mm bit then a 3mm and then 4mm, for an existing neck you can probably go straight to the 4mm bit. The pilot hole for the insert can then be drilled. Mark a 5.6 or 6mm drill bit* to a depth of 11mm and drill out the top of the 4mm holes.

* specifications for the inserts list the pilot hole size as 5.6 – 6.0mm. This is due to differences in the hardness of different wood species. If possible, use a scrap piece of wood to determine the ideal hole size for your project, otherwise use the smaller size and enlarge it if becomes too difficult to screw the inserts in.



4mm & 6mm stepped holes ready for inserts



Inserts in place ready to re-fit the neck

After the holes have been drilled it's time to screw in the inserts. First, run a countersink bit by hand over each hole for an extremely small countersink which will help prevent the wood from lifting as the insert is screwed in. It is a good idea too, to apply a small amount of candle wax or dish soap to the insert first to make it easier to screw in. With a 4mm hex key, making sure the insert and key are vertical, slowly screw the inserts in, a half turn at a time and then unscrew a quarter turn - repeat until the insert is flush with the surface of the neck heel.

Refit the neck using the bolts, making sure not to tighten any of them until all 4 are threaded in. After checking the alignment of the neck, snug the bolts down but be sure not to over tighten them.