Instructions for G5 backplate replacement and motherboard mounting.

Kit contents:
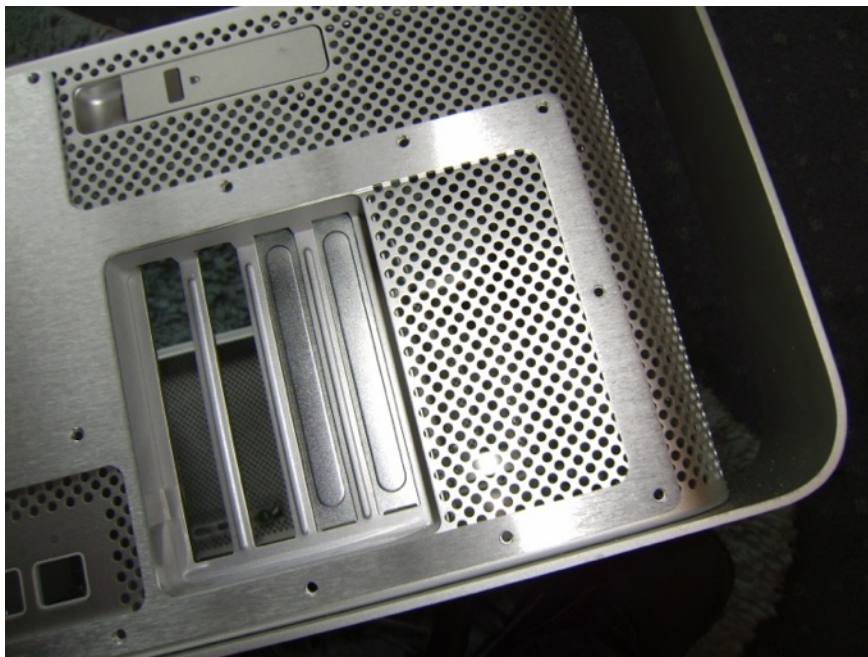
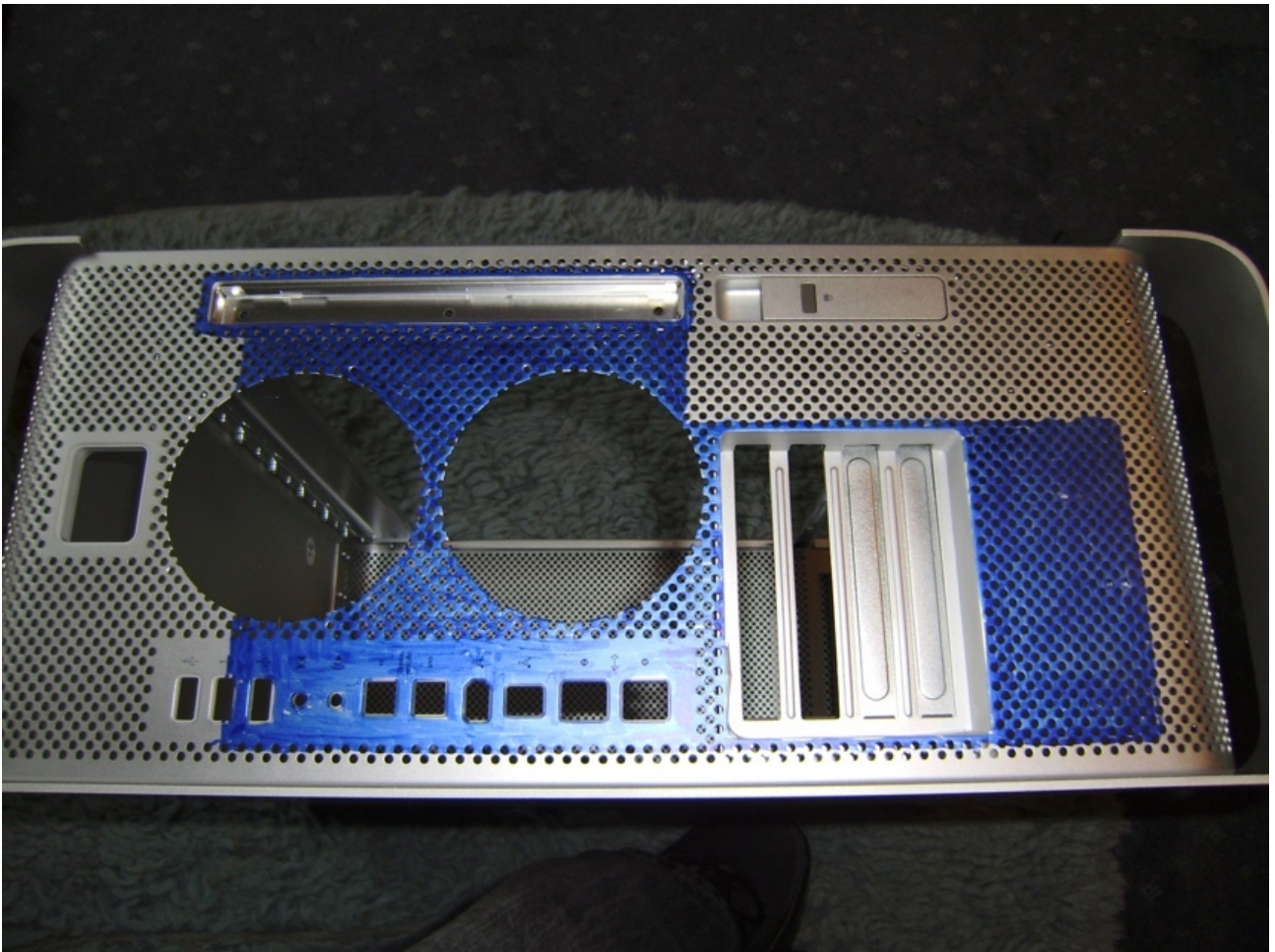See end page.

Instructions.

The case should be stripped of all electrical items and fittings prior to kit installation so as to avoid problems with drilling swarf. The directions below do not detail the full stripping process.
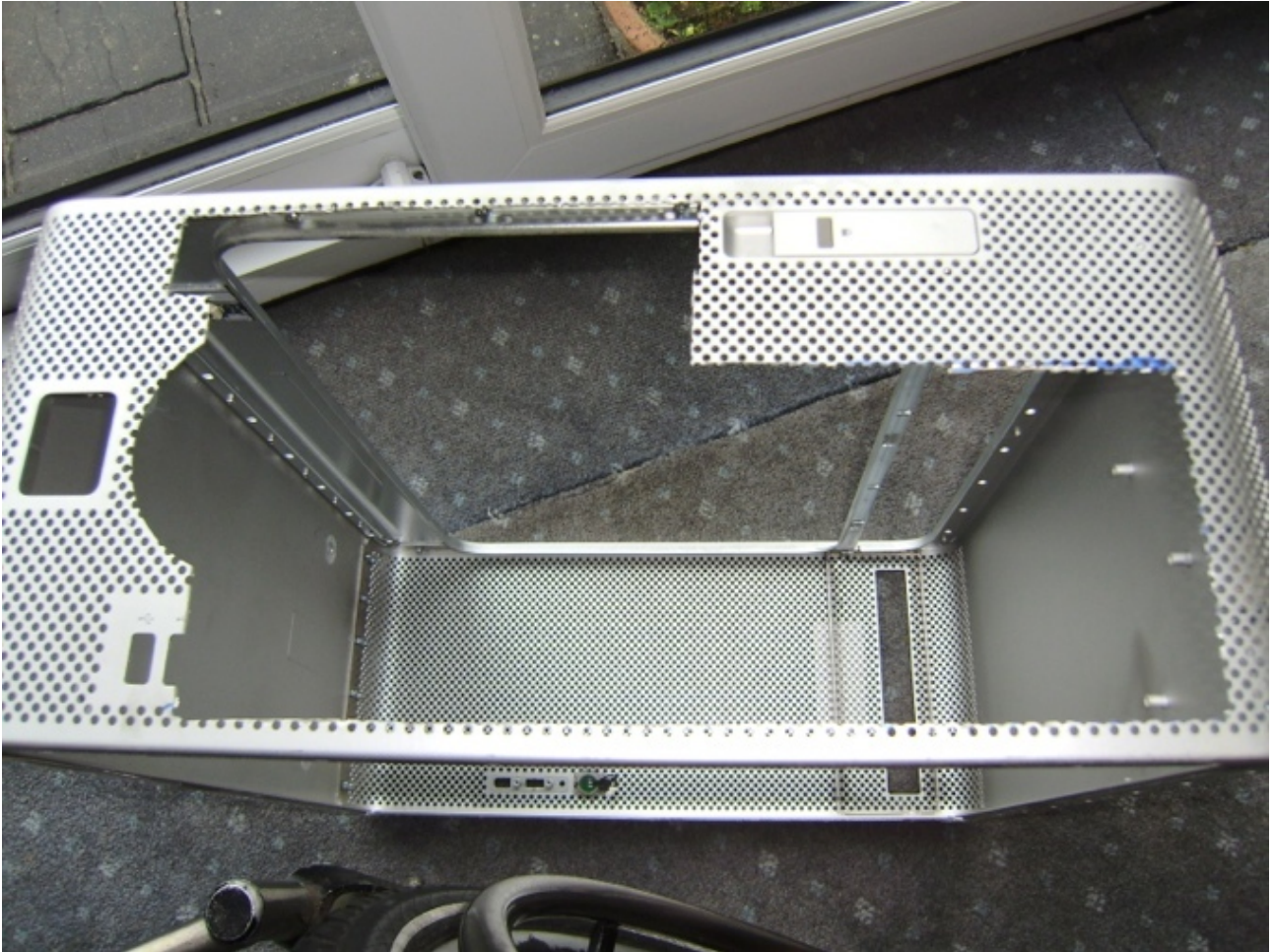
BACKPLATE

1. With the G5 stripped and fans removed, offer up the backplate to the rear of the G5 and do a test fit. Test fitting means simply laying the backplate against the rear of the G5 and ,using the PCI slots as a reference, place the short M3 screws through aligned holes in the G5 backplate.
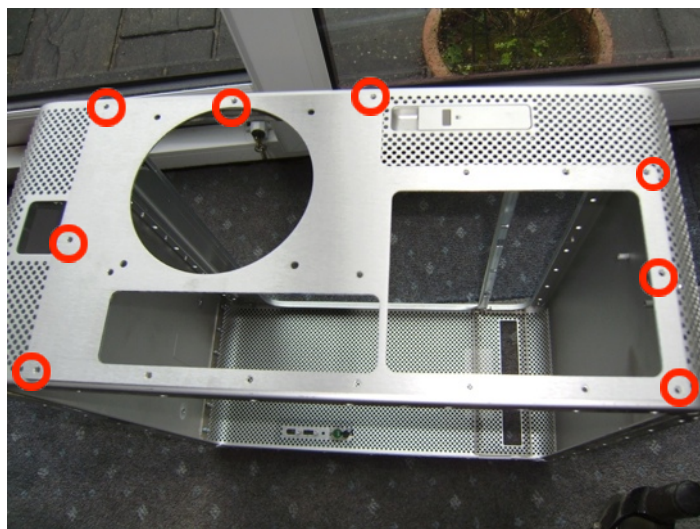
2. With the new backplate lying against the G5 back, this will show you where you will need to cut away material. I suggest marking around the inside of the template as shown overleaf and above all else,REMEMBER you must keep the material of the G5 backplate that you are going to secure the screws to. Below is an example of a mark up which leaves a good margin for error should you go wrong.

5. Once you have made the cuts test fit the new back. This time, once you have loosely fastened the new back plate into place offer up a 120mm fan to the hole and see if all fits well. If there is too much of the original back to allow the fan assembly to fit, then make a note of where the problem is, take the backplate off and do any needed extra cutting.
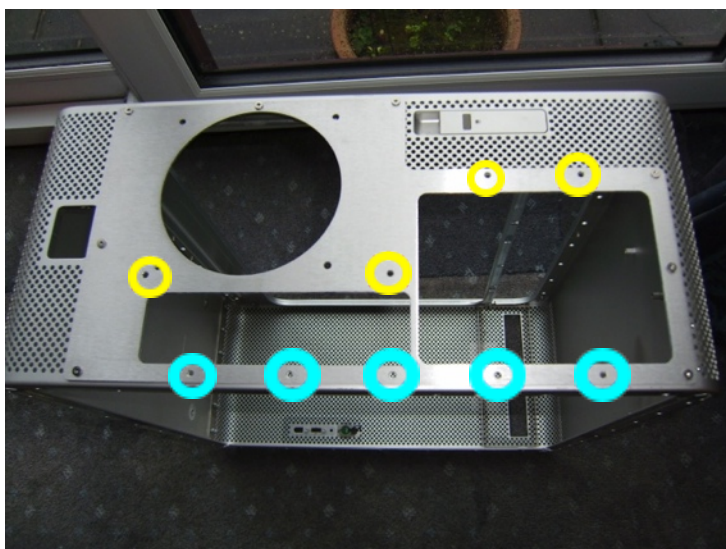

6. Having done this you can now fasten the backplate to the rear of the G5. Fasten the case at the points circled in red using an M3 screw, a washer and a nut at each of the points indicated.
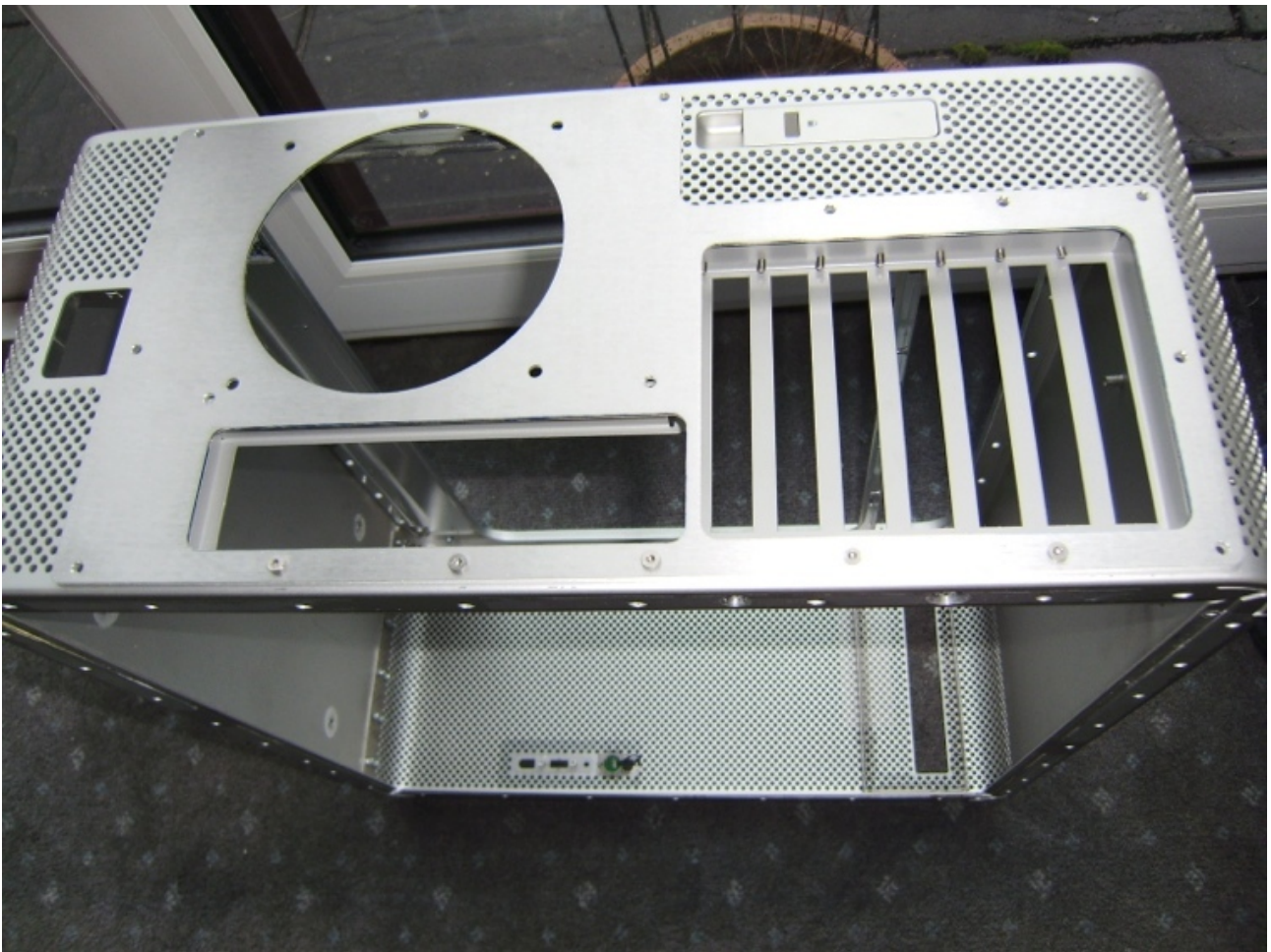
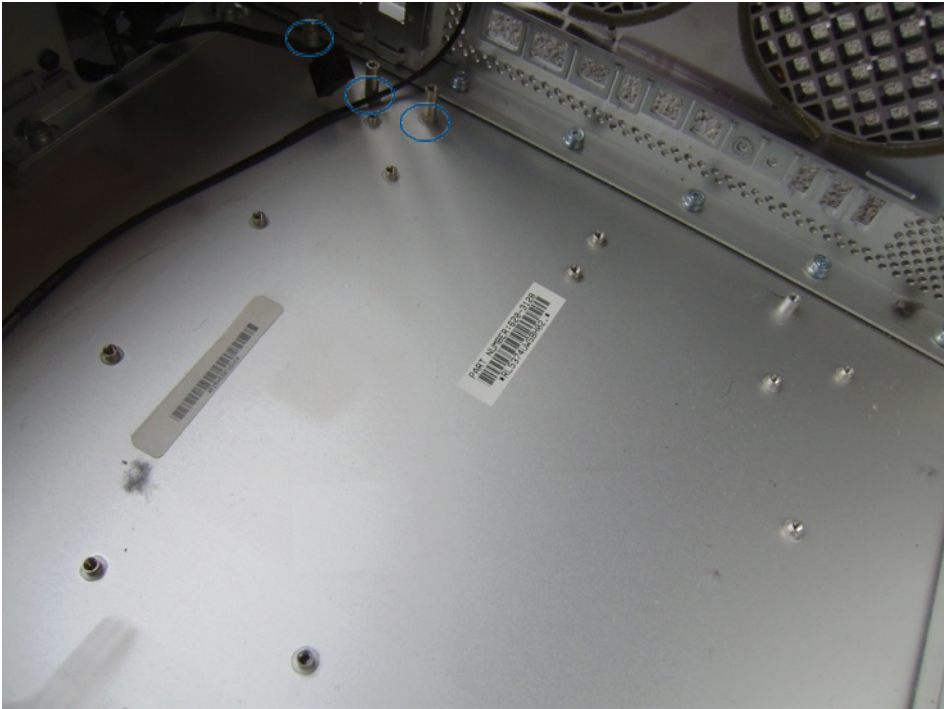7. Once you have done that you can now fit the IO shield.

8. The IO shield is attached to the inside of the case using the remaining mount points. You DO NOT need nuts or washers on the bottom line of 5 holes marked in blue - the IO shield has been tapped and the holes along here have an internal thread. Be sure not to over tighten these screws. The screws shown in blue do need a washer and a nut behind them.

9. Now the stripped interior of the case looks something like this if you have a late 2005 model:
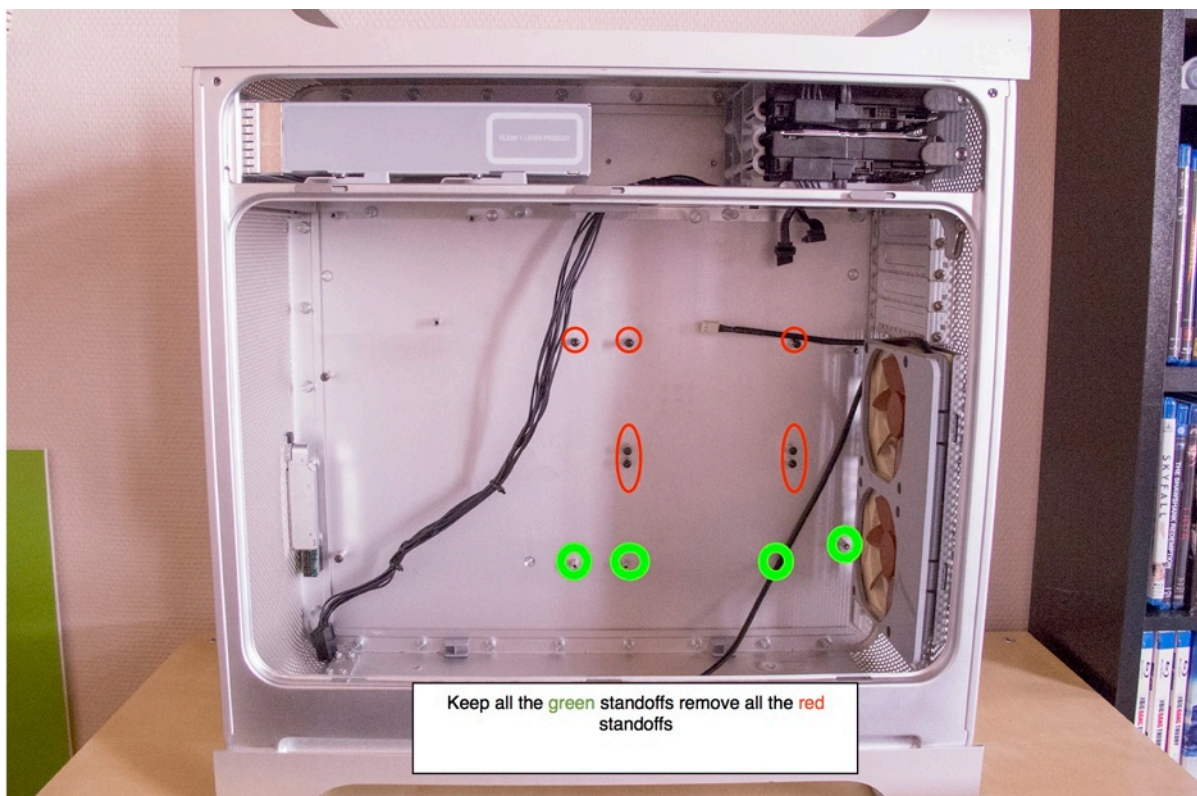
10.You need to remove the three standoffs circled above as well as this standoff just below the top shelf:
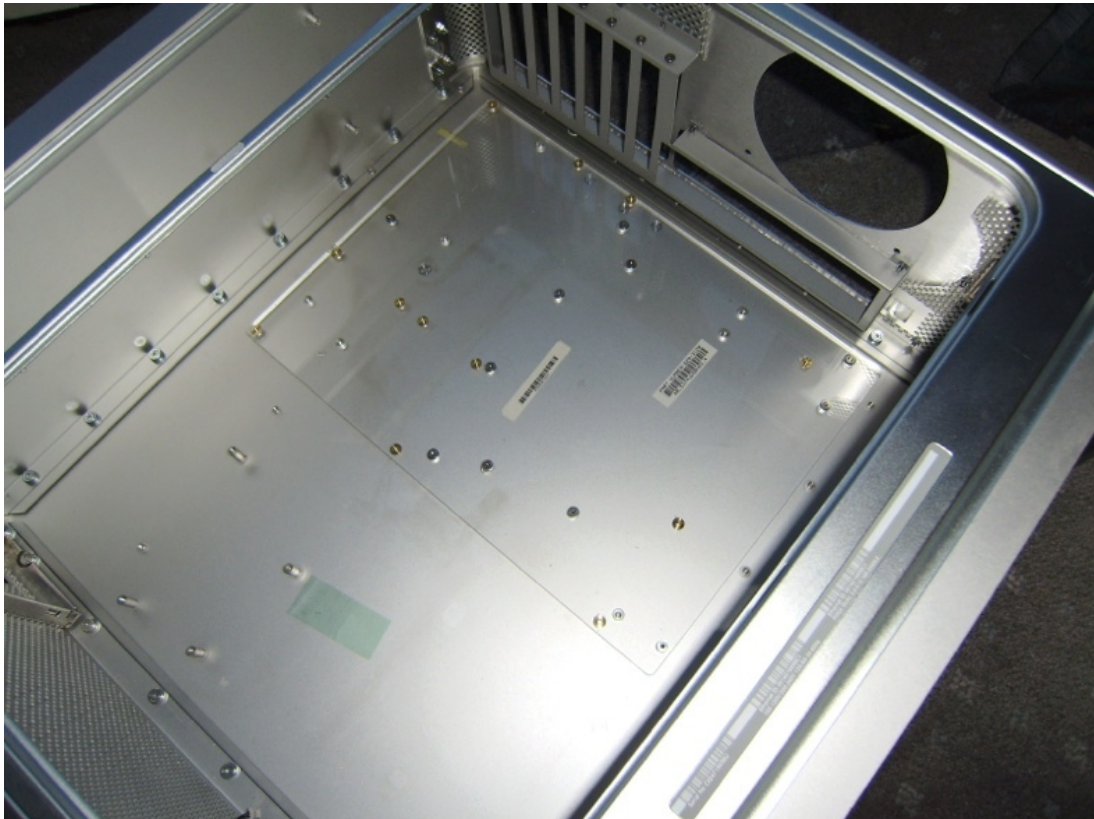

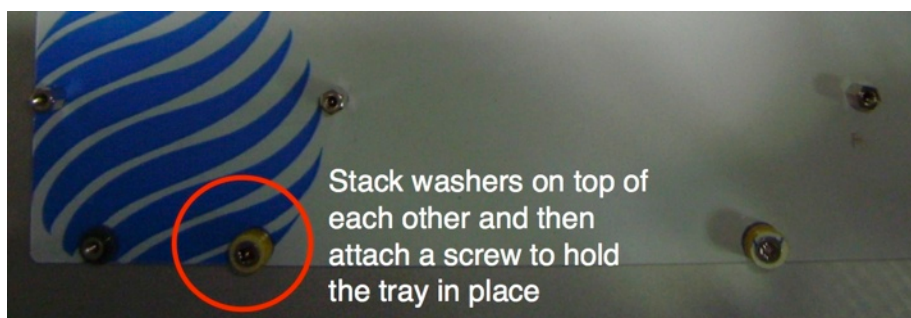This is easy to do with a small sideways tap of a hammer.

11. For other models of G5, the principles are the same - remove standoffs that interfere with the mounting of the motherboard tray. The picture below sums up, for one very common variant of G5, the standoffs to keep and the ones to remove.

Keep all the green standoffs remove all the red standoffs

12. Once the G5 standoffs that do not line up with corresponding holes in the tray have been removed it is time to test fit the motherboard tray. Just lay it down on the inside as shown and arrange the gaps in the tray to surround the little threaded sleeves (i.e. the shelf attachment points and the very short threaded standoffs). With a little gentle persuasion you will find it clicks into place and lies flat.

13. To secure the tray in place you should use the M3 screws/thin washers to secure the tray to the shelf mount points and any other M3 mount points, and you can pile up the thick acrylic washers over the protruding G5 standoffs at the bottom area of the tray and then use one of the M3.5 screws to press down on the washer stack.

Stack washers on top of each other and then attach a screw to hold the tray in place
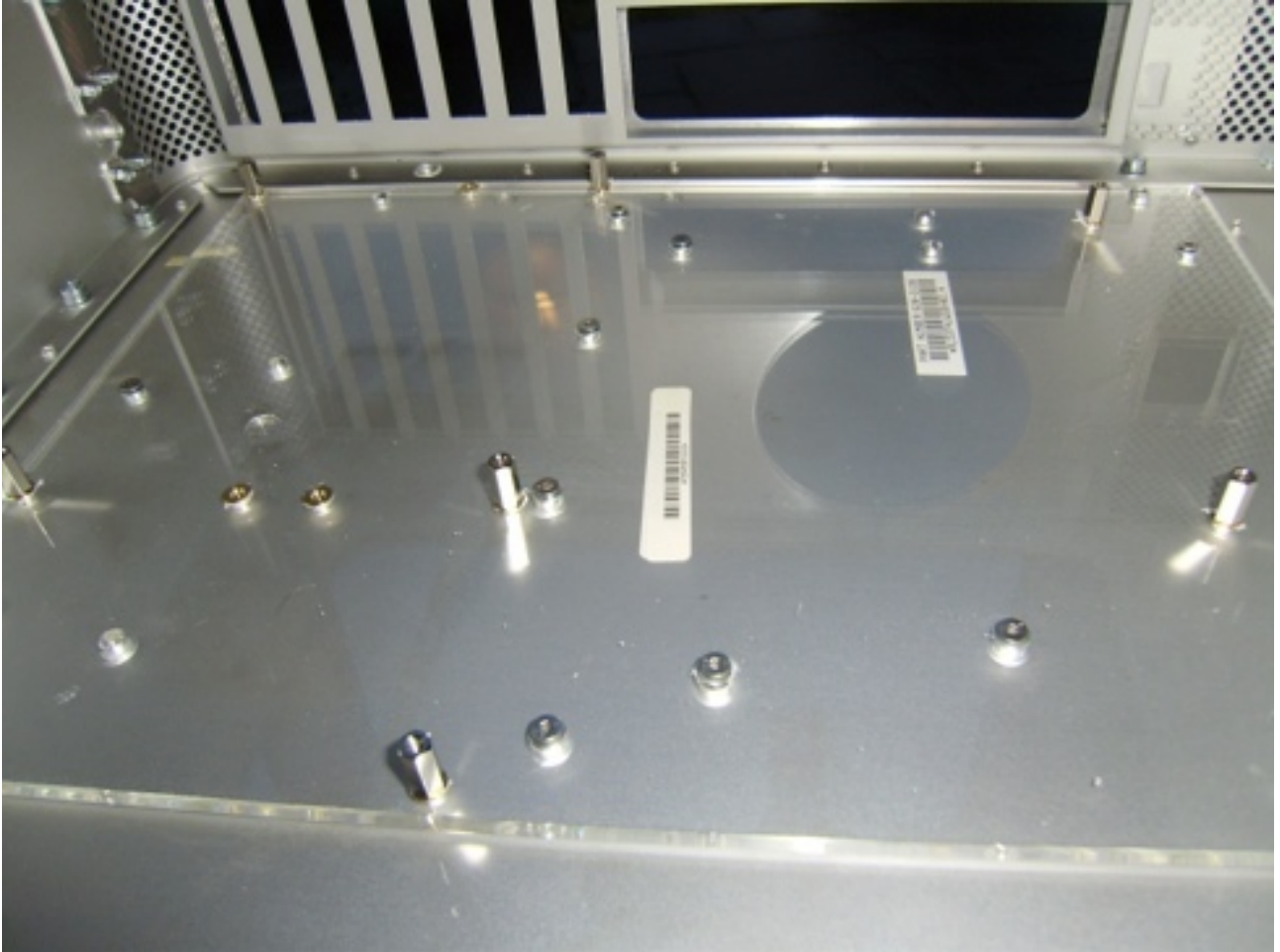
This tray should now be fixed very firmly in position!!

Note: For a few G5s, you may find you need to attach the motherboard tray to standoffs that are inside the footprint of the ATX motherboard. For instance, in the motherboard tray shown below, the tray had to be attached at the points circled in red. For these two mount points the standoffs had to be reduced in size by the use of a dremel tool or hacksaw so that when the motherboard was mounted to the tray there was no chance of them interfering with it.

14. You are now ready to screw in the 9 ATX standoffs supplied. Threaded brass inserts are provided at all of the standard ATX mATX and ITX mount points, just choose the ones you will be using according to the pattern of holes on your motherboard.

15. Before you re-assemble your G5 case and start adding your
    components, you'll also need to modify the top shelf.

The top shelf needs to be cut as shown above. Because the
motherboard tray fits extends into the area where the hard drive
carrier is located. Below is an example of how to cut the tray - note
that the mount points for the door latching system must all be
retained (top of photo) and that the DVD mounting area should also
be retained (left in the photo above), along with the two front shelf
mounting points.

16. Everything is now ready for you to mount your motherboard
inside your G5 or carry on with the rest of your mod.s

17. When you are ready to fit your fan or watercooling solution, remember that the supplied grill fits from the inside of the case like this:

 While the radiator solution above is shown with hoses on top, they can of course be used with hoses at the bottom - whichever you prefer!

18. We hope you are happy with the product, but if you have any problems please contact me, Dave, at The Laser Hive - info@thelaserhive.com

Sit back and admire your handiwork!

For all queries, please email Dave: info@thelaserhive.com

Many thanks for your order.

Kit contents:
ATX Motherboard Tray kit:

1 x Motherboard tray with fitted threaded inserts for ATX, mATX and ITX layouts 9 x 12mm M3 Standoffs
9x M3 screws for fixing to standoffs
10x M3 screws and washers for fixing tray to case

12 x thick acrylic washers 4 x M3.5 screws

ATX Backplate conversion kit 120 version:

1x brushed aluminium backplate
1 x ATX shield
7 x M3 screws for PCIe slots
17 x M3 screws for fixing backplate to shield and to case 12 x M3 nuts and washers

Fan grill

Many thanks again,

David Chugg of The Laser Hive, Carnaby, Pecket Well, Hebden Bridge, HX7 8QN, UK.