G5 Full ATX plus power supply support.

Contents:

Backplate;

IO shield ;

1 bag of fittings for Backplate and IO shield fitting comprising: 17 x M3 socket head bolts, 12 M3 washers, 12 M3 nuts and 2mm allen key.

Next Generation type motherboard tray pre-fitted with threaded inserts in all mATX/ATX positions;

Metal bridge piece;

Acrylic slotted bar;

1 bag of fittings comprising: 9 x M3 standoffs with 9 M3 screws; 5 x silver coloured socket head bolts 8mm length ; 7 x silver coloured cross head bolts 6 mm length: 12 M3 washers;

Fitting instructions.

Backplate

Check backplate position and mark directly on the back of the G5 the areas that will need removing. Note correct positioning is for the plate to fit (as shown below left). The mounting holes will accord generally to the mesh pattern except for the PSU mounting holes where you will need to enlarge the top left fixing hole (see below middle). You should be cautious when cutting not to cut away too much. Take your time.

After you have stripped the G5 completely, start by masking the area where you will be cutting and using a rotary tool (e.g. Dremel) make your cuts.
You must leave one row of holes intact on the edge of the G5 backplate as these rows are very important for attaching the new backplate. You need to remove the PCI slots and as you can see below the area underneath the slots where they attach to the case will not cut
all the way through with the dremel. However, once you get to the stage shown below you can gently rock the part back and forwards until the PCI slots detach.

Once the slots have been removed then put the backplate in position to check where else you will need to cut away material and then make any final cuts to tidy things up.

Here are some key points.

On the long edge next to the IO keep 1 row of holes; Keep at least seven rows of holes under the handle and 10 rows to the right of the handle, and note from the pictures above how the plate uses all of the flat area of the G5 top to bottom. Last of all enlarge the area around the top left screw for fitting the power supply in place.

Remember don't cut too much. If you cut too little you can always come back later and cut more......

Fitting the backplate:

Put the backplate onto the back of the G5 as shown and attach using the screws, washers and nyloc nuts. Please note that for ALL new kits now the panel is slightly larger than shown in most of the pictures and needs to be aligned so that it looks like this around the latch area:

Having then aligned the panel use the screws, washers and nyloc nuts to hold it in place (these screws shown in green below) .

Then attach the IO shield using screws, nuts and washers for the orange circled positions and just screws for the yellow positions. Note that for the long side of the IO plate the yellow holes on the shield are already tapped. Don't do these screws up too tightly as the threads at that point can be stripped if they are overtightened.


Then test fit your ATX supply (screws shown in purple). Note that any obstructions to fitting the PSU need to have been removed before this - notably the shelf must be removed.

Prepare your interior for the tray mounting

The interior of the G5 is shown here with the points marked in green showing where the motherboard tray will attach. The standoffs that are circled in red need to be removed.
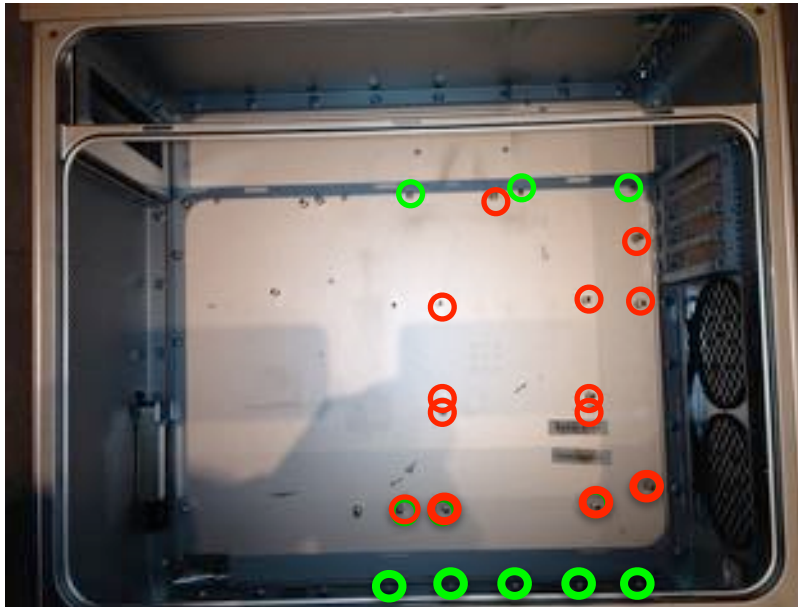
You can do this by tapping them lightly with a hammer.

If you have the late 2005 G5 which has multiple very short standoff mount points then you can grind those off with a dremel or similar. Another way to remove those is to screw in a long M3 screw and then use the sideways hammer tap method mentioned above (the mounting point should then simply pop away from the G5).

Next generation "standard" and "deluxe" trays for G5 ATX conversions.

Deluxe version

This tray version is somewhat different to our usual trays as it has the following features:
(a) It requires the removal of all original standoffs from the G5;
(b) It fixes to the shelf screws and the lower case screws;
(c) It has elongate holes to allow some fore/aft adjustment;
(d) It has a drive bay integrated to allow up to 3 2.5" drives to be fitted underneath the motherboard tray.
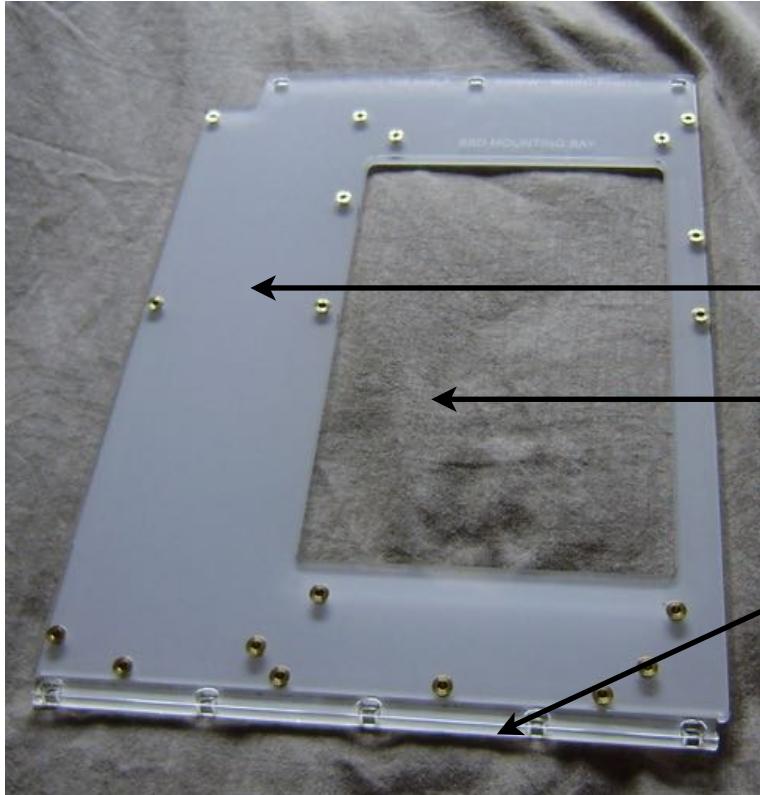
The kit has three parts -

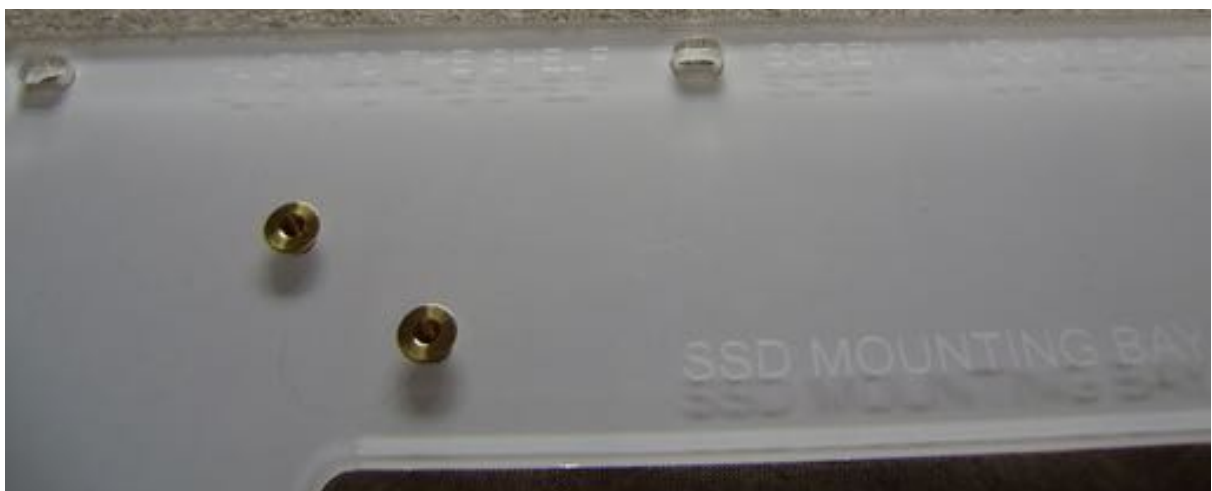Part 1 - The "tray" itself which has threaded inserts for all ATX and mATX fixation positions and also has:

a recess sized to allow 3 x 2.5" hard drives to fit inside it.

Part 2 - A "slotted bar" which is arranged to be placed over the lower case screw mounts

Part 3 - a metal "bridge"

The tray is marked at the top to show that it should be aligned to the shelf screw mounts:

These pictures show how the tray fits into the G5. First remove the shelf and also remove the 5 rearmost case screws from the case bottom.

Next, place the "tray" in position so the three slots at the top align to the three rear most shelf screw mounts and fix in place with three screws and washers (note the screw type
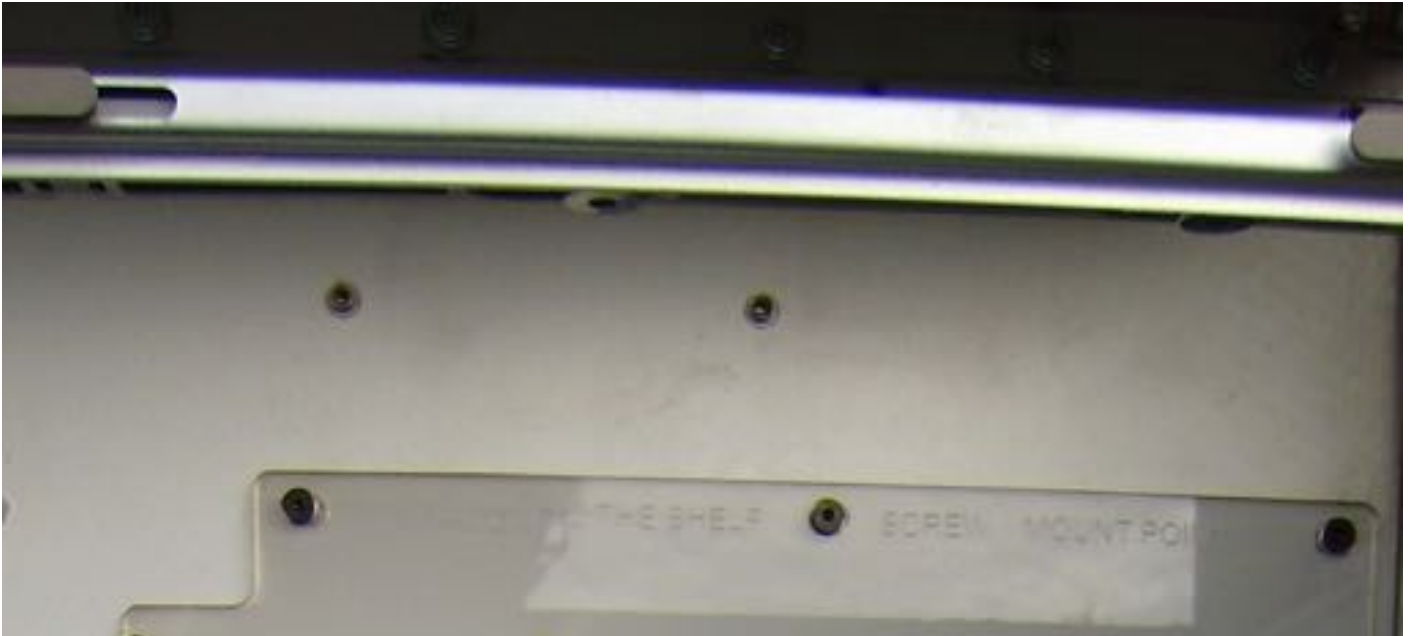
now used are SILVER with a CROSS HEAD type and <u>not</u> the black screws with allen head shown).

Now put the "slotted bar" over the case screw mount points and then fix the "bridge" to the

tray with 4 more of the screws (again please note the screw type now used are SILVER with a CROSS HEAD type and <u>not</u> the black screws with allen head shown) and then use the 5 longer silver screws with allen/hex head and washers to join the "bridge" to the case screw mount points.

Using the SSD storage bay.
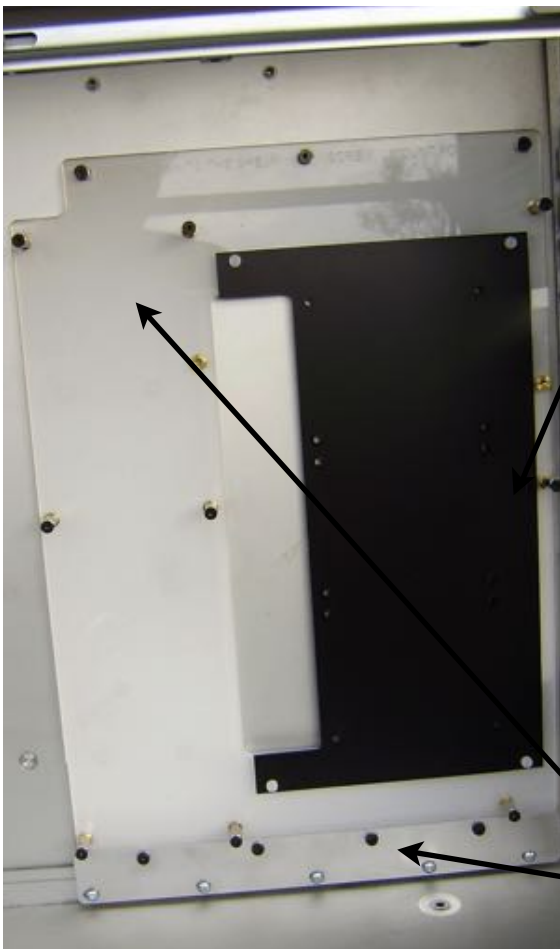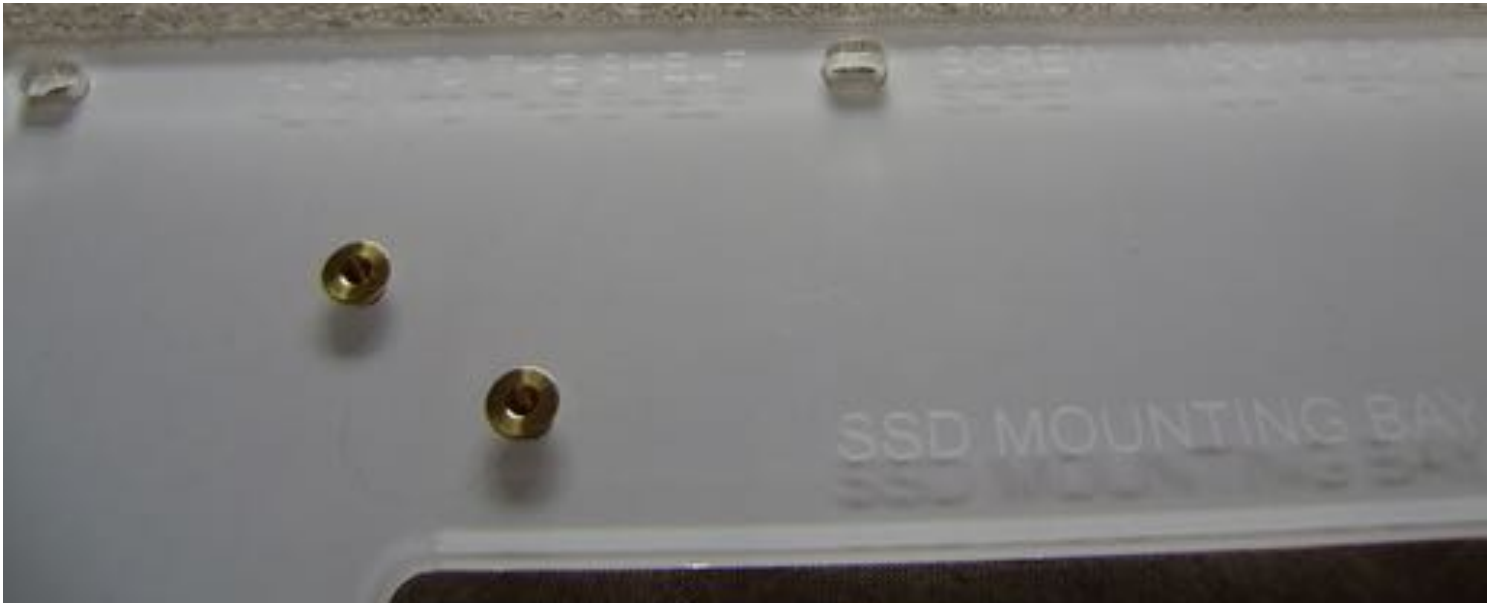
A "plasticard piece" fixes to the tray using 4 Nylon screws.

12 black nylon screws are provided for fixing Hard drives underneath the plasticard piece and housed within the recess of the tray. We recommend the use of super slim 7mm thick 2.5" drives, but thicker drives, can be used as the plasticard and the nylon screws are insulating so that no metal parts can touch the motherboard. The "plasticard piece" is flexible, but this is not a cause for concern. However, because of this you should **ONLY** use the nylon screws supplied with this support - so that there is never a risk of electrical shorts.

Adjusting tray position
If after mounting your motherboard to the tray you find that the PCI-e cards are too close (or too far away from) the PCI-e bracket then the tray position can be adjusted slightly by loosening:
   (a) the shelf screw attachment screws
   and (b) the lower "bridge piece" mounts
the tray position can then be moved a little forward or backwards as needed.
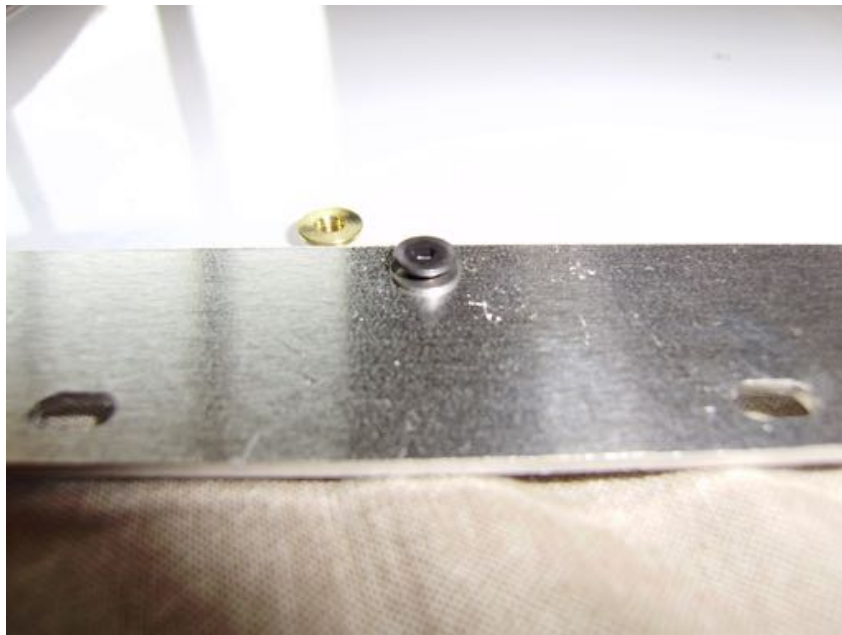
"Standard" version
This is the same as the "deluxe" version except that there is no SSD holder or recess for it.
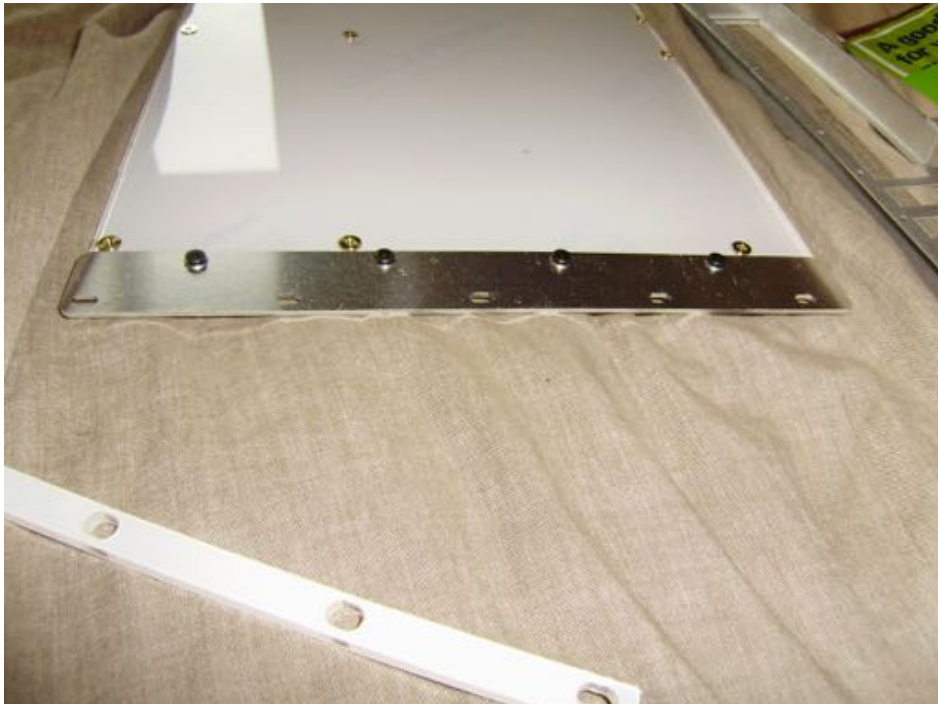
Contents for ATX versions: 9 x standoffs with screws; 7 x 6mm silver cross head screws and washers; 5 x silver 8mm screws and washers.
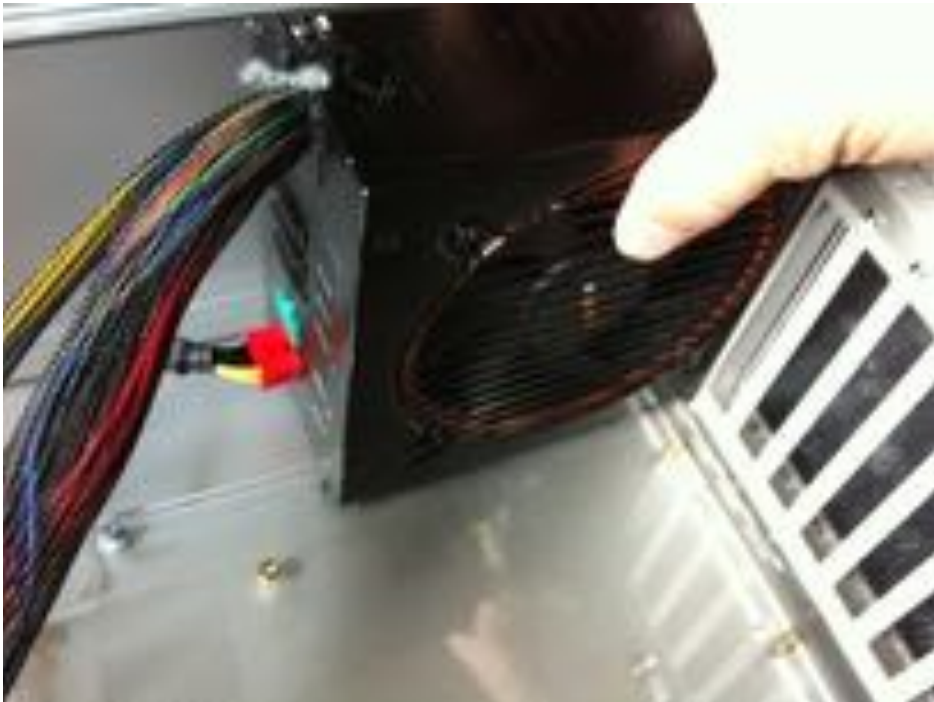
2mm allen key.

Having fitted your tray (either the deluxe or standard version depending on your kit) it is now time to check the fit of the power supply and to make some adjustments to the top shelf.

POWER SUPPLY FIT

With the tray in position now test fit the power supply.

SHELF TRIMMING

With the power supply in position you can now measure up your top shelf to decide how much you will need to cut the shelf.
This shows a typical cut to the top shelf that might be implemented, but in general the more of the material of the shelf that you can keep (and still be able to access everything) the better.

Dependent on your build, you may wish to cut either more or less of the shelf than shown and use it to help support the weight of the power supply. In our experience so far at the Laser Hive, we have not found it necessary to use the shelf to provide any extra support to the PSU enclosure. However, if you have a particularly long/ heavy power supply you might wish to provide extra support by using, for instance, a simple piece of right angle bracket attached to the shelf extra weight support.

Conclusion.

That completes all of the modifications.

You are now all set to fit up your computer!

As for the order of refitting I recommend:

1. Fitting the top shelf

2. Fitting the power supply.

3. Fitting the M3 standoffs into the ATX pattern on the tray

4. Insert the IO shield piece for your mobo and then fit the motherboard to the tray using the M3 screws provided.

Contact

Congratulations, the kit is all fitted.

This kit was developed at the Laser Hive and is exclusively available from the Laser Hive. We pride ourselves on answering any questions and solving problems, so PLEASE if anything goes wrong or you have any problems at all then contact Dave Chugg by emailing info@thelaserhive.com

We stand by our products and will always advise, replace or refund in the case of any difficulty. So as your first priority please give us the chance to solve your problems. We guarantee to react positively and quickly.