

HSPC “Top Deck” Tech Station (patent pending) Assembly Instruction & Usage Guide *Top Deck Tech Station - Standard*



Perfect for the frequent PC Upgrader, Builder, or IT Professional. The Tech Station offers easy access to computer hardware that was once buried inside the traditional computer case.

Testing and upgrading has never been easier!

<< Standard Top Deck Tech Station shown, hardware not included.

Congratulations on your purchase of HighSpeed PC, LLC’s patent pending Tech Station!

If you find parts are missing or need help please email us: support@highspeedpc.com
For other assembly pics/instruction visit our list of independent reviews: <http://www.highspeedpc.com/Reviews.htm>

Tech Station frame assembly Parts List:

- Refer to **Part Reference Page** (pg 7)

Tools needed:

- Philips screw driver (power screwdriver recommended)

Before you begin:

- Clear a table or desk to make room for this assembly project. Give yourself 20-30 minutes for completion. Read these instructions carefully to avoid problems.
- Lay out all the parts and compare them to the parts list. If you have any missing pieces email support@highspeedpc.com and we will help you right away.
- These installation instructions make references to “front, back, underside of bench surfaces” etc. to help orient the bench during assembly. Assume that “front” is the side with the AGP/PCI support brace, the underside of the top shelf holds the Hard Drive Rails and fan brackets, and the top of the upper bench surface is where the motherboard sits. “Pilot holes” as mentioned here don’t go all the way through the material but make it possible to drive screws into the materials.
- A hand screw driver can be used but a power screw driver is highly recommended due to the torque needed to get a snug fit between pieces.
- This bench is designed for Micro ATX and ATX motherboards. Some long motherboards such as Extended ATX may extend over the back of the Standard Tech Station. For complete coverage of even E-ATX motherboards consider using the Large Tech Station models.

Kit Contents:



See page 7 for detailed parts reference.

Assembly steps:

Step 1: Rubber Feet and Motherboard Standoff Installation

Step 1a: Assemble bench feet.

Step 1b: Assemble Motherboard Standoffs.

Step 1a: Assemble bench feet.

For this step you will need:

- The lower bench surface
- The four large black rubber bumpers
- Four of the stainless steel flat washers
- Four of the #6 x 1" screws



Set the lower bench (the board with only the four corner holes and no other pilot holes) on a flat surface.

Put a washer on each of the four #6 x 1" screws. Drive the screws through the recessed opening in the rubber bumpers and into each of the four corner holes. Drive the screws in until the tip of the screw shows through the other side.

Turn the lower bench surface right-side up so it's sitting on the rubber feet. Set this board aside, you will finish tightening the feet later when the vertical supports go on.

Warning: The exposed points of the screws coming through the board are sharp!



Step 1b: Assemble Motherboard Standoffs.

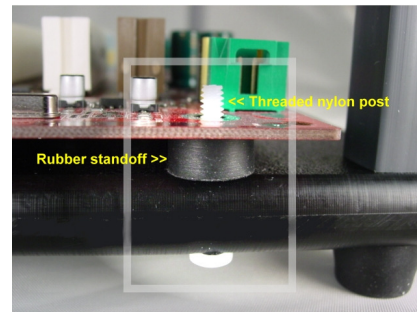
For this step you will need:

- Small parts bag that contains ten small rubber standoffs, eight small screws, two 1" nylon bolts and nuts.



The bumper standoff kit suspends the motherboard on non-slip rubberized bumpers and positions the motherboard perfectly on the Tech Station by using two nylon posts which run through existing motherboard mounting holes.

The bumpers are installed on the top side of the upper bench surface. Rows of pilot holes have been drilled to make installation easier.



Thread the 8 #6 x 3/8" screws through eight of the rubber standoffs (screw heads will counter sink into standoff). Screw down snug into the 7 pilot holes in the back two rows and the center pilot hole in the front row. (Indicated as #'s 1-7 and 9 in image above.)

Tip: Be careful not to over-tighten the screws, which will make the standoffs "pucker" slightly. Tighten just enough so the standoffs won't rotate on the screw, but make sure the screw head is below the top surface of the standoff.

The front row has three larger diameter through-holes, one of which is offset (see #8 in the pic above). Thread the nylon bolts up from the underside of the bench. Thread a rubber standoff down hand tight on each bolt.

For ATX motherboards: use the nylon bolts in holes #8 and #10

For mATX motherboards: use the nylon bolts in holes #8 and #9 (The nylon bolt and screw are interchangeable)

After the Tech Station is assembled, your motherboard will be lined up on the upper bench by laying the motherboard on the standoffs and lining up the nylon posts so they go through the existing mounting holes that are located near the PCI slots and I/O shield. (see the blow-up image above for an example)

Optional: Two nylon nuts are provided if a more permanent motherboard attachment is desired.

Turn the board over so it is resting on the motherboard standoffs and refer to the next step.

Step 2: Installing the Hard Disk Drive Rails

Step 2a: Install Hard Drive Stopper

Step 2b: Install Hard Drive Rails

Step 2c: Install Fan Brackets

Step 2a: Install Hard Drive Stopper

For this step you will need:

- The #6 x 3/4" screw
- One 1/2" white plastic spacer

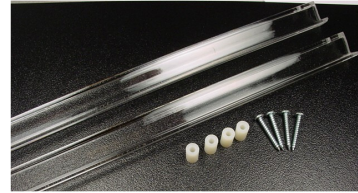
Position the top bench so there are five pilot holes on the left and two on the right. Insert the 3/4" screw into a 1/2" nylon spacer and drive it into the pilot hole in the middle of the left edge (see pic on right). This will keep your hard drive from sliding into the fan when it's placed in the HDD Rails.



Step 2b: Install HDD Rails

For this step you will need:

- Two acrylic drive rails
- Four #6 x 1" screws
- Four 1/2" spacers



Insert a #6 x 1" screw through the holes in each end of the acrylic drive rails. The screw should go in as shown in the image below. Slide a 1/2" spacer over the threads on each screw. Drive the HDD Rail screws into the four pilot holes on the underside of the top bench marked with the "HDD Rails" stickers. The stickers can be removed at any time.

Position the rails so when you look down the length of them toward the fan the rail on the right resembles the letter Z and the rail on the left is a mirror image (see image far right below). The idea is that when the board is turned over the rails create a channel for the hard drives to slide into.



Tip: Tighten the rails completely to avoid excess movement but **DO NOT OVER TIGHTEN** to avoid damage to the acrylic.

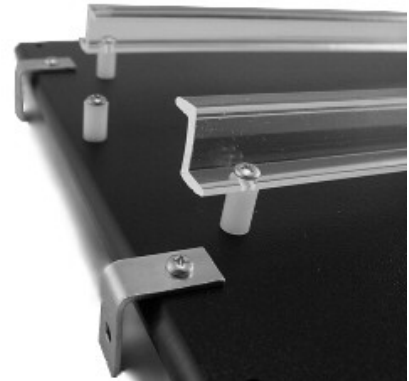
Step 2c: Install Fan Brackets

For this step you will need:

- Two L Brackets
- Two #6 x 3/8" screws (with point)

Lay the top bench so the HDD Rails are facing up and the Hard Drive Stop is on the left. Using two of the #6 x 3/8" screws attach two L brackets to the remaining two pilot holes on the left edge of the bench. Place the brackets so they hang over the edge as illustrated in the pic on the right.

Tip: It's helpful to set the end of the bench on an edge of your table so the L brackets can hang over the side. This levels out the bench and keeps the brackets flat for easier installation.



Step 3: Installing the Vertical Supports

Step 3a: Install front upper & lower supports

Step 3b: Install lower rear supports

Step 3c: Attach top bench to lower bench

Step 3a: Install front upper & lower supports

For this step you will need:

- Two threaded steel posts
- Two 7" long vertical supports
- Two 5" long vertical supports

Locate the front two corner holes on the top bench surface: Set the top board down on the HDD Rails with the fans L brackets on your left. The front of the board is now facing you.

Using two of the threaded 1 ¼" steel posts push or hand thread them through the front two corner holes until equal amounts of the posts are showing through on each side. (see pic on right)

Hold one 7" vertical support and one 5" support in either hand. Begin threading them on to each side of the post at the same time. (they each tighten in a natural right-hand threading motion) The longer support goes on the underside (with the HDD Rails) and the shorter support goes on the top. Tighten them both completely, but make sure the top support's pilot hole faces the front edge.

Important: It may take some tweaking to get the top support's pilot hole facing the front edge while maintaining a tight fit. Leave about half a turn on the bottom support and tighten the top completely with the pilot hole facing front. Once the top support is in place finish tightening the lower one.

Repeat step 3a for the other set of front top and bottom supports.



Step 3b: Install lower rear supports

For this step you will need:

- Lower bench surface
- Two 7" long vertical supports

You will be driving screws up through the rubber feet and into the vertical supports for this step.

Hold tightly one 7" vertical support and drive the screw up through the rubber foot and into the leg. Push the leg tightly against the bench as the screw is driven in.

Important: Stop tightening after you see the rubber foot beginning to compress. Tightening too much will cause the internal washer to pop through the rubber foot. If this happens just back the screw out and reset the washer.

Once you see the rubber foot begin to compress you can turn the leg by hand a half turn or so to get a snug fit. Be sure to line the edges of the leg up square with the corners of the board.

Along the same long edge of the bench go to the opposite corner and install the other leg. (see pic)



Step 3c: Attach top bench to lower bench

For this step you will need:

- Top bench/lower bench with legs attached
- Two #6 x 1" screws
- Two washers
- Two screw caps

In this step you will be setting the top bench onto the lower bench and tightening the two bottom and top two screws. Take the top bench, turn it over and hang the short 5" supports over the edge of your table so the bench is laying flat with the two supports sticking up in front. Take the lower bench, turn it upside down and line the front two rubber feet/screw points up with the front supports' pilot holes. Drive the screws down into the front supports through the rubber feet as indicated in previous **Step 3b**.

Carefully turn the assembly over so it's sitting on the rubber feet. Put a washer on each of the two remaining #6 x 1" screws, and then put a hinged screw cover on each screw/washer so the screw head/washer sits inside the cover's recess.



Step 3c Continues...

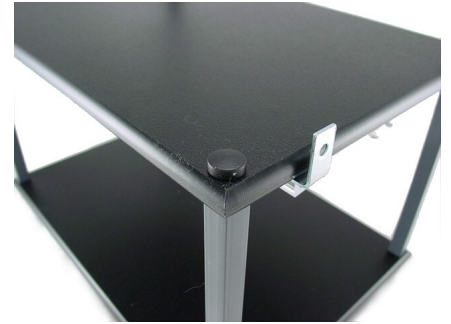
Step 3c continued...

Drive the screws down into the vertical supports one at a time using downward pressure to force a close fit as the screw tightens. Tighten down completely and snap screw covers closed.

Warning: Do not over tighten screws or caps/washers may warp and not snap closed. If this happens back out the screws and flip over the washer if it's bowed.

Tip: If screw caps don't snap closed easily use the handle of a screwdriver or mallet and tap them gently until closed.

Ensure all four legs and two upper supports are square to the bench sides and tight; you can twist them by hand if they need straightening and tightening. Check the rubber feet underneath for tightness and re-tighten bottom screws if necessary.



Step 4: Install AGP/PCI (Add-in Card) Support Brace

Step 4a: Installing the support brace

Step 4b: Capping the ends

Step 4a: Install AGP/PCI Support Brace

For this step you will need:

- AGP/PCI Support Brace
- Two metal "L" Brackets
- Two #6 x 1/4" screws (pan head, no point)
- Two #6 x 3/8" screws (pan head, with point)
- Seven black thumb screws

Lay the assembled Tech Station on its back side so the vertical supports with the two pilot holes are facing up.

Insert a #6 x 3/8" screw (pan head, with point) into each "L" bracket and drive into pilot holes on vertical supports.

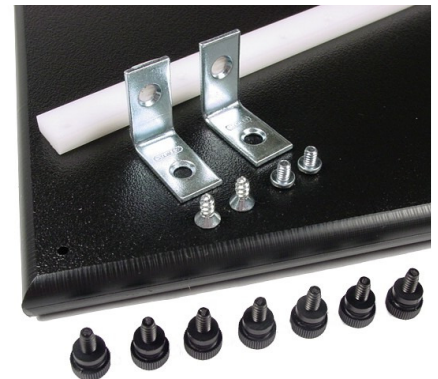
Note: The "L" brackets should be facing up and out, so one side of the bracket is running up the vertical support and the other bracket leg is sticking out.

Lay the AGP/PCI support bar across the angle brackets. Orient the support bar so the line of threaded holes are on the right side, and if you look closely the holes are closer to one side of the bar- the close side faces into the Tech Station.

Thread two #6 x 1/4" screws (pan head, no point) up through the angle brackets into the AGP/PCI support bar. Tighten down completely.

Tip: If you have trouble getting the horizontal support brace to lay perfectly horizontal you can rotate the L brackets and also the vertical supports by hand slightly to get the proper tension. Turning the vertical supports outward will remove an upward bow, turning the vertical supports inward will remove a downward bow.

The last thing to do here is thread in all 7 thumb screws into the AGP/PCI Support Brace.



Step 4b: Capping the ends

For this step you will need:

- Two 1/2" square black caps
- Hammer or mallet

With the Tech Station sitting upright place the 1/2" square black caps on the ends (tops) of each 5" support that holds the APG/PCI Support Brace. You may need to use a hammer to tap them into place. The caps give a cleaner look to the exposed rough cut end of the supports.

Important: It is recommended to set the Tech Station on the floor or other solid surface for this step.



Step 5: Finishing Touches

Step 5a: Attach fan and finger guard

Step 5b: Place non-slip mat

Step 5a: Attach fan and finger guard

For this step you will need:

- The 120mm Fan
- The 120mm Finger Guard
- Six standard case fan screws (black)



Take the 120mm fan and turn it label-side down on your work surface. Use four standard case fan screws (black) and install the finger guard on the side without the label.

Tip: An optional second finger guard can be added to the other side of the fan. Visit <http://highspeedpc.com>

Line the fan up in a diamond shape on the outside of the two L brackets. Drive the last two remaining black fan screws through the L brackets into the fan.

The fan in this position allows for cooling of the both the hard disk drives below and the motherboard above with a single fan.



Step 5b: Place non-slip mat

For this step you will need:

- The non-slip neoprene mat

The neoprene mat provided with your Tech Station is pre-cut to fit on the lower bench surface to provide a non-slip, non-conductive surface for your power supply, optical and floppy drives, etc.

Now you're ready to add your computer hardware!



Using the Tech Station:

The bench surfaces act as shelves to set the PC hardware on. The motherboard (with CPU, memory, video card, etc) sits on the top shelf on rubberized standoffs to protect the underside solder points and circuitry of the motherboard and also reduces static electricity buildup. Nylon posts are included which align the motherboard perfectly on the Tech Station, and the included nylon nuts provide an optional way for added security of the motherboard.

The motherboard is placed on the upper shelf and the thumbscrew holes on the AGP/PCI cards line up with the thumbscrew holes on top of the AGP/PCI support bar. Use the thumbscrews to securely attach add-in cards. The support bar has some natural flexibility to make it easy to take the cards in/out and will stiffen up when a card is in place.

The 120mm fan can be plugged into a motherboard 3 pin power header (or 4 pin power supply Molex plug depending on the connection type of the fan). The 120mm fan is positioned to force cooling air over heat sensitive components including CPU, RAM, motherboard Northbridge, video card, and hard disk drives.

















Under the top shelf are the acrylic hard drive rails where one or two hard drives can slide in and out for secure storage. The 120mm fan blows down this channel for optimum drive cooling. HDD cables can be routed down between the two rails.

The bottom shelf holds other PC components including the power supply, CD/DVD drive(s), floppy drive, hard drive(s), etc. The included neoprene mat can be used on the lower shelf for extra security against movement of these components.

ATX Control Kit: Turning on/off the PC motherboard once seated on the Tech Station can be done with the ATX Control Kit. The Control Kit includes one green LED jumper to indicate power ON, one red LED jumper for indicating hard drive activity, one Piezo buzzer for system alert beeps, and two micro switches to serve as power ON/OFF and System Reset switches. Each jumper is attached to motherboard pin headers as replacement for standard PC case switches, LED lights, and the system speaker. Motherboard operating manuals show locations and orientation of these headers for installation.

CAUTION: Remember to always power off your PC hardware when adding or removing components. It's always recommended to discharge static electricity by touching a metal object such as your power supply prior to touching electronics. HighSpeed PC, LLC is not responsible for any loss or damage associated with use of this product. Keep small/sharp parts away from children.

Part Reference Page

<p>Two 14x9.5" high grade polymer bench surfaces.</p> <ul style="list-style-type: none"> The under side of the upper bench surface is marked with Fan and HDD stickers pointing to their pilot holes. The top side of the upper bench surface has rows of pilot holes for the motherboard standoff kit <p>Four 7" lengths of 1/2" high grade polymer square bar (vertical supports) Two 5" lengths of 1/2" high grade polymer square bar (AGP/PCI brace supports)</p>	
<p>One 13.5" x 1/2" AGP/PCI Support Brace (white)</p>	
<p>Four black rubber bumpers (feet)</p>	
<p>Two 1 1/4" threaded studs</p>	
<p>Six #6 x 1" screws</p>	
<p>Two #6 x 1/4" screws (pan head, no point)</p>	
<p>Six stainless steel flat washers</p>	
<p>Two #6 hinged black plastic screw covers</p>	
<p>Two 1/2" black plastic caps</p>	
<p>Seven #6-32 nylon thumb screws</p>	
<p>Four 1/2" x 1" angle brackets</p>	
<p>Four #6 x 3/8" screws (pan head, with point)</p>	
<p>Six standard PC case fan screws (black)</p>	
<p>One 120mm 12v DC fan w/ finger guard</p>	
<p>Hard drive storage rack parts list: Two acrylic guide rails Four #6 x 1" screws One #6 x 3/4" screw Five 1/2" spacers</p>	
<p>Accessories: Black neoprene rubber mat for a non-slip lower shelf Motherboard Bumper Standoff Kit ATX Control Kit Usage and assembly instructions</p>	

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