

# VELKA 3

## Rev 3.0

# USER MANUAL

5/OCT/23

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## SPECIFICATION

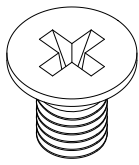
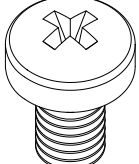
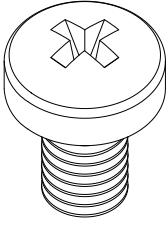
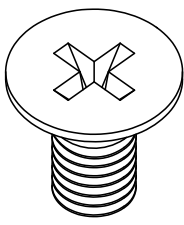
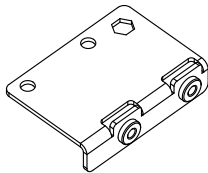
Dimensions (L x W x H)	184 x 99 x 219 mm 7.2 x 3.9 x 8.6 in
Weight	1.4 kg 3.1 lb
Volume	3.99 L external; 3.81 L internal
Materials	<p>Main body: 1.2 mm galvanized steel, powdercoated, stainless threaded inserts</p> <p>Front panel: 2.0 mm galvanized steel, powdercoated, stainless threaded inserts</p> <p>Side panels, interior brackets: 1.0 mm galvanized steel, powdercoated, stainless threaded inserts</p> <p>Structural standoffs: Brass</p> <p>Screws: Ferrous steel</p> <p>Power button: Aluminum, anodized</p>
I/O	<p>Front: N/A</p> <p>Top: N/A</p> <p>Rear: Motherboard, graphics card</p>
Security	Kensington Lock Slot

## HARDWARE COMPATIBILITY

Motherboard	<p>Mini ITX*</p> <p>170 x 170 mm</p> <p>*Maximum primary side component height: 47 mm</p>
Power supply	Flex ATX. Maximum length: 150 mm
CPU cooler	<p>Height:</p> <p>37 mm</p>
PCIe riser cable	<p>Required for graphics card or other PCI card support.</p> <p>Hole pitch:</p> <p>108 mm</p> <p>Length:</p> <p>25-30 cm end-to-end / 20-25 cm along flexible portion</p> <p>Connectors:</p> <p>0° or 180° male to 0° or 180° female</p> <p>Recommended models:</p> <p>Velkase VC-S300G3 ; VC-S290G4</p>
Graphics card / PCI card (L x W x H)	<p>Maximum clearance, including space for cables. Cables require 16 mm+ if not recessed and routed within the bounding box area of the board.</p> <p>175 x 43 x 148* mm</p> <p>179 x 41 x 148* mm</p> <p>*148 mm for card+ cables , 140 mm for card</p> <p>2.0 PCI slots thick</p> <p>Maximum backplate thickness: 4 mm</p> <p>2-slot graphics cards must not have protrusions past the edge of the PCI bracket</p>
Memory	<p>Height:</p> <p>42 mm</p>
Storage	1x 2.5" HDD or SSD (7.0 mm thick)
Case fans	N/A
Handles	<p>Hole pitch:</p> <p>128 mm</p> <p>Screw diameter:</p> <p>4 mm maximum</p>

## PACKAGE CONTENTS

- Velka 3 chassis with pre-installed power button. *PCIe riser cable and handle not included*
- 14x 3M Bumpon adhesive rubber bumpers
- Hardware box; contents listed below. Quantities may vary.

 x12	M3x0.5 5 mm countersunk screw
 x16	M3x0.5 4 mm round head screw
 x6	6-32 6 mm round head screw
 x3	M4x0.7 8 mm flat head screw
 x1	PCIe card retention bracket

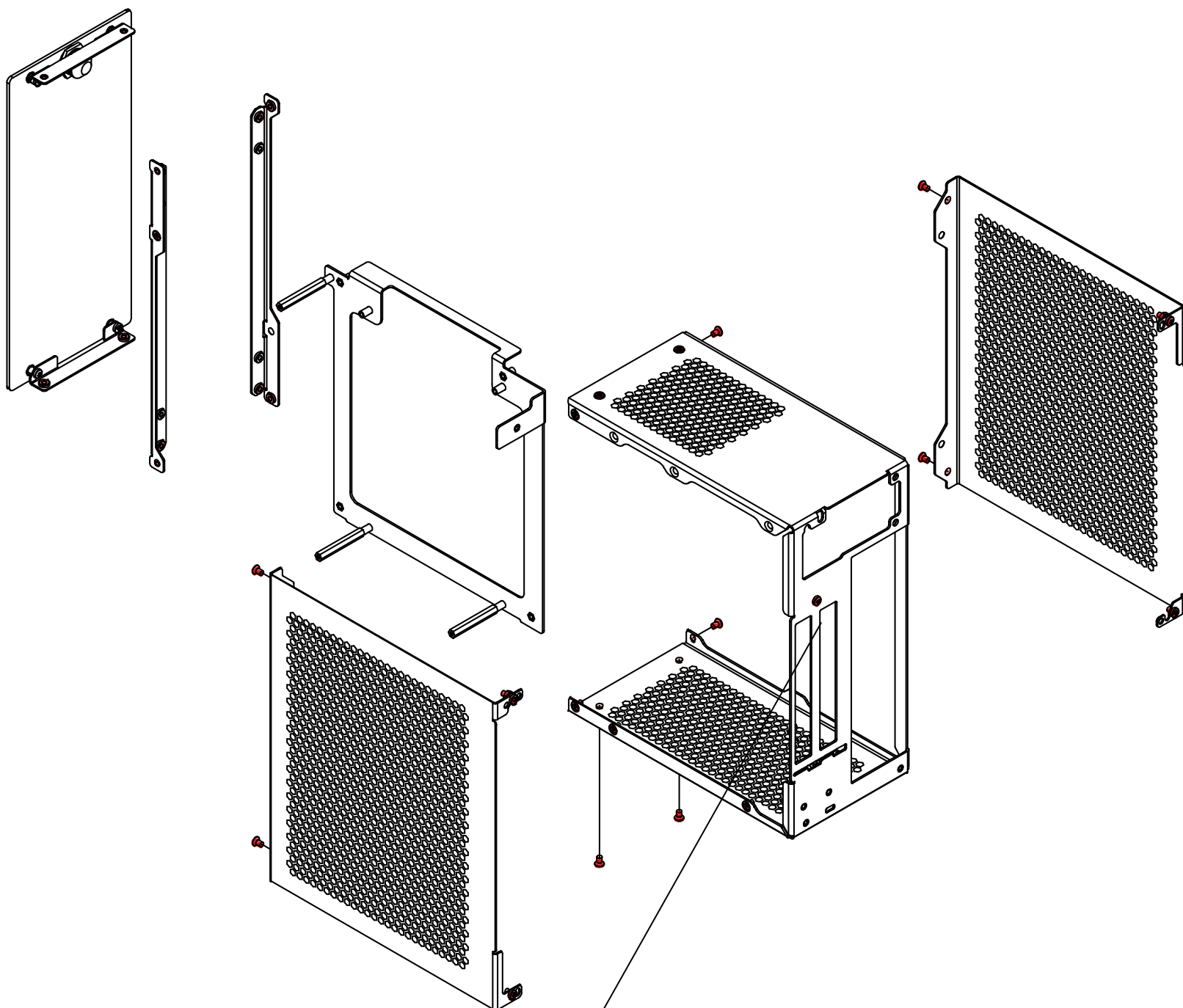
## REQUIRED TOOLS

#2 Phillips (PH2) screwdriver



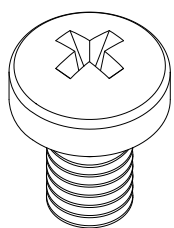
## CASE DISASSEMBLY

- Perform initial system assembly with all components and cables outside of the case
- Work on a soft, clean surface
- Once complete, disassemble the case to the following state



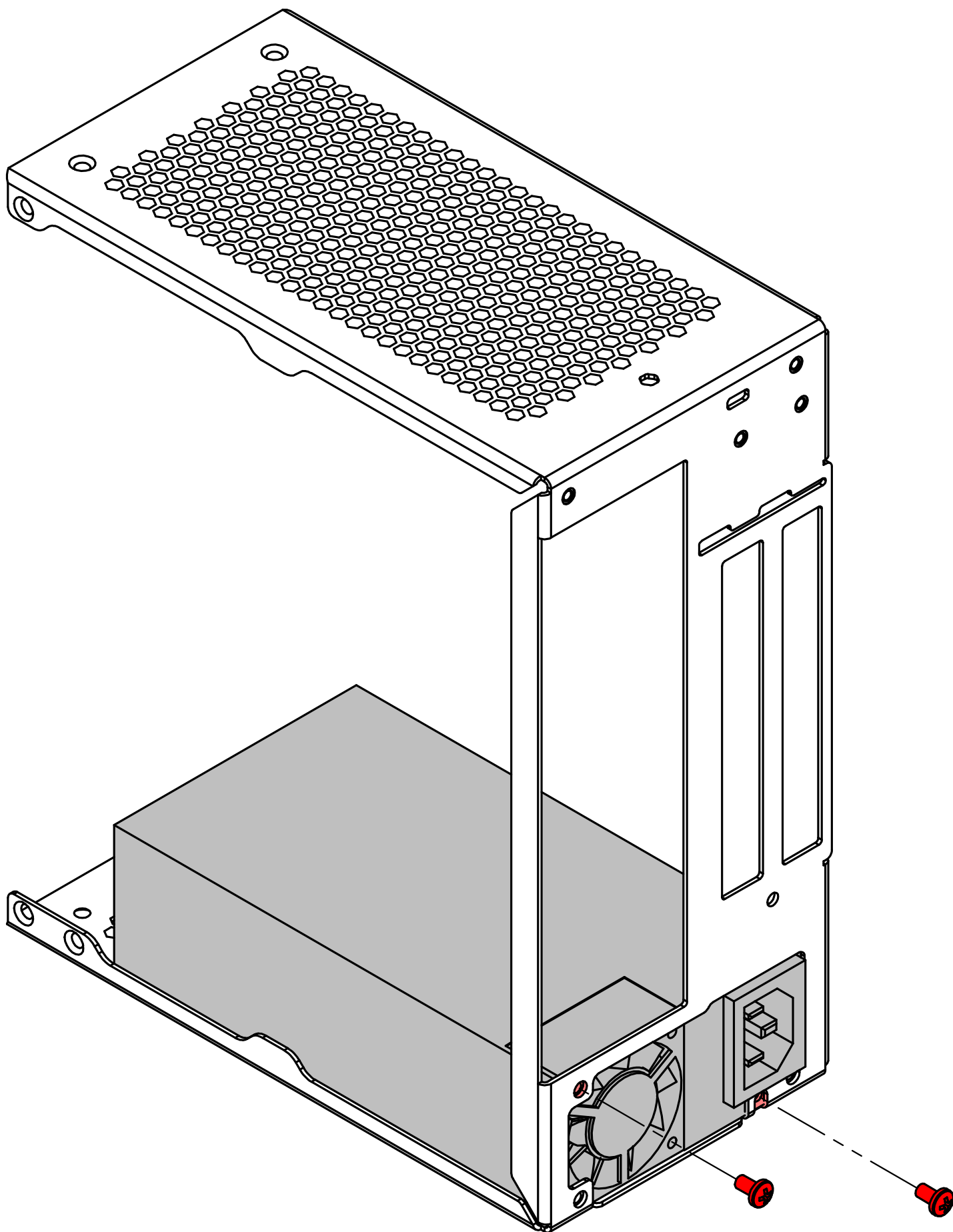
M3x0.5 10 mm round head screw x1  
Not included in hardware box.  
Required for assembly

PSU



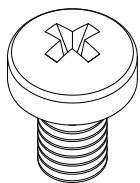
x2

6-32 6 mm round head screw



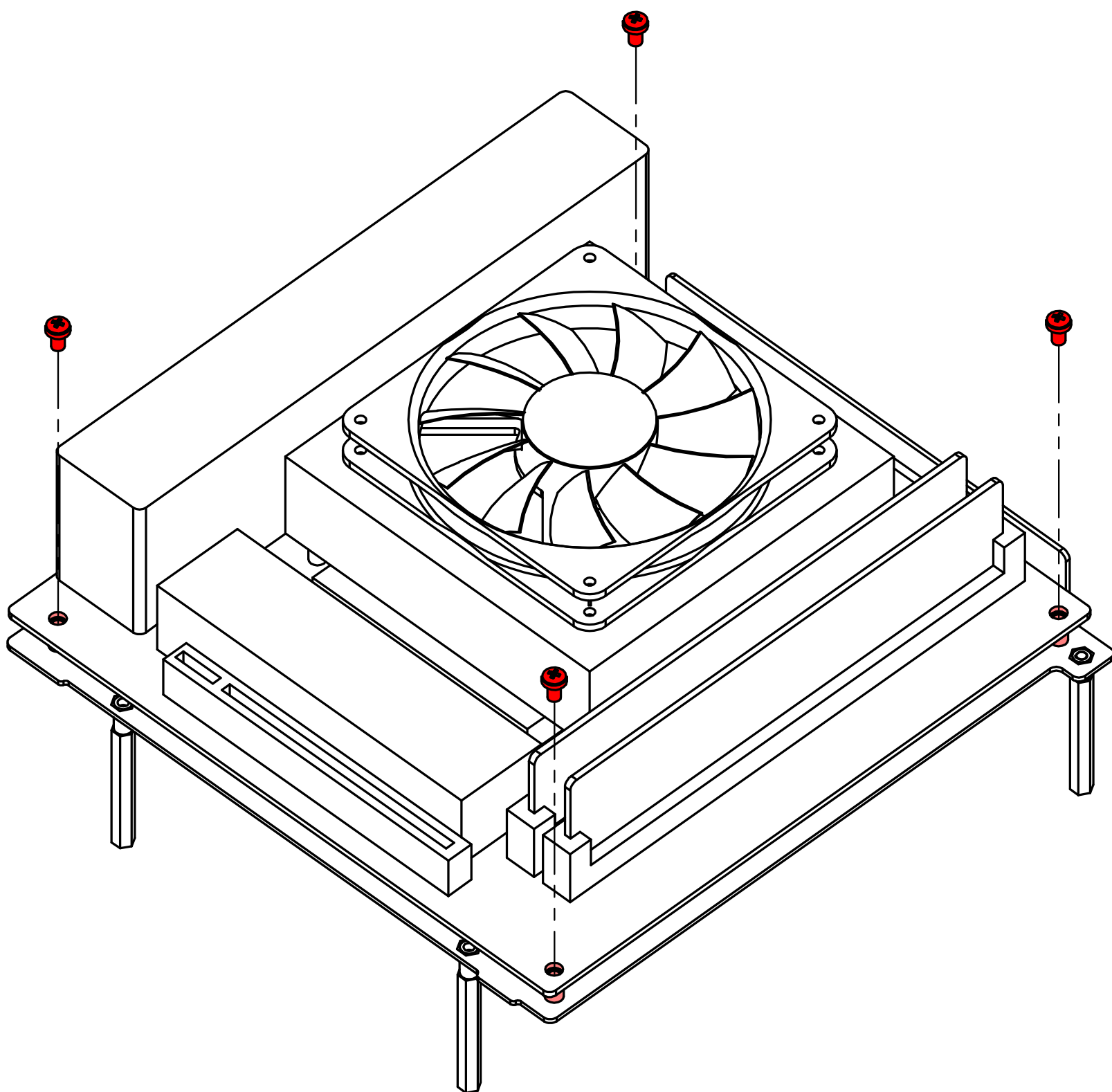
## MOTHERBOARD

- The CPU, CPU cooler, RAM, and storage should be installed onto the motherboard prior to this step



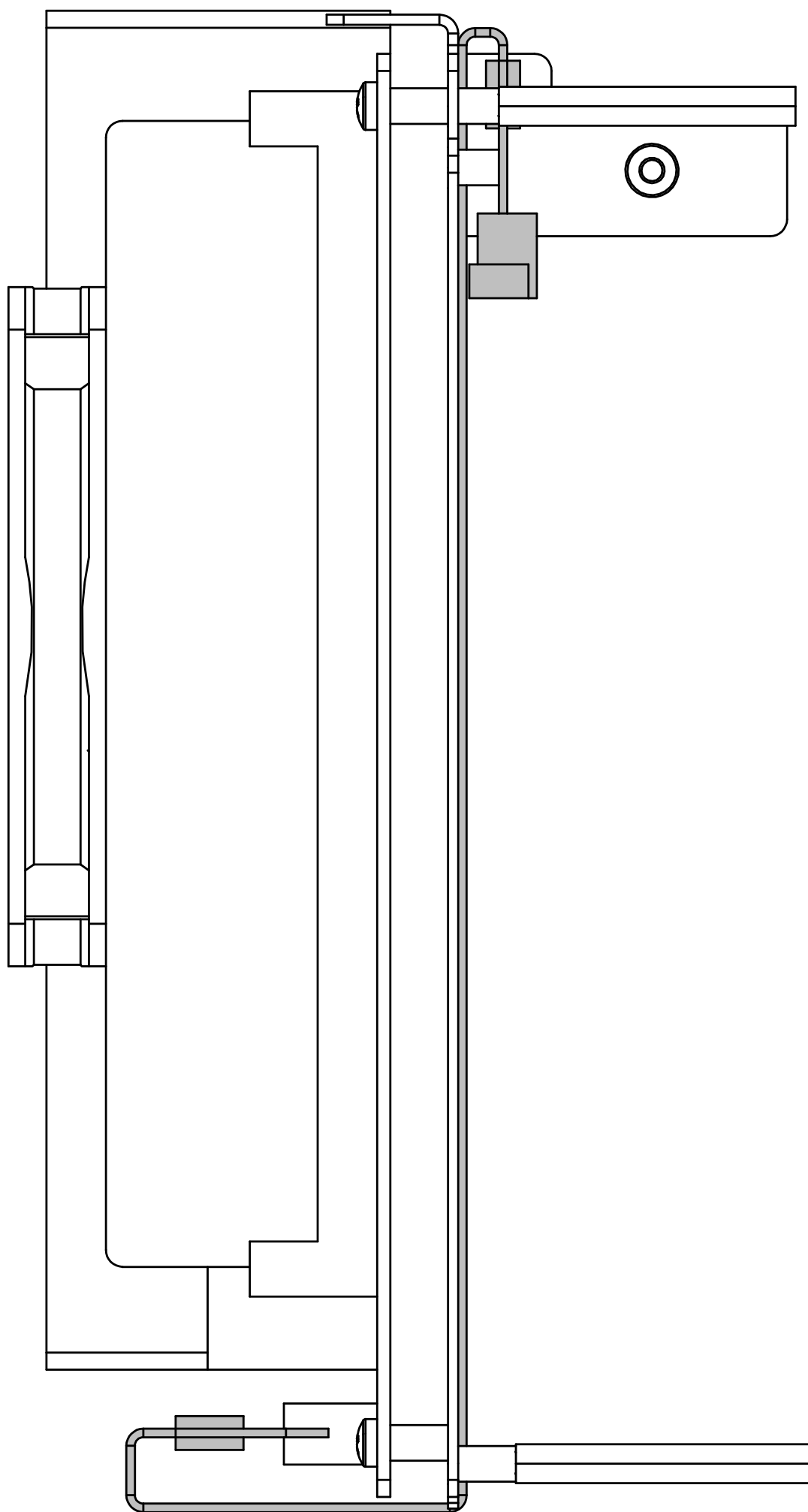
x4

M3x0.5 4 mm round head screw



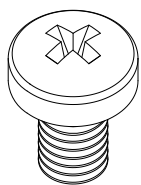
PCIE RISER CABLE

As viewed from the front



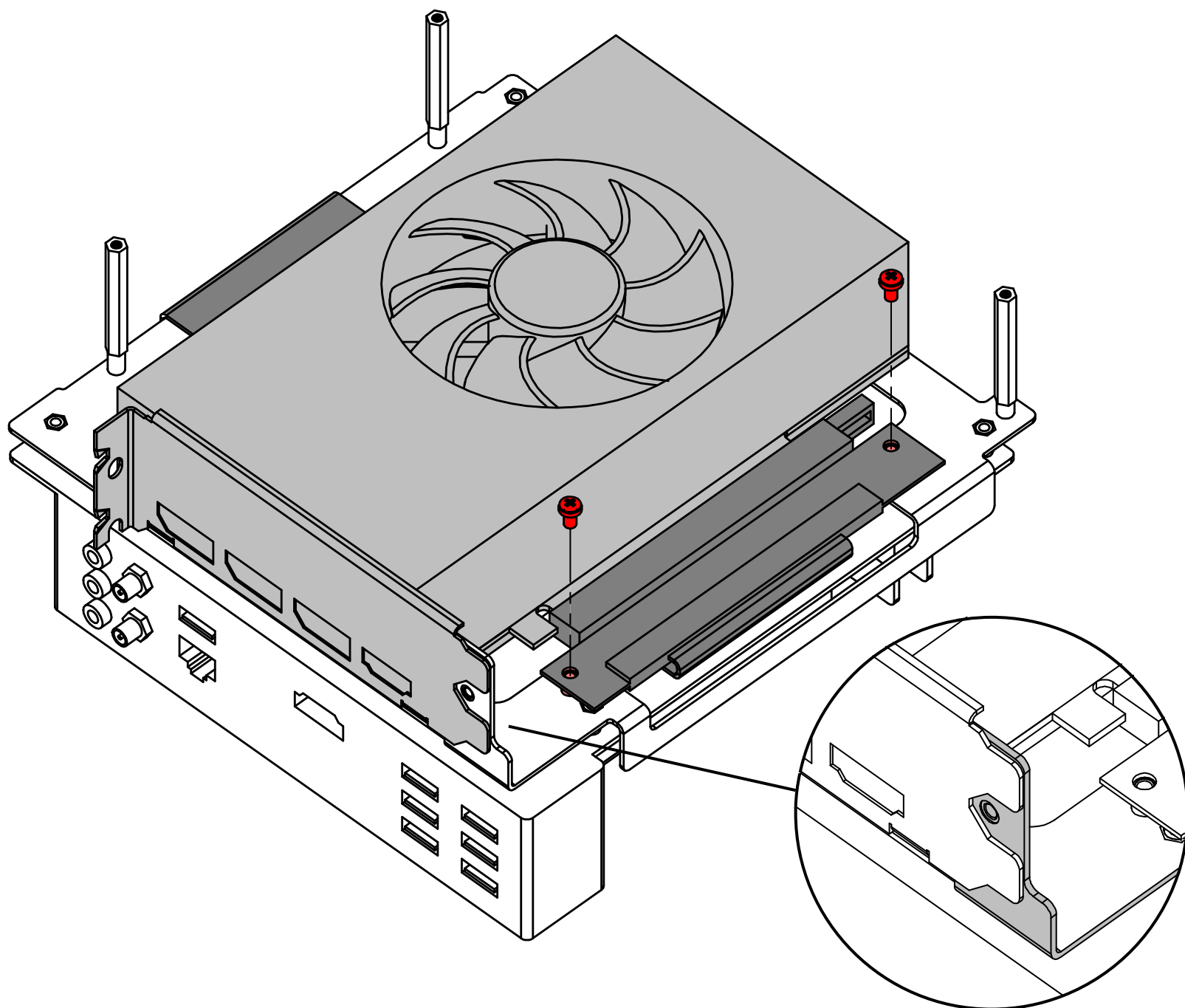


## GRAPHICS CARD



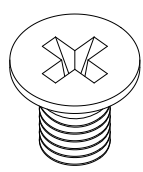
x2

M3x0.5 4 mm round head screw



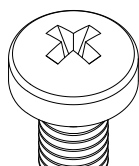
## MOTHERBOARD TRAY INSERTION

- Install the motherboard IO shield in the appropriate orientation
- Pay attention to the PCIe cable to prevent it from being caught on any edges
- Connect the graphics card's power cable mid-way through insertion, and the remaining components' power cables afterwards



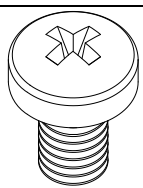
x2

(A)  
M3x0.5 5 mm  
countersunk screw



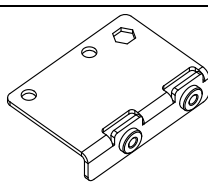
x1

(D)  
M3x0.5 10 mm round  
head screw  
(from disassembly)



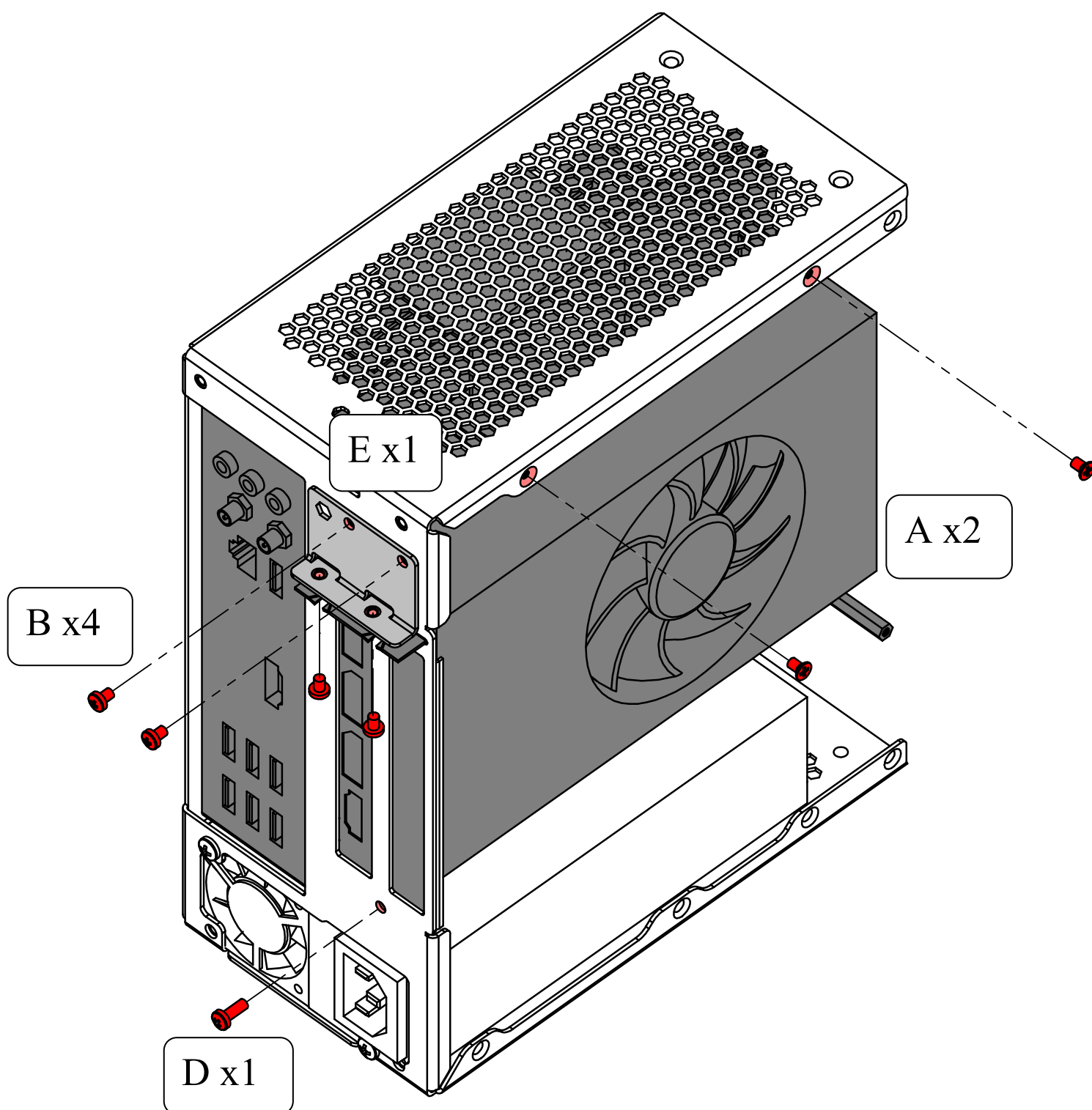
x4

(B)  
M3x0.5 4 mm round  
head screw



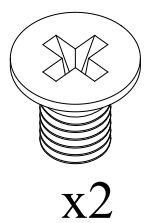
x1

(E)  
PCIe card retention  
bracket



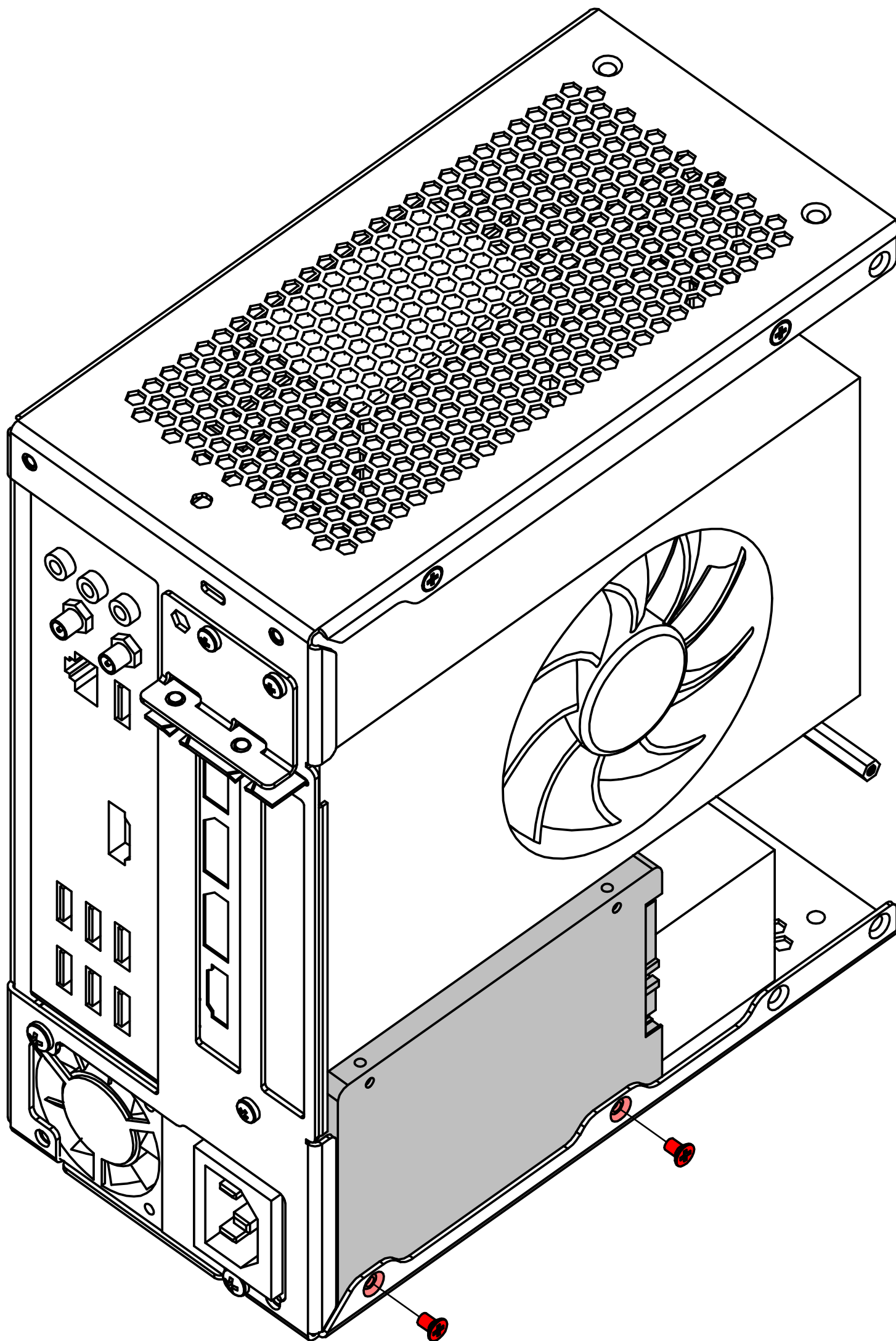
## SATA DRIVE

- Connect the SATA data and power cables to the storage drive and motherboard at this step



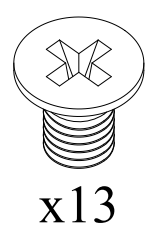
x2

M3x0.5 5 mm  
countersunk screw



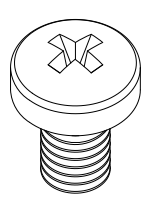
## CLOSING THE CASE, RUBBER FOOT INSTALLATION

- Wipe the case surface to improve rubber foot adhesion
- Stick 4 adhesive rubber bumpers onto the bottom of the case according to the chosen orientation
- For quieter operation and increased internal clearances, mount the side panels using the adjacent mounting holes. The side panels will bend inwards at the center due to their concave shape, which can be partially mitigated by inserting rubber bumpers between the case body and side panels



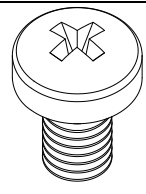
x13

(A)  
M3x0.5 5 mm  
countersunk screw



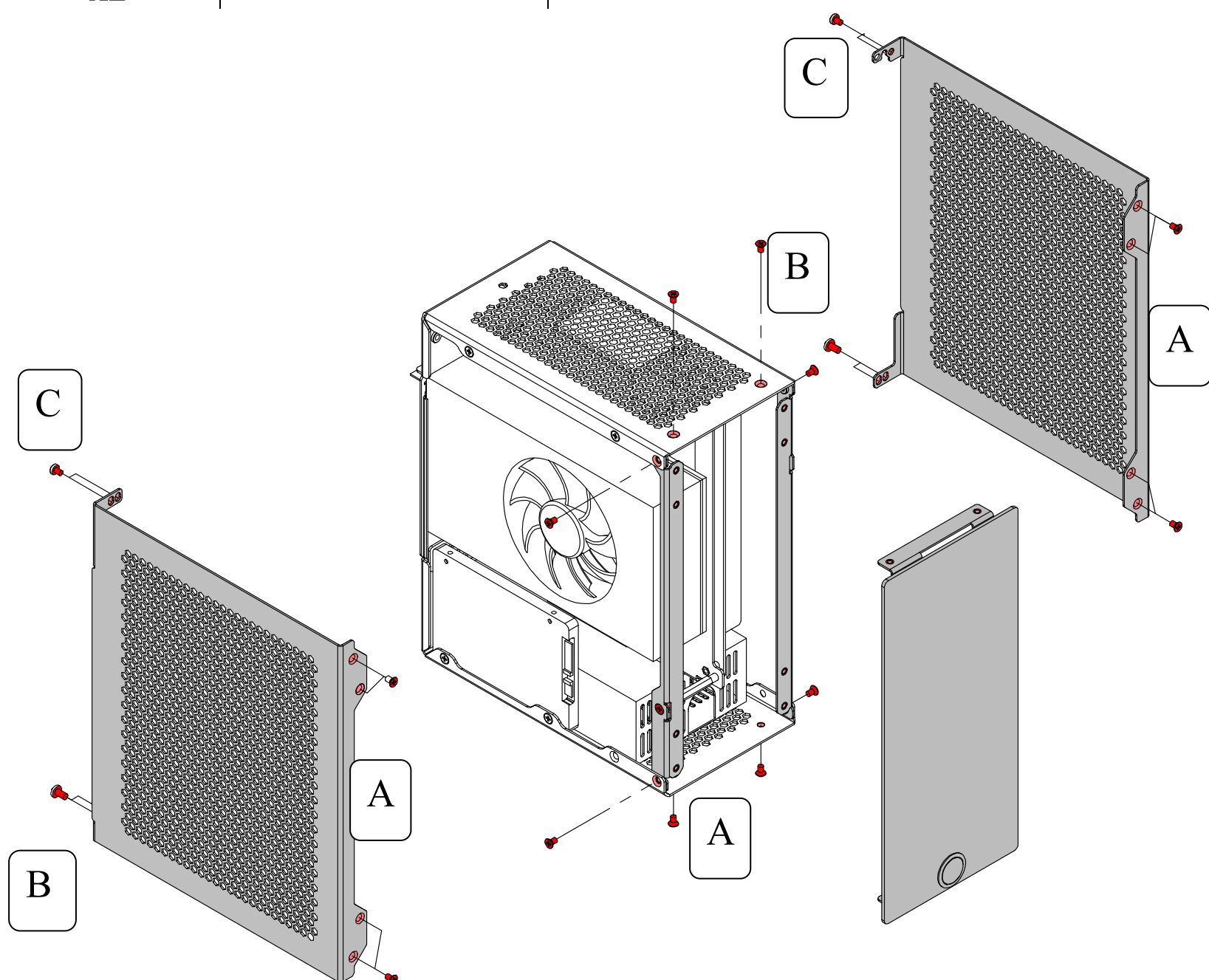
x2

(C)  
6-32 6 mm round head  
screw



x2

(B)  
M3x0.5 4 mm  
round head screw



## TROUBLESHOOTING

- Screw heads stripping
  - Ensure that you are using a #2 Phillips driver for the included screws. Using any other type of driver for the included screws can wear them down, making them difficult or impossible to remove. Replace damaged screws early
- System instability or no display output from the graphics card while using PCIe gen 4+ motherboard and graphics card with an older gen PCIe riser cable
  - Manually set PCI link speed in UEFI BIOS to match that of the PCIe riser cable (ex: gen 3). If there is no display output in UEFI BIOS, use onboard graphics (if available) or plug the graphics card directly into the PCIe slot without the cable to change this setting

## SUPPORT AND SERVICE

For all inquiries, please email [contact@velkase.com](mailto:contact@velkase.com)

All user manuals: [www.velkase.com/downloads](http://www.velkase.com/downloads)