Api

PowerRAC Chassis 320

Quick Start
Installation Guide

www.alpha-processor.com

51-0040-0A

Step 1. Remove the Top Panel by unfastening the **three** screws located at the rear of the unit.
- Save these screws.

Step 2. Identify the Subassemblies.

- I/O Connectors Cutouts
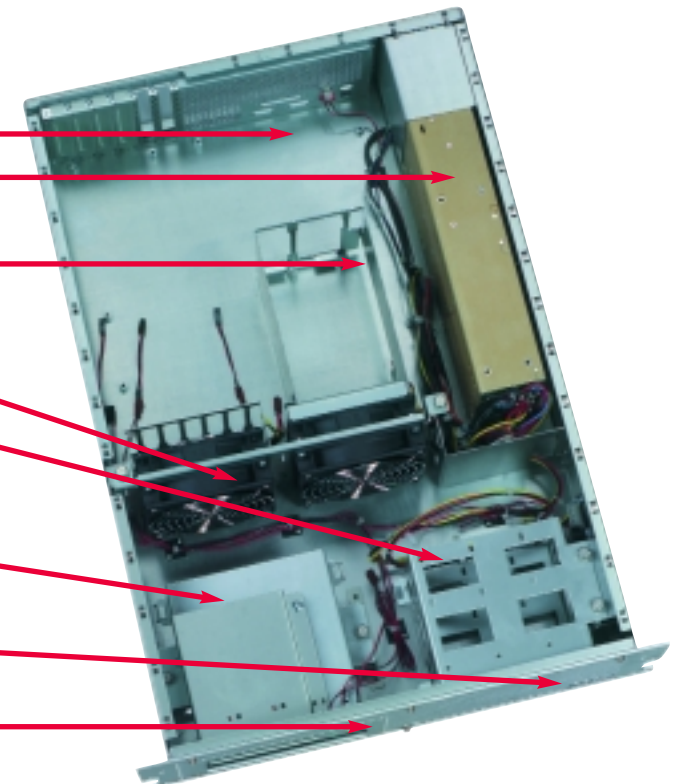- Power Supply
- Goalpost Assembly
- Fan Assembly
- Hard Disk Drive Carrier
- Floppy Disk/CD-ROM Drive Combination Carrier
- Front Panel
- Indicator LEDs

PowerRAC Chassis 320 Parts (Not Shown)
Rack-Mount Slide Kit

RFI Gasket

Bag of Hardware containing:
- Floppy Power Adapter Cable
- Ten Screws (M4x8mm Philips Pan Head)
- PowerRAC Chassis 320 Quick Start Installation Guide

API Components Required
UP2000 Motherboard*

Alpha Slot B Module (1 or 2)

Customer Furnished Components
Hard Disk Drive(s)

Floppy Diskette Drive

CD-ROM Drive

Memory DIMMs

PCI Cards

Mouse

Keyboard

Serial, Parallel and USB Peripherals

Custom Designed Front Panel Logo (1" sq.)

Signal Cables for Drives

Tools Required
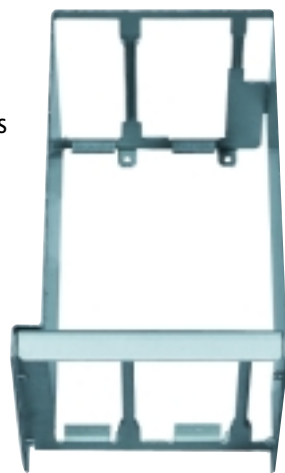Philips Head Screwdriver

Torque Driver

* Supports all UP2000 series motherboards

B Remove Subassemblies

Step 3. Remove **Goalpost Assembly**
- Save the four (M4x8mm) screws

Step 4. Remove **Fan Assembly**
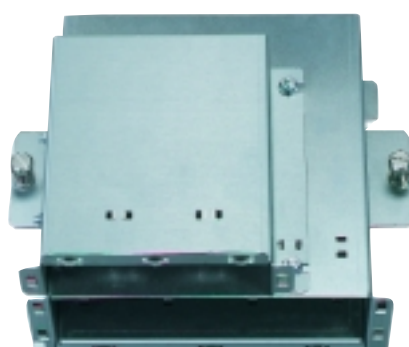- Unfasten spring-loaded screws

Step 5. Remove **Hard Disk Carrier**
- Unfasten spring-loaded screws
- Slide carrier toward rear, then lift up

Step 6. Remove **Floppy Disk/CD-ROM Combination Drive Carrier**
- Unfasten spring-loaded screws
- Slide carrier toward rear, then lift up

C Begin System Assembly

Step 7. Identify the Power Cables/Connectors
- Alpha Slot B (4 x 1)
- ATX Standard (10 x 2)
- ATX Auxiliary (6 x 1)

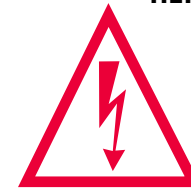**Step 8.** Identify these Indicator Cables by their labels:

SPKR = Speaker

PWR = AC power ON (Green LED)

ACT = Hard Disk Activity Light (Amber LED)

RST = Reset Switch
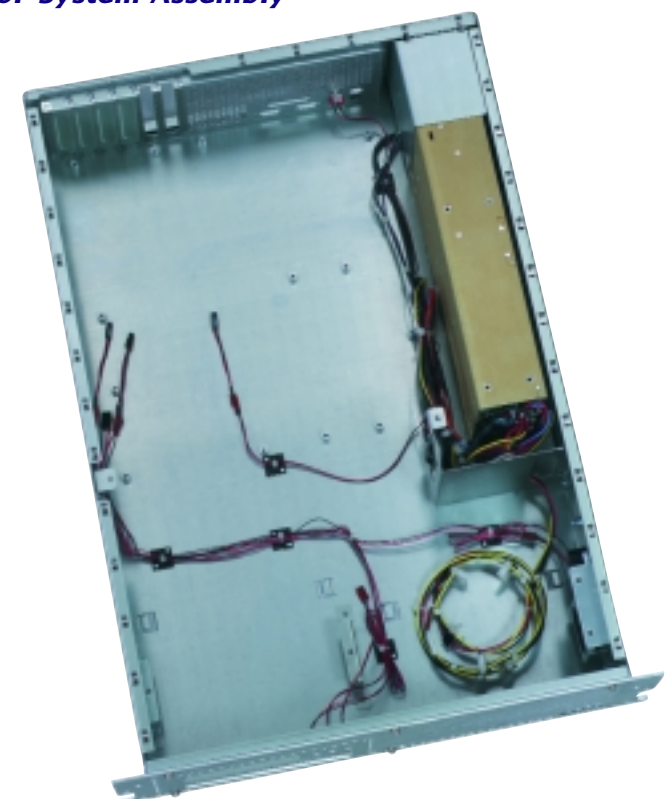
HLT = Halt Switch**

Always take appropriate electrostatic discharge safety measures when handling boards or modules

Step 9. Install the UP2000 Series Motherboard
- Identify **ten** UP2000 mounting standoffs & **four** Goalpost Assembly standoffs.
- Remove **six** I/O Connector hex standoffs from system I/O section of Motherboard.
- Press RFI Gasket over the I/O Connectors
- Slide I/O Connectors into matching cutout of rear panel I/O section.
- Ensure that RFI Gasket stays properly in place.
- Match UP2000 holes with Chassis standoffs
- Fasten UP2000 to Chassis using this procedure:
- Start, but do not tighten, all **ten** screws (M4x8mm) into their threaded standoffs.
- Fasten screws to an 8 inch/lbs. torque limit.
- Replace **six** hex standoffs on I/O Connectors.

** Not enabled on the UP2000 A-series motherboard

Empty PowerRAC Chassis 320 Ready for System Assembly

Step 10. Mount Goalpost Assembly replacing four (M4x8mm) screws.
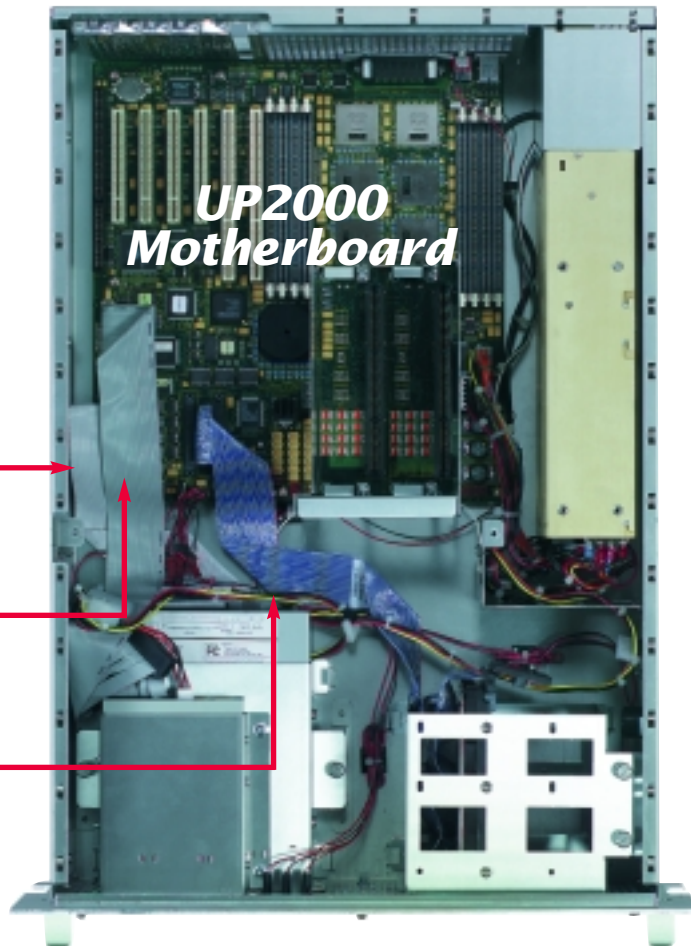
Step 11. Connect Indicator Cables to Motherboard ▲

Step 12. Connect Power Cables to Motherboard ▲

Step 13. Mount Disk Drives in Disk Carrier.

Step 14. Install Disk Carrier into PowerRAC 320.
- Slide under tabs & fasten 2 spring-loaded screws.

Step 15a. Separate Floppy holder from CD-ROM holder by unfastening four M4 nuts on top & side of Combination Drive Carrier.

Step 15b. Mount the floppy & CD-ROM drives in their holders.

Step 15c. Use the four M4 nuts to re-attach the two holders, again forming the Combination Drive Carrier.

Step 16. Install Combination Drive Carrier into PowerRAC 320.
- Slide under tabs & fasten 2 spring-loaded screws

Step 17. Connect Power & Signal Cables to Hard Disk.

Step 18. Connect Power & Signal Cables to Floppy & CD-ROM.

Step 19. Route the flat ribbon signal cables from drives to Motherboard sockets.
- Fold cables neatly to allow for Fan Assembly.

> ▲ **For additional information consult the API documentation set:**
> - UP2000 Series User Manuals
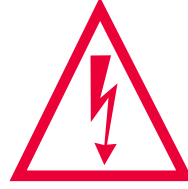> - UP2000 Series Quick Start Installation Guides
>
> Available on our Website:
> **http://www.alpha-processor.com**

UP2000 Motherboard

Floppy Cable

CD-ROM Cable

Hard Disk Cable
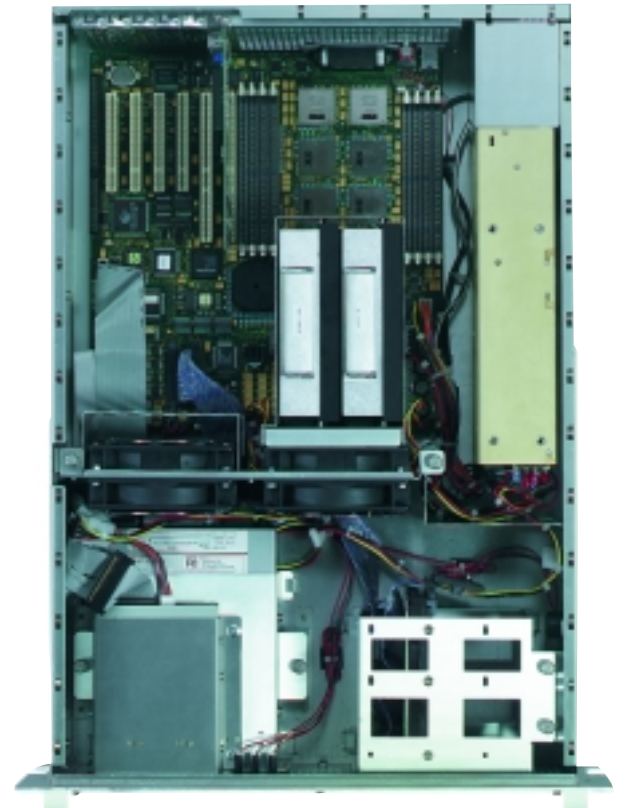
Step 20. Install Fan Assembly
- Line up with support guide holes, fasten with captive spring-loaded screws.
- Connect fan power cables
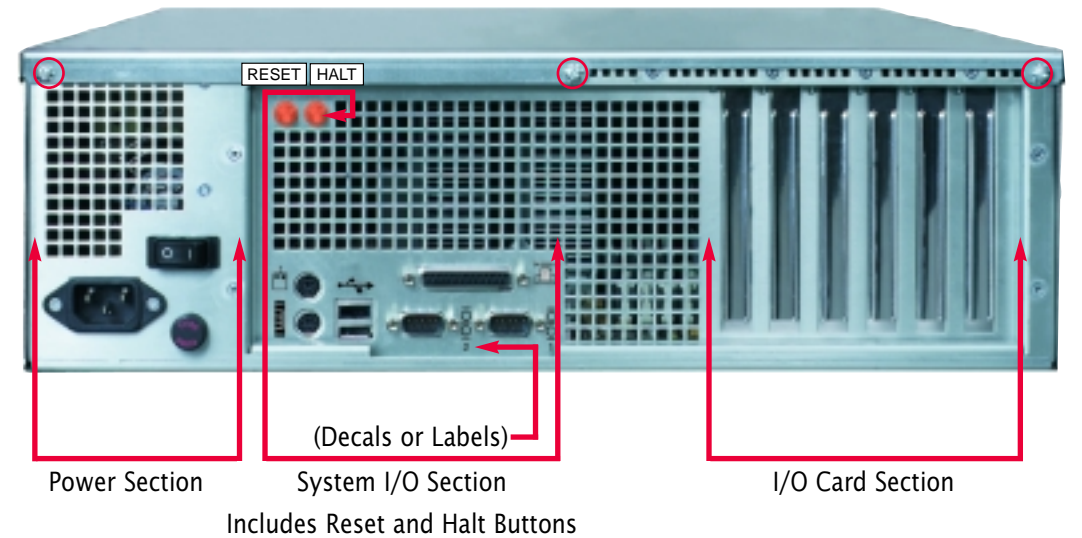- Ensure that drive signal cables do not block air flow.

⚡ Always take appropriate electrostatic discharge safety measures when handling boards or modules

Step 21. Install Alpha Slot B Module(s)

Step 22. Install Customer Furnished Components
- Memory DIMMs
- PCI Cards

> Use procedures defined in UP2000 series documentation set.

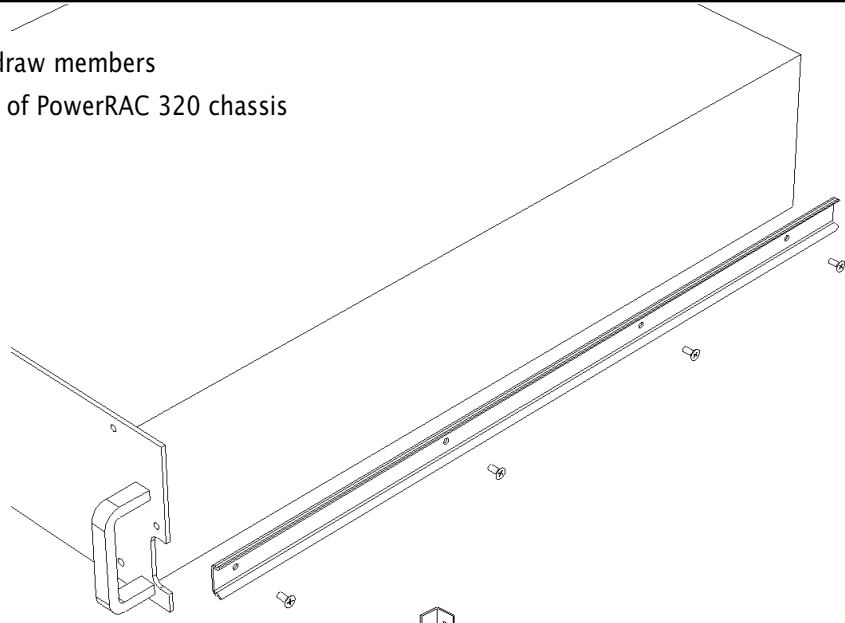**Step 23.** Install Top Cover using **three** screws.

RESET HALT

(Decals or Labels)

Power Section

System I/O Section
Includes Reset and Halt Buttons

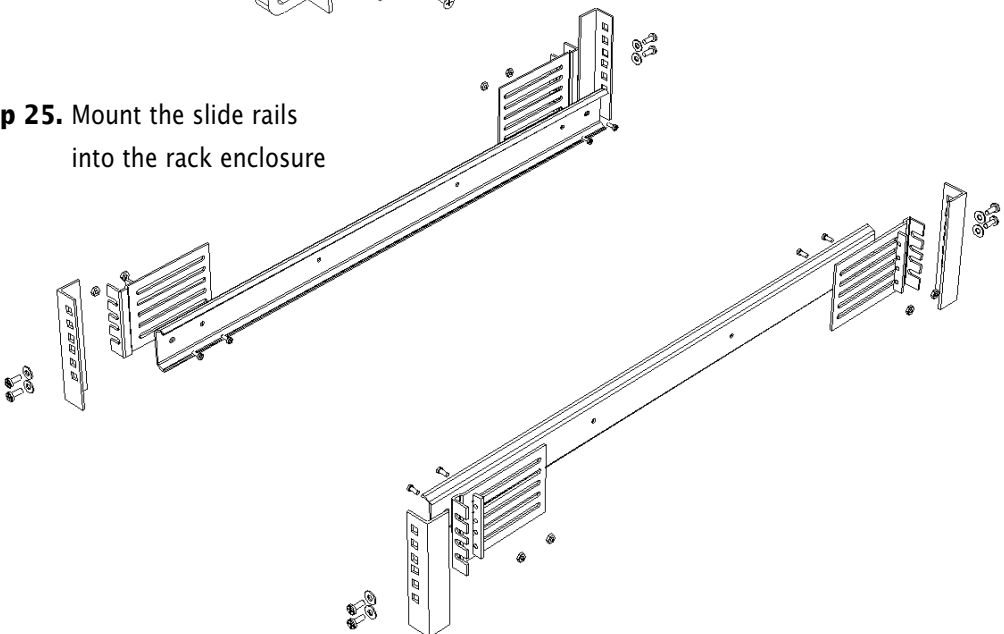I/O Card Section

Step 24. Attach draw members to sides of PowerRAC 320 chassis

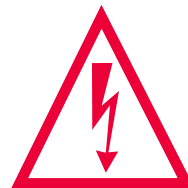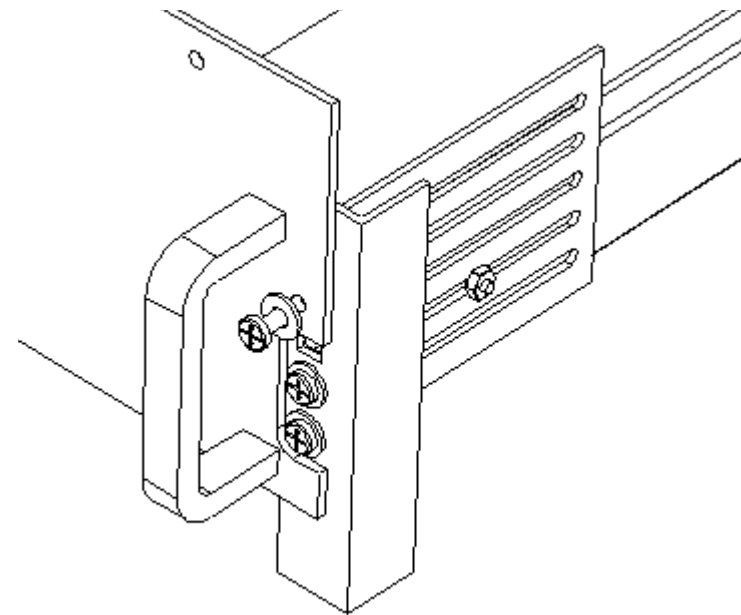**Step 25.** Mount the slide rails into the rack enclosure

Step 26. Install Chassis into Rack
- Pull slide rails forward from rack to their outer locked position.
- Lift PowerRAC Chassis 320 and align draw members with rails.
- Engage slide mounting hardware and push unit half way into rack until draw members lock.
- Release both draw member locks and push unit completely into rack.

Step 27. Install chassis locking screws on both side of the front panel.

⚡ **SAFETY CONSIDERATIONS**

> Fully assembled, the PowerRAC 320 weighs approximately **50** pounds.
>
> For personnel and equipment safety, API recommends that two people work as a "rack mount" installation team.
>
> Ensure that the mechanical loading of the rack keeps it stable and unlikely to tip over.
>
> Do not block power supply vents or otherwise restrict airflow when installing the unit in a rack system.
>
> Be aware of the overall loading of the branch circuit before installing any equipment in a rack environment.
>
> The maximum ambient room temperature at which the unit can operate is 35˚ C (95˚ F).

Api

For more information on API capabilities visit our website:
http://www.alpha-processor.com