

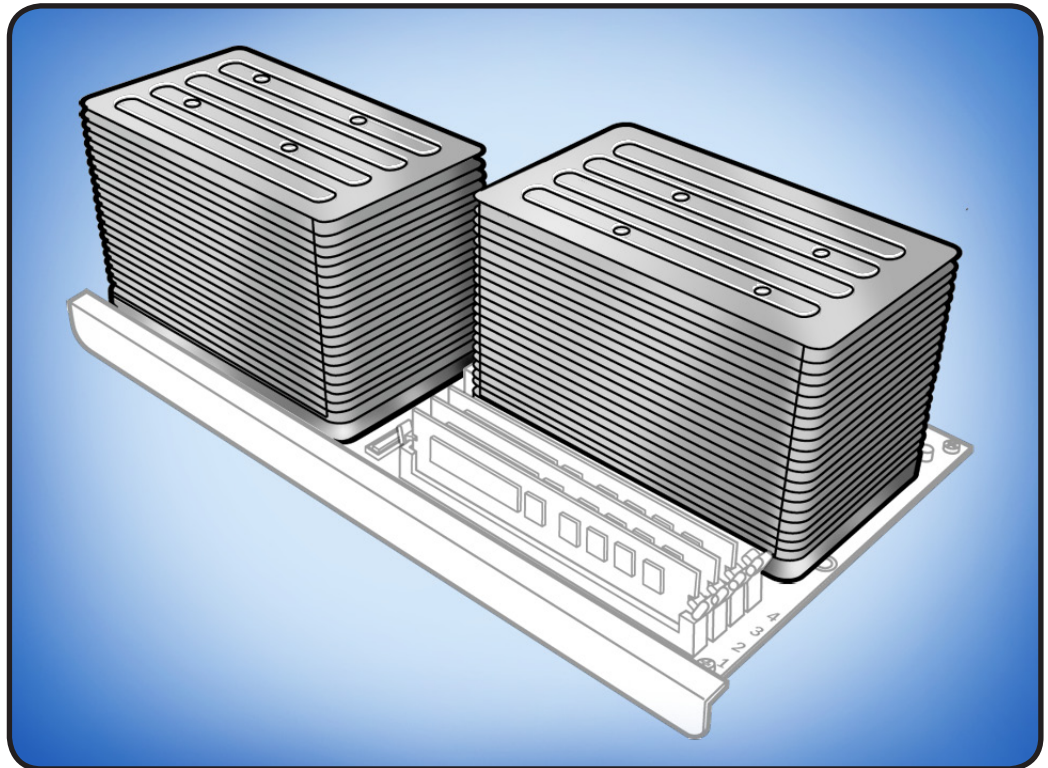


Processor Heatsinks, Dual

First Steps

Open computer, lay it down with access side facing up, and remove:

- Processor tray

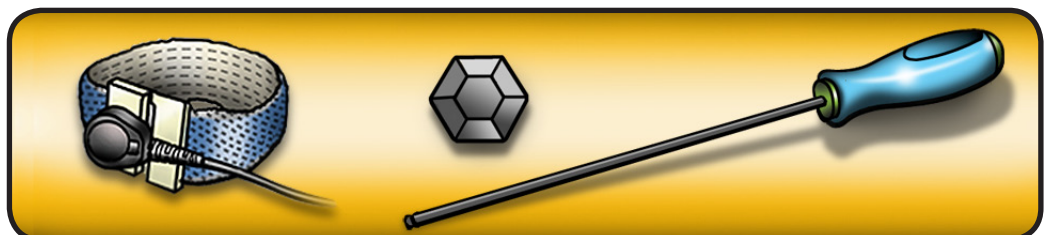


Note: This procedure applies to Mac Pro (Mid 2010) dual-processor configurations. For single-processor configuration, see [“Processor Heatsink, Single.”](#)

Important: Mac Pro (Mid 2010) processors require thermal grease for proper operation. Every time you remove a processor heatsink, you must replace the thermal grease on the processor below it. New grease and alcohol wipes for cleaning off the previous grease are included with replacement heatsinks, processors, and processor boards.

Tools

- ESD wrist strap
- Long-handled, 3 mm flathead hex driver

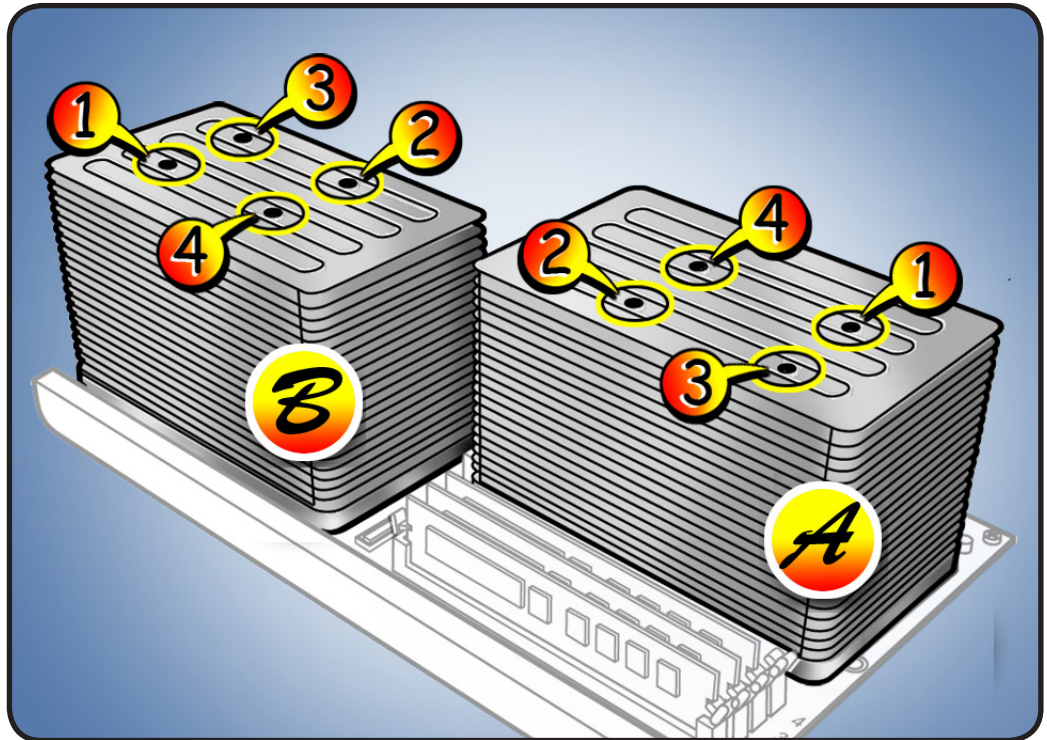




Removal

Note: See illustration for position of CPU A and CPU B heatsinks. When processor board is installed in computer, CPU A heatsink sits toward rear of computer and CPU B heatsink sits toward front of computer.

- 1 Using hex screwdriver, loosen 4 captive mounting screws in order shown.
- 2 Holding processor tray steady with one hand, lift heatsink straight up out of enclosure.

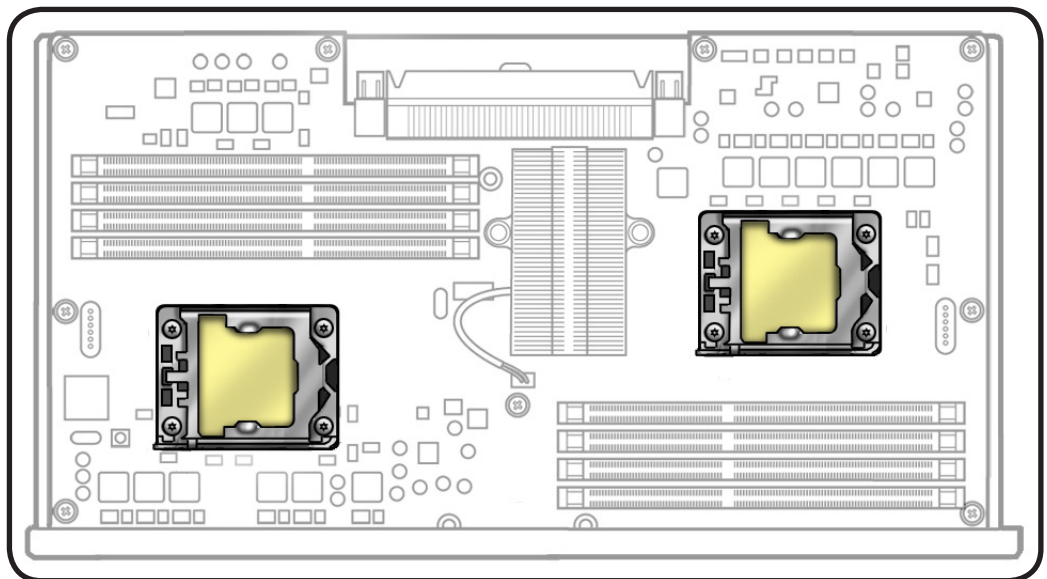


Reassembly

Important: Do steps 1–3 with processor REMOVED from processor board. See “[Processor, Dual.](#)”

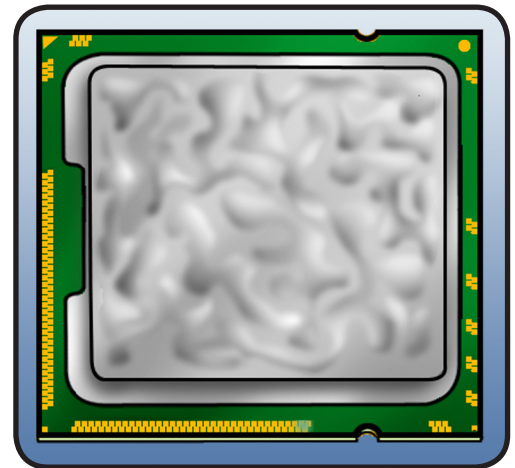
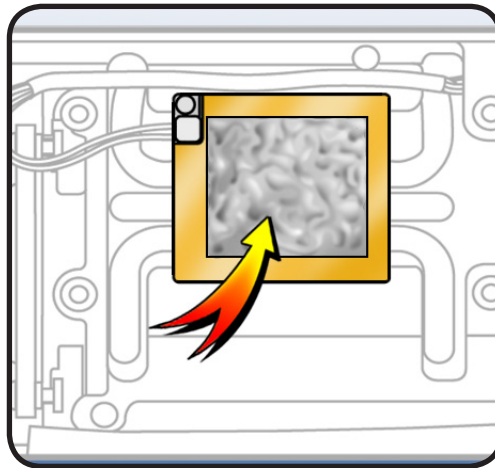


Every time you remove a processor, even for a few seconds, cover the processor socket with a connector cap. Spare caps are packed with replacement parts.





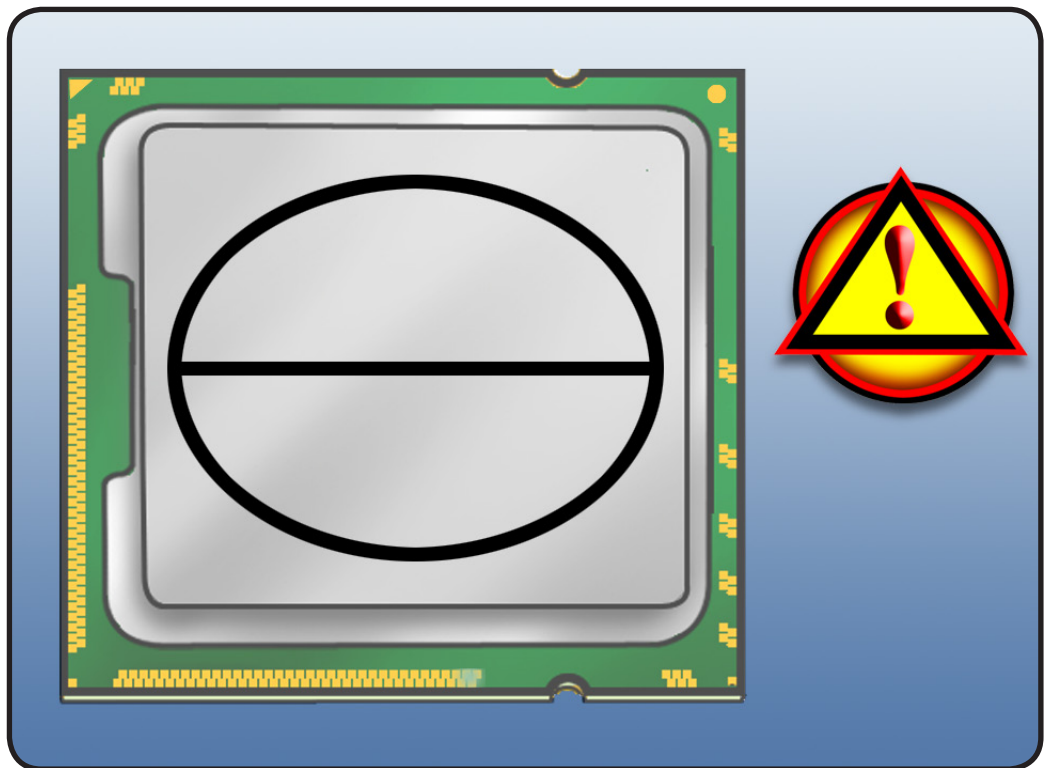
- 1 Using alcohol pad included with replacement part, clean off thermal grease from underside of heatsink and top of processor.



- 2 Using syringe of thermal grease included with replacement part, apply narrow bead of grease to processor chip (raised square on top of processor). Apply in pattern illustrated, using approximately 0.2 cc.



Warning: Do not apply more grease than recommended. Grease must not overflow into processor connector.



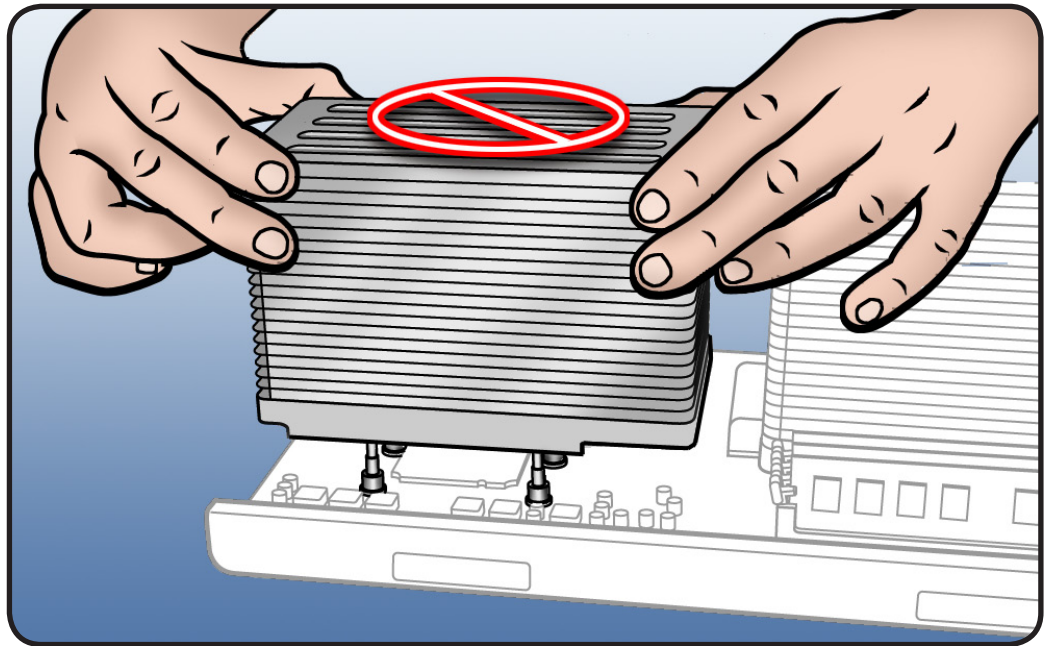
- 3 Reinstall processor.



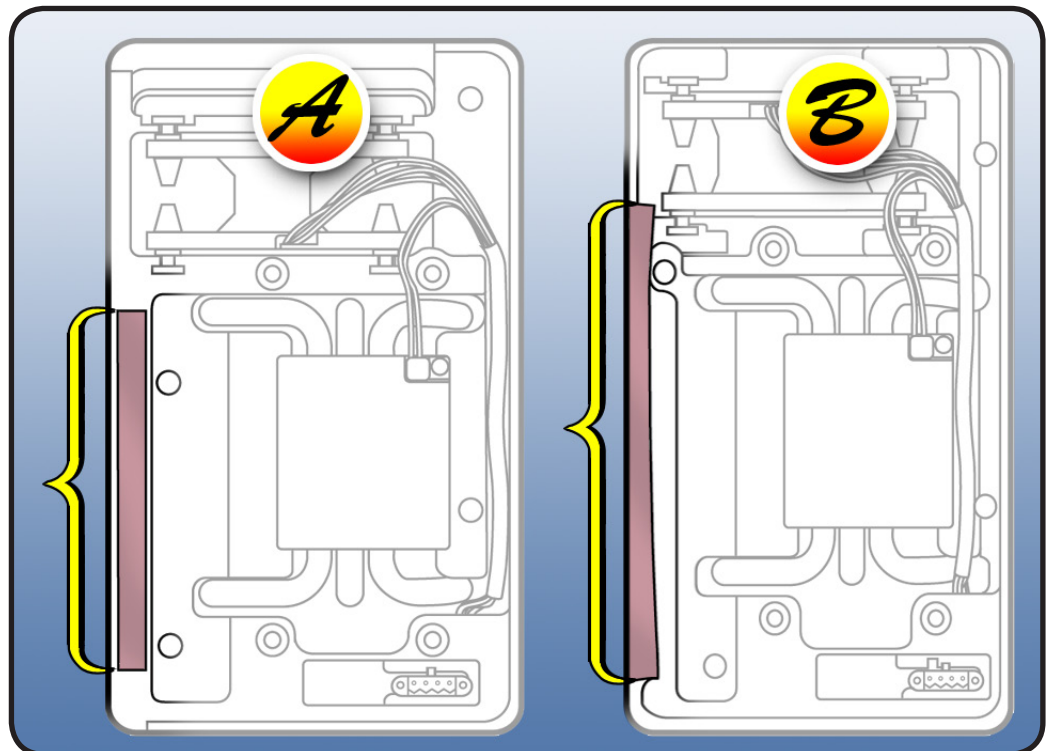
- 4 Carefully align holes on underside of heatsink with mounting posts in processor board, and lower heatsink straight down onto processor. Double-check posts to make sure heatsink is seated properly.



Warning: Use two hands to hold heatsink by its sides. Be careful of heatsink fins, as they can be sharp. Do not press down on the top of the heatsink.



Important: CPU A heatsink (rear) and CPU B heatsink (front) are different parts; they can be identified by their undersides (see illustration). Be sure to install the correct heatsink on each processor.





- 5** To position heatsink screws, lightly tighten them (4 lb.-in. or 0.452 Nm torque) in order shown, using no more than two turns of driver per screw.

Note: While positioning screws, keep heatsink level by holding it in place with one hand.

Reminder: Hold heatsink by its sides. Never press down on the top of the heatsink.

- 6** To secure heatsink to processor, again tighten screws (8 lb.-in. or 0.904 Nm torque) in order shown until they are “finger tight.” Then turn each screw (in order shown) 1/4 turn more.

