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# INSTALLATION INSTRUCTIONS

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<b>Product Line:</b>	Obsession II Systems
<b>Kit Identification:</b>	Memory upgrade kit, P/N 4152S1018
<b>Kit contents:</b>	2 - SIMM inline memory cards 1 - Anti-static wrist strap

## Purpose:

This document's purpose is to help you install static-sensitive memory cards in an Obsession II processor unit (PU). If you are installing in a dual processor system (DPS), both processors must contain the same amount of memory.

Save your show to hard drive or diskette before you start. Then determine if your system needs this upgrade using the procedure given under *Verification*, below. If needed, proceed to *SIMM Installation* to perform the upgrade.

## Questions or problems

If you have any questions about this kit or about the procedures outlined in these instructions, please call ETC Technical Services at 800-775-4382.

## Tools needed

- #1 Phillips screwdriver
- #2 Phillips screwdriver
- Anti-static wrist strap (supplied)

## Save before starting

Since system memory is disturbed in this installation, you should save the current show and system configuration to hard drive or diskette before beginning. If unsure about those procedures, see your Obsession II User Manual.

## Verification

Check your processor memory before beginning this installation. Some systems don't need this upgrade because the system was shipped with 64 MB of memory or processor memory was increased to 64 MB during a service procedure. Follow the procedure below to make this determination (for each processor if a DPS):

1. Shut your entire system down.
2. Connect a monitor to the processor's video port. **Turn it on.**
3. Start the processor and watch the monitor's screen carefully. As part of the startup procedure, the processor counts the available memory. Watch for the count-up at the left edge of the screen (usually the first screen displayed, but keep watching if you don't see it at first). If the upgrade is warranted, the count will reach 32768. If the count stops at a lower number, you need more memory than this kit provides and you should report that to ETC Technical Services. If the count reaches 65536, the processor does not need this memory upgrade.
4. For a DPS, repeat steps 1-3 above for the second processor.

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## SIMM Installation

After verifying that this kit is warranted for your system, shut the system down again. Remove all cables from the processor or processors. If necessary, label the cables and sketch where they're attached so that you can re-connect them correctly after you finish the installation.

1. Work with only one processor at a time. Skip to step 5 if the processor is not mounted in a rack or road case. Otherwise, continue with step 2.

2. Using the #2 Phillips screwdriver, loosen the four screws at the locations indicated in Figure 1. Do not remove.



Figure 1. Processor's rear panel.

3. With the #2 Phillips screwdriver, completely remove the four screws at the locations indicated in Figure 2.

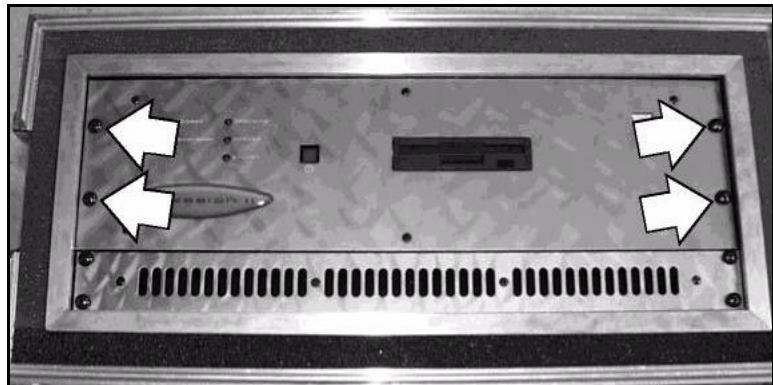


Figure 2. Processor's front panel.

4. Slide the processor out from the front of the rack or road case.

5. Using the #1 Phillips screwdriver, remove the four (4) flat head screws from the front edge of the top of the case (Figure 3, arrow 1). Remove the five (5) flat head screws holding the case top against the back panel (arrow 2). Also, if the case of your processor has a flat head screw at the bottom edge (arrow 3) and a cap head screw holding the side flange to the case top (arrow 4), remove those. **DO NOT LIFT OFF THE TOP OF THE CASE YET.**

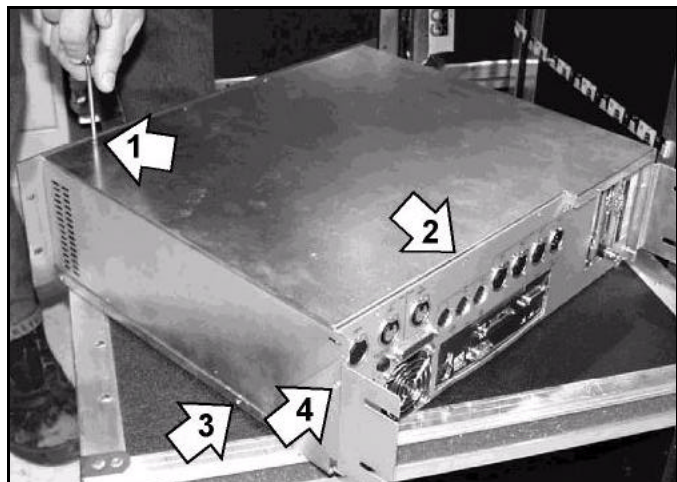
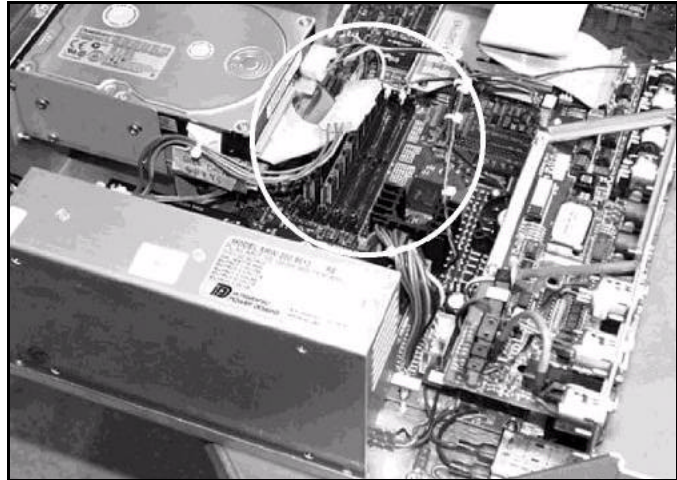


Figure 3. Removing the top of the case.

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6. Neutralize any static electricity present.
  - a Take the wrist strap out of its bag.
  - b The strap has conductive tape at either end. Wrap one end around your wrist and fasten with the tape. Tape the other end to bare metal on the bottom of the processor case.
  - c Plug the power cord back into the power source and into the processor. This ensures that the case is electrically grounded.
  - d After grounding the case, remove the power cord. **KEEP THE WRIST STRAP IN PLACE.**
  - e Except as noted below, do not handle or touch other items until you have completed the installation of the SIMM cards.


7. Lift off the top of the case. The SIMM slots are located near the middle of the processor (circled in Figure 4).



**Figure 4. The open processor case.**

8. Examine the SIMM sockets. Two sockets should be empty. If not empty, this processor is using lower density SIMM cards and all four SIMM cards should be replaced. Call ETC for an additional Memory upgrade kit (P/N 4152S1018) for this processor. Before calling ETC, however, skip to step 16 for this processor, and complete these procedures with the second processor if you're working with a DPS system. Then call ETC.

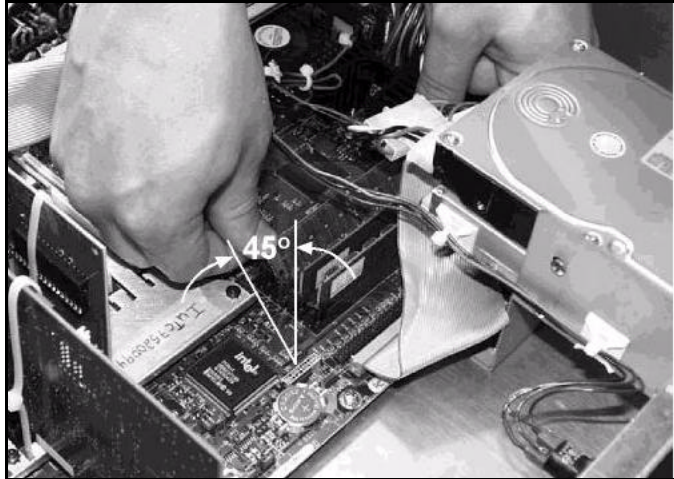
**When handling SIMM cards, follow the precautions below:**



- Do not remove a card from its protective bag until you are ready to install it.
- Hold the card by its edges, avoiding contact with circuit components or edge connectors.
- Don't slide the your hand or the card over other surfaces.

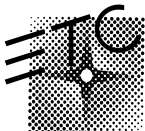
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9. Remove one of the two SIMMs from its protective bag.
10. Referring to Figure 5, position the card at approximately a 45° angle in one of the empty slots, with circuit components facing the same direction as they do in the installed cards. Line up the notch in the middle of the card's edge connector with the ridge in the slot. Using both hands as shown, gently push the card in place all along the socket. There is no need to use tools or great force.



**Figure 5. Rotating a SIMM card in place.**

11. While holding the card against the slot with both hands, rotate it upright until the clips at either end of the slot snap around the card. Verify that the clips are securely in place at each end.
12. Repeat steps 9 through 11 with the other SIMM card in the kit.
13. Replace the top of the processor case without replacing the screws. Re-connect the power cord. Repeat the procedure given under *Verification*, earlier, to determine whether the memory count reaches 65536. If it processor passes this test, skip to step 15.
14. Each SIMM card contains approximately 16 MB of memory, so if the count stops at 49152, there is a problem with one of the SIMM cards. If the count stops at 32768, there is a problem with two SIMM cards, and so on. Assuming that the problem is due to a faulty installation:
  - a Disconnect the power cord.
  - b Lift off the top of the case.
  - c Remove both SIMM cards, one at a time, and replace them in the protective bag.
  - d Repeat the installation starting with step 9 above.
  - e If the processor will not pass the test after re-installing the SIMM cards, go to step 15.
15. Disconnect the power cord.
16. Replace all screws in the case and tighten.
17. If the processor was initially in a rack or road case, replace it by reversing the procedure covered in steps 3 through 5 above. Otherwise, go to step 18. When re-installing the processor in a rack or road case, make sure that the rear screws slide into the slots in the brackets that extend from each rear corner of the processor. Replace and tighten the screws holding the front panel in place. Tighten the screws holding the rear brackets in place.
18. If working with a DPS, perform steps 1 through 18 for the second processor.
19. Reconnect all cables to your processor(s) as before.
20. If one or both processors failed the memory verification test, please call ETC Technical Services to continue troubleshooting the problem.



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