



Optical Drive Installation Guide

2005-2008 15" MacBook Pro

2006-2008 Black & White 13" MacBook



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2005-2008 MACBOOK PRO

REQUIRED TOOLS

- #0 Phillips Screwdriver
- Torx T6 Screwdriver
- Nylon Pry Tool (spudger)



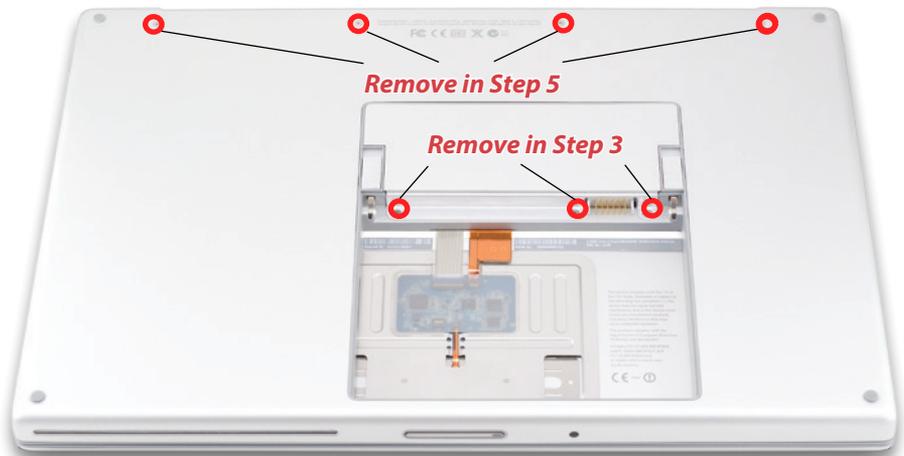
These are static-sensitive devices. They are susceptible to damage if not protected during installation.

We recommend proper grounding by using a grounding strap. Make sure to work in a clean and static-free area, and avoid wearing clothing that retains static charges. For more information, please visit:

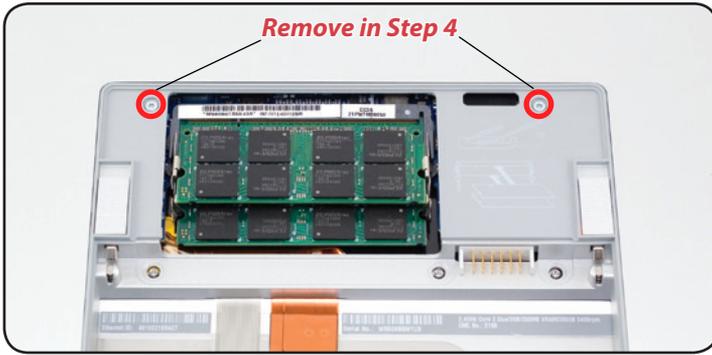
www.owcdigital.com/support/anti-static/

INSTALLATION STEPS

1. Shut Down your MacBook Pro and disconnect the power cord.
2. Close the screen, place the laptop top-down on a flat surface, then remove the battery.
3. Using a #0 Phillips Screwdriver, remove the three wide-capped, 2.15mm screws that secure the RAM slot cover, then remove the cover.



4. Using a Torx T6 screwdriver, remove the two 9.8mm screws that are located under the RAM slot cover, as shown below.



5. Remove the four 14.4mm Phillips screws that are set along the hinge side of the bottom cover. (These screw locations are shown on the preceding page.)

6. Remove the two 2.55mm Phillips screws located near the front edge of the battery bay.



7. Remove the four 3.4mm Phillips screws located along the left side of your MacBook Pro.

8. Remove the four 3.4mm Phillips screws located along the right side of your MacBook Pro. (The layout is the same as the picture below, only the ports will be different.)



9. Remove the two 3.2mm Phillips screws on the back of your MacBook Pro, near the hinge.



10. Open your laptop and tilt the screen back as far back as it is designed to go.

11. Lift up on the top case by the edge nearest the screen. You may need to loosen the left corner with the nylon pry tool (or spudger) to get started.



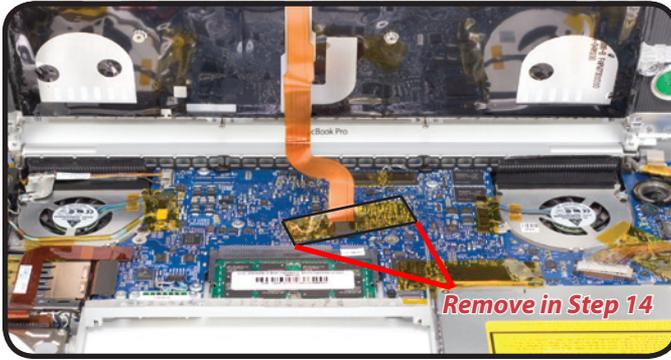
12. Starting from left to right, use the nylon tool to disengage the snaps along the front. Slowly slide the tool to the right, gently turning it like a key as you go, to pop the snaps. Do not be alarmed if you hear small popping noises as the snaps disengage. **This is normal.**

Work your way across the entire top cover, being especially careful around the latches, and across the top of the optical drive slot — these areas are fragile. There are 6 snaps to release.



13. Once the front edge has been loosened, lift the top cover up. Be **extremely** careful, as the keyboard is still attached to the motherboard. Don't scratch your screen during this process!

14. Detach the keyboard connector (which will likely be held on with a piece of yellow Kapton tape) from the motherboard. The connector will lift straight up and release from the logic board. This will allow you to remove the top cover completely. Set it aside to continue.



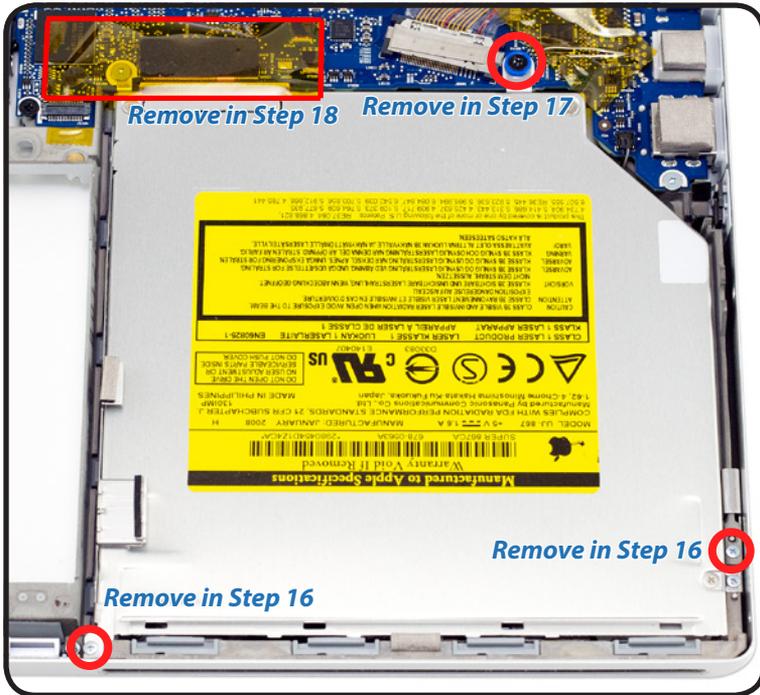
15. On the right front side of the laptop you will see the optical drive. Remove three screws, the piece of yellow Kapton tape, and disconnect the flex connector.

Proceed to the next page.

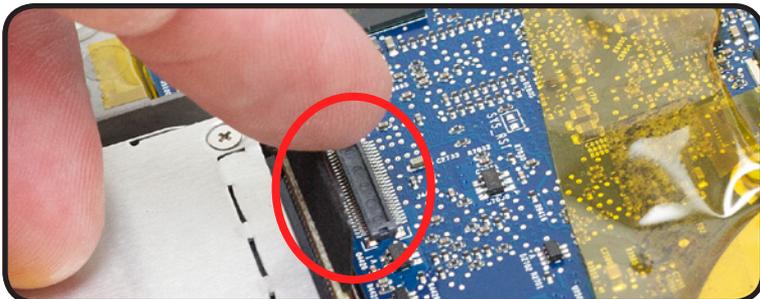
16. Remove the two silver colored 3.5mm Phillips screws from the front of the optical drive.

17. Remove the black Phillips screw from the right-rear of the optical drive. It goes through a rubber gasket in the bracket; if the gasket comes off, be sure to keep put it in a safe place. You will need it later.

18. Remove the yellow Kapton tape from the top of the flex connector, being careful to not disconnect the flex connector from the logic board. The tape must be removed before disconnecting the flex connector.



19. Using your fingernail, disconnect the flex connector from the logic board, pulling it towards the optical drive, then lifting it up and off of the logic board as shown.



20. Remove the two 2.15mm Phillips screws from the optical drive bracket on the side closest to the flex connector.



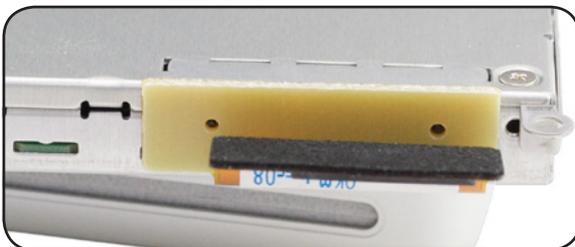
21. Remove the two 2.15mm Phillips screws from the short optical drive bracket on the side opposite to the flex connector.



22. Remove the two 2.15mm screws from the rear bracket attached to the optical drive.



23. Remove the flex connector from the back of the optical drive. It comes straight off, pull equally from both sides of the connector.



24. Remove any metal EMI gaskets still attached to the optical drive (not pictured, and not present on all drives) and transfer them to the same location on the new optical drive. The adhesive on the gaskets is reusable.

25. Begin reassembly, installing the brackets onto the new optical drive, following these steps in reverse order to put reassemble your MacBook Pro. When placing the top cover back onto your MacBook Pro, make sure that the plastic clips from Step 11 are fully inserted into the bottom case before placing the top cover onto the chassis. Getting the clips to snap back together can take a light “flick” or tap from your fingertips onto the leading edge of the top cover to snap them back into place. Do not apply too much pressure to the optical drive slot, it will bend with excess pressure.

This completes the Installation process.

2006-2008 MACBOOK

REQUIRED TOOLS

- #0 Phillips Screwdriver
- Nylon Pry Tool (spudger)



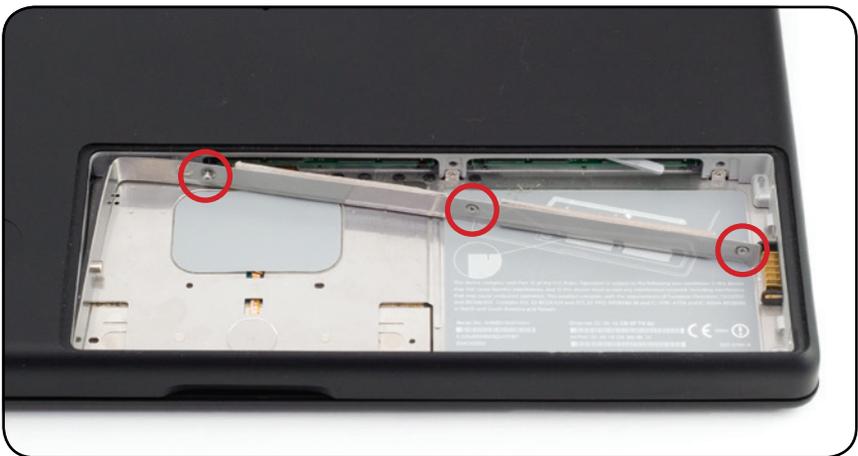
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www.owcdigital.com/support/anti-static/

INSTALLATION STEPS

1. Shut Down your MacBook and disconnect the power cord.
2. Close the screen, place your MacBook face-down on a flat surface, then and remove the battery.
3. Using a #0 Phillips Screwdriver, remove the RAM cover by loosening the three screws shown below, then pulling the metal cover out. Removing the RAM modules is optional.



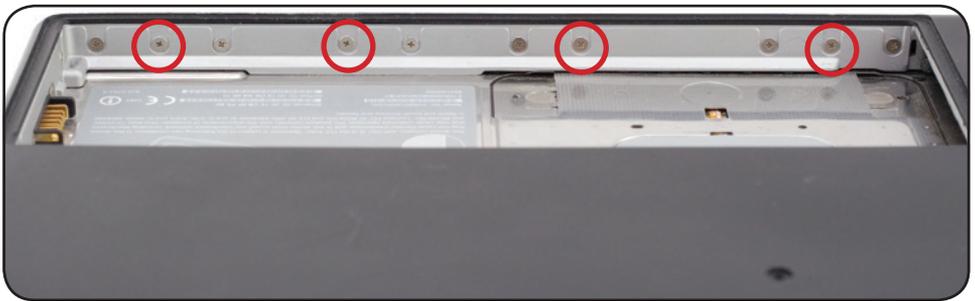
4. Remove the hard drive by lifting up on the plastic flap with a small screwdriver or other tool, until it is exposed. Once the tab is extended, use it to pull the hard drive towards the open battery bay and completely remove it from the MacBook.



5. Remove the three Phillips screws from the MacBook bottom case. (shown below). The two screws to the rear of the MacBook are 14mm long, the center screw is 11mm long. They extend through the bottom case and into the keyboard.



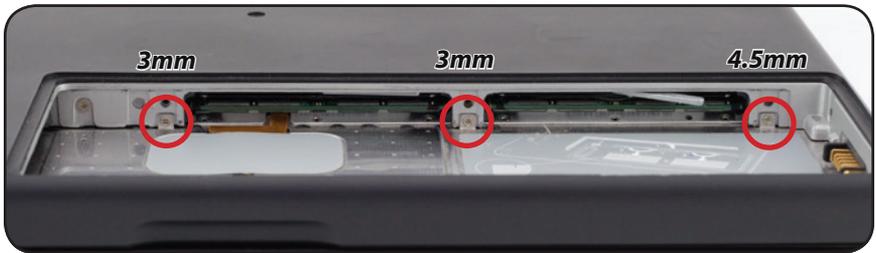
6. Using a #0 Phillips screwdriver, remove the four 3mm screws indicated below from the inside of the battery compartment. Do not remove other nearby screws.



7. Using a #0 Phillips screwdriver, remove the two 6mm screws (shown below) from the inside of the battery compartment.



8. Using a #0 Phillips screwdriver, remove the three screws (shown below) from the inside of the battery compartment, near the memory slots. Note that the screw on the far right is a 4.5mm screw, slightly longer than the other two screws.



9. Using a #0 Phillips screwdriver, remove the two 5.5mm screws from the side of the MacBook, near optical drive slot. NOTE: You do not need to remove the corresponding screws from the opposite side of the MacBook.



10. Use a #0 Phillips screwdriver to remove the four screws from the hinge of the MacBook. There are two 12mm screws and two 8mm screws; their locations are shown below.



11. Open your MacBook's display lid as far back as it was designed to go.

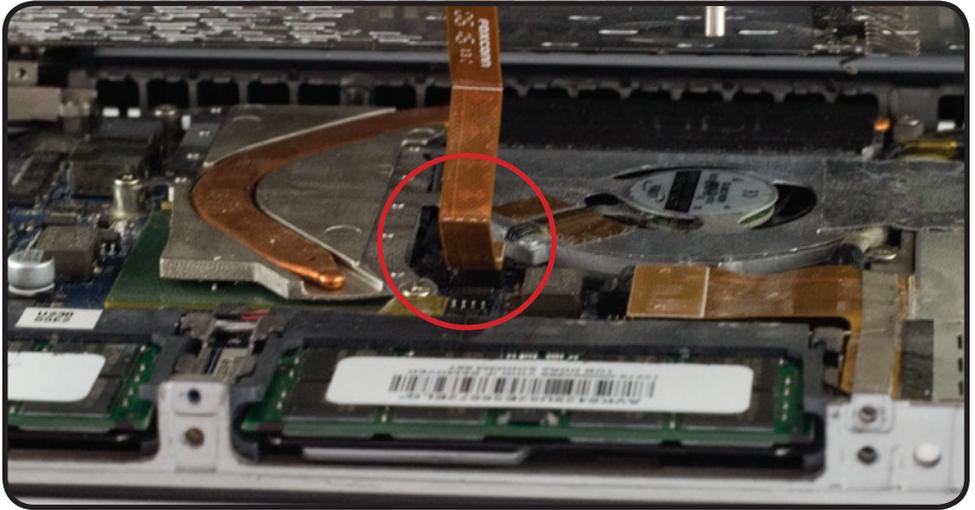
12. Lift up on the top case, nearest to the screen. You may need to loosen the corners using the spudger. NOTE: In rare cases, the keyboard may stick inside the case and not separate. A little extra force may be needed to pop the cover loose in that case.



13. Use the spudger to loosen the front edge. You may hear some small pops as the plastic clips release. **This is normal.** Work your way around until the entire cover is separated. There are three clips on the right front, and four clips over the optical drive to release.



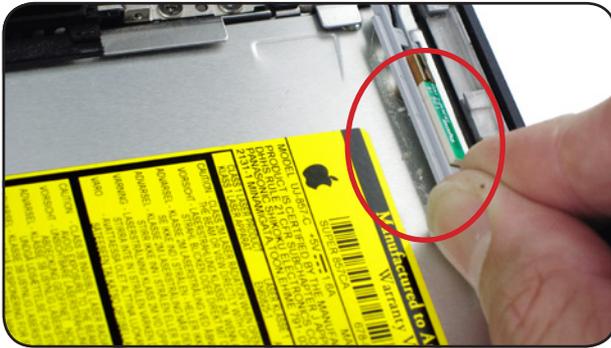
14. Gently lift up on the front edge of the top case until you can see the keyboard connector cable. Carefully disconnect this connector from the logic board. You may then completely remove the top case from the MacBook.



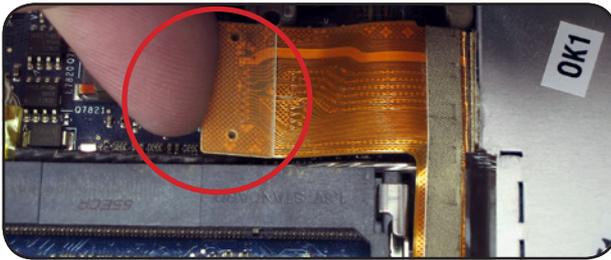
Now that the top is removed, you will see the optical drive.



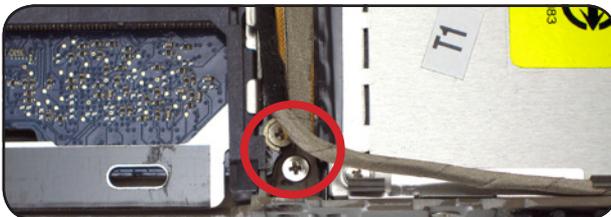
15. Remove the Bluetooth assembly from the top of the optical drive. Use your thumbnail or a spudger to release the bracket and board. Be careful not to bend the metal cover of the optical drive. Once the plastic bracket is detached, remove the green Bluetooth board from the bracket and set it out of the way for use in a future step.



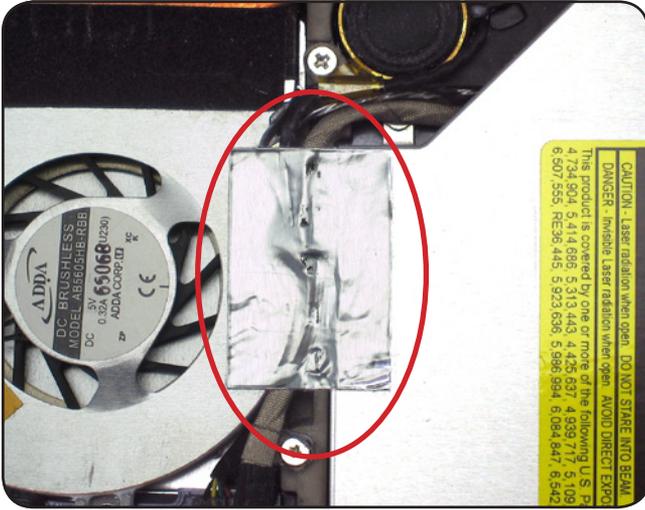
16. On the left side of the optical drive there is a copper colored ribbon cable connecting the optical drive to the logic board. Lift up on the left side of the cable as shown below, then detach the cable from the logic board. You may have to wiggle the cable for it to release.



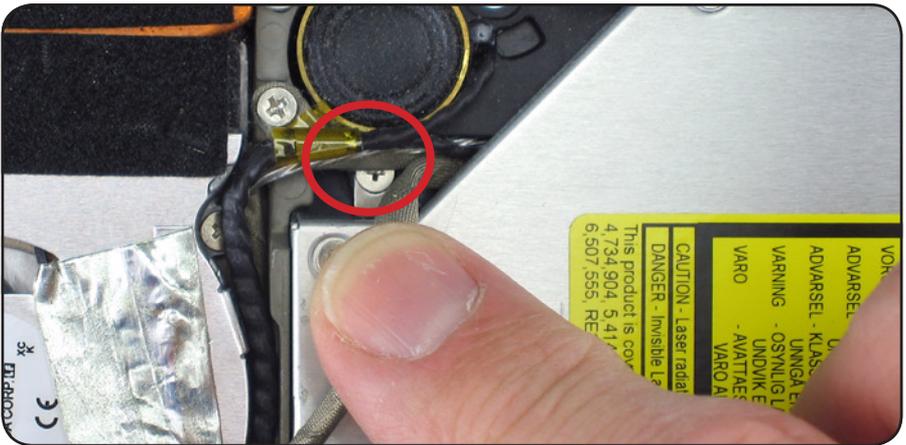
17. At bottom-left, near the battery bay and memory slot, remove the 6mm screw ONLY IF there is a ground loop through the copper orange colored ribbon cable above it. This is present only on some early MacBook systems. You will need to loosen the silver wrapped cable from its retaining clip on the top of the optical drive to uncover the screw. Note: the cable has been removed for this photograph.



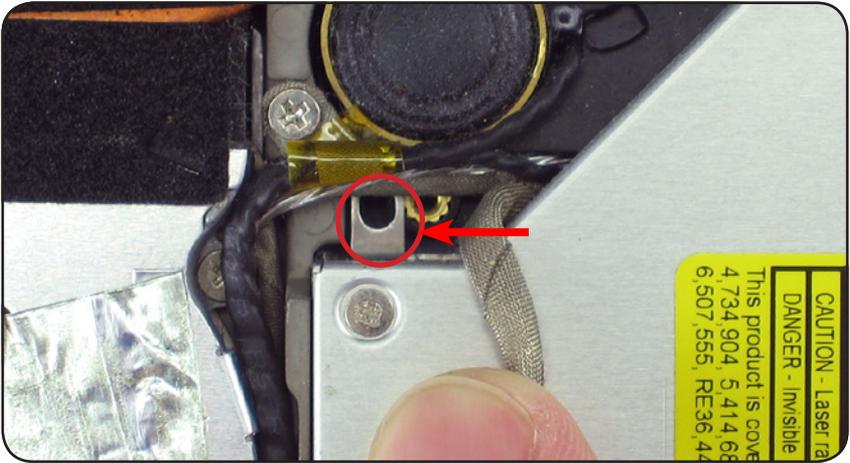
18. Near the upper-left part of the optical drive you will see a large piece of metal foil tape. You need to peel back this foil tape from the optical drive to access the screw and bracket underneath to continue. You can use either your fingernail, or a plastic spudger tool to help peel the foil back. You only need to remove it from the optical drive, you do not have to completely take it off. Take care not to tear it.



19. Once you've peeled the metal foil back, you will expose a braided silver cable. You need to gently lift that away from the corner of the optical drive, revealing a small 3.5mm screw underneath. Remove that screw.



20. Once the screw is removed, you will see a metal bracket that the screw went through. This is actually a bracket underneath the drive that you need to slide out of the frame of the computer. Slide the silver bracket to the left approximately one half inch to release it from the frame.



21. Inside the hard drive bay, there are two Phillips screws that need to be removed. The one on the left that goes through the frame is 3mm, the one that goes through the rubber slider is 4.5mm on some machines, 3mm on others. Be sure to put the long screw (if used) through the rubber slider during reassembly.



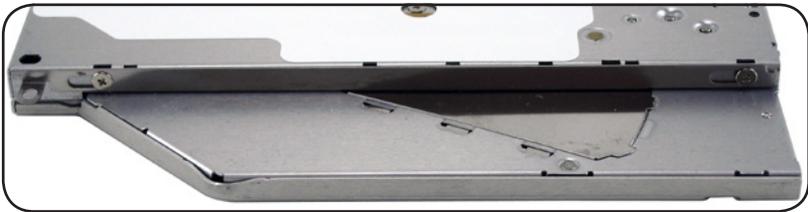
22. Lift the silver-wrapped cable that is clipped multiple times, into a metal framework along the bottom edge of the optical drive (near the hard drive bay). Release this cable but do not detach it from any connectors, in order to remove the optical drive from the MacBook.



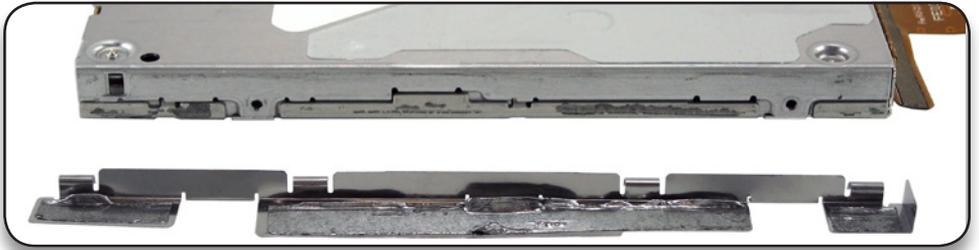
23. Now that you have removed all of the screws, the ribbon cable, and unclipped the silver wrapped cable from the front of the drive, you can gently lift the optical drive out of the the computer, starting at the front side nearest the hard drive bay. Pivot the optical drive around the cable you unclipped, then place it nearby on the working surface you're using.



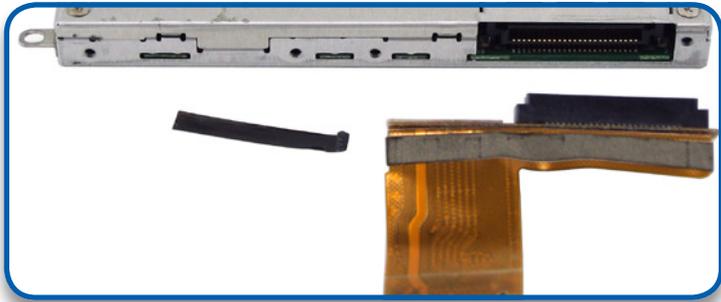
24. Turn the optical drive over so you can see the bottom of the drive. On the side with the recessed portion of the frame, there is sliding metal bracket that you released from the frame of the computer. Remove the two 3mm screws so you can use them with the new drive. When you affix them to the new optical drive make sure the bracket can move freely - it must slide it back into the frame of the computer when the new optical drive is installed.



25. Turn the optical drive over again so you are looking at the top. Remove the metal frame that has wire clips at the top, then transfer it to the new optical drive. This bracket is glued onto the top of the optical drive; you need to gently work the adhesive loose using a plastic spudger. The bracket bends very easily. Use extreme caution and patience when removing this bracket! **WARNING: THE METAL BRACKET IS SHARP. DO NOT CUT YOURSELF!**



26. Looking at the rear edge of the optical drive, remove the ribbon cable and transfer it to the new optical drive. There is a thin piece of black tape across the top of the connector, unpeel that tape and before you remove the cable from the back of the drive.



27. Begin reassembly, installing the brackets onto the new optical drive, following these steps in reverse order to put your MacBook back together.

When placing the top cover back onto your MacBook, make sure that all of the plastic clips from Steps 11 – 13 are fully inserted into the case before placing the top cover onto the machine. They should just slide back into their retaining slots on the bottom cover; be certain that they are all fully in place and not crooked.

Once you place the top cover back onto the chassis, getting the clips to snap back together can take a light “flick” or tap from your fingertips onto the leading edge of the top cover, in order to snap them back into place. Take your time, make sure that you have all the cables you displaced put back so they are not pinched, or out of place.

This concludes the Installation process.

SUPPORT RESOURCES

CONTACTING TECHNICAL SUPPORT

HOURS OF OPERATION

8AM - 8PM (CT) Monday - Friday

9AM - 4PM (CT) Saturday



1-866-692-7100 (North America)
+1 (815) 338-4751 (International)



Live chat is available during normal business hours at:
www.owcdigital.com/support



Email support is available at:
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