

# TIVO UPGRADE INSTRUCTIONS

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Instructions for dual drive upgrade for Sony SAT-T60

## A FEW WORDS OF CAUTION:

**First and foremost, please be aware that upgrading a TiVo presents a few physical hazards. As with most consumer electronics devices, components in the TiVo may still carry a lethal charge, even after disconnecting from your power supply. Be aware of this while working inside your TiVo. Allow sufficient time for discharging of components and avoid contact as much as possible with potential hazards. While we have done everything we can to provide accurate, easy-to-follow instructions, we cannot be responsible for any damage done to your TiVo or to yourself as a result of your upgrade. By opening your TiVo, you agree that neither Adberg Consulting LLC nor any of its members or affiliates is responsible in any way for any harm done. Please be VERY careful when upgrading. NEVER open the TiVo while the unit is plugged in and NEVER operate the TiVo if the lid is not securely fastened.**

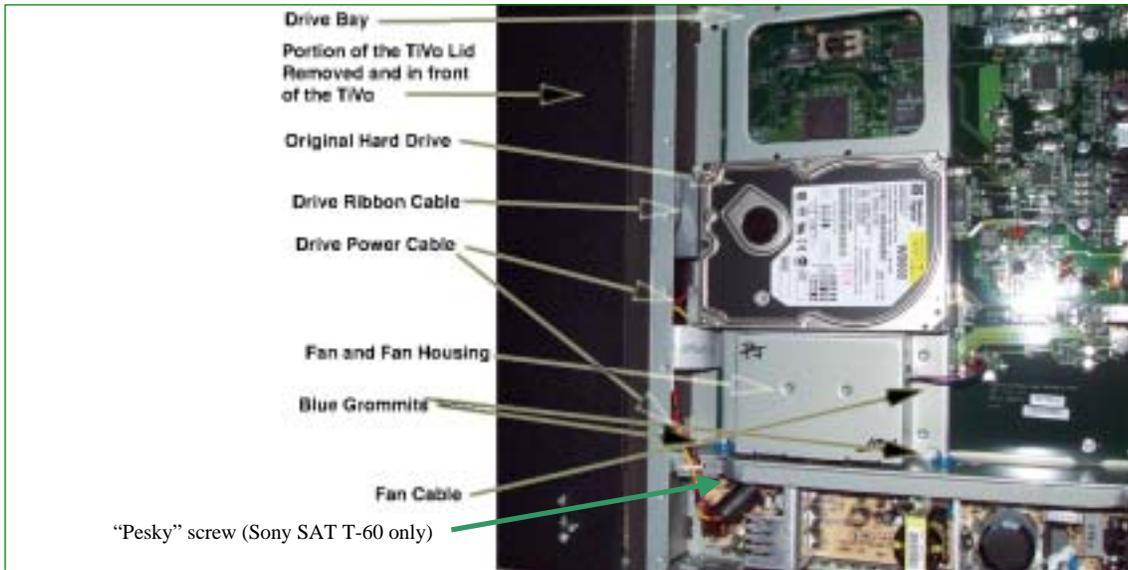
**Please Note: Opening the TiVo *voids the warranty.***

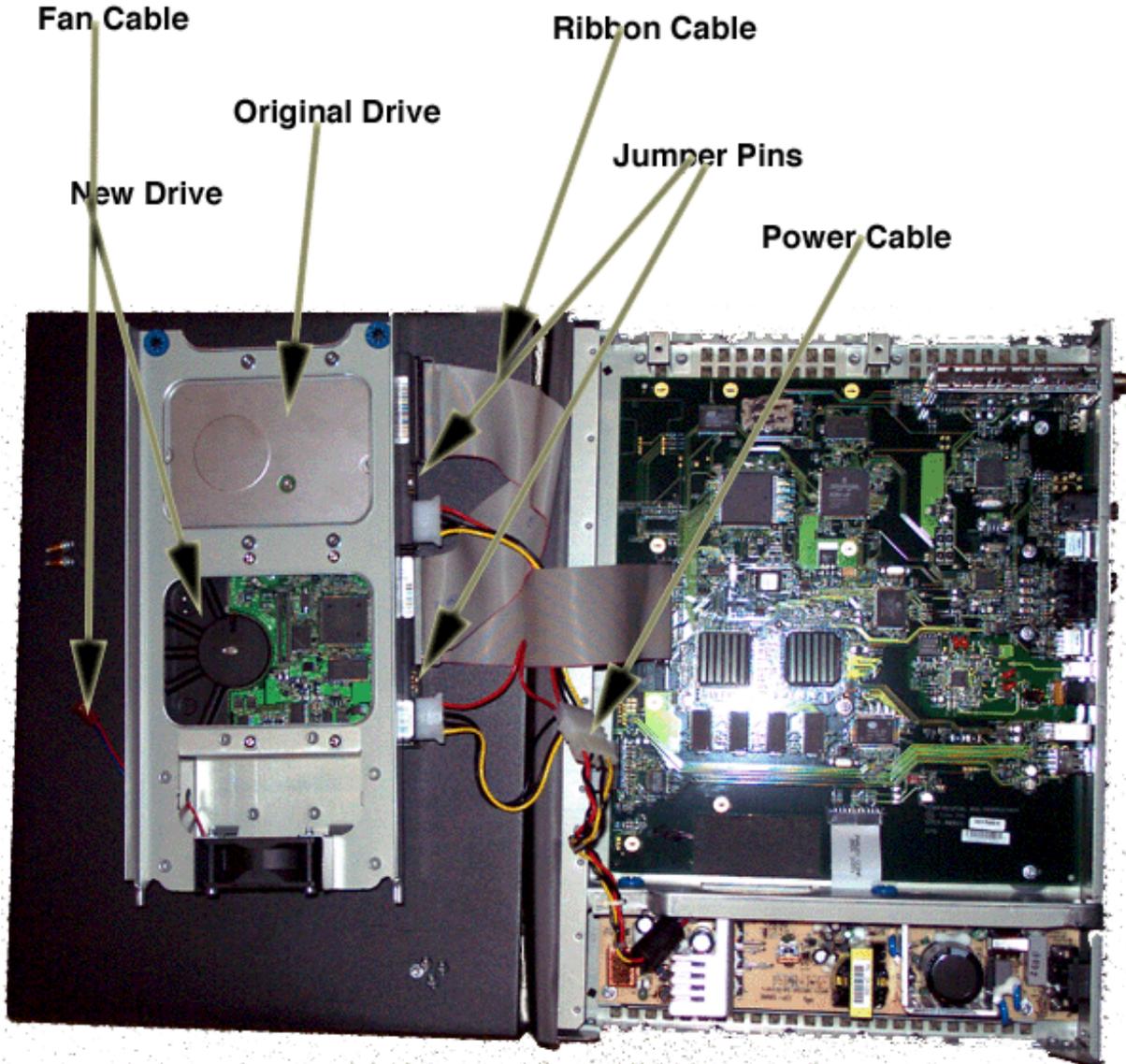
## 1. OPENING THE TIVO

1.1. Unplug the power cord from the TiVo and wait five minutes for the TiVo to discharge. Do not plug the TiVo back in until you are completely finished. Be very careful of static electricity, which can destroy your TiVo's internal parts. You shouldn't perform this upgrade on carpet.

1.2. Using the Torx screwdriver included in your kit, unscrew the four Torx screws on the back of your TiVo. The four screws are surrounded by black from the top of the TiVo's case (there are four other screw which you should NOT remove).

1.3. Once the four screws are removed, you have to remove the lid, which can sometimes be difficult. The "tried and true" method is to place the TiVo on the floor and kneel down with your knees about 6 inches from the FRONT of the TiVo. Place your palms on the top side edges of the TiVo, toward the back and push toward the back of the TiVo (this occasionally requires a bit of force). The cover should slide back and then up. Remove the cover from the TiVo.





## 2. DISCONNECTING THE DRIVE BAY

2.1. With the cover off and looking underneath the front lip of the TiVo, you will be able to see (1) one (or possibly two) hard drive(s), (2) a ribbon cable that runs from the greenish motherboard underneath the drive to the hard drive, (3) a multi-colored (red, black, yellow) power cable that runs from the power supply to the hard drive, and (4) a fan cable (two-wires; red/blue) that runs from the hard drive bay to the motherboard.

2.2. Place the TiVo lid upright in front of the TiVo, forming a platform that will be used to support the drive bay after you remove it.

2.3. Gently remove the fan cable from the motherboard. Pull straight up and out.

2.4. Using the picture above as a guide, locate the “pesky” screw that connects the drive bay to one of the blue grommets. You will have to look behind the power supply. This screw has definitely earned its name, because it is very tricky to remove. Using the L-Key Torx driver that was included in your kit, carefully remove the screw. This will take a some patience. Be very careful to avoid the power supply. The screw comes out counter-clockwise. Note: Once this screw has been removed, you will NOT have to attach it again at the end of your upgrade.

2.5. Using your Torx screwdriver, unscrew and remove the two screws on the left-hand side of the drive bay (as you are looking at the front of the TiVo). Also remove the gold inserts from the blue grommets and keep the two screws inside the gold-colored inserts.

2.6. Once the screws and inserts are removed, you will be able to lift the drive bay up from the left side and slide it out of the two holes on the right side of the drive bay. As you slide the drive bay up and out of the holes, watch the drive cable and power cable that are connected to the drive. Flip the drive bay up and out of the TiVo and onto the TiVo lid, with the hard drive face-down on the TiVo lid and the two cables running from the drive to the TiVo. You will now need to remove both of the cables connected to the hard drive by following the instructions below:

(a) The hard drive has a power connector running into the hard drive. The power cable has a white connector plugged into the hard drive. Remove the power connector from the hard drive. The power cables are sometimes difficult to remove; patience and wiggling it back and forth usually does the trick. If your TiVo has two factory hard drives, remove the cables from both drives.

(b) Remove the hard drive ribbon cable (longer, gray cable with a blue or black connector) from the hard drive(s) by pulling on the hard plastic piece connected to the hard drive. You should now have no cables running to the hard drive(s).

### **3. REMOVING THE EXISTING DRIVE(S)**

3.1. Place the hard drive bay upside-down on the TiVo lid, with the drive label down and the drive connectors facing the front of the TiVo.

3.2. With the hard drive bay upside down on the TiVo lid, use your Torx screwdriver and remove the four screws connecting the hard drive to the hard drive bay. (If your TiVo has two drives, you will need to remove the eight screws connecting the two drives.) Do not confuse these screws with the four screws you removed from the back of the TiVo before removing the lid.

3.3. Set aside the drive(s) you have just removed for safe keeping.

### **4. CONNECTING THE NEW HARD DRIVES TO THE DRIVE BAY**

4.1. Included in your upgrade kit are two hard drives and a bag of screws. If your factory TiVo had two drives, you will not need the screws that we included in the kit. If your TiVo had only one drive, you will need the four screws that you removed from the

hard drive bay and the four screws that we included. The screws will be used to attach the two upgrade drives to the drive bay.

4.2. First, you will want to attach the drive marked "A" to the drive bay. There should be a piece of paper included with your drives that identify them as either "A" or "B".

4.3. Install the A drive in the position closest to the LEFT side of the TiVo (as you are looking at the TiVo from the front). In the pictures above, the location of the A drive should be the TOP location. Align the hard drive on the drive bay. Using the screws included in your kit (or that were removed when you removed your TiVo's original drive(s)), attach the drive to the bracket by following the instructions below:

(a) We have found that the easiest way to attach the drive to the bracket is to turn the bracket upside down. Using one hand, hold the drive against the bottom of the bracket and look through the holes in the drive bay to align the screw holes. Using your hands, screw the screws into each of the four holes. Use a Philips-head screwdriver or Torx screwdriver (depending on the screws being used) to tighten the screws.

(b) NOTE: Check to be sure that the drive is attached so that the drive connectors face the proper way. See the picture above

4.4. Repeat the same process with the "B" drive, attaching it next to the "A" drive. See the picture above.

4.5. You should now have two drives connected to the drive bay.

## **5. CONNECTING THE POWER AND HARD DRIVE CABLES TO THE DRIVES**

5.1. If you have the floor/table space, move to the back of your TiVo so that you are looking at the back of the two hard drives.

5.2. Connect the two power cords to the two drives, being sure to align the power connectors properly (rounded side down). Be sure that the power connectors are securely fastened.

5.3. If your SAT has only two connectors on the gray IDE cable (one for the motherboard and one for the drive) you'll need the extra cable included in your Weaknees.com kit. Then follow A. If your SAT already has a cable with three connectors that can accommodate both drives or if you want to switch out your current cable, use instruction B here.

(a) Connect the gray hard drive cable to each of the hard drives. The connector at the end plugs into your TiVo's original drive. The middle connector plugs into your new drive. Again, be sure the cable is pushed snugly into the drive (it only fits one way). Be very careful not to bend any of the hard drive pins.

(b) Connect the blue cable end into the motherboard IDE connector. Then connect the gray connector into the new upgrade drive, and the black connector into your original factory drive.

5.4. Now move back in front of your TiVo to re-attach the drive bay.

## 6. RE-ATTACHING THE DRIVE BAY

6.1. Once you have the cables connected to the drives, carefully flip the drive bay over.

6.2. You will need to insert the two pins on the right into the light blue grommets, while at the same time watching the power connectors and the gray hard drive cable. You will want to tuck the power cables down into the TiVo (in front of the hard drives). You will also want to tuck down the portion of the hard drive cable that is between the two drives. You will also want to watch the fan cable (the lone red/blue cable) to be sure that it hangs free.

6.3. A word about the extra cables: You will need to play with the excess cable to be sure that the excess cable is in front of or on top of the drives—and not below the drives. Ideally, you will have the excess gray cable folded on top of the drives and the power cable tucked in in front of the fan housing.

6.4. Once the two pins are in the blue grommets, align the left side of the drive bay so that it is directly over the screw holes on the left side of the TiVo.

6.5. Screw the two screws (and gold inserts) back into the holes on the left side of the drive bay using the Torx screwdriver.

**6.6. Insert the fan cable back into the motherboard. (This is easy to forget, which is why it is in bold!)**

## 7. RE-ATTACHING THE TIVO LID

7.1. Kneel down in front of your TiVo as you did when you removed the lid. Place the TiVo lid back over the TiVo. Align the clips on each side of the lid so that they clip down on the sides of your TiVo. Slide the lid toward you while simultaneously pushing down on the top of the lid.

7.2. Once the lid is in place, reattach the four Torx screws.

7.3. Plug in your TiVo and enjoy! NOTE: When you first power up your TiVo, you may find that the TiVo restarts itself once at the "Powering up..." screen. This is normal and will happen only once.

We thank you very much for your purchase and hope that you enjoy your newly-enhanced TiVo. Please [email us](#) with any comments, suggestions or complaints. If you found the upgrade easy to install (or even if you found it more difficult than you expected), we'd love to know. If you found our service to be excellent (or awful), we want to know that

too. We're always looking to improve our products and services...the more we hear from you, the better. Thanks very much!