

# TIVO UPGRADE INSTRUCTIONS

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Instructions for dual drive upgrade for Philips HDR Series and Sony SVR-2000

## 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 all finished. Be very careful of static electricity, which can destroy your TiVo's internal parts.

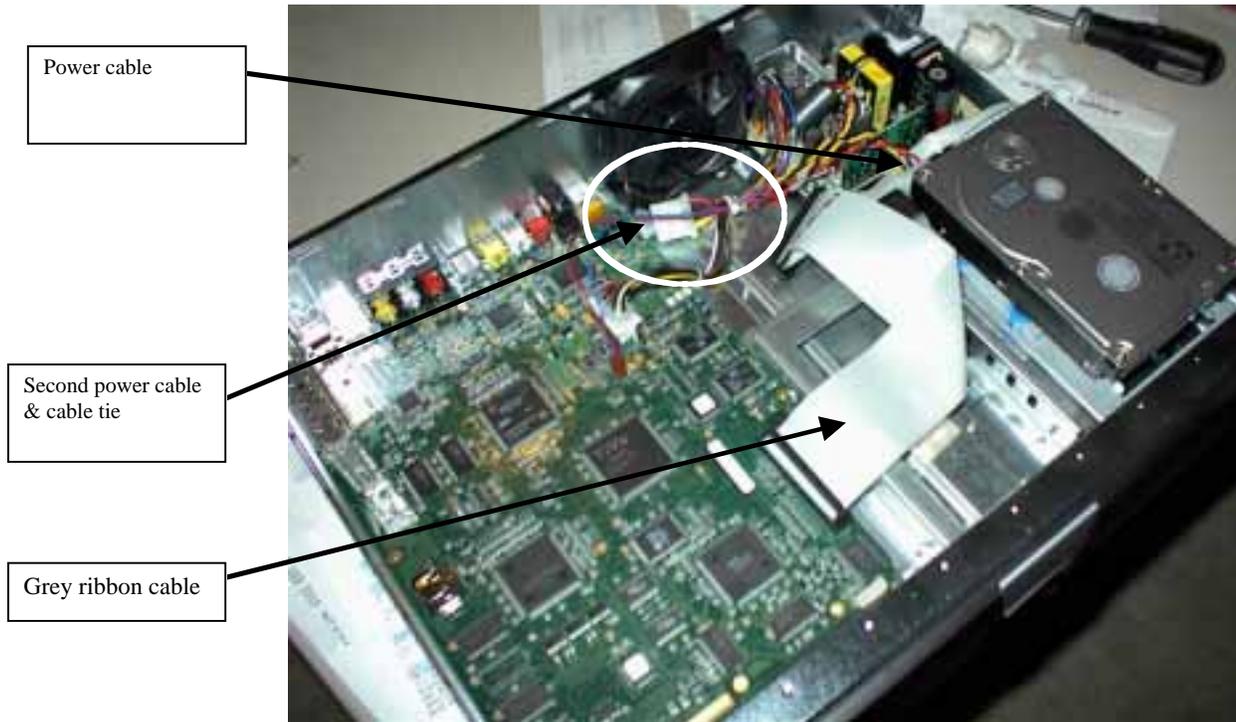
1.2. Using the Torx screwdriver included in your WeaKnees.com kit, unscrew the three screws on the back of your TiVo. The three screws are surrounded by black from the top of the TiVo's case.

1.3. Once the three screws are removed, you have to remove the lid, which can often 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 middle of the TiVo's cover and push, hard, toward the back of the TiVo. The cover should slide back and then up. Remove the cover from the TiVo.

## 2. DISCONNECTING THE CABLES

2.1. With the cover off, you will be able to see one hard drive and a ribbon cable that runs from the greenish motherboard to a plastic holder and then to the hard drive (see picture below). The cable is gray and has a black connector that is plugged into the hard drive. Gently remove the gray cable from the back of the hard drive by pulling on the black connector. Do not touch the power supply, located behind the drive.

2.2. The hard drive also has a power connector running into the hard drive (see picture below). The power connector has a white connector (smaller than the black connector referenced above). Remove the power connector from the hard drive. Again, be very careful not to touch the powersupply/card located near the power cable. The power cables are sometimes difficult to remove; patience and wiggling it back and forth usually does the trick.



### 3. FREEING THE SECOND POWER CABLE

3.1. The TiVo has a second power connector (identical to the one described in 2.2 above; see picture above). This connector may be tied down with cable ties and you'll need to carefully cut the cable ties that hold down this second power connector. Be very careful not to cut any of the wires.

3.2. If the hard drive (gray) cable is clipped onto a clip next to your hard drive, you'll want to remove it from the clip. The cable should now have two connectors that are free and one that is connected to the motherboard.

### 4. REMOVING THE EXISTING DRIVE

4.1. Using your Torx screwdriver, carefully unscrew the two screws that secure the existing hard drive to your TiVo. The two screws are located toward the front-bottom of the TiVo, where the drive sits.

4.2. Once the two screws are removed, remove the drive and bracket by sliding the drive toward the back of the TiVo and lifting the bracket/drive combination out. Before

removing the drive, take note of where the drive is located in your TiVo and how the bracket sits in the TiVo. You will be replacing the bracket in the identical place later.

## 5. REMOVING DRIVE FROM BRACKET, RECONNECTING NEW DRIVE, AND SECURING NEW DRIVE TO TIVO

5.1. Turn over the drive/bracket that you just removed so that the top of the drive is sitting on a flat surface. Using your Torx screwdriver, unscrew the four screws that are securing the bracket to the drive. Before removing the drive from the bracket, take note of the position of the drive and bracket. You will be re-securing the same bracket, using the same parts, to one of your new drives (included in upgrade kit). Once all four screws are removed, the bracket should come free from the drive.

5.2. Connect the drive marked "A" to the bracket that you removed from your TiVo. Use the Torx screwdriver to screw the four screws into the drive.

5.3. Re-attach the bracket and drive to the TiVo by lining up the two metal prongs in the TiVo chassis with the holes in the TiVo bracket. **DO NOT SCREW THE BRACKET INTO THE TIVO UNTIL YOU HAVE COMPLETED STEP 6.**

## 6. CONNECTING SECOND DRIVE TO BRACKET

(Bracket installation instructions courtesy of 9<sup>th</sup> tee)

6.1. Following the bracket installation instructions included with your kit, mount your drive (marked "B") to your bracket, and your drive/bracket combination to your TiVo. Be sure to secure the new drive/bracket to the TiVo using the screws provided in your upgrade kit.

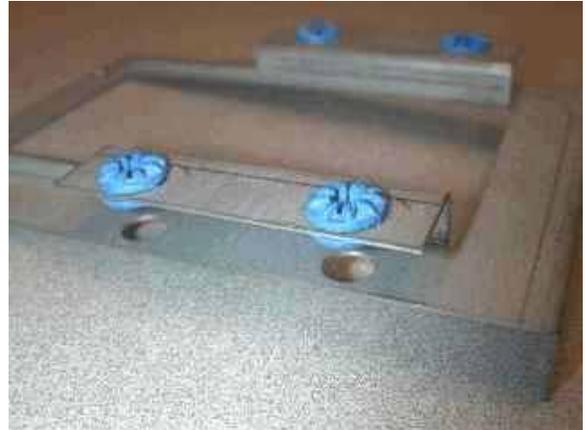
6.2. If you find that your two brackets do not "fit" because they are too close together, you should adjust either or both brackets by using a different set of holes. The bottom of the picture below shows the two sets of holes in each bracket.

### BRACKET PARTS LIST:

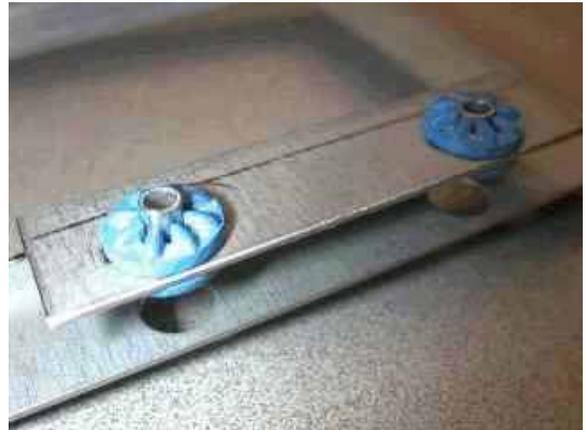
- (1) Bracket
- (4) Blue Rubber Grommets
- (4) Metal standoffs
- (4) Machine Screws with Lock-Washers
- (4) Plastic Spacers
- (2) Self-Tapping Screws
- (2) Flat Washers



**STEP 1:** Insert the blue Grommets into the slotted holes. A small screwdriver helps make it an easy job.



**STEP 2:** Insert the metal standoffs into the blue Grommets.



**STEP 3:** Turn the bracket over and insert the (4) 1/2" Long screws thru the white plastic spacers and into the metal standoffs in the blue Grommet.



**STEP 4:** Turn the disk drive so that the screw holes in the disk drive line up with the screws in the bracket. Using a Phillips screwdriver, tighten all 4 screws. Note that the connectors are sticking out at the left side of the disk drive.



**STEP 5:** Turn the drive and bracket over.



**STEP 6:** Locate the IDE and power cable and move them out of the way to make room for the new drive.



**STEP 7:** Slide the drive bracket into position, lining up the two metal prongs in the TiVo chassis with the holes in the TiVo Mounting Bracket. If you find that the factory-installed bracket is too close to the new bracket that you are now trying to install, you may have to unscrew the factory bracket (which is connected to the factory drive) and move it into the alternate set of holes. Moving the factory bracket over will leave sufficient room for the new bracket.



## 7. CONNECTING THE CABLES TO THE DRIVES

7.1. Once the drive/brackets are installed, connect the two power cables to the two drives (one per drive). Be sure to push on the cables with some force to be sure that they are seated properly. Be very careful not to touch the power supply.

7.2. Connect the gray cable to each of the hard drives. The connector in the middle plugs into your new "B" drive. The end connector plugs into your new "A" drive. At no time should you disconnect the gray cable from the TiVo's motherboard. Again, be sure the cable is pushed snugly into the drive. Be very careful not to bend any of the hard drive pins.

## 8. RE-ATTACHING THE TIVO LID

8.1. Kneel down in front of your TiVo as you did when you removed the lid. Place the TiVo lid back over the TiVo, so that the back part of the lid is hanging over the back of the TiVo by about 8 inches. 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. As the lid moves toward the front of the TiVo, push down on the top-front of the lid to be sure that the top-front clip is secure. Watch the two clips on the back of the lid to be sure they sit inside the holes located on the back of the TiVo.

8.2. Once the lid is in place, reattach the screws.

8.3. Plug in your TiVo and enjoy!

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!