TIVO UPGRADE INSTRUCTIONS (#33)

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Instructions for Series 1 DirecTV/TiVo ONE DRIVE REPLACE upgrade (SAT T60 / DSR6000 / GXCEBOT)

These instructions are also available in color at http://www.weaknees.com/upgrade_instructions.php

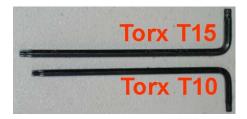
WORDS OF CAUTION:

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 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*.

THIS KIT INCLUDES:

1 T10 Torx L-Key

- 1 T15 Torx L-Key
- 1 Upgrade hard drive (not shown)
- 1 Set of upgrade instructions (not shown)



1. OPENING THE TIVO

Unplug the power cord from your electrical outlet 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 should not perform this upgrade on carpet.

Using the Torx T10 (smaller of the two) L-key included with 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.

Once the four screws are removed, remove the lid. 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

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.

With the cover off and looking underneath the front lip of the TiVo, you will be able to see (1) a multi-colored (red, black, yellow) power cable that runs from the power supply to the hard drive, (2) a gray IDE ribbon cable that runs from the greenish motherboard underneath the drive to the hard drive, (3) one hard drive, and (4) a fan cable (two-wires; red/black or red/blue) that runs from the hard drive bay to the motherboard.. NOTES: The DSR6000 and some SATT60 units have a gray IDE ribbon cable with two hard drive connectors. The GXCEBOT's cable has a connector for only one drive.

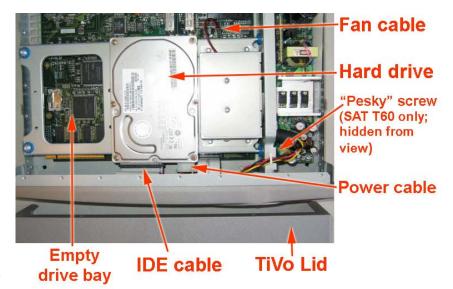
NOTE: Some DSR6000 and SAT T60 TiVos shipped with two drives from the factory. If your TiVo has two drives, then you will be removing *both* of these drives and replacing them with the upgrade drive in your kit. In a two-drive factory TiVo the empty drive slot shown in the picture will contain the second drive.

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

Using your Torx T15 L-key (larger of the two, although either may work for these screws), 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. [In the picture at the right, the front of the TiVo is to the left.]

SONY SAT T-60 ONLY: Locate the "pesky screw" (see picture above) and remove it using the Torx T15 L-key. The screw is inserted into one of the pins of the drive bay, to the right of the metal divider shown in the picture above. Be careful not to damage the power supply while removing this awkward screw. Patience, slow small turns, and about 30 seconds should see you through. Do not re-install this screw after it has been removed.

Once the screws and inserts are removed, you will be able to lift the drive bay up from the left side (as you are looking at the front of the TiVo) 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 TiVo, do two things simultaneously (1) support the right side of the bracket to prevent it from falling onto the motherboard as you pull it out of the holes, and (2) be mindful of the drive cable and power cable that are still 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.







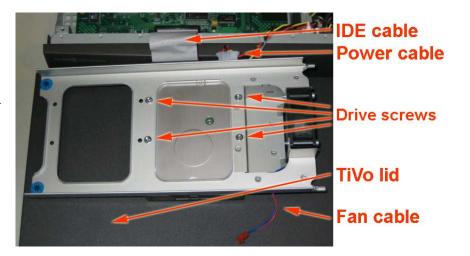
You will now need to remove both of the cables connected to the hard drive by following the instructions below:

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.

Remove the hard drive ribbon cable (longer, gray cable with a blue or black connector) from the hard drive by pulling on the hard plastic piece connected to the hard drive.

If you have a two-drive factory TiVo, follow the instructions above to remove the cables from both drives.

SAT T60 and DSR6000 ONLY: These TiVos have a twodrive power connector—see picture at right. In addition, the DSR6000 and some SAT T60 units have a two-drive IDE drive connector—see picture at right. After you have installed your upgrade drive, you can connect either power connector to the new hard drive. You should use the connector at the *end* of the IDE cable, even if that is not the connector that had been used with the factory drive.



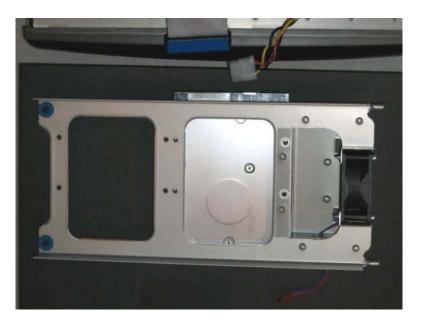


3. REMOVING THE EXISTING DRIVE

Before removing the factory drive, take note of its position and orientation on the drive bay. Note in particular the direction in which the drive connectors face.

With the hard drive bay upside-down on the TiVo lid, use your Torx T15 L-key to remove the four screws connecting the hard drive to the hard drive bay. Set these screws aside, and do not confuse them with the four screws you removed from the back of the TiVo before removing the lid. Remove the hard drive and set it aside for safe keeping.

Notes about drive location: The factory drive in a GXCEBOT is generally located in the position next to the fan (as shown in the picture). The factory drive in a SAT T60 or DSR6000 can be in either location on the hard drive bay. Your upgrade drive should be installed in the same location as the factory drive. If you have a two-drive factory TiVo, install your new drive in the location shown in the picture at the right.



4. CONNECTING THE NEW HARD DRIVE TO THE DRIVE BAY

Align the new hard drive included in your kit on the drive bay, as shown. (If you have a one-drive TiVo and your factory drive was located in a different location than in the picture, use that alternate location.) Using the drive screws you removed from the factory drive, attach the drive to the bracket by following the instructions below:

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 your Torx T15 L-key to tighten the screws. NOTE: Do NOT change the jumper on your upgrade drive. It is set correctly.

Fan cable <

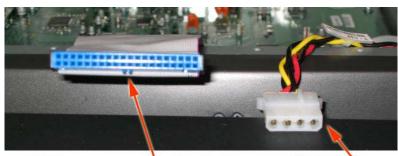


IDE/Power connectors

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

Connect the gray IDE ribbon cable to the hard drive. If the drive is face down on the TiVo lid, then the notch in the cable should be face down as it is inserted into the drive. 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. If your cable has two connectors, use the end connector. (Note: Your IDE cable connector may be black.)

Connect the power connector to the drive, being sure to align the power connectors properly. If the hard drive is face-down on the TiVo lid, then the rounded side of the power cable will also be down. Be sure that the power connector is securely fastened. If your TiVo has two power connectors, use either connector.



IDE connector/notch

Power[\] connector

6. RE-ATTACHING THE DRIVE BAY

Now, carefully flip the drive bay over. 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 watch the fan cable (the lone red/blue cable) to be sure that it hangs free.

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.

Screw the two screws (and gold inserts) back into the holes on the left side of the drive bay using the Torx T15 L-key

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



Pins in blue grommets

Fan cable (connected)



7. RE-ATTACHING THE TIVO LID

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. Once the lid is in place, reattach the four Torx screws using your T10 L-key.

Reconnect your TiVo to your television and power it on. After your have gone through guided setup, you will be able to verify your TiVo's new capacity in the System Information screen. If your TiVo sticks at 28% when first loading satellite information, this is a DirecTV problem. Please see the instructions below.



SPECIAL NOTES ABOUT YOUR UPGRADE:

If you are stuck at 28%.

DirecTV is currently having a problem that may affect your TiVo. After your upgrade, your TiVo unit might stall while it is acquiring the satellite signal or verifying your dish type. Generally, it hangs up at 28%. If this happens to you, do the following: (1) unplug the power cord; (2) unplug your satellite input(s); (3) plug in the power cord and proceed with guided setup. After some time, your TiVo will warn you that it was unable to acquire a satellite signal/dish type. Choose the option that says you will fix the problem later. Your TiVo may then attempt to acquire a signal again, which will take some time (up to 15 minutes). Eventually, you will come to a screen that permits you to proceed to TiVo Central (generally the last of three options on the page). Choose that option and proceed with setup. Once you are at the TiVo Central screen, plug the satellite inputs back into your TiVo.

Local channels

If you subscribe to local channels with DirecTV, it may take several hours for them to appear in your DirecTV guide after your upgrade. If for some reason your local channels do not appear after this period of time, you may need to call DirecTV (800-DIRECTV) to have them reload your access card. Simply call DirecTV and tell them you have lost your local channels. They will send a signal to your unit and your locals will reappear.

ENJOY! We thank you very much for your purchase and hope that you enjoy your newly-upgraded 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!