

Duck Pants New Member

Start a Conversation

Joined:

Nov 3, 2017

<u>6</u>

10

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Location:

Littleton, Colorado

Vehicle:

2010 Prius

Model:

Four

Background

My 2010 Toyota Prius JBL navigation system touchscreen (E7022) stopped working:

- The LCD display still showed the map, music, and other info, but wouldn't respond to touches to the screen.
- The buttons to the side of the display worked correctly, but when I would touch the display, nothing would happen.

The dealership said the whole system needed to be replaced (\sim \$3,000) and an aftermarket system would cost \sim \$1,000 get installed.

Some research led me to <u>https://priuschat.com/threads/replaced-2011-jbl-nav-touchscreen-success.175158</u>. Tgtech had the same symptoms and found that only the touchscreen (a thin piece of clear glass that sits on top of the LCD display) needed to be replaced. Illuminus found that you could take the multifunction display (MFD) out without taking apart the rest of the stereo. Trip Kirby found a US ebay seller that sells reliable touchscreens for \$80. While tgtech, Illuminus, and Trip Kriby all gave great information, they were all pieces to this frustrating puzzle. Here is a step-by-step instruction on how to replace a defective touchscreen.

I am not mechanically inclined, but I tried this myself because Car Toys, Best Buy, and other shops in the area would only replace the entire unit, not open it and replace a part. I am confident that if I can do this, anyone can.

Process

Estimated time: 2-3 hours

Before you begin, have these things ready:

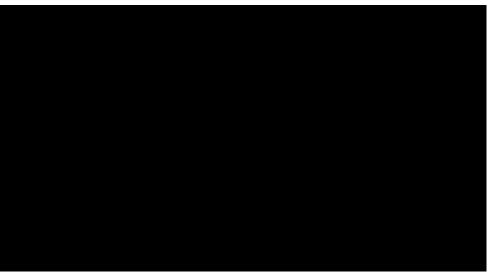
 A replacement touchscreen (recommended: <u>2010-11 Toyota Prius JBL E7022 Navigation Touchscreen Digitizer Stopped Working?</u> <u>eBay</u>, title: 2010-11 Toyota Prius JBL E7022 Navigation Touchscreen Digitizer Stopped Working?, seller: popularitycontest).
 A **good set** of miniature screwdrivers (that you can grip well). The cheap dollar store sets will not do, as you will end up stripping a screw and end up having to drill it out (this happened to me).

3. A standard set of screwdrivers.

4. An extra set of hands to help hold stuff.

Steps:

- 1. Turn the car on.
- 2. Open the multifunction display (MFD) by pressing and holding the Close button for ~10 seconds.
- 3. Turn the car off.
- 4. Remove the MFD from the head unit:



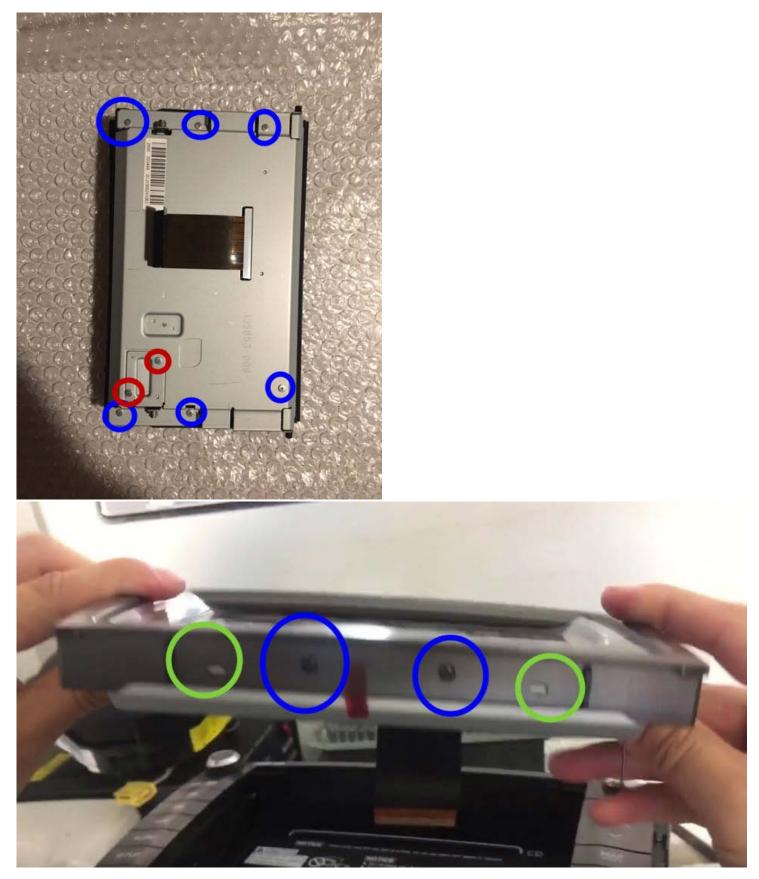
Note: The ribbon that you disconnect is connected via a locking mechanism. Slightly pull out the lock before you remove the ribbon (image taken from <u>Recognizing & amp: Disconnecting Cable Connectors - iFixit</u>):



- 5. (Recommended) Take the unit and your tools to a clean table with plenty of space.
- 6. Separate the MFD:
 - a. The blue circles are the screws that you remove
 - b. The red circles are the screws that you DO NOT remove
 - c. The green circles are the locations of hook tabs where you need to pry between the plastic and the metal. There are more
 - of these tabs on the other side (I just don't have a picture)



- Here's another type of ribbon connector, commonly found on Xbox gaming consoles.
- To remove it, use a spudger or fingernail to lift the clear blue tab away from the connector.
- Next, use the tip of the spudger to push open the plastic locking tab.
 - (i) The locking tab will only move about 2 mm.
- Pull the ribbon cable out of the connector in the direction of the cable.



7. Open the MFD to reveal the motherboard, then remove the following screws:

a. The red circles are the screws that you remove to replace the LCD (DO NOT remove these)
b. The blue circles are the screws to remove to replace the touchscreen (the location might vary slightly as I don't remember *exactly* where they are. The important thing is that you do not remove the screws circled in red)
c. The yellow arrow is the where connect/disconnect the touchscreen (note: the ribbon is connected via the same locking mechanism in step 4)



- 8. Your unit should now be split into 4 parts:

 (1) the metal housing
 (2) the motherboard attached to the LCD
 (3) the old touchscreen
 (4) the plastic housing for the display

 9. Remove the old touchscreen and install the new touchscreen. Note: the ribbon is connected via the same locking mechanism in step 4. Slightly pull out the lock before you install the new ribbon ribbon.
- 10. Put everything back together by following these steps in reverse order.

<u>#1 Duck Pants</u>, <u>Nov 7, 2017</u> Last edited: Nov 7, 2017



prmp945 Member

Start a Conversation

Joined:

Oct 10, 2014

<u>50</u>

27

<u>0</u>

Vehicle:

2011 Prius

Model:

Three

New Thanks for putting this together!

The link to the US based seller is sold out, but I sent a message to the seller and he pointed me towards his new listing:

2010-11 Toyota Prius JBL E7022 Navigation Touchscreen Digitizer Stopped Working? | eBay

In case the above link doesn't work, the eBay seller's name is AUTONAVIFIX. I ordered it and received it the next day. It works perfectly.

A couple of thoughts on the process:

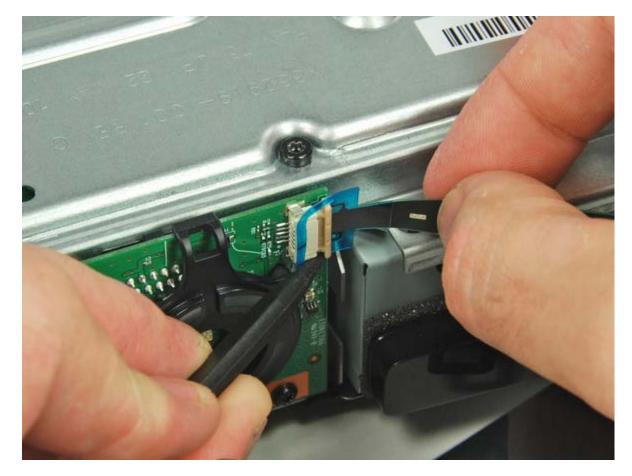
Read the instructions posted by the OP (<u>@Duck Pants</u>) carefully! Don't try to yank the old ribbon cable connectors out without FIRST unlocking the connector harnesses. Likewise, when reinserting the ribbon cables, you'll need to re-lock the connector harnesses to keep the ribbon cables in place.

This is important to note because the youtube video posted above shows the guy just pulling the LCD ribbon cable out of the system board without unlocking the connector harness. Don't do that!!! You need to unlock the connector harness first, or you may damage your system board and/or cable.

I'm going to paste all 3 photos from Duck Pants' above link to try to make that process clear. Notice how in the first photo that the brown/tan plastic piece is held close against the white piece. The brown/tan plastic piece is the locking portion. It needs to be pulled out and away from the white piece, as shown in the second photo. Once is has been unlocked, the ribbon cable will pull out without any force at all. Of course, when re-inserting the cables, you need to push the lock back in place in order to hold the ribbon cable in place.

You will encounter 2 connector harnesses and ribbon cables while doing this fix: one is for the LCD (the thick one shown in the youtube video above) and one is for the touchscreen (the skinny one seen after disassembling the LCD assembly).







Thanks again for the great writeup, Duck Pants!

#6 prmp945, Today at 5:37 PM

Additional, from @aires:

https://priuschat.com/threads/how-to-replace-a-defective-touchscreen-digitizer-on-a-2010-gen-3-toyota-prius.187917/#post-2780080

I've had the same problem with my 2010 Prius touch screen about 18 months ago, and searched for a solution, to no avail at the time - I posted a question on Priuschat at the time, but didn't hear much. About the only lead I had at the time was to find that the issue wasn't the whole display in the unit, but a digitizer overlay - the touch screen. But, there were no sources at the time for the part, or instructions.

Two weeks ago, I had the driver's side mirror hit overnight and was searching eBay and salvage sites for a replacement for my 2010 Prius. I found the exact mirror assembly I needed, and on a whim searched for Prius touch screen. Lo and behold, I found the merchant and then found this great set of instructions. Thank you to Duck Pants and the others. I completed the mirror and touch screen replacement in about 2 hours, and the speed was due to the incredible resources on-line.

A few comments about the instructions that may help another:

The large ribbon cable that needs to be detached in Step 4 before the MFD can be removed is described in some detail here. But, I think it's important to note that the locking mechanism needs to be opened outwards and this can be tricky without a steady hand and some decent tools. It is hard to do, and I found it easiest to pull on the corners of the locking mechanism rather than try to pull it out by latching something to the center of the locking piece. It's pretty easy to lock the mechanism when the ribbon is reconnected by pushing on the two outer edges of the locking mechanism.

When separating the MFD from the plastic cover, in Step 6, there are a few photos that really help. What's missing, though, is a photo that shows the opposite view to the second photo under 6.C. That would show the 4 hook tabs on the side opposite the side with two screws. There are no screws on that side, but hooks that in my case, needed to be freed by pulling the plastic housing away from the hooks. Easy to do, but necessary.

Thanks folks!