

What do I need to do to bypass the motion lockouts on a Pioneer Avic-Z1?

Bypassing the lockouts is all based on the month your Avic-Z1 was manufactured and what software it has loaded on it. I know this is confusing and you can thank Pioneer for changing the way this is done half way through 2006.

- If your Avic-Z1 was made in January 2006 through and including June 2006 and it still has the factory original software loaded on it then you need to [flash your headlights](#) when you start the car. If you get sick of manually flashing your headlights [please buy one of my circuits](#).
- If your Avic-Z1 was made in July 2006 through the present (I believe the newest Avic-Z1's are made in December 2006) then you need to [ground 2 wires](#).
- If you have ever updated your Avic-Z1 with the [Bluetooth Update CD](#) (no matter what month your unit was made) then you need to [ground 2 wires](#).

I have some questions.

- How do I know when my unit was manufactured?
 - The manufacture date is printed on a sticker on the unit itself (on the same sticker the serial number is on) and it's also printed on the box the unit came in. It's not encoded in a number, it's printed in plain English like "April 06".
- How can I tell if my software has been updated?
 - From any of the screens in the Avic-Z1... you can't. The only possible way to tell is to either try [manually flashing the headlights](#) and [see if it works](#). Or insert the [Bluetooth update cd](#) into the unit. If it says that update has already been installed, it was (and you need to [ground 2 wires](#)). If it wasn't installed yet it will start the installation whether you want it to or not.
- My unit is already installed and I lost the box how can I tell when my unit was manufactured?
 - I think the manufacture date is also printed on a card included with the unit. If you don't have any of these, the only way to know for sure is to take the unit out of your dash. Sorry. That being said you really only want to know when it was manufactured so that you know which bypass to do. You will have to test your unit manually.
 - I would recommend trying flashing your lights with the [procedure below](#).
 - [Check to see if the unit is bypassed](#).
 - If it is bypassed then you know the software is original and the unit was made before July 2006. You need one of [my circuits](#) for this unit.
 - If it was not bypassed, then either your timing is off, your headlights don't dim the screen when turned on or you have a newer Avic-Z1. Try [grounding 2 wires](#).

- Why didn't I just try [grounding the 2 wires](#) first instead of all the flashing nonsense?
 - This gets little complicated thanks to the way Pioneer designed the Avic-Z1. When the Avic-Z1 is brand new and you ground the parking brake wire (one of the 2 wires grounded in the new method), even if you are supposed to flash your headlights (because you have an older unit), it will bypass your Avic-Z1... for a short while. This works for about 50 - 100 miles. Then it will start locking you back out when you move and put up a new warning message you have to hit ok to get past every single time you start your vehicle. Leaving the parking brake disconnected and testing the bypass by flashing the lights is something you can verify without a doubt while you are parked, sitting still with the vehicle not even running. If you were unsure of which bypass you needed and started with the 2 wire grounding method, and you needed to flash your lights, the 2 wire grounding would still work for you for 50 - 100 miles. Then it would stop working and you would need to take your dash apart again to fix it. Start with the flashing, it's easy, you don't have to take anything apart and if it works then you know for a fact that's what you need to do. If it doesn't work, try it again. If it still doesn't work, most likely you need the 2 wire grounding method.
- What about the CD Database (CDDb) updates from Pioneer? Do those update CD's effect the bypass?
 - At the moment, no. There have been a couple of update cd's that Pioneer has come out with. You can find a link to the latest one [here](#). So far, those updates have not changed the way the bypass works. I can't say they won't in the future. Updating your software in your Avic-Z1 is done **AT YOUR OWN RISK**.

Manual Testing Procedure (my circuit can NOT be installed for this):

This is for June 06 manufacture dates and before.

If you have a July 06 try this but most likely you will need the 07/06 bypass.

If you have an August 06 and newer just skip to the 07/06 bypass.

Manufacture dates are a good indication of what might work for you, but not conclusive. The change happened some time in July 06 as far as we can tell.

First make sure the ILL wire is hooked up correctly.

Turn the car on and go to a nav screen.

Turn on the lights.

Does the screen dim and put the nav screen into night mode?

If not, the Z1 has no idea if you turn on your lights. Manually flashing your lights will not work. The ILL wire from the Z1 needs to be connected correctly for this to work. Refer to your installation manual.

If turning on the lights puts the nav screen into night mode, turn off the key (make sure the unit shuts down) and continue testing.

Manual Flashing Procedure:

Disengage the parking brake (and make sure that sense wire is not permanently grounded). If you get the "parking brake warning" message when you start the vehicle, then you need to reset the Z1 with the little recessed button to the right of the eject button.

Turn the vehicle on (don't bother starting the engine).

As soon as you see the "Starting up Pioneer Car Navigation..." text screen



Turn your lights on and then off (about 1 second on is perfect). Let the Z1 finish booting.

How do I know if the Z1 is bypassed?

Hit the MENU button (if you get a disclaimer screen, hit ok and then MENU again). Look for "Address Search" and "POI Search".



Are these available or grayed out?

Don't worry if your screen doesn't look EXACTLY like this one. In the picture above, the right 2 buttons (Route Overview and Cancel Route) are grayed out and the other 8 are available. If you have not let the Z1 calculate a route yet, your Destination History button would be grayed out

(because you don't have any history yet). If you haven't programmed the Z1 for what the Go To button "goes to" then the Go To button will be grayed out as well. But if the bypass works the Address Search and POI Search buttons will be available... those are what you want to look for.

If they are available because you manually flashed your lights (and your parking brake is disengaged or the parking brake sense wire is not even connected) then your unit was just bypassed and it is compatible with my circuit. [Please buy one](#) or you can just flash your lights manually every time you start the vehicle.

If those buttons are "grayed out" and your unit's manufacture date is June 06 and before, then most likely you did not flash your headlights correctly (or your unit has the Bluetooth software update installed or possibly your parking brake wire is grounded or your unit needs to be reset). But if your unit is June 06 and older, this procedure should work as long as the software on the unit has not been updated.

If those buttons are "grayed out" and your unit's manufacture date is July 06 and later, then most likely you need the 07/06 Bypass below.

Pioneer Bluetooth Echo Fix CD Information:

If you call Pioneer support and say "bluetooth echo" they will take your name and address down and ship out a bluetooth update cd.

This update can also be downloaded as an ISO file which can be burned to a CD. This CD or the one you get shipped from Pioneer is then inserted in the Z1 and by pressing MAP it will update the Z1's software in an attempt to fix the echo that the caller hears when using the Z1's bluetooth adapter. I have tested this and while it does reduce the echo, it's not eliminated. You can turn up the volume louder without an echo so it is better than before. In my tests, it works about as good as the ["original fix"](#).

I have been told that by updating an older Z1 it will disable the "flash the headlights" bypass (my circuits will no longer work) and the only way to bypass the Z1 after the update is the [07/06 bypass method](#) (as described [below](#)).

Here is the update CD if you chose to download it and try it:
<http://www.sminntech.com/AvicBluetoothFix.zip>

NOTE: You download and install this **AT YOUR OWN RISK**.

When I tried installing this update CD, my Z1 got to 99% and froze and ended up in a reset loop I could not get out of. I don't know why some people have had a problem and others have downloaded this same file from me and had none.

If you want to test your cd before sticking it into your Avic-Z1 then I would recommend trying to copy all the files off the CD to a folder on your PC. If that works (you can copy the files off the CD you made) then the Z1 will be able to as well and the CD will work. Those who had trouble updating with their CD's could not copy all the files to their PC, windows (or whatever os you choose) would pop up a read error on the CD before it was done.

If you have trouble making this CD and getting it to read, you can extract the files from the ISO and create a Data CD with those files and that structure if you are so inclined. That is what most people have done to get it unstuck when installing and getting to 99% and the update won't continue. Eject that CD and insert the "new" CD with the extracted files you burned to a data CD and that seems to work.

I ended up finding the file which was not reading off my CD, which happened to be [this image](#). This file is currently installed on every Z1 from Pioneer and is being overwritten by the same image. Why? I don't know, but it's what I had problems with.

A detailed thread about this update CD is [here](#).

My limited testing of my pre-July 06 Z1 updated with the CD and bypassed with the 07/06 bypass has been successful. Again, you are installing this CD **AT YOUR OWN RISK**.

07/06 Bypass

For all units made since 07/06, or any unit updated with the Bluetooth Update CD

For these models you will NOT need my circuit, all you need to do is just ground 2 wires.

Wire #1:

Ground the light green parking brake sense wire from the Z1. If the light green parking brake sense wire is already connected to your vehicles parking brake switch wire, then disconnect it from the vehicles wiring and then ground it. Do not permanently ground the vehicles parking brake switch wire, just the light green sense wire from the Z1.

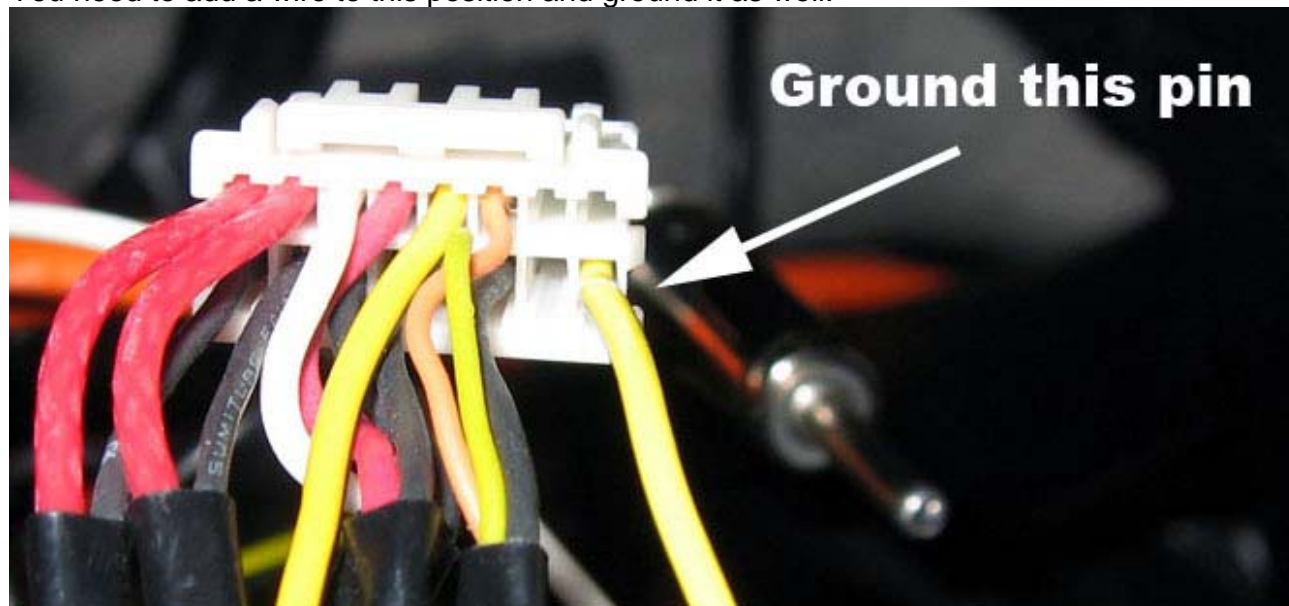
Wire #2:

Look on the back of the Z1, there are 3 main connectors.

As you are looking at it from the rear, the connector on the bottom right (closest to the FM antenna plug) is labeled on the back of the Z1 as "connector 2".

The 4 right most locations in that connector DO NOT have wires in them.

You need to add a wire to this position and ground it as well.



Ground this pin in "connector 2"

Personally I took the "cell phone mute" wire out of "connector 1" by taking a

jewlers screw driver and lift up on the white plastic connector part just behind the "metal tang" in the connector. Some times with these connectors, you push on the metal tang to get the wire out, with these connectors, lift up on the plastic tang retainer, don't push down on the tang. It's much easier. I then inserted the cell phone mute wire into this position and grounded it.

NOTE: The "cell phone mute" wire has nothing to do with the Pioneer ND-BT1 (add-on bluetooth module). This wire is used if you install a 3rd party (non-Pioneer) speaker phone system so that it can interface to the Avic Z1. If you install a non-Pioneer cell phone interface then you will most likely use this wire to mute the Z1. If so, choose another wire. If you use the ND-BT1 you will NOT use this wire and it will be extra for your installation (which makes it an appropriate choice). Another choice is the "guide on" wire which is for turning off an external sound processor when the navigation voice speaks. This is another wire most people won't use in a standard install. It doesn't matter what wire you relocate into this location in Connector 2, just pick one that you don't use in your specific installation.

I did what you say to above and when I start driving around I get a pop up message about my parking brake not beeing connected properly and I get locked out again.

I get this a lot. You are not alone. What happened is that you didn't do "wire #2" correctly. In the instructions above, wire #1 is the parking brake wire. Grounding that will bypass the unit while you are not moving. Grounding wire #2 will keep the unit unlocked when you start moving. If wire #2 is not grounded properly then when you start moving it will lock you back out again and put up that pop up message. I know you think that you grounded that wire correctly, and most likely you did. Where most people have problems is in the connector itself. Either the terminal is not oriented correctly or it's not inserted all the way or something. But check and double check that connector. That's where every single problem I have seen has been. Trust me this procedure works and it works well. If it's not working then double check what you did. If you are still getting the pop up message, the only way to get rid of it is to press the recessed button to the right of the eject button (the button the opens the face of the Avic-Z1). This will lose your AM/FM radio presets but not much else.

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