

# Installing Nokia CK-100 Car Kit in Subaru MY09 Forester XT (Part 1)

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I recently purchased a Nokia CK-100 to install in my Subaru MY09 Forester.

After unpacking the car kit, I found that there are two versions of the car kit. The difference is in the wiring harness they are shipped with.

One comes with a small speaker, and a 4 wire harness that consists power, ignition and mute.

The other doesn't ship with the small speaker, and has an additional 16 wire harness, called the CA-135 ISO Cable.

The CA-135 ISO Cable has a 24pin connector which connects to the car kit interface (HF-22).

I had tried contacting Nokia to see if I could purchase this cable separately but no one I spoke to there had heard of it.

I looked in to installing the car kit just using the harness that came with it, and muting the radio. I obtained a wiring diagram of the back of the factory head unit, which showed there was no mute wire on the radio. There was a mute button on the steering wheel but this works by applying a different resistance for each of the buttons on the steering wheel. Each resistance representing a different function. This is connected to the head unit via 2 wires from the steering wheel connectors. I thought about using a relay and a resistor to mimic the steering wheel button. But that would need a momentary application of the resistor across the circuit, and again to turn the mute off.

So back to the CA-135 ISO Cable.

Not able to purchase this cable in Australia, I wasn't about to purchase another CK-100 car kit from overseas just to get my hands on the ISO cable.

So I've decided to build my own harness between the Subaru head unit, the Nokia CK-100 and the vehicles wiring.

The biggest obstacle in my way would be getting a connector to plug in to the car kit.

After some research I found that the 24 pin connector is a TYCO ELECTRONICS / AMP - 2-794617-4 which I purchased from Farnell.

I also purchased the pins for this connector, TYCO ELECTRONICS / AMP - 1-794610-1.

There is a crimp tool made specifically for these pins, but it is very expensive, so I am just going to solder them.

I've also ordered the male (car facing) and female (radio facing) connectors, these come with a short pigtail of wires already crimped in to place. So the wires can be easily soldered.

I found that the Metra 70-7552 and the 71-7552 harnesses for recent Nissan head units also suited the Subaru head unit.

Using the wiring diagram in the Subaru service manual, and the diagram on the CK-100 I have come up with my own wiring diagram for how the 3 connectors need to be wired.

[Click here for a full sized image.](#)

To be continued, I am waiting on the connectors to arrive. I'll update with photos of the steps to remove the radio, and the finished wiring harness.

The connectors arrived, but I found I had to modify them to suit the Subaru's stereo.

This required me to use a pin to remove some of the pins and sockets from the and re-insert them where required.

Next I carefully soldered fly leads on to the pins for the Tyco connector.

Then carefully I inserted them in to the back of the Tyco connector, make sure they are the correct way around so you hear a small click as they lock in place.

Along with the fly leads, a loop is also required, the users manual that came with the CK-100 explains why.

To neaten things up I put a peice of heat shrink over my fly leads and the supplied power leads.

This is the finished product, with the Metra harnesses soldered to the fly leads on the Tyco connectors and the power connector.

I've decided to continue this article over here [Installing Nokia CK 100 Car Kit in Subaru MY09 Forester XT Part 2](#) to hopefully make it easier to follow.