F12 M6 CIC to NBT EVO Retrofit Review/Write up (In Depth and LONG)

****NOTE: This only covers the NBT EVO install, not the SMARTVIEW HD Install. That will be my next in depth write up/ Review. I do recommend doing both at the same time though, it makes life easier, and you have to install more items behind the head unit****

****NOTE: Pictures coming soon, if someone can explain to me how I can insert pictures near the text I want the picture near that would be awesome! Thanks!****

There is also a PDF with no pictures yet if you want to print this, and if you want to make edits to this I can even give you the word doc to edit. I know this goes without saying too but don't hold me responsible if you somehow break something removing it (for the guys ten years in the future)

So as the title says this is a review and write up on a CIC to NBT EVO retrofit on a F12 M6. I did this on my personal daily driver and love the results. I will be adding pictures soon to show that the retrofit is not that hard to do. On a scale of 1-10 with 1 being very easy and 10 being professional installation required, this comes in around 4~5 for ONLY Hardware installation with the proper installation kit, and will take about 8 hours to do if you go slow, I did not including any coding as that was provided to me by Bimmer-tech.net. The Kit I order was from Bimmer-tech.net and they provided a full installation kit with instructions, and did all the necessary coding to get it to work. If you only want to read this far into this Review. I would highly suggest using Bimmer-tech.net for their excellent customer support. I had issues with my installation (my faults, not theirs) and they returned my calls/emails quickly in order to resolve my issues with the installation. Now enough about that, let's get into it.

Price: The kit I ordered from Bimmer-tech was about \$3,000, mine was a little more because I wanted a head unit with Sirius radio, so saying it's about \$3,000. This kit is one of the more expensive kits on the market for retrofits into this car but well worth the cost for the support.

Kit Contents: NBT EVO head unit, 10.25 inch screen, Touch IDrive controller, touch IDrive module, aerial amplifier, ATM module, Plug and play(mostly) wiring harness, WiFi and Bluetooth antennas, new screen video cable, new USB cable, fiber optic loop/terminators, wire crimps, software coding by Bimmer-tech.net.

The Instructions: For the most part the instructions are very good and well put together. There are some holes/voids that were not addressed directly in the directions but the support team was able to get me going in the right direction which is why I will continue to praise the Bimmertech support team. I added my own instructions to this as to help anyone else out as well.

Coding: I did no coding to the car, the Bimmer-Tech team coded the car remotely. We initially had problems coding the car but again due to the amazing support from their team. We were able to identify my problem which was two wires were spliced in incorrectly and then everything worked as planned. If you are planning on getting this kit have some extra options coded in! Here is a full list of what I had coded in

Blinkers on HUD Entertainment List on HUD Phone Activity on HUD **Disable Active Sound Design** Seat Belt gong Disabled Turn off auto start stop by default A/C to remember to stay off when you powered it off last time you turn off the car key Rolls Royce warning chime Remote power folding mirror Auto Unlock doors upon vehicle shut off Remote window controls Road Route Preview Enhanced Bluetooth Full text message display (not working) Compass RDC Video in motion Services in motion USB video player Euro MDM Sport displays (don't work on pre LCI) Increase angel eye brightness to 80% with low beams on from 50% Remove rear lamp malfunction warning (for LED reverse lights)

Bottom Line: The kit is completely worth it from Bimmer-tech just based on the support they provide alone, along with all the research they have done to create these kits and make them work.

Pros: Clean look of updated screen, new IDrive infotainment menu which is much more responsive than CIC, touch IDrive controller is much nicer. Carplay also works seamlessly and displays the most important app of all time, WAZE!

Cons: Disassembly of half of the car. The screen is not a touch screen, but were not offered as touch screens in this generation on this platform. The SUV has the Touch Screen and is able to be swapped in alternatively but not recommended.

Write up:

Unplug combox and Fiber optic loop on combox:

Remove the rear pull out section by pulling the black release tab towards the front of the car and tilt the section out of the backrest section.

Remove the rear seat section by pulling up the front section of the seat and by tilting upwards and pulling forward to let the seat belt buckles fall through the cushion.

Remove rear seat headrest by pulling them straight up. These are very hard to remove and require some force. Put your hand under headrest and pull up with one hand and keep constant pressure on it. With your other hand hit each side up from the bottom. The headrest will walk up and out of the back seat. This holds the top half of the rear seat in the car.

Remove the rear backrest by unbolting two torx bolts under the backrest. Pull the seat belt trim plastic off on the seat. Be very careful with these trim pieces, they feel weak. Once unbolted it

will pull it out of your way. You can also unbolt the seat belts but I just put the top down on the car and rest the seat parts on the rear deck lid.

Disconnect the bottom two connections on the combox. Essentially this removes all the features you don't use any more like connected drive. Leave the box installed just in case you need your car to be recoded by a BMW dealer, but then again it's highly unlikely you will ever need it again. The bottom left connector is the power cable, disconnect it using a screwdriver to help you release the lock on it. Just leave this connector unplugged there. The bottom right connection is the fiber optic line. This gets a termination end from the kit. Tuck it out of the way, and if you want put a piece of tape on it to hold it to the combox or secure it somewhere if you feel like it

Route new antenna cable and replacement aerial amplifier:

Remove the trunk lid interior trim, a bunch of Philips head screw clips, let it hang slightly out of your way.

Unplug/ unbolt the aerial amplifier. This connects a couple of antennas to the car for FM and AM to work. I had to change mine, on different years you might be able to continue to use your original aerial amp. Install the new amp and reconnect it except for the circular plugs.

Unseat the electrical harness weather boot on both the trunk lid and on the body of the car to get into the trunk. Remove trunk floor and storage compartment. Un-clip the driver side trunk trim to gain access behind it for passing the new antenna cable behind it.

Make a snake from an old wire coat hanger. Make a loop on the end of the snake with the antenna cable going through it so you can pull it more easily. Cover the connection in tape and lube the tape and electrical boot. It's a very tight fit to get the connector head through so it's going to be hard to pull through if you do not lube it up. Once you get the antenna cable into the trunk you can remove the snake and put the electrical boot back on both ends. Make sure to get as much of the antenna cable into the trunk. Leave a little slack so that you can connect the opposite end to the aerial amp circular connection. You can now connect the amp to the antenna cable and button up the trunk lid.

Feed the antenna cable behind the trunk trim going towards the backseat and pass the antenna cable through the rear insulation were the rest of the cars wire harness feeds through, this is right next to the combox. Once it is through the backseat divide pull as much cable as you can and button up the trunk. You can also reinstall the back rest of the rear seat and headrests once that cable is on the floor section of the rear seat. This cable will go to the back of the new head unit eventually.

Disassemble the center console and center stack:

Place seats in as far back as they can go and have them slightly tilted to the back of the car to make removal of the interior trim as easy as possible, once that is set, disconnect the negative battery terminal.

Remove the torx head screw from the front section of the carpet trim under the leather trim, then slide the carpet trim forwards to release the clips from the center console. Do this on both sides of the console. Once the carpet trim is removed you can pry the leather trim off. It's pretty

durable so don't be afraid to break it. Be gentle still but it will disengage rather easily as you walk it out from front to back. Once it is completely un-clipped put it aside, do this for both sides.

Remove the upper steering column trim. It has three clip points, one on both ends and then in the center. Pull straight out towards the back of the car. Un-clip the interior trim with the A/C vents next. It has four clips in each corner, it removes very easily. Disconnect all the plugs, put trim aside. Remove the lower HVAC trim, rather small piece of trim. Very annoying to remove. Feels like you're going to break it each time you pull on it. It is removed by prying down and then out. It has clips on top and slides in back. Put it aside. Remove the HVAC control panel by four torx screws and unplug both latch connectors on it, place it aside with the rest of the trim.

Remove the cup holder insert in the cup holder. Unscrew more torx screws front the driver side of the center console trim piece. Pry the center console trim up from the back. it will disengage easily and lever it out and over the shifter. Unplug the connectors from the trim to remove it fully and place it aside.

Remove the IDrive console section by unscrewing more torx head screws. Two are now revealed once the shifter trim was removed and the other 3 or 4 are revealed when the carpet and leather were pulled from the passenger side. Once all the screws are removed it must also lever out. There is a hook in the front of the leather piece. Wiggle it out and disconnect the IDrive controller and the ashtray harness from under the console.

Unscrew the four torx screws from the original head unit. Pull it out and disconnect all the connectors from it. The antenna cables lock in so pull the tab out and then press on it to release the tab. the rest is straight forward. The large quad lock is snug but comes out with a little more wiggling. Set the old head unit aside.

Lastly we remove the screen. The directions made it sound easy. It was not easy. Unscrew two torx head screws and you have to release the clips on the lower corners of the screen separately from the rear cover of the screen. It requires some force and trim tools. Probably the hardest thing to remove. Once the screen is free unplug the two connection for power and video and put the screen aside. These connectors **CAN NOT** be reused, you **NEED** the new cable. Lastly unscrew the last two bolts from behind the screen holding the rear cover on. Place the old rear cover aside.

Install New Screen:

Install new rear cover, same two screws from the last cover. Insert the new video/power cable to the new screen and then install the screen to the cover. Finish the screen install by pressing the screen into the rear housing and by screwing the last two torx screws for the bottom corners of the screen.

Route New Cable Harness:

Unclip the green fiber optic connector from the original quad lock connector and insert it into the new cable harness. Connect the harness quad locks together from vehicle end to harness end. Route the IDrive controller wires going towards the IDrive controller. Route the microphone connections going towards the steering wheel, and then route the CAN+/- (labeled 48 and 49) under the knee bolster towards the OBD2 connector. The connectors for ATM will get plugged into the ATM module and sit in the bottom of the center stack. NBT connector will also go to the

head unit so you can leave that alone for now. It's a messy process but it's all able to be done. I did not go crazy fastening my harness to places because I Also did the SMARTVIEW HD ATV4 install next and will just had to pull my harness out again later.

Installing Head Unit, Touch controller, Touch Module, and ATM Module

First install the ATM module

Plug in the blue connector (GPS cable) into the ATM module (white connector). Next install the cable labelled ATM from the new harness into the ATM module. This goes next to the GPS cable. On the opposite side of the ATM module plug in the connection labelled ATM POWER from the new harness. Tuck this module into the center dash under the center stack if you can.

Next Install IDrive touch Module and Controller

Unscrew the old IDrive controller out of your center armrest if you haven't already. Leave the plastic trim in the Center console section do not remove that. You need to remove the IDrive controller trim from the new IDrive controller. It will not fit properly in the old armrest. Good news though because your old trim fits around it. You can either disassemble the entire IDrive controller to remove the new trim. Break it off, or easily and gingerly pry it off using a bunch of small screwdrivers how I did, but it takes a while and some disassembly of the IDrive controller. Easiest thing is to break the new trim off and just screw the new IDrive controller in place. Plug the new harness connector labeled controller into the controller and the Touch module connector into the touch module. Put the touch module under the center armrest somewhere. I stuffed mine were the center console USB plug is located. Lastly the original IDrive connecter gets connected to the new harness labelled accordingly.

Lastly the Hardest Part! The Head Unit

The head unit is the easiest and hardest part to install by far. You will be battling so many wires trying to keep everything neat! Just relax and let it stay messy for a little bit. First connect the NBT labelled plug from the new harness into the only connector it can plug into under the quad lock connector. Next plug in the new screen cable that's purple to the purple connector on the Head unit. Plug in the new USB cable provided to the back of the Head unit and route that to the shifter, it is going to replace your center console USB connection, and it needs this new wire. Next install the two new WIFI and Bluetooth antennas, both small dipole antennas, into the center stack area just toss them in there somewhere and they connect to the back of the head unit to the small blue plugs, doesn't matter which. If you have Sirius radio plug the pink plug to the pink plug, I believe it is SDARS. Plug in your FM antenna black plug to FM1 also black connector. And FM2 is the new cable you routed from your trunk. That goes to the white connector on the back of the head unit named FM2. Lastly the massive quad lock with fiber optic connector. It is hard to get in but it goes. Use the lever action lock to help you get it in right. It will click into place and be all set. Be careful when it mates that nothing pushes out of the quad lock, and if it does, push it in gently from the back for it to reseat itself. If it does not go in gently, remove and see what's happening, you don't want to break your head unit! It will be tight now so don't stress your cables! Slide the head unit into place and hide your cables accordingly. The quad lock from the car to the new harness will be the only challenge to hide back there, don't let it get behind the head unit or it will not fit! Once that is all set screw the head unit down and the install is actually almost done.

Microphone and CAN connections

Remember those wires we have left still to be connected, the microphone and CAN lines? Well now the mic depending on your car is in 1 of 2 locations. Easiest, is the convertible, it live in the steering wheel cowl on the left side. Pop that cowl up being careful and disconnect the left mic from the vehicle harness and connect that mic to the new PNP harness end. Button up the wheel cowl and that is done.

Lastly, the Key to making it all work is the CAN lines. Bring the knee bolster down with two large torx screws and I pulls down/slides forward. It will have an airbag connected to it so leave that connected and just let it hang, support it if you like but I didn't. Disconnect the connector from the ZGW module. When I get a picture up it's easier to understand what module that is. You will be tapping the can lines on the connector. They are yellow red and yellow brown. I did this step wrong the first time, and the guys at bimmer-tech caught it and I flipped my connections and everything worked great. My PNP harness had my wires labeled +49 and +48, corresponding to which pin numbers had to be tapped. CAN low (#48) needs to be tapped to the yellow with red stripe, while the CAN High (#49) needs to be tapped to the yellow with brown stripe.

Reassemble your car now only to the point where you can have items plugged back in so you can have your car coded. Set up an appointment and have it coded, if anything you did wrong during the install is found you can correct it here with support from the coder, with the car half apart. Once your coding is completed actually put the car back together and enjoy it!