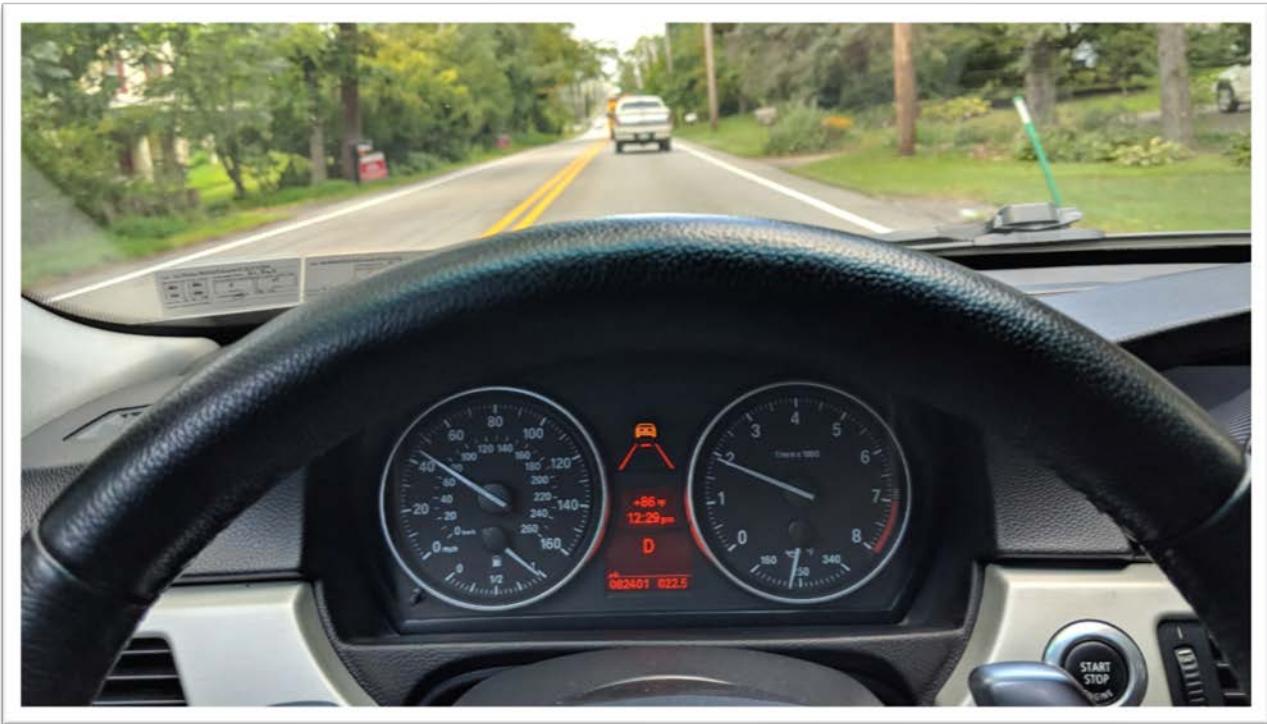


E9X ACC Retrofit DIY

By: Nickco43



This is a very rare option from the factory as it was an over \$2,000 standalone option. The hardest part of this entire job was finding all of the parts. You will need a six-cylinder powered E9X with cruise control + brake function. This was done on a 2006 BMW 330i with an LDM module. The LDM came with option \$544 on pre-2007, six-cylinder cars.

When shopping for parts look all over the internet. Normally you can find 2-3 sensors for sale at a time. Look on eBay.de, eBay.au, eBay.co.uk, ect. I would not spend more than \$500 for this retrofit.

Parts List:

Part	Part Number	Price	Notes
ACC Sensor	66316777883	\$150-\$1000	Good luck
Bracket A	66316769132	\$15	Dealer
Bracket B	66316769133	\$15	Dealer
Sensor Trim	51117154550	\$25	Dealer
Bumper Trim	51117152791	\$45	Dealer
Screws X6	07146959923	\$2	Dealer
Adjustment Nuts X3	66316762520	\$2	Dealer
ACC Stalk	61319203109	\$50-\$200	Good luck
VW ACC Wiring Harness	AliExpress	\$20	
Soldering / Wiring Supplies		\$20	

DIY:

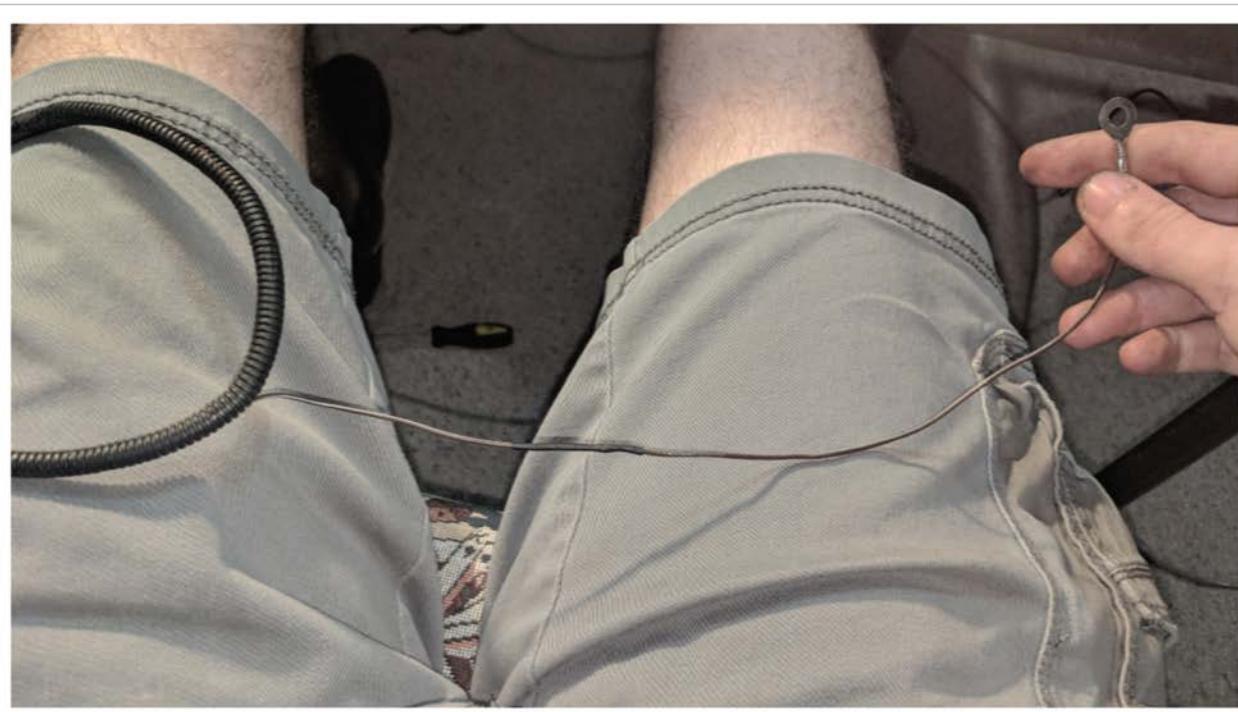
Remove the front bumper by removing the under tray, wheels and front wheel well guards. The front bumper on this car is a pain to remove and reinstall.



Put the sensor on the two brackets and bolt it to the car. Leave the 3 bolts holding the two brackets together loose.



Take the VW harness and repin it for the E90. You will also need to cut off the ground cable and solder it near were the plastic sleeving ends. The connector is a pain to take apart but it will eventually push out.



A144a Active cruise control

Plug connector overview

Number	X-pin, colour	Description
X1783	8-pin, black	Component connector Active cruise control

Pin assignments at plug connector X1783

Pin	Type	Description /Signal type	Connection /Measuring notes
1	M	Ground	Ground point
2	E/A	Signal PT-CAN high	CAN bus connector
3	E/A	Signal PT-CAN low	CAN bus connector
4	E	Wake-up signal, terminal 15	Car access system
5	--	Not used	
6	--	Not used	
7	--	Not used	
8	E	Supply, terminal 30G	Fuse F21

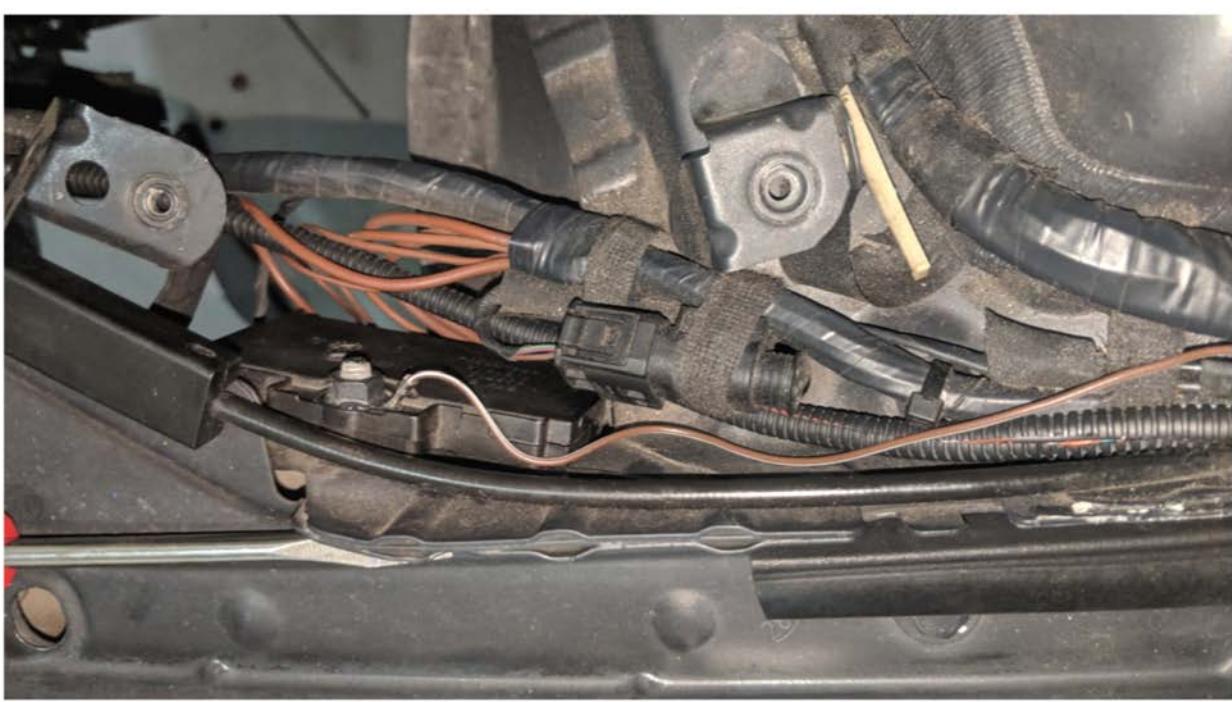
Run the wiring harness along the crash bar and up near the headlight. You will need to remove the airbox to do this.



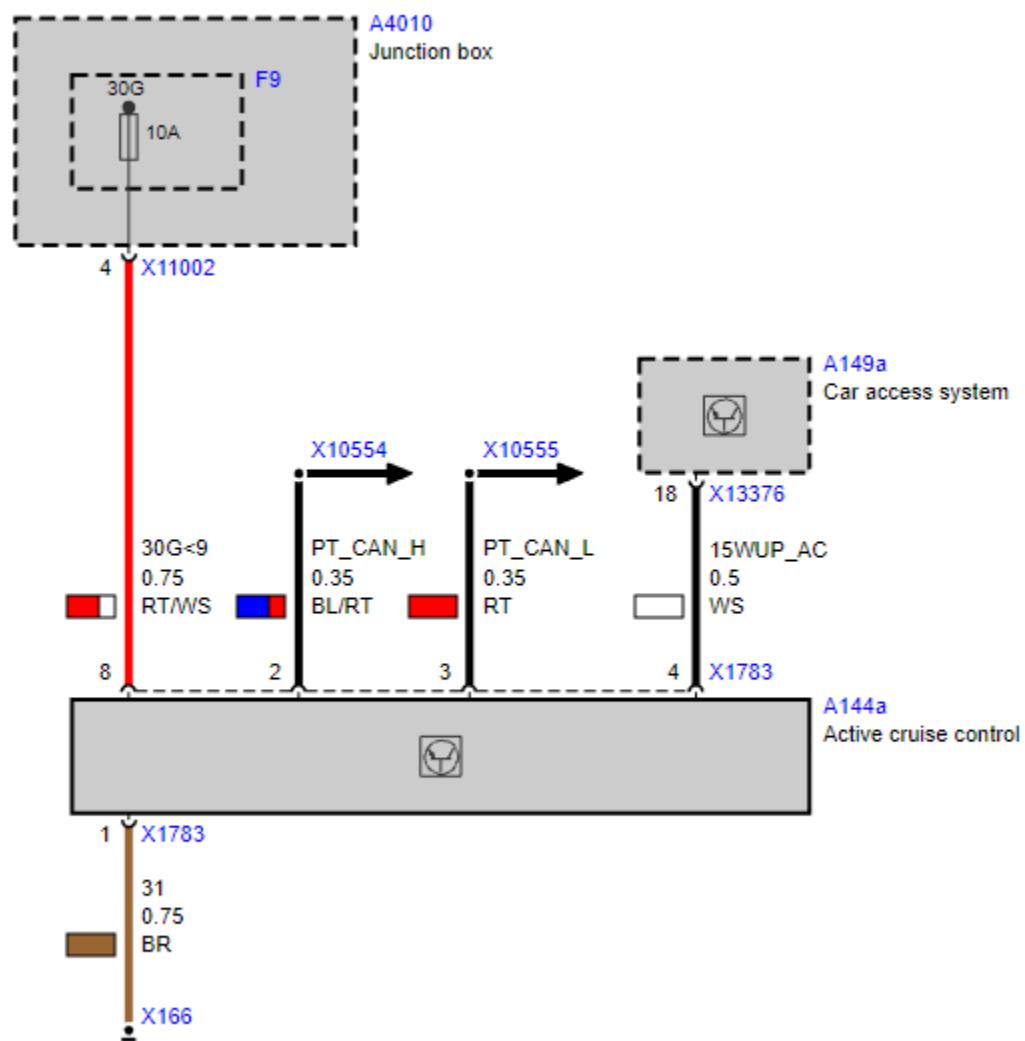


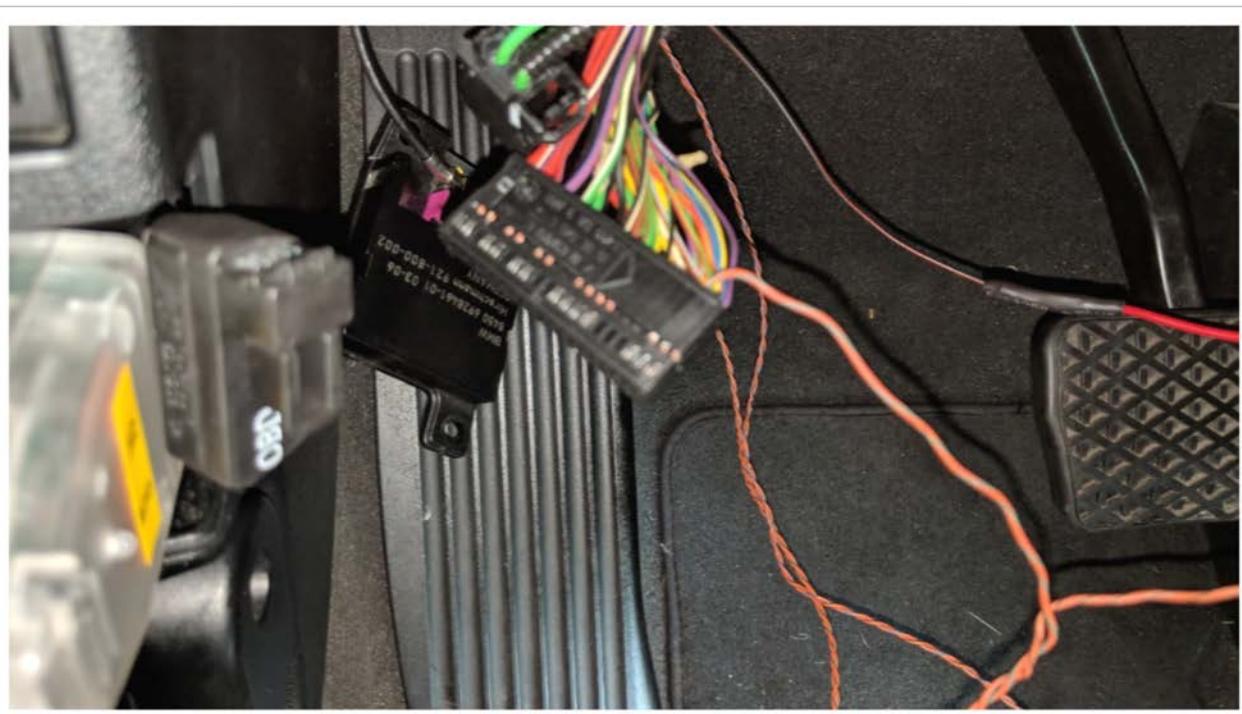


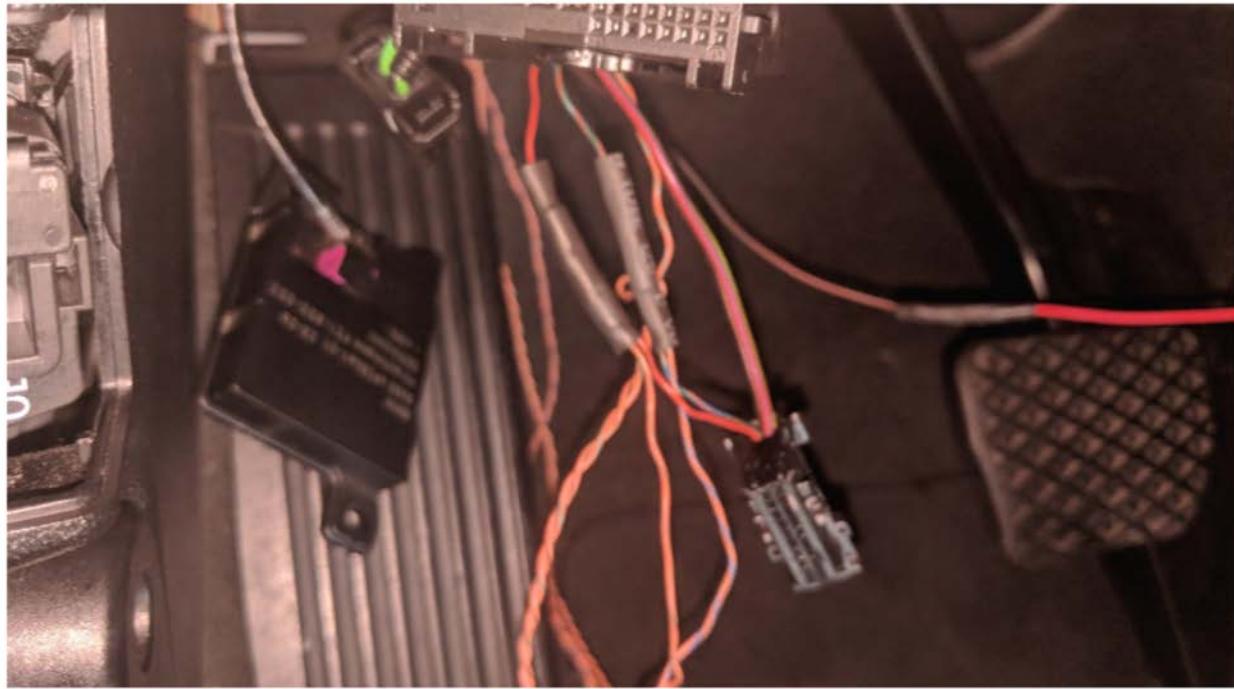
Ground the harness at the factory ground location



Run the harness all the way to the rubber gromet behind the DSC module. I poked a small hole through the rubber and ran the wires through. You will need to remove the driver's side under panel. I ran power from my deleted cigarette outlet but you could also run power from the fuse box. It needs to be from a 10-amp fused power source with 18-gauge wire. Pin in the signal wire to the CAS and tap the P Can lines from the LTM. I used heat shrinked butt connectors to tap the P can lines.







Neatly route the wires and reinstall the under panel. I zip tied the wires to the main wiring harness.

Install the new trim onto the bumper and reinstall. Once the bumper is installed the ACC sensor will naturally move into its correct position. Tighten down the three T-30 bolts holding the brackets together.



Coding:

Delete \$544 and add \$541. Write the FA to the CAS and FRM modules. Then code the VO to the DSC, Kombi and FTM modules.

Sensor Calibration:

Sometimes the sensor will be out of alignment and will not work. Place a mirror 1.2 meters away from the sensor and use INPA to calibrate the sensor. Use the two calibration bolts to move the sensor. The top left bolt is for vertical calibration and the top right bolt for horizontal calibration. You can also use ISTA to calibrate the sensor.

[Factory Adjustment Manual](#)



ACC Use:

ACC can be engaged from 30km to 180km. If you live on the edge you can edit the hex code and change the max + min values. When the car detects the car in front of you slams on the brakes it will beep at you and you need to manually brake the car.

