

BMW X-5 Evaporator Removal

Intro:

The following instructions will help you in replacing the Air Conditioning Evaporator in a BMW X-5. Following these instructions is at your own risk and the author assumes no responsibility for your repairs or damage as the result of replacing the evaporator. These instructions assume you have a Bentley Publishers E53 Service Manual and access to the BMW TIS Online Repair Manuals at <http://tis.spahetticoder.org/>

Required Parts:

Part	Part Number
AUTOMATIC AIR CONDITIONING EVAPORATOR	64118385560
Gasket ring D=11.1MM	64508390602
Gasket ring D=14MM	64508390603
FRACTURE BOLT	32311093570

Removing the Dashboard:

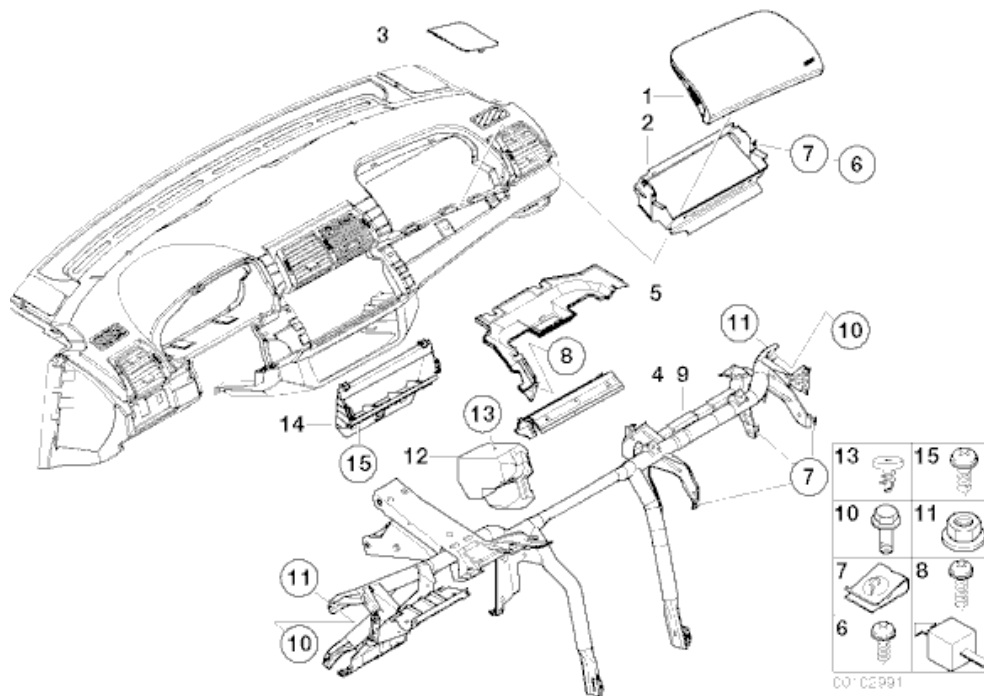
Remove the dashboard per the instructions given in the Bentley Publishers E53 Service Manual starting on page 513-4. Be sure to read section 001 Warnings and Cautions. You are going to remove the A-pillar trim, light switch, instrument cluster, steering wheel/airbag/column stalk switch, dash fresh air grill, radio, passenger airbag, center console, lower dashboard panels, and the glove compartment. The instructions are very good in Bentley's. Follow them to the letter, keep track of all the screws and you would have a problem.

Removing the Steering Wheel Column Support:

After removing the dashboard you are left with this:

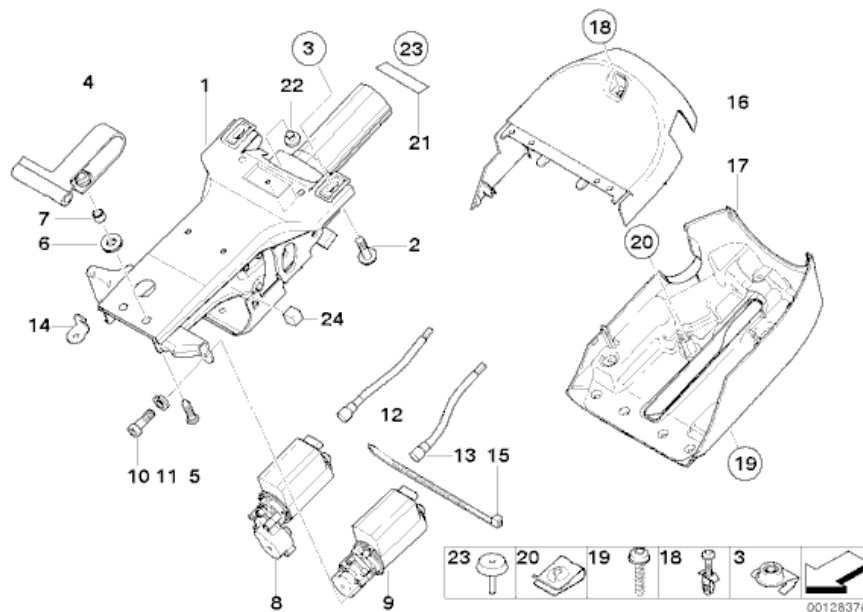


You now need to remove the Steering Wheel Column Support. That is the steel tubing frame that supports the steering wheel and dash (number 9).



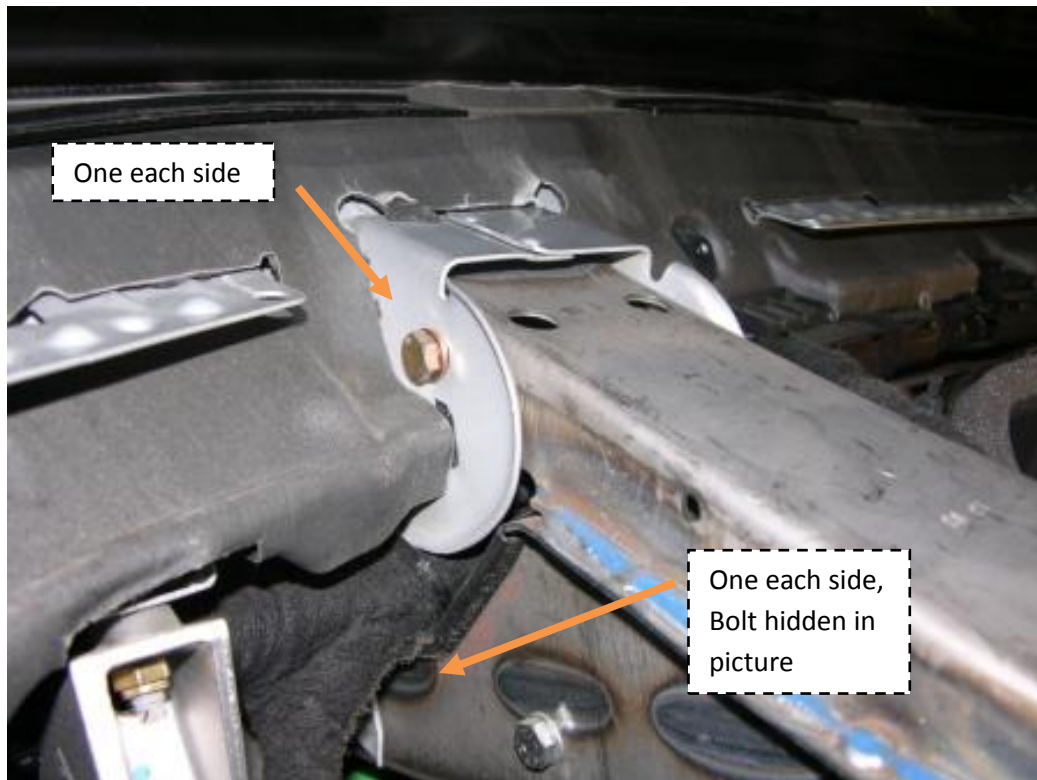
Bentley does not have instructions for this so here we go:

- Take pictures of all wires that are secured to the support with wire ties so you have a reference when reinstalling the support.
- Cut wire ties securing wires to the support being careful not to cut or damage the wires.
- Remove fracture bolt (shear bolt) securing steering column to support underneath steering column. See page 320-8 in Bentleys. The bolt will not have a head because it was sheared off when it was installed (number 5). Remove it by drilling a small hole in it and using an easy out to unscrew it.
- Remove the two Allen head bolts (number 2) and column will drop down unsecured. Support it with a wood board lying between the seat and pedals.



- Detach the Fuse panel the located above the glove compartment (four torx screws located underneath).

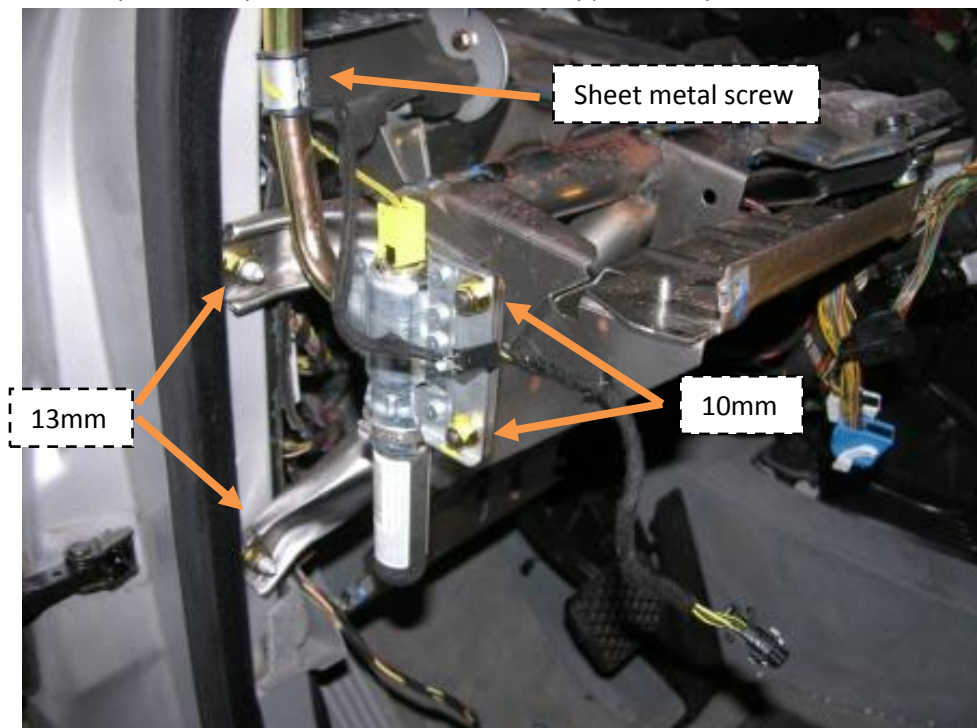
- Remove four 13mm bolts attaching support to firewall.



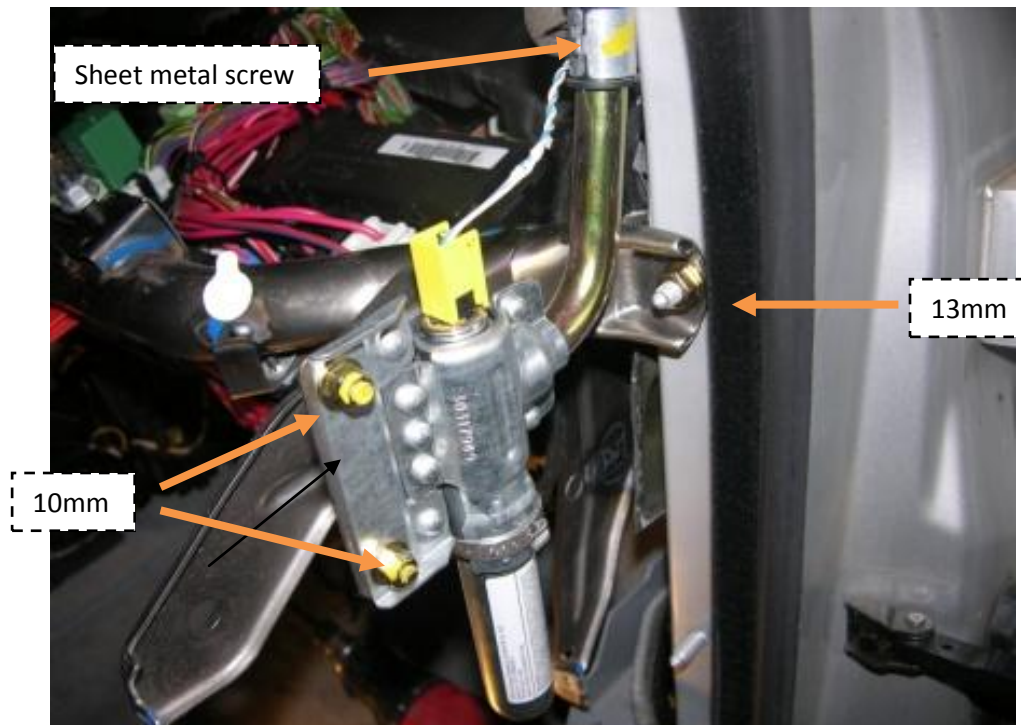
- Remove two 13mm bolts securing support to center tunnel.



- Remove two 13mm nuts securing support to left door jam.
- Remove two 10mm nuts and 10mm sheet metal screw securing left ITS head air bag to support and body. Carefully move the ITS out of the support's way.



- Remove one 13mm nut securing support to right door jam.
- Remove two 10mm nuts and 10mm sheet metal screw securing right ITS head air bag to support and body. Carefully move the ITS out of the support's way.

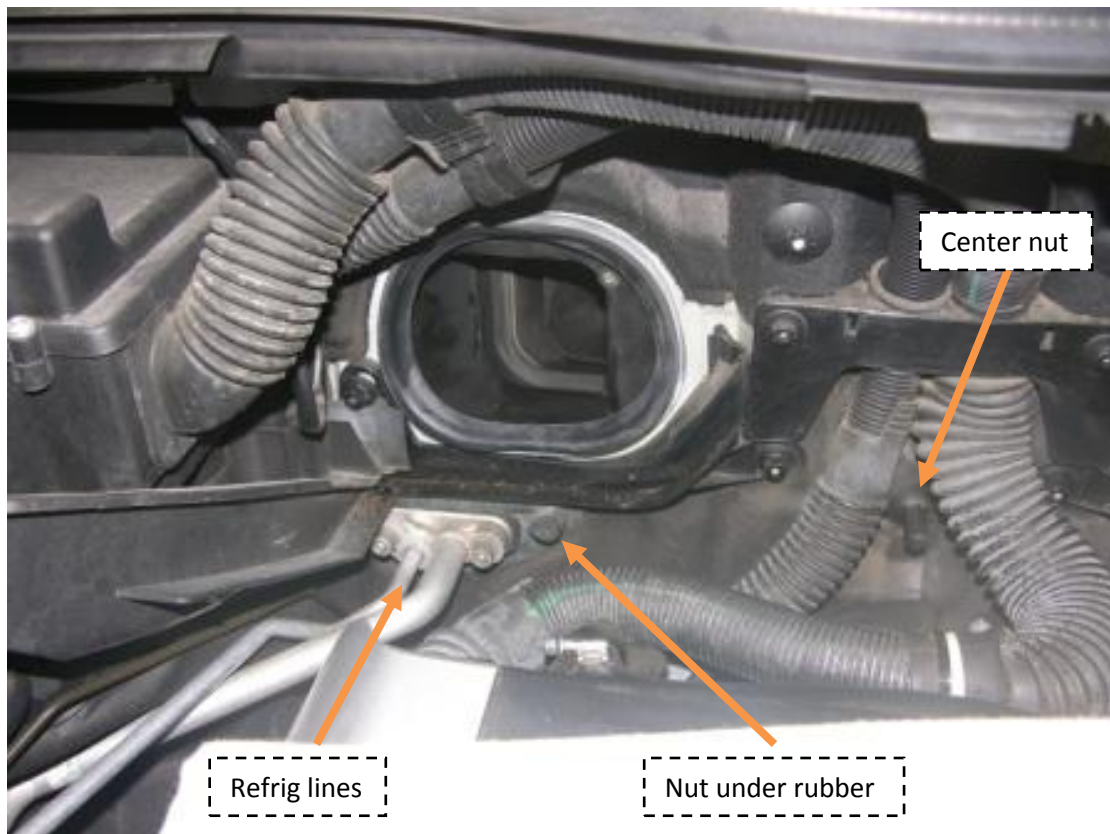


- Remove the support being careful not damage the ITS air bags or pull or snag any wires still attached to the support.

Removing Automatic Air-conditioning Housing:

Instructions for removing the housing are not included in Bentley.

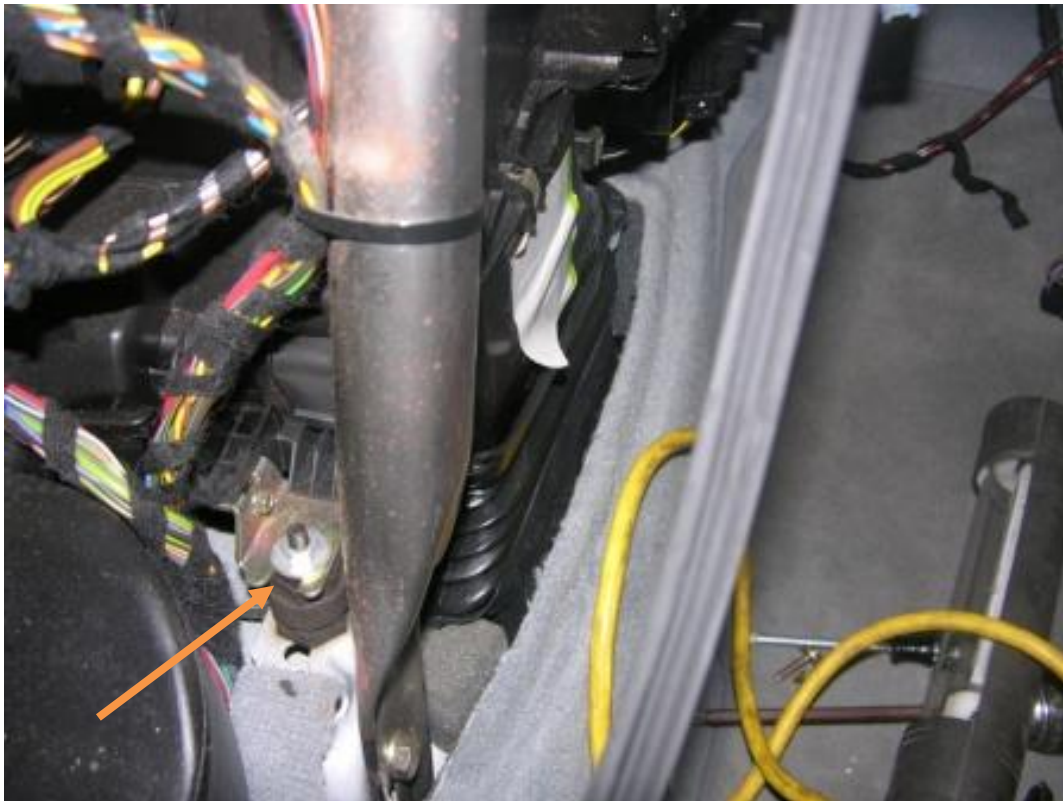
- Have the refrigerant removed and recovered from the A/C system.
- Drain the coolant from the radiator (no need to drain the block).
- Remove Plenum chamber cover in engine compartment per Bentley's page 513-16.
- Loosen three clamps and remove three coolant hoses from heater core lines on engine side of fire wall.
- Remove two A/C refrigerant lines on engine side of firewall.
- Remove 10mm nut at center of firewall
- Remove 10mm nut at refrigerant connections on firewall



- Remove 10mm nut at coolant hose connection on firewall



- Inside, remove two 10mm nuts securing Housing to center tunnel.



- Disconnect wires leading to housing. Main connector is located aft of gear lever. No need to disconnect the wires at each component on the housing.
- Housing should now easy lift out, be care some coolant may leak out of the heater core as you lift it.

Replacing Evaporator in Air-conditioning Housing.

Instructions for opening the housing can be found here [BMW TIS removing and installing /replacing evaporator](#).

Putting it back together:

Just follow the above instructions backwards. After installing the Housing, reattach the refrigerant lines and pressurize the system with nitrogen to around 200 psi and look for leaks. If no leaks are found continue putting it all back together. Use the pictures taken of the wires to strap them back to the tubular support. Use a new fracture bolt to reattach the steering column. Install the two Allen bolts loosely first and then the fracture bolt. Slowly tighten the fracture bolt until the head shears off and then tighten the Allen bolts. Good luck.