

REMOVAL OF HEATER/EVAPORATOR CORE – 2003 JAGUAR XJ8 (X308)

Introduction

These procedures describe the removal process of the heater/evaporator core on a 2003 Jaguar XJ8 Vanden Plas (X308). General guidance was taken from the Jaguar Technical Information System (JTIS), which is basically the factory service manual in electronic form contained on a compact disc. The section number from the JTIS for each procedure is provided for reference as well as the illustration and associated identification numbers as annotated in the JTIS. Occasionally, the JTIS illustration was incorrect and actual photos have been added for clarification when available. Also, extra photos were added to provide further insight on the methods used. The sequence listed is a step by step progression of events that was used to replace a leaking evaporator core to repair an inoperative air conditioning system. Other methods and varying sequences can be used, but this procedure was successfully completed, resulting in the installation of a new evaporator core.



2003 Jaguar XJ8 Vanden Plas (X308)

In this model (X308), it is possible to replace the heater core without completing this entire process; that is, with the exception of removing the instrument panel, center console, and the fascia (dash) board. The heater core merely slides out of the heater/evaporator box on the driver's side after disconnecting the heater hoses at the box; however, the steering column must be lowered to do this.

Preparations

Move the front seats all the way rearward. Align the steering wheel in the straight ahead position and fully lower and extend the steering column. Apply the parking brake. Put the gear selector in the “Drive” position. In order to access the evaporator, the entire dash including instrument panel, steering wheel, radio, and air bags have to be removed. To do this, the complete center console that extends between the seats has to be removed as well. Use approximately 30 zip-lock bags, with a notepad labeling and storing all nuts, bolts, switches, and other miscellaneous hardware in the bags to avoid confusion during assembly. There are no special tools required to complete this operation.



Interior of the 2003 Jaguar XJ8 Vanden Plas (X308)

Drain the coolant. <<26.10.01>>

Evacuate remaining refrigerant. <<82.30.30>>

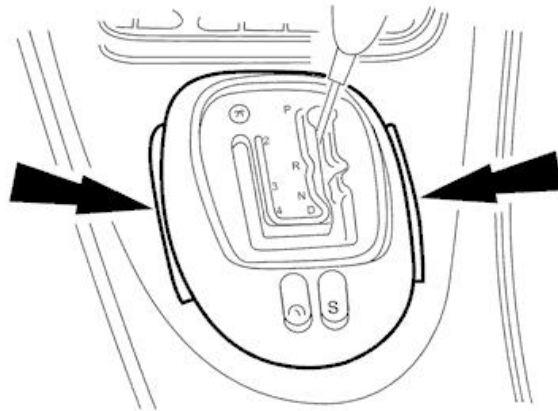
Disconnect the battery. <<86.15.91>>

Locate and leave the gear selector in the “D” drive position. This is necessary to allow access for removal of the audio system head unit.

Cover the front seats and floor with blankets to protect them from tools, debris, and wear.

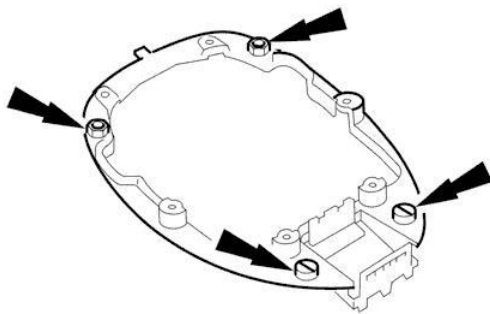
Radio and Climate Control Assembly Removal

<<76.25.24>> <<501-12>> Apply protective tape on the wood around the finisher (trim). Then, remove the 'J' gate (shift column cover) finisher by gently prying with a plastic knife and pulling evenly and straight up, or the tabs will break (E36213). There is one slot at the top, front of the trim to assist in lifting up on the gate.

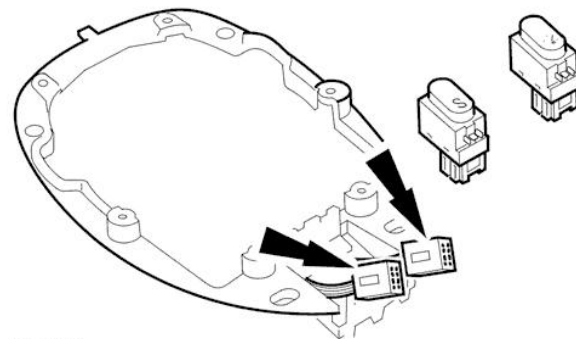


E36213

<<76.25.26>><<501-05>> Use a 7mm socket to remove the 'J' gate finisher bracket (E36214). Remove the cruise control and sport mode switches from the bracket (E36215).



E36214



E36215

<<76.47.26>> Remove the wooden console veneer finish panel by gently lifting from the bottom (rear) and lifting up and over the two studs at the ‘J’ bracket mount (E36334).

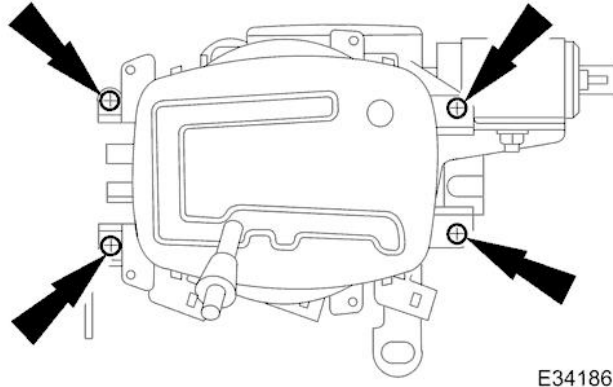


E36334



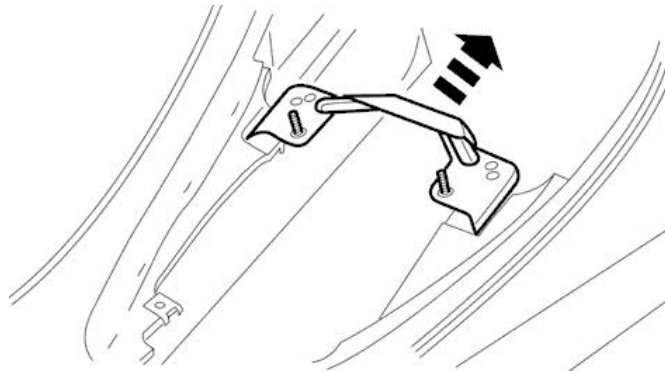
Console wood finish “ski slope” trim detached from the console.

<<44.15.14>> Remove the four Phillips head screws holding down the transmission selector housing module to gain access to the radio (E34186).



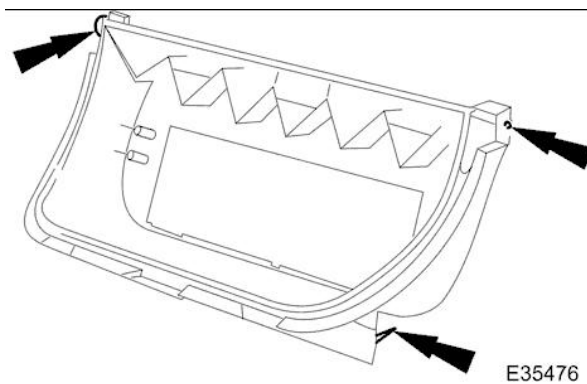
E34186

<<76.25.24>> Remove the stud mounting plate off of the console (E35517).



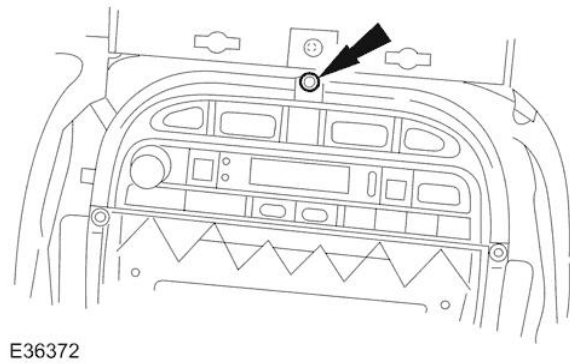
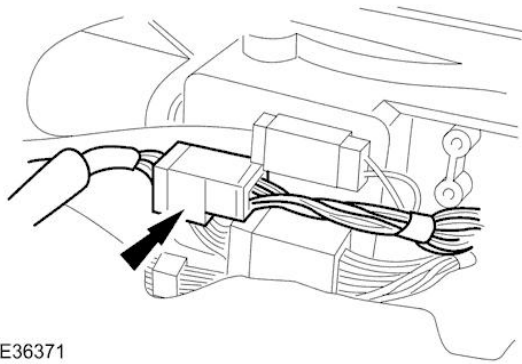
E35517

<<76.25.15>> Remove two Phillips head screws from the top of the radio housing; then remove the radio by pulling it straight out. There are two dowels/tabs at the bottom rear of the radio console (E35476).

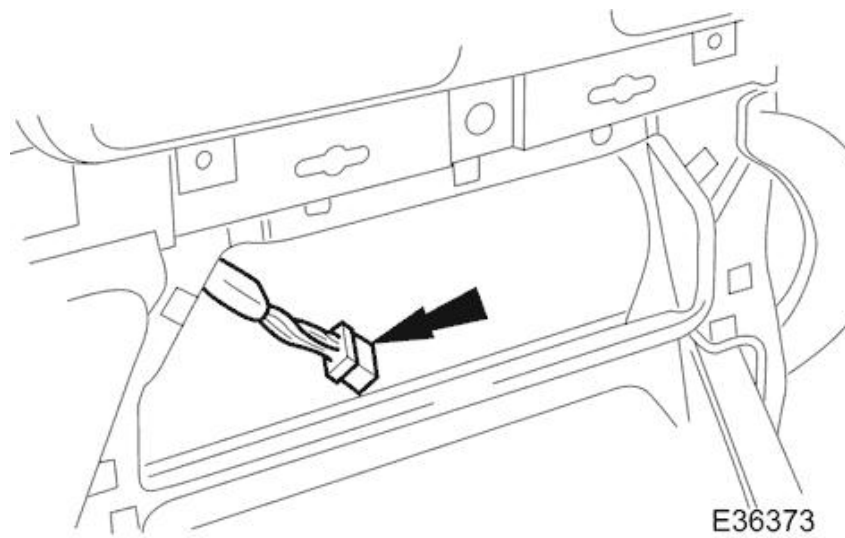


E35476

<<501-12>> Remove the climate control assembly housing by disconnecting the blue electrical connector at the left of the gear selector switch (E36371). Remove one screw at the top of the assembly (E36372). Reach in behind and push the assembly out (towards the rear of the car).

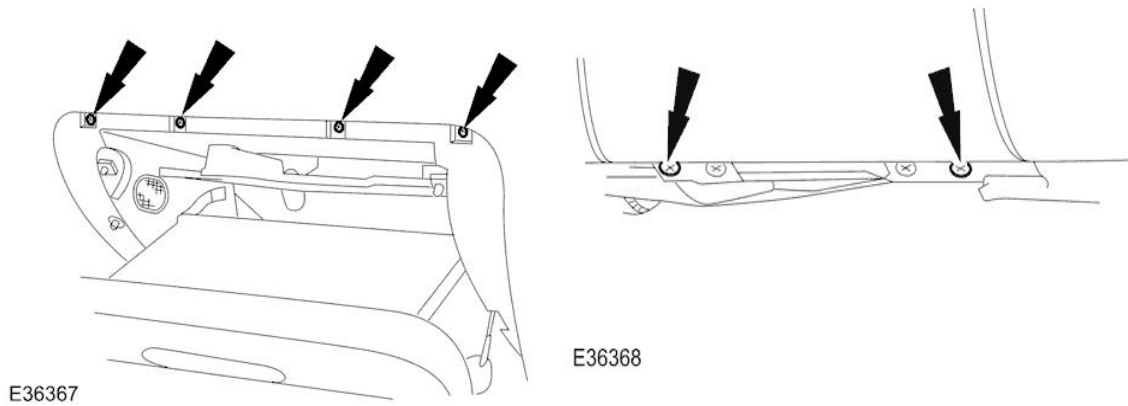


Disconnect its electrical connector (E36373).

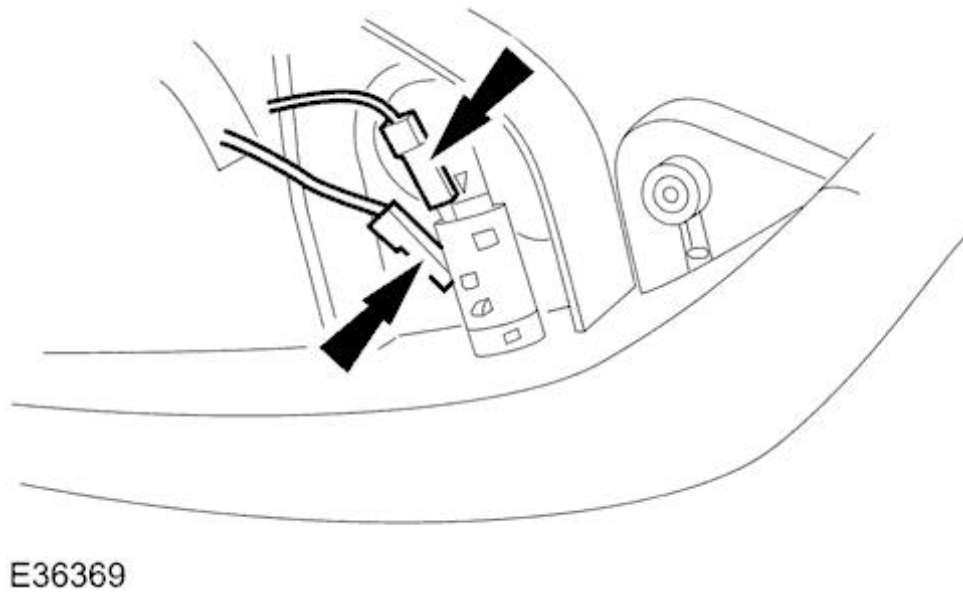


Removal of Glove Box

<<76.52.03>> Remove the glove box by removing four Phillips head screws at the top (E36367) and two Torx screws (T-30) at the bottom (E36368).



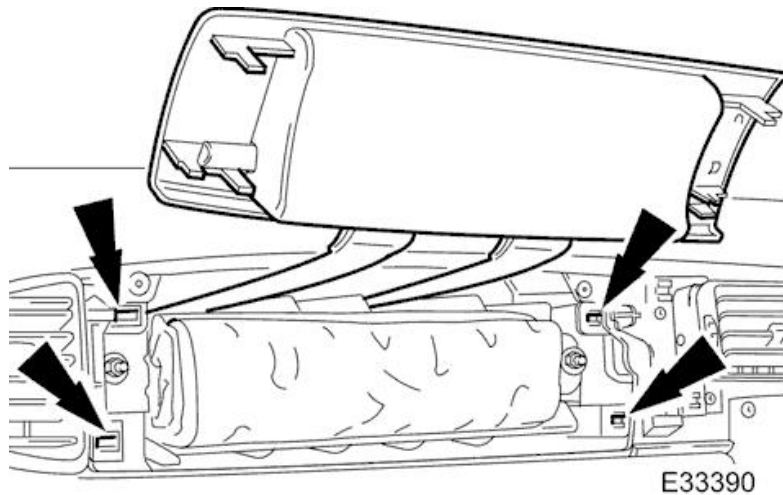
Unhook the electrical connections (E36369) and remove the glove box from car. The black plug is connected to the ground of the bulb socket.



Passenger Side Air Bag Removal

<<75.25.01>>

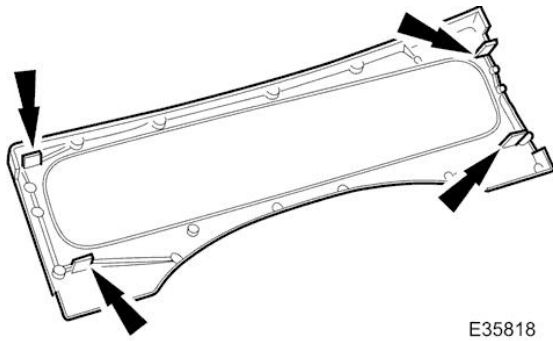
<<76.46.01>><<page 16-17>> <<76.47.06>><<page 1>><<501-12>> <<76.73.37>>
Remove the passenger air bag. Take off the wood veneer panel by gently prying with a plastic knife or other plastic tool. The panel is held in place to the dash by four tabs (E33390).



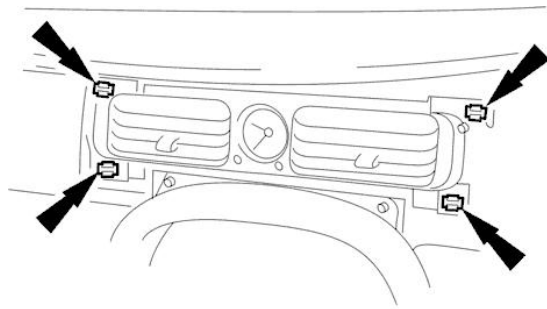
Detachment of the wood trim panel using a plastic tool

The wood veneer panel is also strapped to the air bag itself (leave it connected).

<<76.47.06>><<501-12>><<page 2>> Remove the center wood veneer around the center vents (E35818) to provide access for removal of the passenger side airbag. Use a thin plastic knife and gently pry away the wood veneer from its four holding tabs (E35819). This will also enable access to the center floor console top mounting bolts for later removal of the console.



E35818

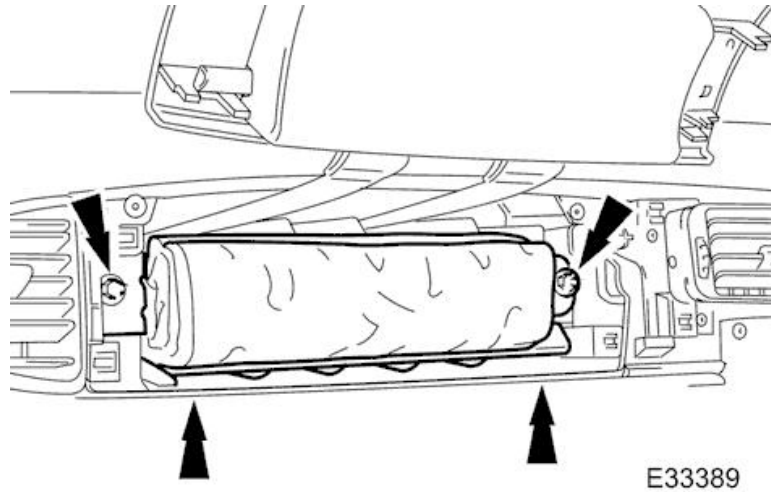


E35819

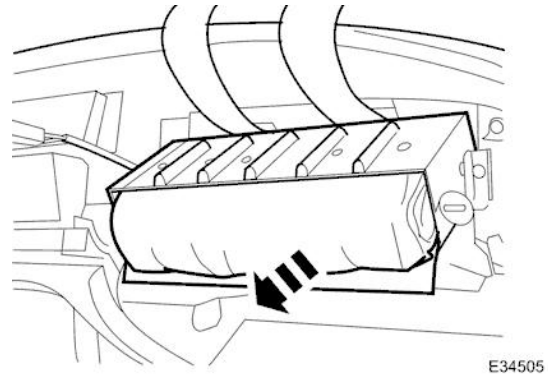
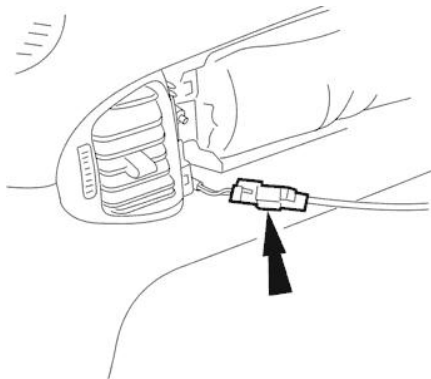


Remove the center wood veneer around the center vents with a plastic tool.

Remove four nuts (10 mm socket) that hold the air bag in place. Two of the nuts are mounted underneath fastened vertically and two are in the front (E33389).

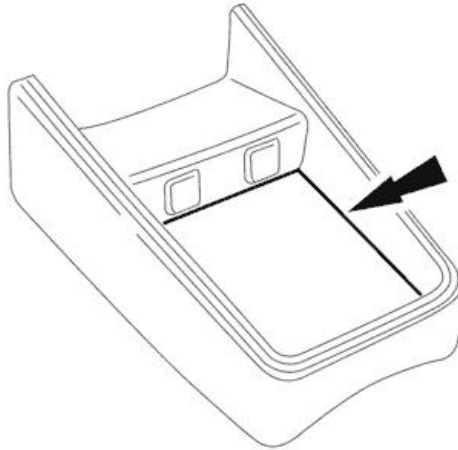


Partially withdraw the airbag and unhook its electrical connector (E35813). Remove the air bag assembly from the car (E34505).



Center Floor Console Removal

<<76.25.05>> Remove the center console rear extension that is located behind the front seats. To do this, gently use a thin plastic knife and pry up the veneer wood (E36362). Do this by prying up the wood from the rear and once the wood is dislodged, pull it rearwards, sliding it from under the seat heater switches.

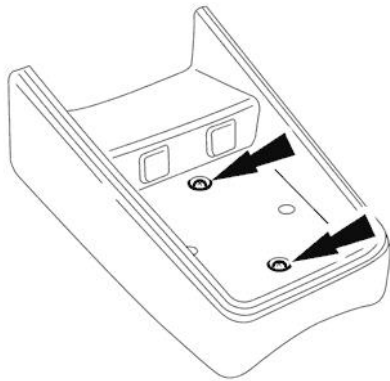


E36362

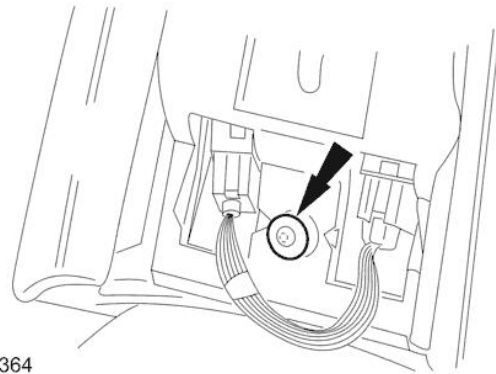


Detaching the wooden console rear extension with a knife wrapped in tape.

Next, remove the two Phillips head sheet metal hold down screws (E36363). Finally, remove the Phillips head screw holding in the heater switches (E36364). Unhook the heater switches.

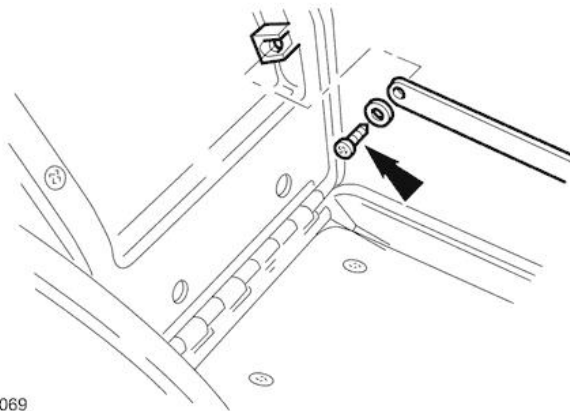


E36363



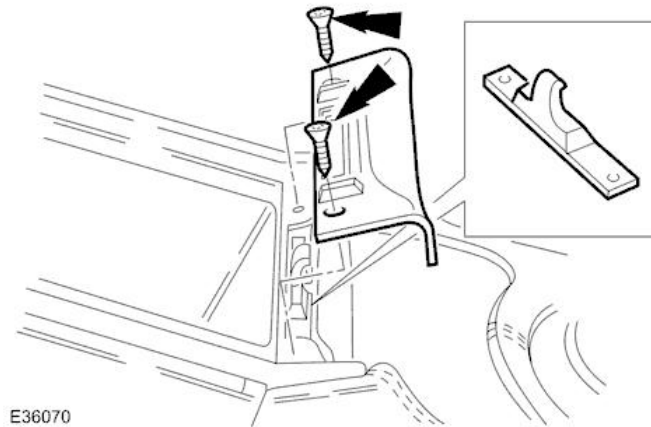
E36364

<<76.25.18>> Remove the floor storage box (glove box in center) console. Do not remove the glove box lid stay (E36069) since there is no need to do this.

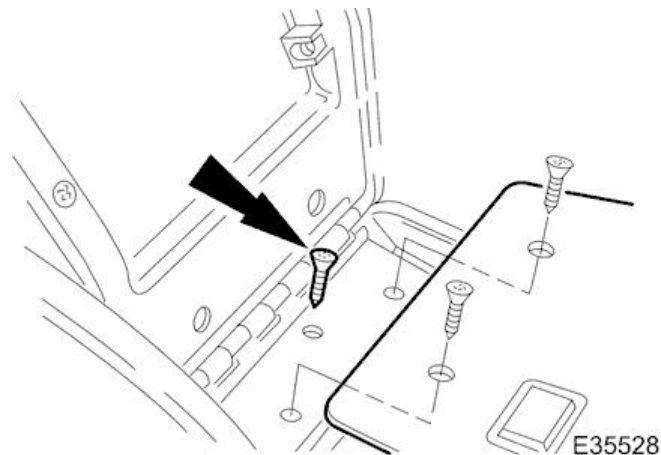


E36069

Remove the two Phillips head screws from the front latch and remove the latch (E36070).

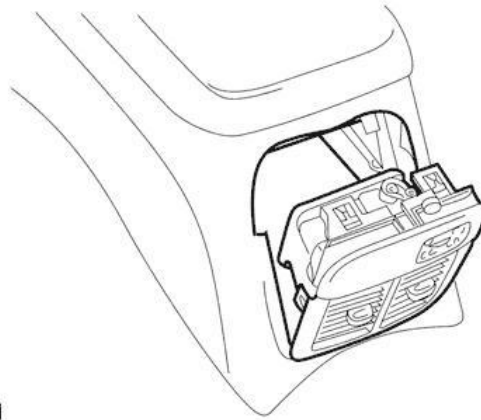


Remove the rear Phillips head securing screws at near the hinge and the third remaining hinge screw (E35528).



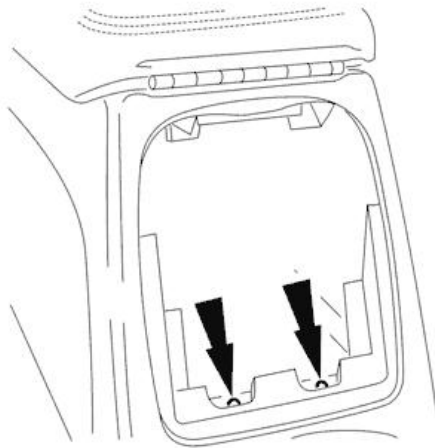
Remove the box from the car. This provides room to assist in access of the securing tabs of the rear air distribution panel (next step below).

<<76.25.01>> Using a thin plastic lever or knife, carefully release the rear air distribution panel tabs (tang) at the very top and two other tabs at the sides (near the bottom) (E36211). This will at first seem difficult, but it will eventually pop out. Unhook the cigarette lighter and lamp plugs.



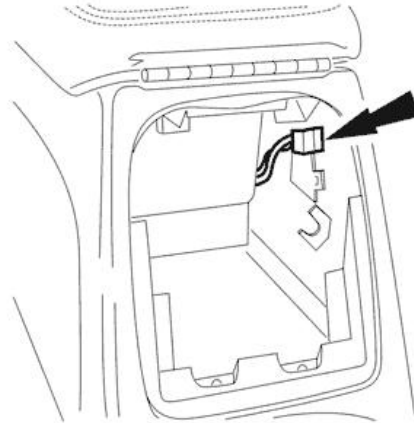
E36211

<<76.25.01>> Remove the two rear console Phillips head mounting screws (E36216).



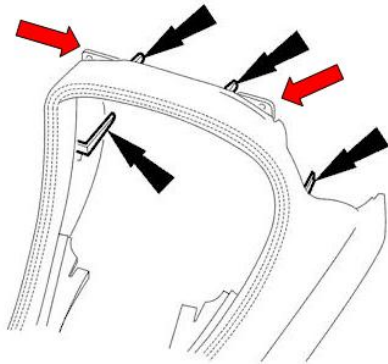
E36216

Disconnect the electrical connector (white plug) to the driver's cigarette lighter and ash tray illumination lamp (E36212). This connector is at the rear of the center console.

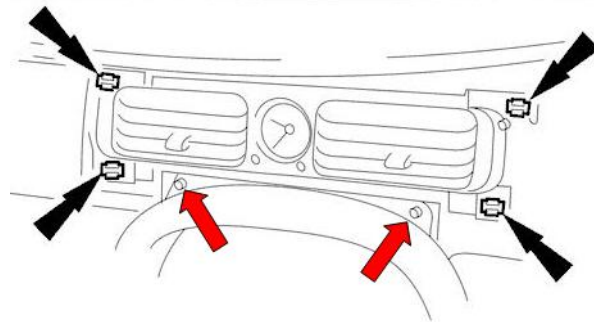


E36212

<<76.25.01>> <<501-12>><<page 3>> Remove the two center console Torx mounting bolts (T-30) at the top of console. **NOTE:** Figure E35490 of the JTIS is incorrect in that it shows removal of the wrong mounting bolts. Do not remove those bolts depicted in illustration E35490 at this time. The correct mounting bolts for the console cannot be seen in this illustration (E35490). Remove the center console mounting bolts at the topmost left and right tabs of the console. The correct tabs are visible in diagram E36217 (red arrows). These tabs can also be seen in diagram E35819 (red arrows). Remove the two Torx (T-30) bolts at the red arrows at this time.



E36217



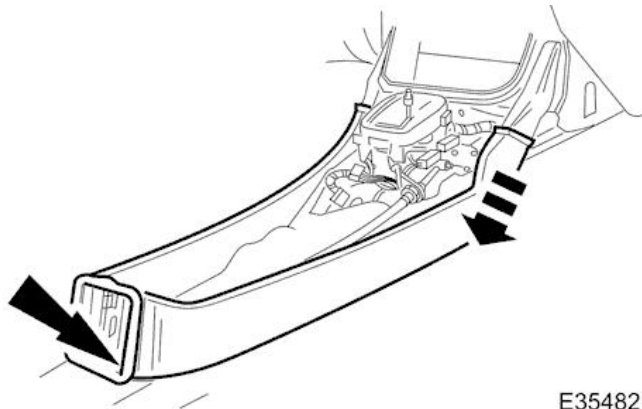
E35819



Actual location of the top mounting bolts for the center console

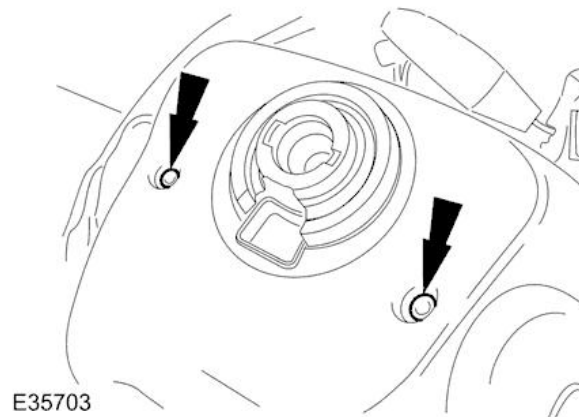
Remove the center console from the car. Make note of the alignment tabs and their entry positions during reassembly. The tabs can be seen at the black arrows in the above diagram (E36217).

<<76.46.01>><<page 2>> Remove the center floor console air ducts, there is one Phillips head screw holding the plastic assembly in place at the rear (E35482).



Steering Column

<<76.73.39>> Remove the driver air bag that's located in the steering wheel by loosening two Torx screws (T-30) from behind the steering wheel. The steering wheel must be turned to enable access to each screw one at a time from the top, 12 o'clock position from the rear (E35703). Note: The diagrams and procedures in the JTIS for removal of the air bag are unclear.



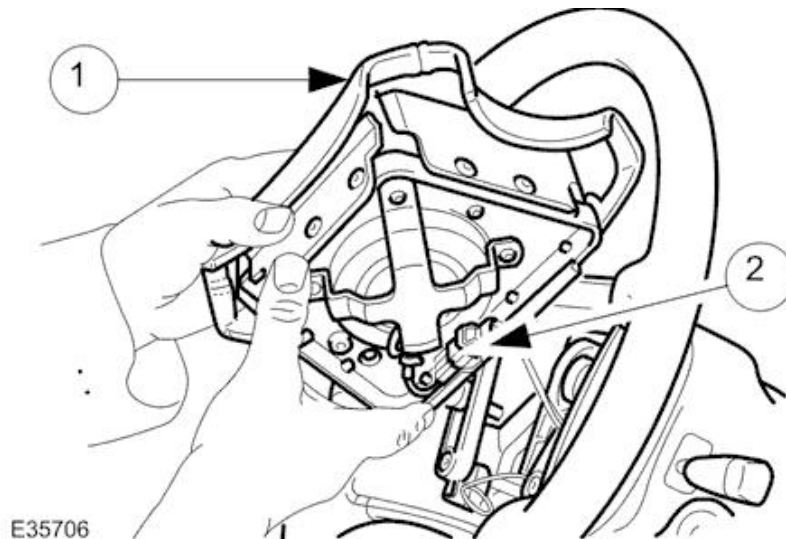
Note: The above diagram shows the location of the air bag retaining screws from the rear of the steering wheel, without the steering column and upper and lower steering column cowls in place.

Use the short end of a Torx wrench (T-30) to loosen the screws and a Torx driver bit after the screws are loosened to assist in removal.



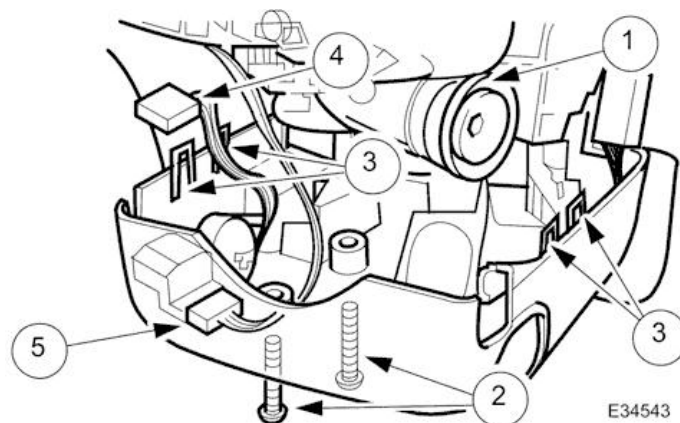
Use a Torx (T-30) wrench and driver bit to remove the driver's air bag.

Unhook the air bag electrical plug (E35706) and remove the air bag from the steering wheel.



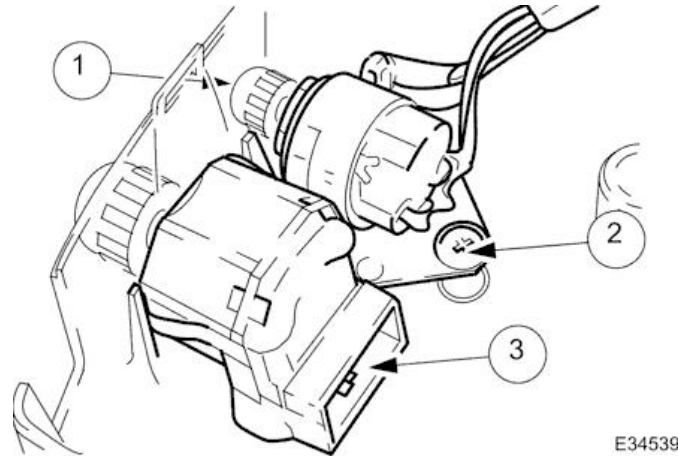
<<211-04>> After the air bag is removed from the steering wheel, the steering wheel mounting nut is visible in its center. Mark the position of the steering wheel by applying a straight line with a marker from the steering wheel to its mounting column. Remove the steering wheel by removing the center bolt (15 mm socket). Gently pull the steering wheel straight off of the column. The JTIS has no diagrams showing this.

<<76.46.03>> Remove the lower steering column cowl by removing two Phillips head bolts from underneath (E34543).



There are four tabs, two on each side, holding the bottom cowl to the top cowl. Gently dislodge these tabs from the top cowl to separate the two halves. The instrument panel dimmer switch and steering column position adjustment switch will come out with the

lower cowl (E34539). Remove the Phillips head screw holding the dimmer switch to the cowl and disconnect its electrical plug to the steering adjustment switch after un-securing its tabs and pushing it through the cowl.

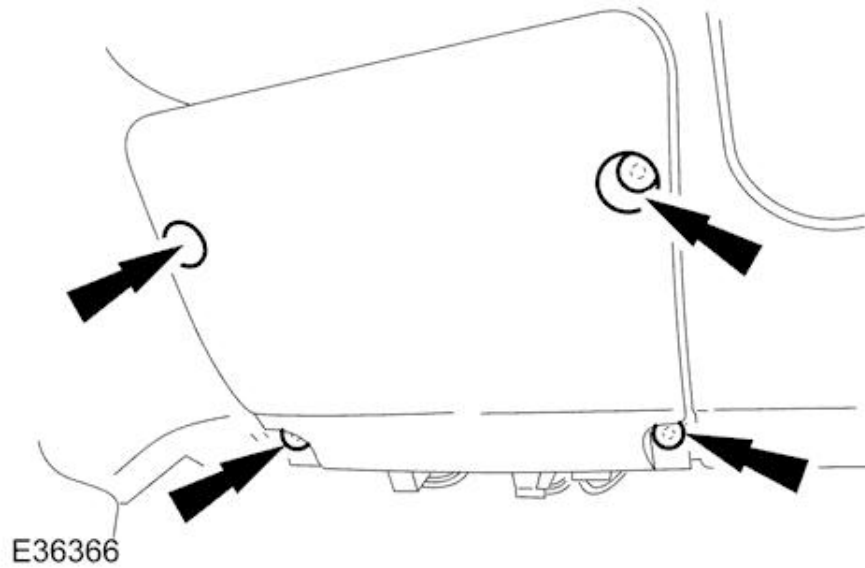


<<76.46.02>> Remove the upper steering column cowl by removing three Phillips head bolts from underneath at the bottom where the lower cowl had been. After the three bolts are removed, just lift it off of the top of the steering column. Note: the JTIS procedure does not mention these three bolts nor is there a diagram of the mounting bolts and upper shroud.



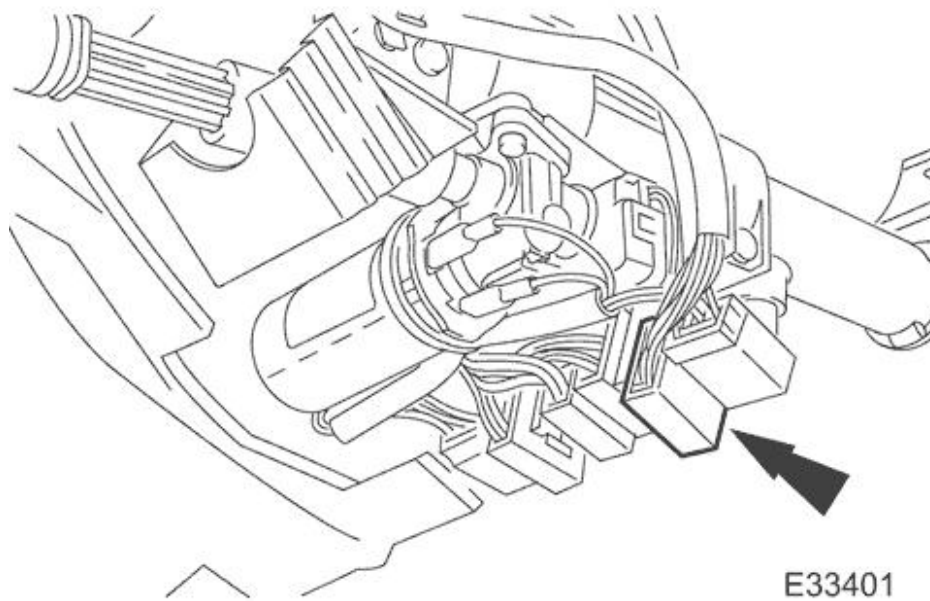
The underside of the upper steering cowl, showing its three mounting bolts

<<76.46.11>> Remove the driver side under scuttle by removing four Phillips head screws (E36366).

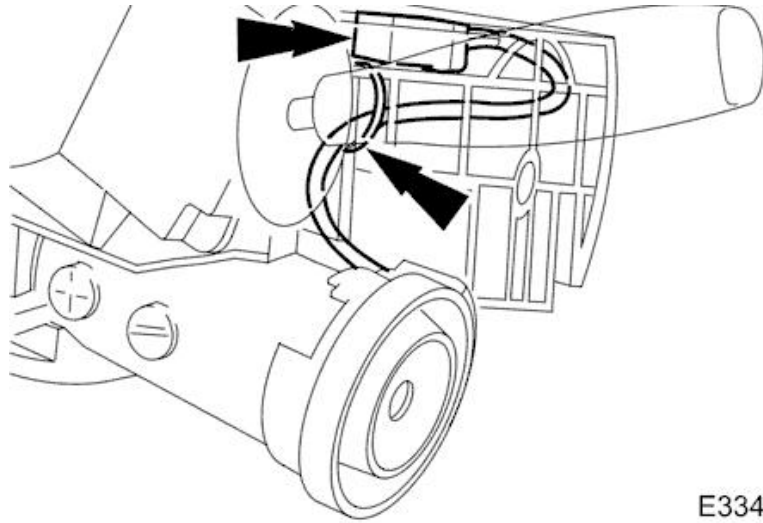


Removal of the combination switch

<<86.65.42>> Remove the wiper/washer switch electrical plug (white). The plug must first be released from its mounting bracket in order to disconnect it (E33401).

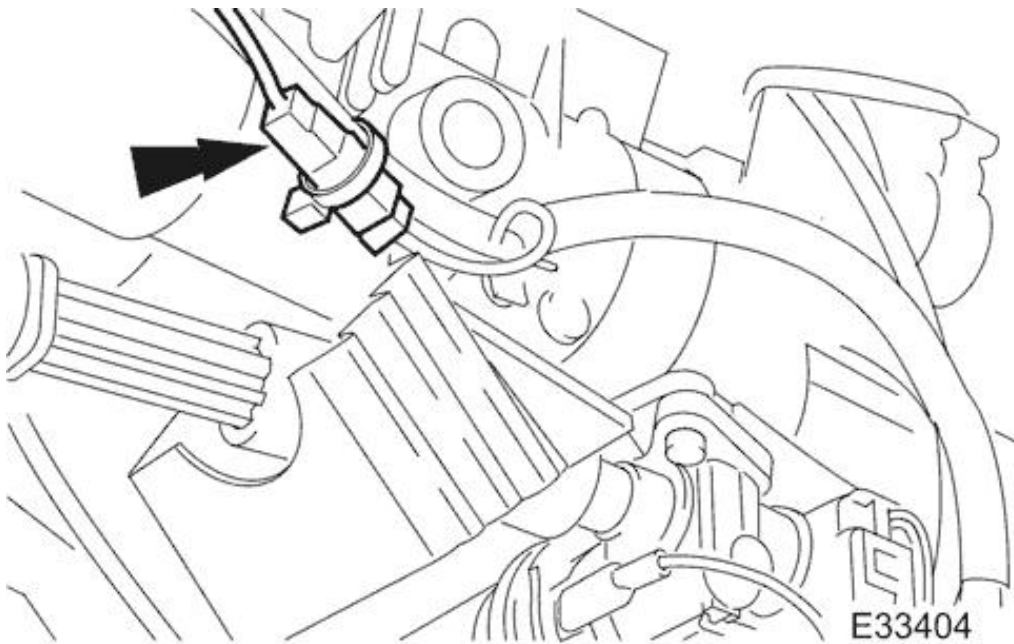


Cut the tie straps from the key tumbler plug and wiper/washer plug (E33403).



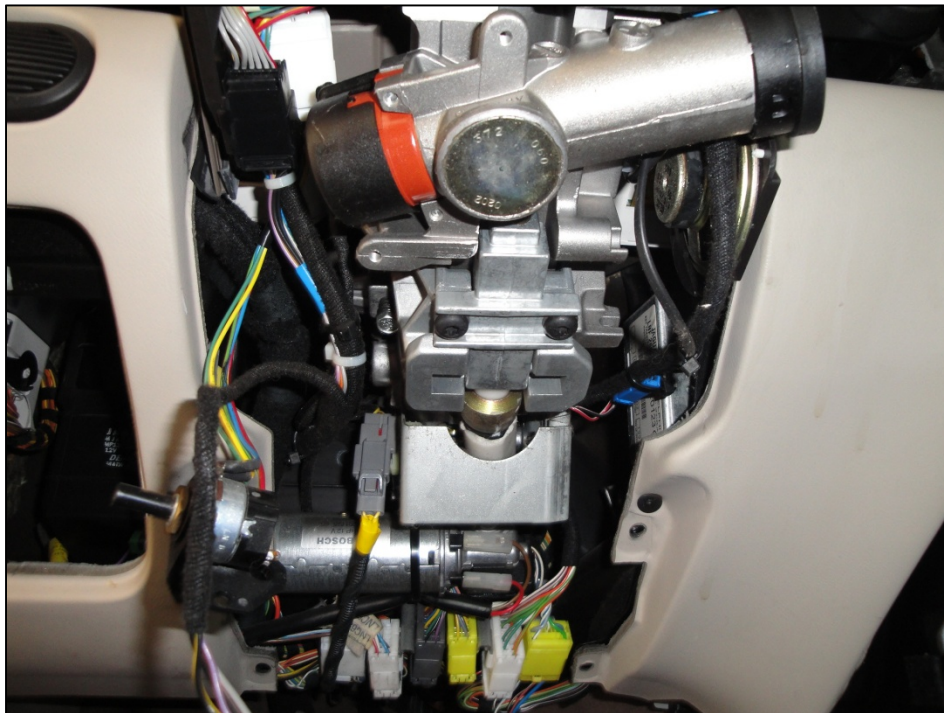
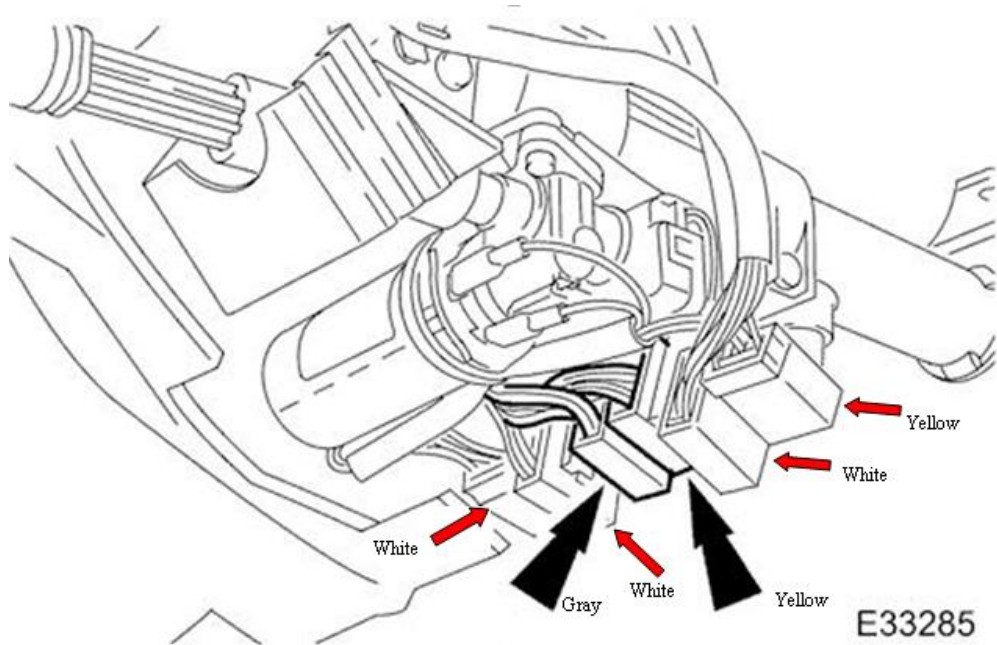
E33403

Disconnect the small blue electrical plug to the key tumbler (E33404).



E33404

Remove the flasher/lamp/trip meter electrical plugs (black arrows in the diagram below) from their retaining brackets (gray and yellow) and disconnect the plugs (E33285).



Electrical plug colors and locations under steering column.