Remote Key Fob Control Module for 1996-1999 Jaguar XK8 / XKR Convertibles

Left Hand Drive

Installation and Operation

Introduction

Jaguar omitted the very desirable ability to control the convertible top operation with the *existing* remote key fob.

This feature adds fun and convenience to the ownership experience of a convertible XK8 or XKR. It also is handy for saving time as you walk to the vehicle. It can help you to locate the vehicle in a busy parking lot and save you time as you automatically close the top while you stow your boot cover and leave the vehicle.

Once you have this great feature, you will not know how you did without it! It will enable you to raise, lower (and reverse and stop for safety) the convertible top, all with one or two simple button presses on your key fob.

The module comes complete with all accessories needed. All wiring is color coded to match your vehicle, so you simply have to match the colors to the car wiring to install it. Connections are made with included Posi-taps(tm), that are extremely simple to use reliable wire connectors. The module also has six LED lights (which are hidden in the door along with the module after installation). These LED lights will give you positive confirmation that it is installed correctly.

Kit Contents (supplied):

- Remote top control module with vehicle matched color-coded wiring harness
- Quantity 12, black 4" tie wraps
- Quantity 2, AWG 22-24 Posi-taps™ (red or red/black)
- Quantity 4, AWG 20-22 Posi-taps™ (red/slate)
- Quantity 2, AWG 16-18 Posi-taps™ (blue)
- Plastic wire pulling needle
- Short length of double-sided tape
- Velcro™, 3"x2" Industrial grade

Tools List (must be provided):

- #2 Philips screwdriver
- Small flat blade screwdriver (1/8" blade)
- ¼" or 3/8" ratchet set with 7mm, 8mm, 10mm. and 13mm sockets
- T27 torx driver (male)
- Tack puller or trim / panel clip removal tool or panel clip pliers (preferred: http://www.harborfreight.com/panel-clip-pliers-67399.html)
- Jack (Jack in trunk is fine)
- Lug wrench to fit your wheels (lug wrench in trunk/boot is fine)
- Jack stand (recommended for safety)
- Scissors
- Sharp nail
- Pliers
- Vinyl electrical tape

Not required, but might be handy in some circumstances

- #1 Phillips screwdriver
- Silicone spray lubricant
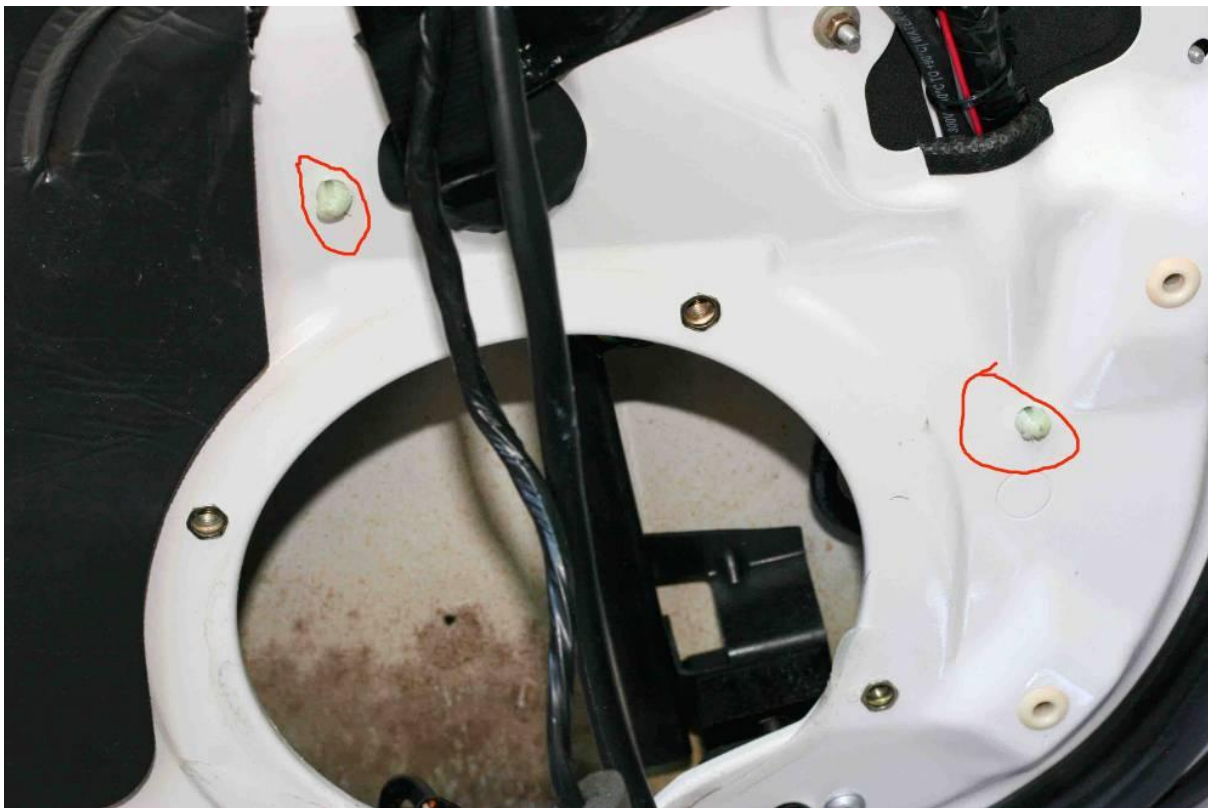- Duct tape

Installation

Step 1: Work on level ground since you will be jacking up the car later. Raise the windows. Open the driver door. Remove the negative battery terminal the trunk with an 8mm or 10mm ratchet (depending on model year) and bend the terminal away so it does not touch the negative battery post. Do not ignore this step...the battery must be disconnected to prevent possible personal injury, vehicle damage and battery drain while working with the door open.

Step 2: Carefully remove the driver door panel and associated hardware (a.k.a. door card). Reference this YouTube video: http://www.youtube.com/watch?v=a3wMh_R3fws. Set the panel aside for later.

Step 3: Remove the driver door speaker (4 8mm bolts) and its associated door panel bracket mounted on two of the driver door speaker bolts. Take note of the mounting position of the speaker and bracket. Do not touch the paper speaker element. Handle the speaker only by the metal frame. Unplug the speaker cable and set it and the foam baffle behind it safely aside.
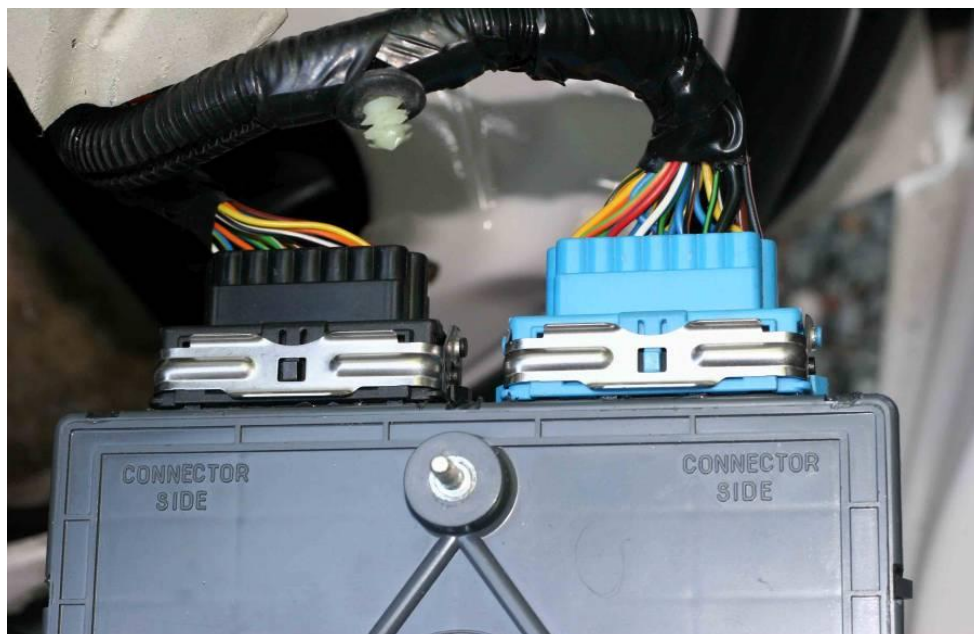
Step 4: Using the point of a closed set of pliers, press the two harness mounting clips near the speaker opening circled in red below into the inside of the door.

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Step 5: Remove the three 7mm bolts retaining the Driver Door Module behind the sheet metal of the inner door.
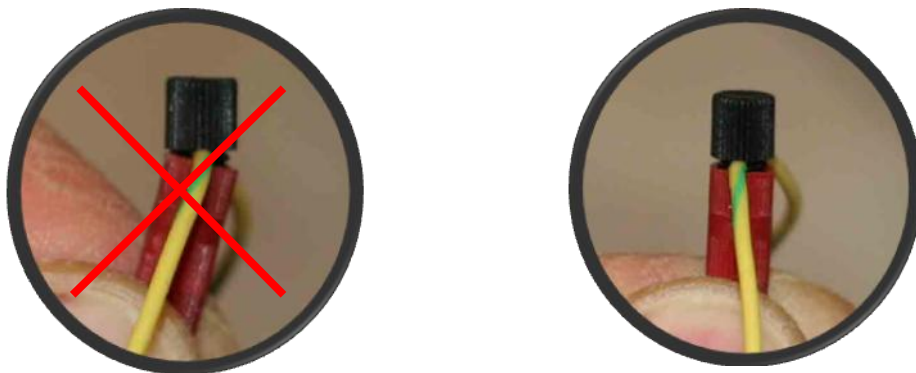

Step 6: Carefully extract the driver door module from the inside of the door cavity with the attached cables through the speaker opening. Make sure you do not lose the foam gasket inside the door. Carefully unravel about an inch of the electrical tape wrapping each of the harnesses near the connector. There is no need to unplug the connectors.

Step 7: Peel off about 3" of the upper right black vapor barrier membrane near the door handle. Locate the section of harness under the door handle where the cable splits off to the door handle.   Unravel a couple of inches of electrical tape from the harness to the left of the split. Rotate the **slate/green** wire to the front. . (**Note:** sometimes the thin colored stripe is on the backside of the wire...inspect carefully).
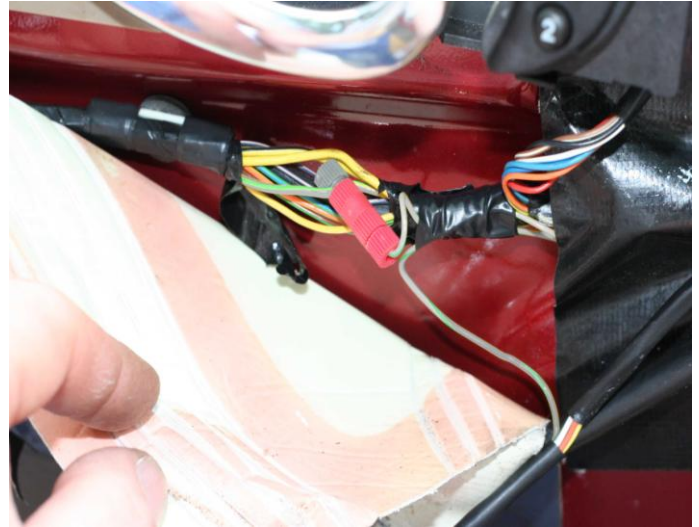

Step 8: Refer to the Posi-tap installation instructions at http://www.posi-lock.com/instructions1.html.   Be particularly careful to put the Posi-Tap caps on squarely. If they are not put on squarely, they may not make contact with the wire, and the smaller Posi-Taps in particular might be damaged. The damage would be a bent or broken contact pin. See the incorrect and correct illustrations below:
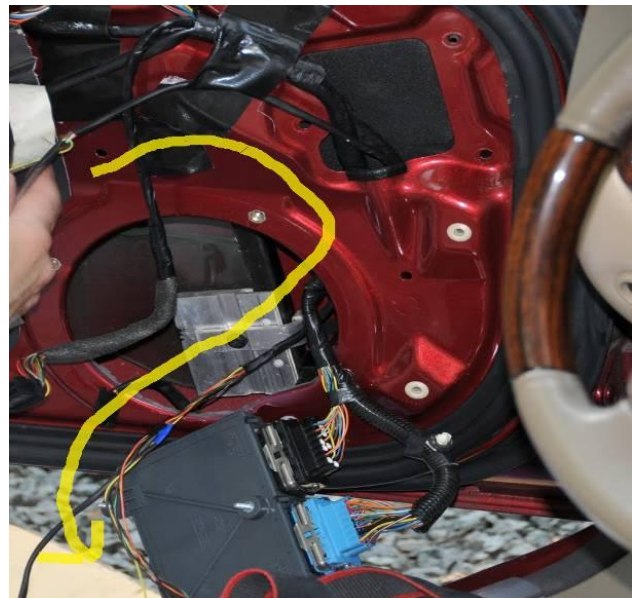

If a Posi-Tap is accidently not put on squarely, check the internal pin for breakage or bending prior to reuse.

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Apply a **red**/**slate** Posi-tap (**grey** tap side) to the exposed **slate/green** wire. Remove the insulation from the end of the remote module's **slate/green** wire and connect it to the Posi-tap wire side. Strain relief the **slate/green** wire to the wire bundle with a tie–wrap or some electrical tape (tape shown in photo on right below). Re-tape the area with electrical tape.
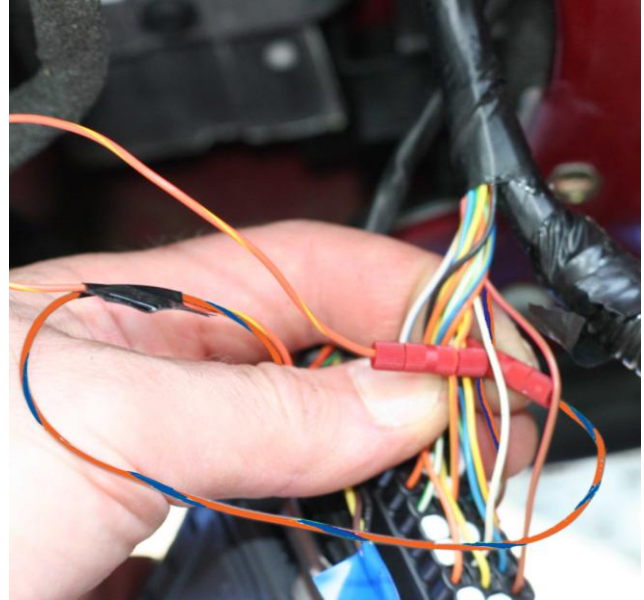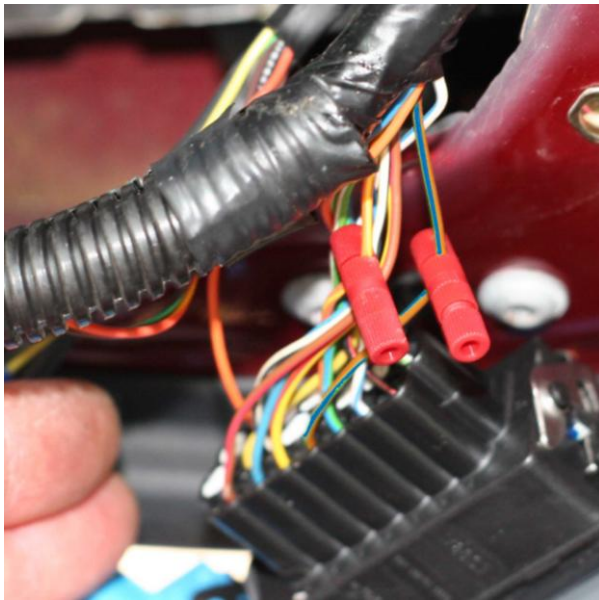

Step 9: Thread the two wires at the end of the remote module harness through the bottom of the driver door module opening and down through the speaker opening. Pull the remote module harness its full length through the speaker opening.

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Step 10: Locate the <mark>orange/blue</mark> wire on the **BLACK** door module connector. If necessary peel back the electrical tape in the harness. Tap the wire with a **small solid red** Posi-tap. Connect the <mark>orange/blue</mark> wire from the remote top module wiring harness to this Posi-tap. Take care not to cross-thread the caps, particularly on these **small solid red** Posi-taps,.

Locate the <mark>orange/yellow</mark> wire **(orange wire with a yellow stripe, NOT yellow wire with an orange stripe)** on the **BLACK** door module connector. Tap the wire with a **small solid red** Posi-tap. Connect the <mark>orange/yellow</mark> wire from the remote top module wiring harness to this Posi-tap. (*Red/Black* Posi-Taps may be substituted for **solid red** Posi-Taps).
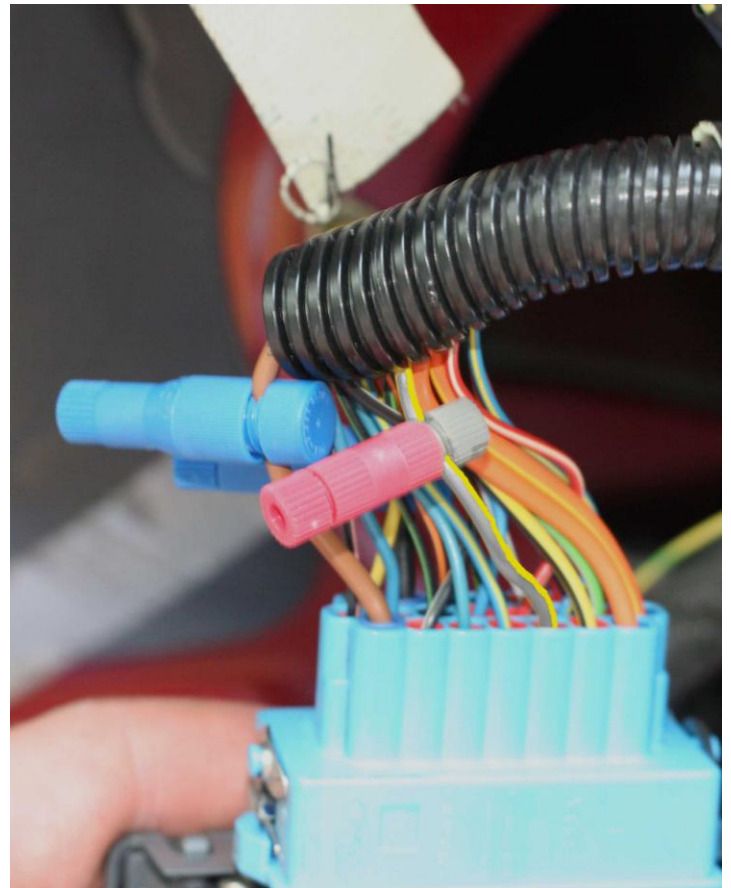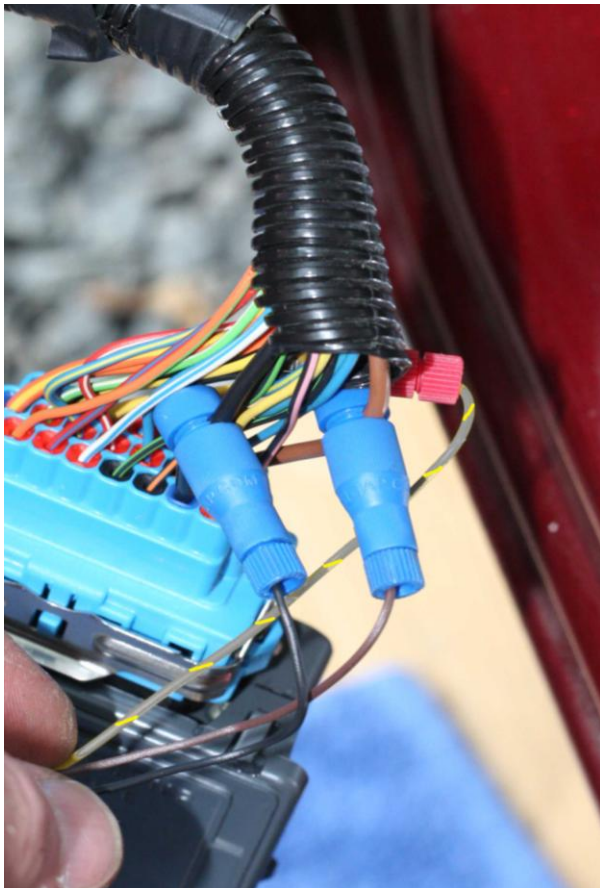
Step 11: Locate the heavy **brown** wire on the **BLUE** door module connector. If necessary peel back the electrical tape in the harness. Tap this wire with a **large blue** Posi-tap. Connect the solid **brown** wire from the remote top module wiring harness to this Posi-tap.

Locate the heavy **black** wire on the **BLUE** door module connector. Tap this wire with a **large blue** Posi-tap. Connect the **black** wire from the remote top module wiring harness to this Posi-tap.

Locate the slate/yellow wire on the **BLUE** door module connector. Tap the slate/yellow wire with a **red**/slate Posi-tap. Connect the slate/yellow wire from the remote top module wiring harness to this Posi-tap.

Tie wrap wires neatly to existing to the door module harness. If desired, re-tape over area with electrical tape.

Step 12: Open the driver door fully. Turn the knurled plastic connector between the door and body harness counterclockwise to until the connector disengages. Remove the harness grommet end from the body and rotate it as shown below, with the connector facing outward:

Step 13: Carefully pierce the rubber boot precisely as shown in the photo below with awl or sharp nail. Be careful not to damage wires in the boot.

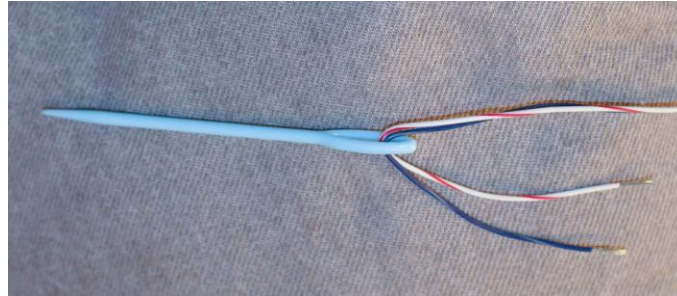**Step 14:** Thread the two wires (**white/red** and **blue/slate**) into the eye of the supplied plastic needle. Use the needle to then pass the wires through the piecing in the rubber boot from the inside to the outside. Then pull the wire harness through the rubber boot by the outer black cable sheath (not the inner conductors) . The final result should look like the picture below. Be sure to leave a few inches of cable slack inside of the door. Remove and discard the needle.

Step 15. Reinstall the Driver Door Module connector and the driver door module, with gasket inside the door with three 7mm nuts. **Use tie wraps to tie the new wires to the door module harness. Make sure all wires are clear of the window track and the door check strap inside the door...both of these can slice through your wires if they are not clear of them.** If you have difficulty, make sure you left enough cable slack in Step 14 and readjust as necessary. Re-insert the two cable nylon cable clamps into the holes in the door panel. Plug in the speaker, and reinstall the speaker, foam baffle and door trim bracket with four 8mm bolts.

Step 16: Neatly dress the cable to the boot with two black tie wraps as show below:

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Step 17: Cutoff the tie wrap tails. Take the loose end of the cable and stuff the remaining cable through the adjacent open cavity of the front fender (it will be retrieved later). Reinsert the grommet in the door, and rotate the boot back to its original position. Re-insert the round connector into the body with a clockwise turn until it stops. The final product should look like the photo below, with the new cable tie wrapped behind the boot and barely visible:

Step 18: Set the emergency brake. Unlatch the hood. On level ground jack up the driver's side front and remove the driver's side front wheel. Support the car with a jack stand for safety.

Step 19: Remove the driver's side front wheel well liner. See the YouTube video with this procedure: http://www.youtube.com/watch?v=r4A3q1cuNSs

Step 20: Retrieve, pull free and straighten out the remote top harness cable stuffed in the fender wheel well cavity in Step 17.

Step 21: Tie wrap the cable to a nearby electrical harness in the wheel well. Make sure the cable is slack to allow movement for door opening. Then tie wrap the cable to the hose that wraps around the perimeter of the wheel well along the top.

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Step 22: Once on the left side of the wheel well, thread the cable up into the opening to the engine compartment.

Step 23: Open the hood. Locate the fusebox on the driver's side. Lift the rubber boot over the cable stud and bolt and remove the power cable with a 13mm socket. (This is a high current +12 connection, so make sure the battery had been disconnected from Step1 !) Pull UP firmly on the black plastic rectangular latch in front of the fusebox latch until it rises. Once the latch it released, slide the fusebox toward you until it is free. (Note: if the latch does not lift, spray the latch in the front of the fusebox with silicone lubricant. Let it soak for a moment or two and try again).

Step 24: Tilt up the fusebox, exposing the blue and black connectors on the underside. Route the harness from the wheel well to the fusebox and up through the opening underneath it.

Locate the **white/red** wire on the **BLUE** fuse box connector. Attach a **red**/slate Posi-tap. Connect the **white/red** wire from the remote top module wiring harness to this Posi-tap.

Locate the **blue/slate** on the **BLACK** fuse module connector. Attach a **red**/slate Posi-tap. Connect the **blue/slate** wire from the remote top module wiring harness to this Posi-tap.

Add tie wraps to tie the top-module wires to the fusebox harness. Wrap electrical tape around the splices and harness. Re-lock the fusebox in place. Reconnect the power cable, and tighten the 13mm nut and replace the rubber boot over the nut.

Step 25: Replace the wheel well liner and its fasteners. Replace the wheel. Lower the car and tighten the lug nuts.
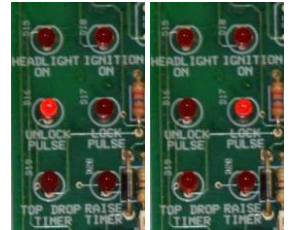
Step 26: Re-attach the window switch unit temporarily to run some tests in the next step. Reconnect the battery negative cable.

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Step 27: Perform the following tests:

a: Shut the doors. Make sure that the door locks operate. If they work, move on to b.

If they do not work, remove and reconnect the battery cable again. Occasionally this has to be done several times until the door lock control initializes properly after a long battery disconnect....this is a Jaguar anomaly and has nothing to do with a correctly installed remote top module. Sometimes it helps to perform steps c. and d. below and come back and try the door locks again. If this happens, it may also be a sign that your battery is getting weak.

b. When operating the door locks, note that the "Unlock Pulse" and "Lock Pulse" red LEDs on the remote top module flash appropriately when the door locks operate. If they do not, recheck your wiring at the door module.

c: Turn on the ignition. Note that the "Ignition" red LED lights when the ignition is on. If the "Ignition" light does not turn on and off with the ignition, recheck your wiring at the fusebox. Roll the windows all the way down, holding the window down button until you hear a click. Now roll the windows up, holding the up button until you hear a click. Repeat this procedure a second time**.** Check that the window auto-drop that functions when either door is opened or closed now works normally.

d: With the ignition on, lower the top from inside the car. Make sure you hear a 'ding' at the end of the cycle. Then raise the top from the inside of the car. If there is any malfunction, go back to step 27a and repeat again. If it works, go to the next step.

e: Check that your headlights work normally with ignition on in low beam, high beam and auto. Also check that the "Headlight" red LED light when the low beam headlights are on. If the headlight LED does not turn on with the low beam headlights, check your wiring at the fusebox.

f: Turn off the car, exit and lock the door with the remote.

g: Press the headlight button once (lower left button) on the remote key fob. On some cars the button may show a picture of a headlight. On other cars it may show a picture of a horn. The low beams should go on for about 25 seconds and then go off automatically. Note that the headlight LED on the Remote top module turns on with the headlight. (Note that three consecutive presses of the headlight button with 25 seconds will set off the panic alarm...don't do that).

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h: The door must still be locked. Press the headlight button on the remote key fob once. Then immediately press the UNLOCK button on the key fob. The top should drop! The red 'Drop Timer' LED should remain on for about 35 seconds. (The headlight LED will extinguish after about 25 seconds.)

i: Now with the door unlocked, press the headlight button on the remote key fob once. Then immediately press the LOCK button on the key fob. The top should raise back up! The red 'Raise Timer' LED should remain on for about 35 seconds. (The headlight LED will extinguish after about 25 seconds.)

j: The door must still be locked. Press the headlight button on the remote key fob once. Then immediately press the UNLOCK button on the key fob. As the top drops hit the LOCK button midway during the cycle. If the headlights are still on, the cycle should reverse and the top will raise back up. If the headlights are off, the top motion should stop mid-cycle. To resume motion, hit the headlight button and hit LOCK or UNLOCK buttons.

k: Drop the top. Press the headlight button on the remote key fob once. With the door still unlocked, immediately press the LOCK button on the key fob. As the top raises hit the UNLOCK button midway during the cycle. If the headlights are still on, the cycle should reverse and the top will drop back down. If the headlights are off, the top motion should stop mid-cycle. To resume motion, hit the headlight button and hit LOCK or UNLOCK buttons.

Step 28: Back at the driver door, apply supplied double faced tape in sections to the back of the vapor barrier membrane in the corner area where it was previously peeled off. Remove the tape backing and restore the vapor barrier to its original position adhered to the inner door.
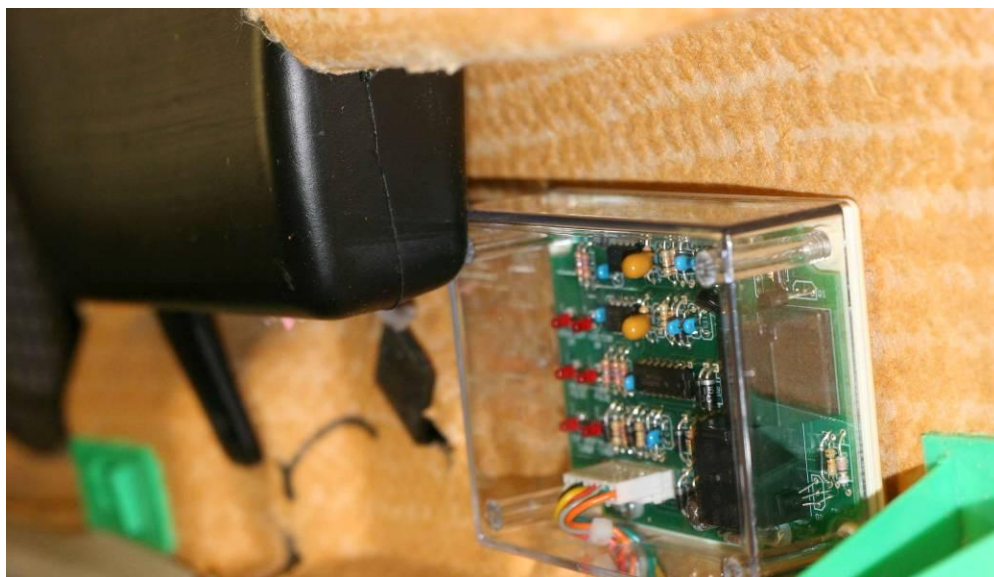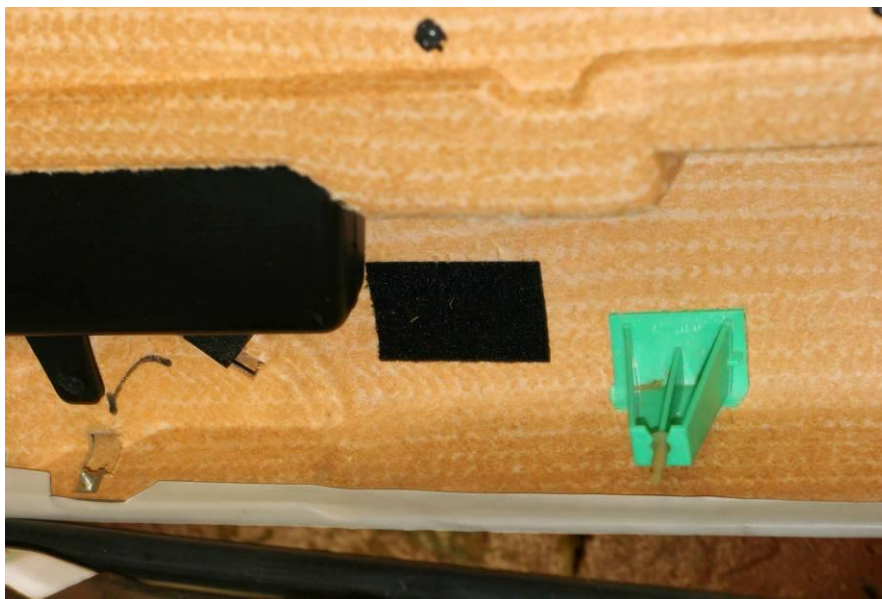
Tie wrap the remote module cable to the puddle lamp connector cable. Apply additional duct tape to support the combined cable on the door vapor barrier membrane if necessary.

Remove the temporarily attached window switch unit in preparation for re-assembly of the door panel.

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Step 29: Apply the 'ribbed' side of the 2" x 3" velcro to the center of the base (solid colored plastic) portion of the remote module enclosure.

Position the module inside the door trim panel (door card), in the empty area just to the left and below the black plastic armrest shell. Catch the corner of the module under the bottom of the armrest shell. This will give you the location to apply the 'fuzzy' side of the Velcro. Apply the 'fuzzy' side of the Velcro to the inside of the door panel, and burnish it down thoroughly with a screwdriver (this is necessary because the inside of the shell is rough and will not adhere properly unless the Velcro tape is thoroughly burnished down.

Then attach the module, cable side down, to the inside of the shell with the Velcro patches, again catching the corner under the armrest shell (catching the corner provide a little extra pressure for the adhesive to set well).

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Step 30: Reinstall the puddle lamp connector. Reassemble the door panel trim and hardware on the door per the video instructions referenced above. Take care that the cable from the remote module remains within the door panel and does not protrude from the bottom of the door.

Step 31: Do not forget you will need to power your radio back on and reset your climate settings after the battery disconnect.

Certain **non**-USA vehicles may also require the radio code which should be with your vehicle paperwork (but can be obtained from your dealer with proof of ownership if lost).

<u>Operating Instructions</u>

To drop the top, with the doors locked, simply press the headlight (lower left) button on the remote key fob once. Then immediately press the door UNLOCK button on the key fob.

To raise the top, with the doors unlocked, simply press the headlight (lower left) button on the remote key fob once. Then immediately press the door LOCK button on the key fob.

Notes:

1. The remote will only drop the top if the doors are locked. If the doors are unlocked, lock them with the remote first before dropping the top

2. The remote will only raise the top if the doors are unlocked. If the doors are locked, unlock them with the remote first before raising the top.

3. The remote will only operate the top if the ignition is off.

4. To reverse or stop the top drop process, depress the door lock button.

5. To reverse or stop the top raise process, depress the door unlock button.

6. For 4. and 5. above reversing occurs if the headlights are on, stopping occurs if the headlights are off.

7. To restart the cycle after it was interrupted, if the headlights are still on, depress the unlock button to drop or the lock button to raise the top.

8. To restart the cycle after it was interrupted if the headlights are off, depress the headlight button on the remote key fob once. Then immediately depress the unlock button to drop or the lock button to raise the top.

9. On some cars the headlight button (lower left button) may show a picture of a headlight. On other cars it may show a picture of a horn.

10. To use your headlights remotely without operating the top, lock or unlock the car first as desired, then press the remote headlight button.

11. Do not turn on the ignition until the top cycle is complete…this may generate a top not latched warning.

12. Do not use the remote fob to operate the top while inside of the vehicle…this may inadvertently set off the theft alarm.

Important Safety Warnings

With the new capabilities of your remote key fob extra care must be observed.

To avoid risk of death, injury, entrapment or property damage:

NEVER operate the convertible top remotely without a competent adult observing the convertible top operation.

ALWAYS keep body parts and interfering objects away from the moving convertible top and windows.

NEVER operate the convertible top remotely around infants, children or pets or others with impaired vision or judgment.

NEVER allow infants, children, pets or those with impaired vision or judgment to handle or have access to the remote control.

NEVER depend solely on the "stop" and "reverse" features of the remote control to avoid death, injury or property damage.

NEVER leave children or pets unattended or in a closed vehicle.

ALWAYS store your remote control key fob in such a way that the buttons will not accidently get pressed.

ALWAYS provide these safety warnings to any operator of the vehicle remote control.

ALWAYS immediately remove the remote top controller from the vehicle (remove the door panel, remove the four Philips #1 screws in the case and unplug the unit from cable), in the event a malfunction of the remote top controller product is observed.

Support

Email whitexkr@comcast.net with as much detail as possible.