

## **Modification of X308 lighting module and GDO to X300 compatibility**

The GDO on the early X300 Jaguars (up to 1996 MY) does not operate rolling code garage openers that are now common. I understand there was a conversion module that would enable a rolling code, but I've not seen one and doubt the part is available at this time. The lighting module and GDO on the X308 starting in 1997 MY does provide rolling code compatibility and will fit and plug into the X300 overhead console. However, there was a change in how the BPM (Body Processor Module) operates the interior lights that renders the X308 unit incompatible with the X300 model.

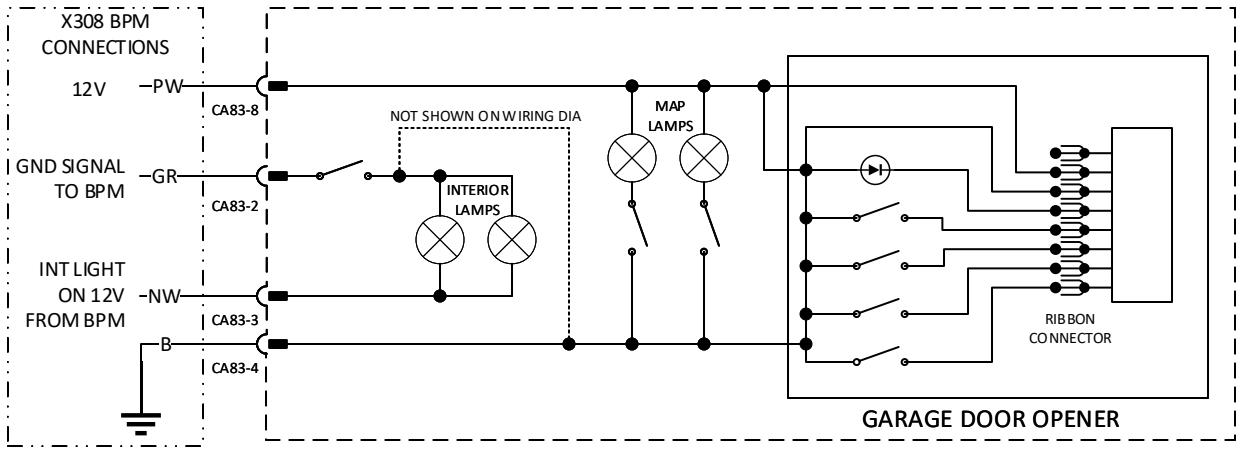
Other than the interior light change, the units are physically compatible and electrically compatible with all other functions that are controlled by the overhead console: GDO, Map lights, sliding roof. As it happens it is possible to modify the circuitry of the X308 to be fully compatible with the X300 wiring and enable a rolling code GDO in the X300.

The X308 lighting module is shown in the top wiring diagram. It's a little misleading because the ground shown as a dotted line is not shown on the factory schematic but is in the actual circuit. The overhead interior lights are powered by 12V from the BDM thru terminal CA83-3 when the switch is operated, taking a sensing circuit thru CA83-2 to ground. The ground terminal of the interior lamp is common with the open side of the switch. The map lamps and GDO are powered by 12V thru CA83-8. The map lamps are operated when the respective switches take the other side of the lamp to ground thru CA83-4. The GDO also grounds thru CA83-4.

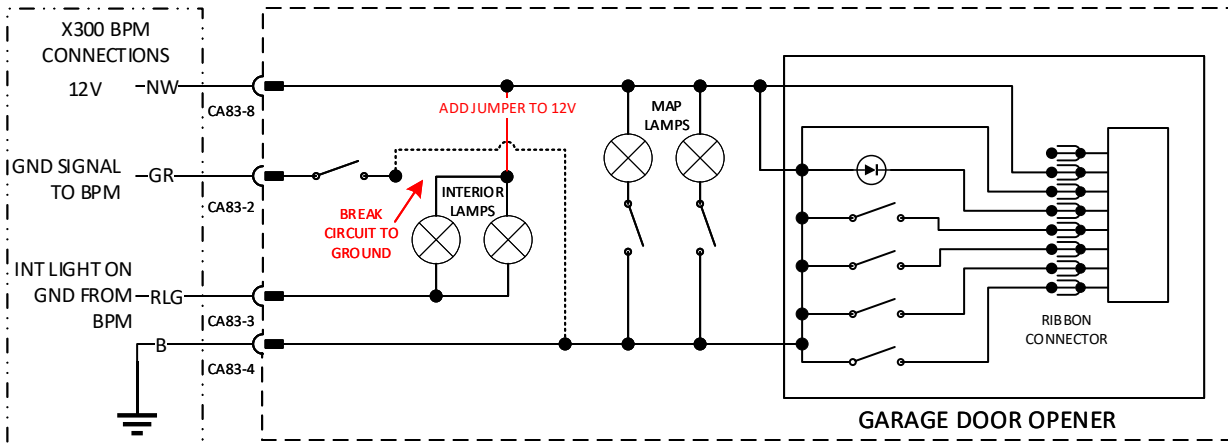
The interior lights in the X300 operate a bit differently. Rather than taking 12V from the BPM, they are powered the same as the map lamps: constant 12V, operated when it when the other side of the lamp is grounded by the BPM thru CA83-3. The switch signals the BPM in the same manner on both the x308 and X300 by grounding terminal CA83-2. The difference is that the X308 BPM provides 12V to the interior lamps which have a continuous ground and the X300 BPM provides a ground to the interior lamps which have continuous 12V.

As it happens, the terminals of CA83 are such that the X308 can be modified to operate in the X300 configuration with 2 minor changes to the circuit board. The middle wiring diagram shows the changes required. It is necessary to separate the ground side of the interior lamps from the ground on the circuit board and provide 12V in place of the ground. The other side of the lamp still goes to CA83-3, but in the X300 wiring this provides ground to the lamp thru the BPM. The 12V source is the same that powers the Map lamps and the GDO on both the X308 and X300 thru CA83-8.

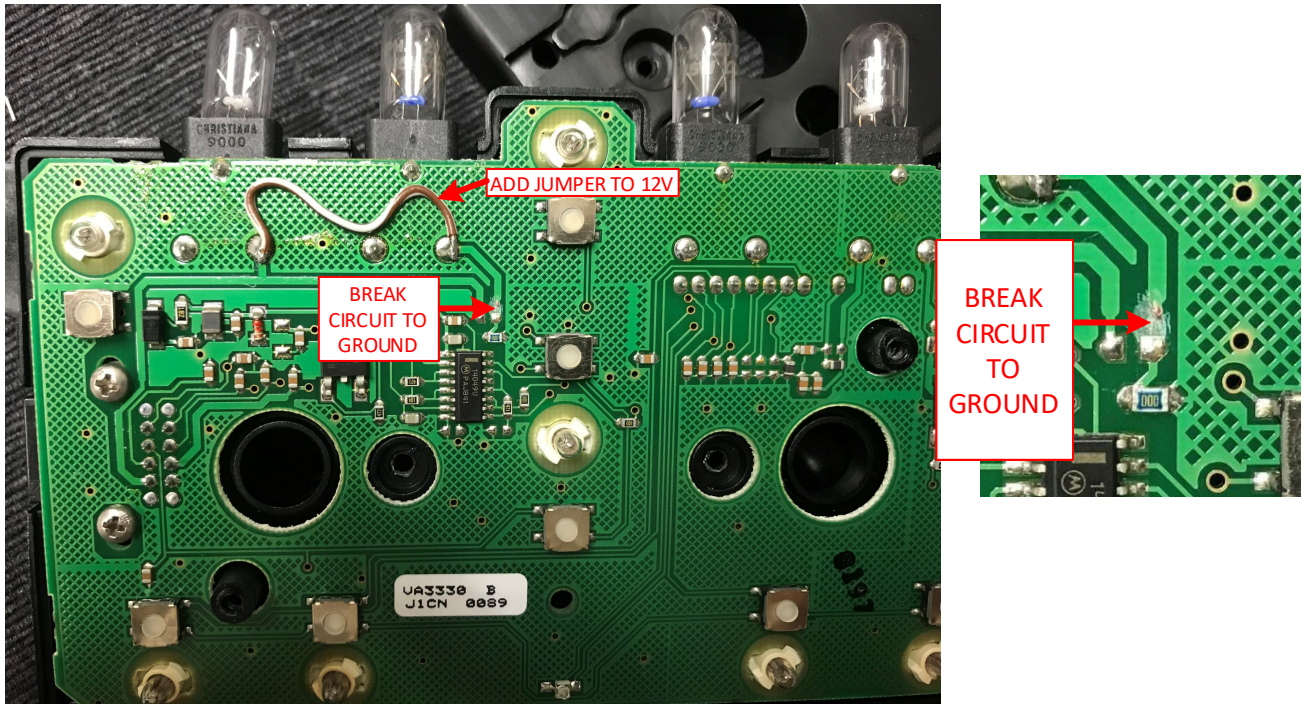
The image shows the change on the circuit board. The circuit board trace to be cut is at the point of the arrow. The trace originates at the lamp terminal, is wide for a short distance then becomes narrow just before it passes thru a surface mount resistor to the ground grid. I cut it at the narrow point. The trace can be cut by carefully scraping off the surface coating to the copper trace, then severing the copper and establishing a separation between the ends. The jumper carries 12V from the map light to the two interior lights. That's it. The X308 lighting module and GDO is now compatible with the X300.



X308 INTERIOR/MAPS LAMP CONSOLE



X308 INTERIOR/MAPS LAMP CONSOLE MODIFIED FOR X300 BPM



X308 INTERIOR/MAPS LAMP CONSOLE CIRCUIT BOARD MODIFICATION