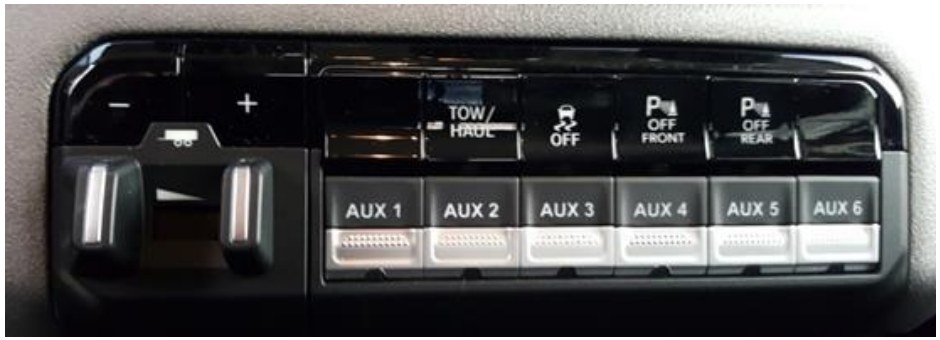
AUXILIARY SWITCHES

Starting in 2019 vehicles equipped with Auxiliary (Aux) Switches will have 6 Aux Switches. These switches are integrated into the vehicle electrical architecture and communicate over a LIN bus to the vehicle. The low current outputs control relays in the Aux Power Distribution Center (PDC). The outputs of the relays go to the 2 four way connectors (light gray and dark gray) that are located on the inboard side of the Aux PDC. The vehicle comes with a kit containing wires terminated with the proper terminal that can be installed into the 4 way connectors and spliced to. The Aux switch functionality can be programmed to change how each one works.



- 6 Switches located in the lower switch bank of the I/P – all are auxiliary switches
- All aux switches can be programmed in the EVIC to be battery or ignition function, momentary or latching, and remember last state (for ignition operation). Please see the programming flow chart on page 6.
- Fuse sizes (rating) for the switches are customer choice via fuse relocations. See the Upfitter Schematic for detailed instructions.
- Connections to the auxiliary switch controlled outputs are located in two 4-way connectors mounted on the side of the Auxiliary Power Distribution Center (PDC) located underhood on the drivers side against the bulkhead.
- The caps of the two 4-way connectors (light gray and dark gray) are used in conjunction with the eight wires that have ¼ inch blade terminals crimped on them that are in the upfitter wiring kit that comes with the vehicle. Remove the green plugs for the circuits that are to be used and insert the blade terminal with the seal around the wire into the desired cavity. It will “click” into place.

AUXILIARY POWER DISTRIBUTION CENTER

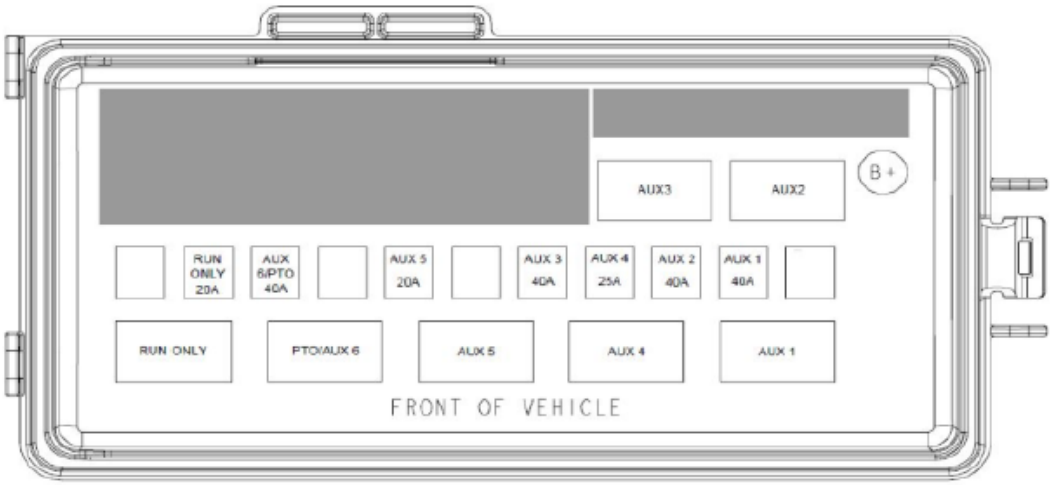
Auxiliary Power Distribution Center (Aux PDC)

The Aux PDC contains 7 relays related to auxiliary functions. Six relays are for Aux switch outputs. There is also an Upfitter Ignition relay as well. The fuses for the outputs can be moved to provide the necessary current depending on the specific Aux output load. The fuses are not to exceed the total current as noted in the Upfitter Schematics portions of the information in the Upfitter Schematics are shown below. Refer to the Upfitter Schematics for detailed schematics of the system.

Max Combined Fuse “rating” allowed for Aux Switch 1,2,3,4,5,6, Run Only & Battery is 210 Amps.
These fuses can be rearanged in the box as necessary. Max allowable total continuous amperage draw is 1

AUXILIARY PDC Topology

Additional relays not related to Aux functions are grayed out



Max Combined Fuse "rating" allowed for Aux SW 1, 2, 3, 4, 5, 6/PTO, Run Only & Battery is 210A. Fuses can be relocated in box as necessary.
Max allowable combined total continuous amperage draw is 135A.
Max fuse "rating" in any one location is 40A.

***The upfitter/customer is responsible for placing the correct fuse in the correct location depending on the actual load.**

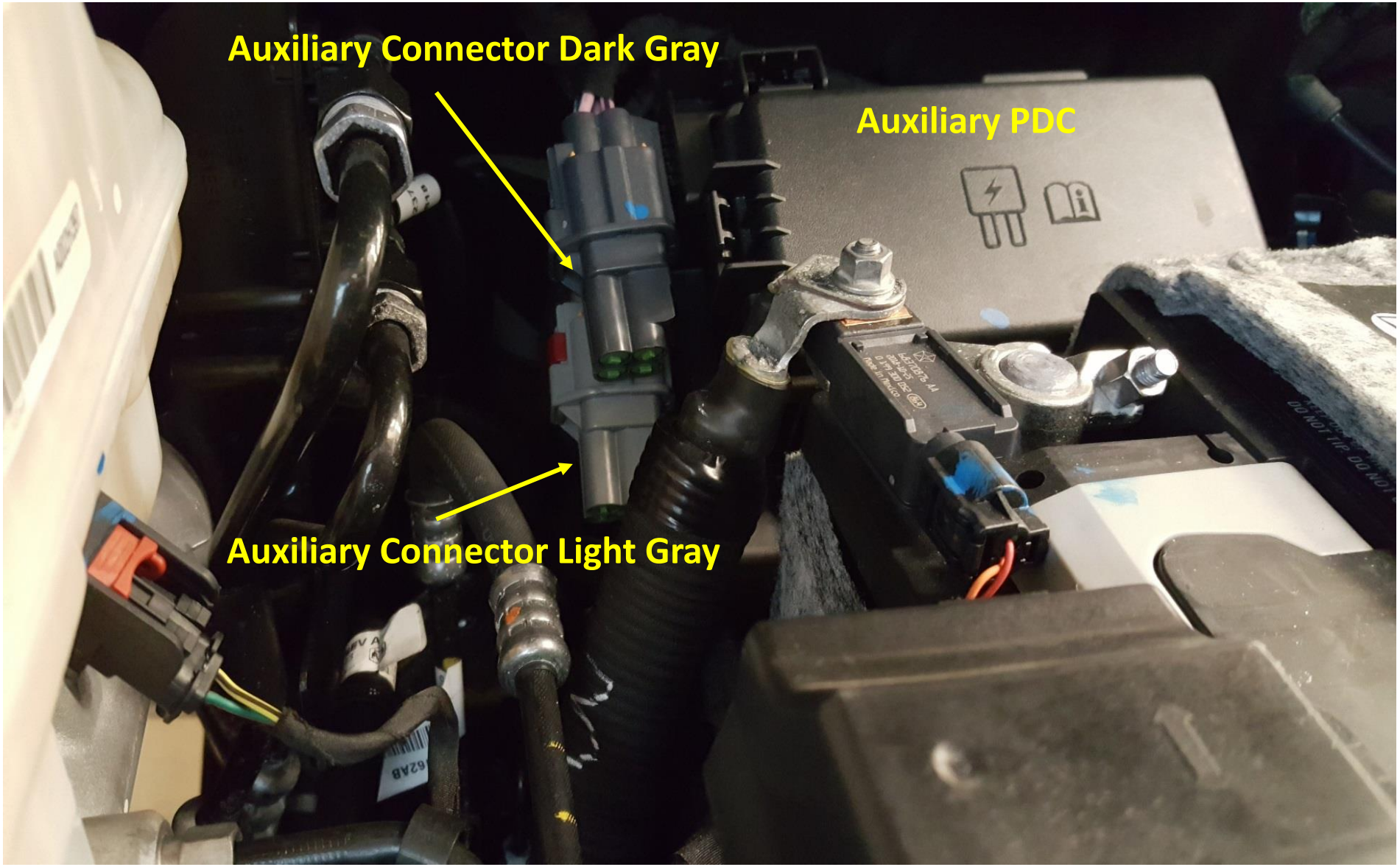
***Amperages shown in schematics are for fuses/circuits as installed for the vehicle as sold and will change as fuses are reconfigured.**

Sheet.2

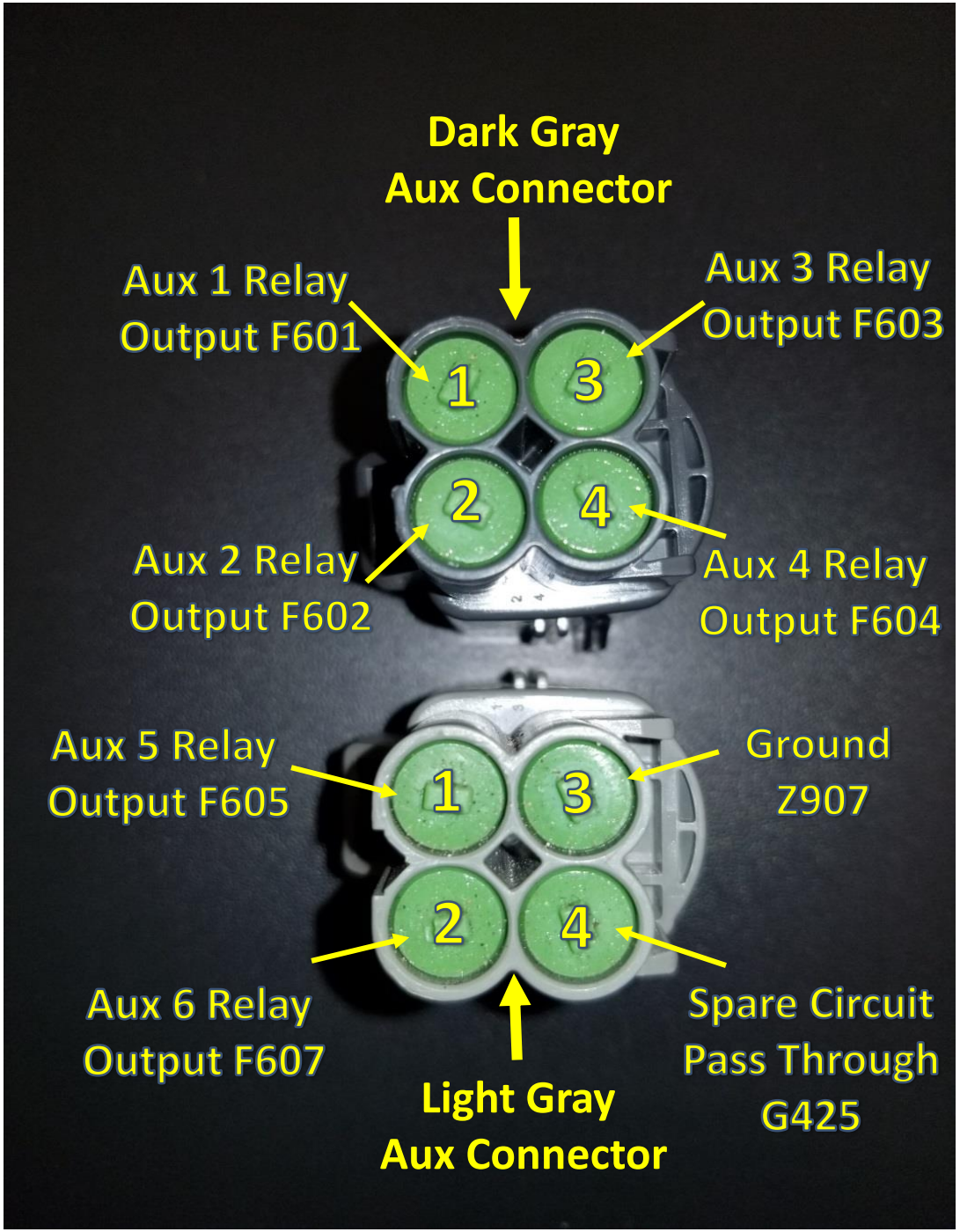
MAX ALLOWABLE CONTINUOUS AMPERAGE DRAW PER FUSE RATING

FUSE RATING	MAX ALLOWABLE CONTINUOUS AMPERAGE
20A	14A
25A	17.5A
40A	28A

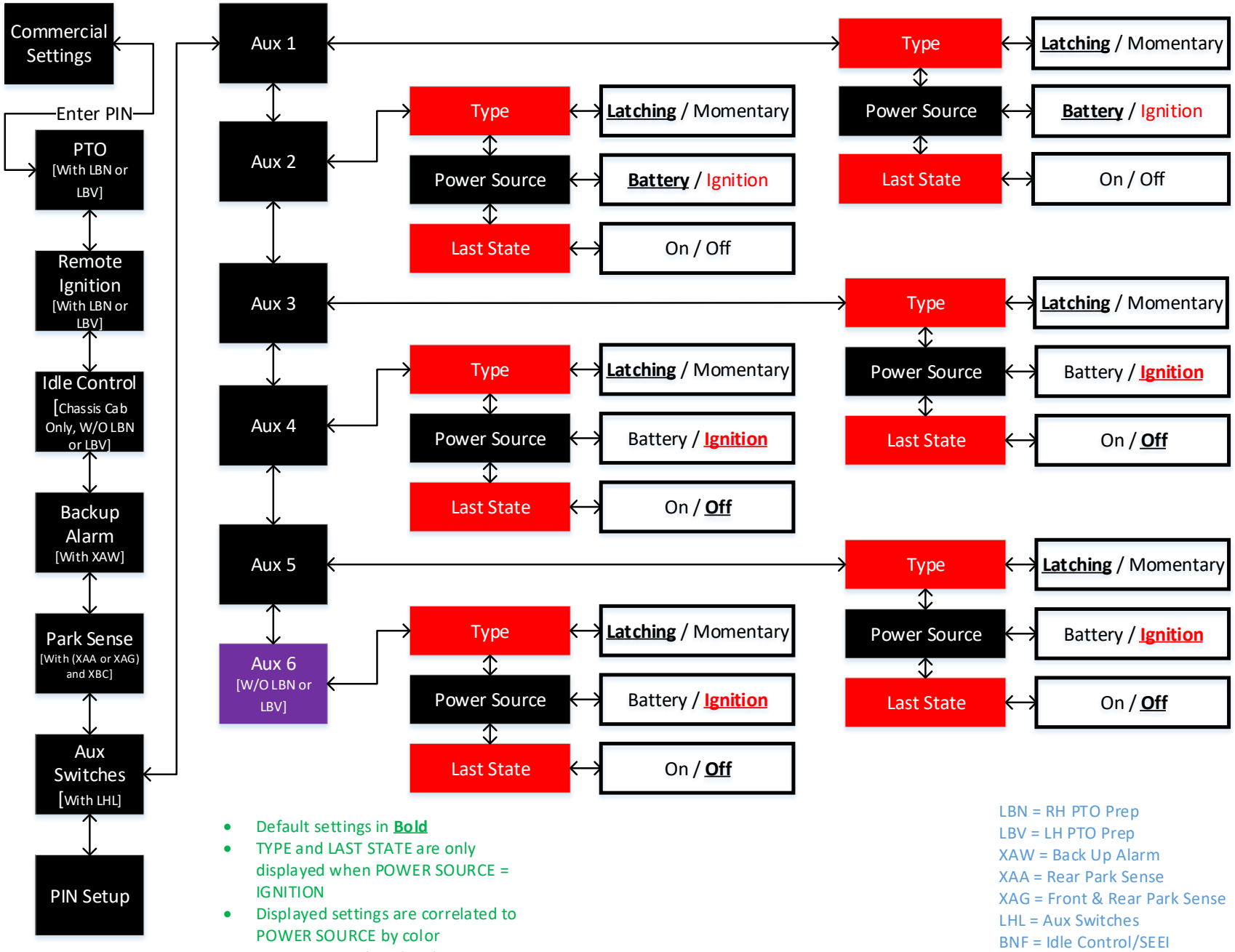
Auxiliary PDC & Connector Locations



Auxiliary & PTO Switch Circuit Locations



Auxiliary Switches Programming Flow Chart



- Default settings in **Bold**
- TYPE and LAST STATE are only displayed when POWER SOURCE = IGNITION
- Displayed settings are correlated to POWER SOURCE by color
- Aux 6 Not Displayed with PTO Prep

LBN = RH PTO Prep
LBV = LH PTO Prep
XAW = Back Up Alarm
XAA = Rear Park Sense
XAG = Front & Rear Park Sense
LHL = Aux Switches
BNF = Idle Control/SEEI
XBC = Delete Pickup Box