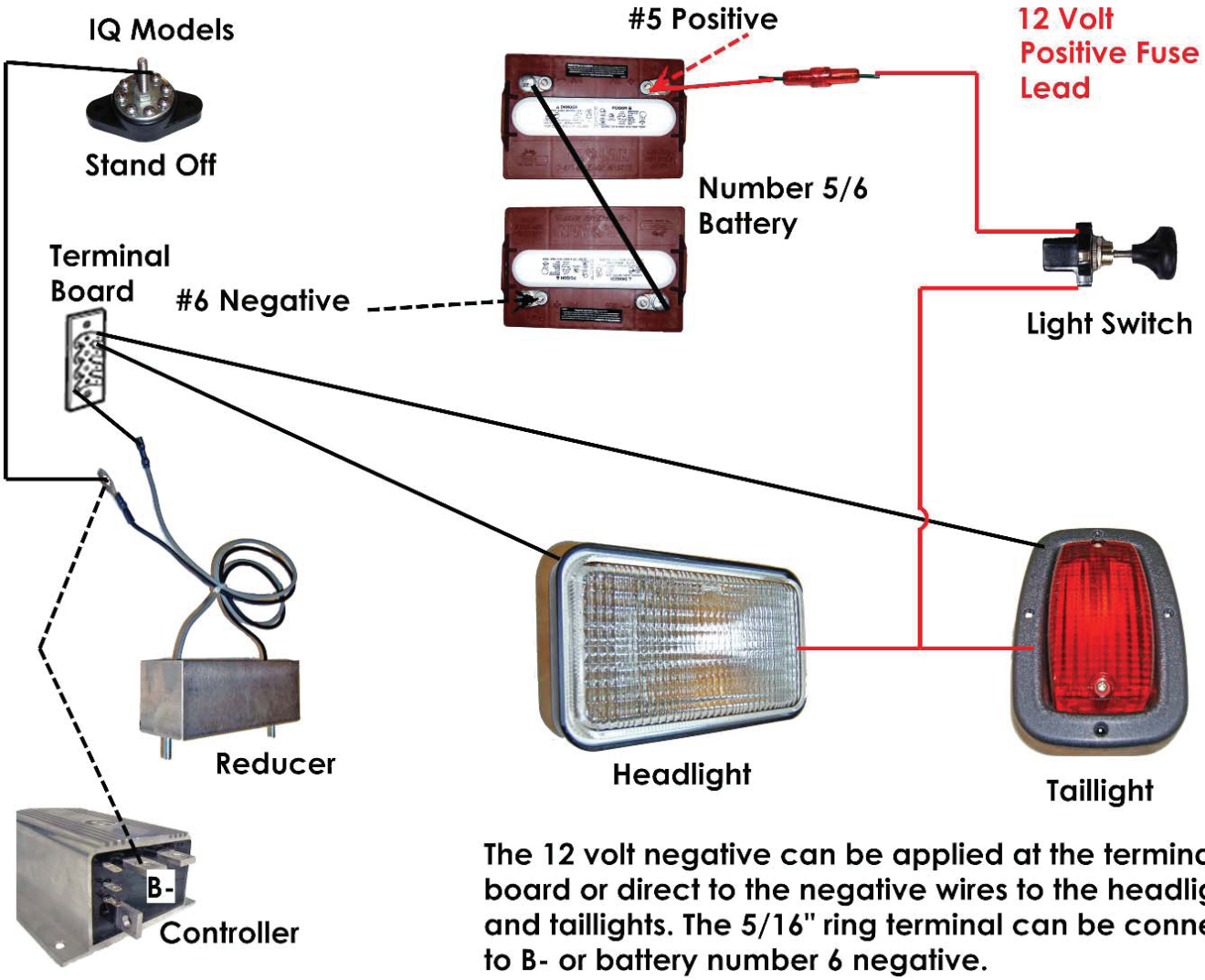
Voltage Reducer Instructions: ELE UNV 434

Always wear appropriate eye protection during the install!

Disconnect the battery pack at main negative and positive. If your car uses a run/tow switch place the switch in the tow position before disconnecting the batteries!

YOU CANNOT USE THE REDUCER WITH A FRAME GROUND! The reducer is designed to work as an Isolated Negative. This means battery negative returns to the battery pack through the reducer system wiring and not the frame. Likewise battery positive is not to be used on the frame. You must not have more than 10 millivolts to the frame either positive or negative. If you have more than 10 MV to the frame it must be removed before using the reducer.
By the use of an ohmmeter from battery positive and battery negative to the frame you cannot have over 15K ohms. What this means is connecting the ohmmeter to the car's main positive and negative wires and to the frame (battery pack disconnected). Warranty is not covered for a reducer that is frame grounded!

- The reducer becomes very hot during use and must be mounted to a solid metal frame for heat dissipation. Do not mount on plastic and insure you have 2" of clearance from other components.
- Drill two holes, each, spaced 5" apart. Insure there will be no mechanical interferences and that an appropriate path for the wiring exists. Club Car has two pre-drilled holes on the driver's side I-Beam for mounting the reducer.
- Verify the battery pack is a composed of a string of 8 VDC batteries. The reducer is designed for use with two 8 volt batteries only.
- The reducer is for 16 to 12 volt reduction only. It will not reduce 48 volts to 12 volts!
- The 5/16" ring terminal is connected to battery number 6 negative post or B- on the speed controller. On later model IQ cars you can connect to the Negative Stand Off stud located next to the computer (a 1/4" ring will be needed and is not supplied with this kit).
- The gray wire with the .250 female faston connects to the 12 volt accessory terminal board or directly to the 12 volt negative circuit.
- Connect a 25 amp fast acting fuse to the 12 volt positive lead wire connecting to battery number 5 positive post.
- This unit is rated at 16 amps continuous duty with a 20 amp in-rush. Poor heat sink mounting and over amperage draw on the unit will cause damage to the unit.
- This reducer is designed for a 2-wire/12 volt application only and chassis return for -12 (negative) vdc cannot be used.
- The reducer during operation is very hot! (do not touch until it is cooled).
- Radios must be isolated from the chassis of the vehicle (no frame ground).
- The negative feed wire to the radio can be mounted to frame with the use of a 1uF capacitor (polypropylene, polyester or metalized film) to improve the radio noise performance.
- Radios must be fused properly per manufacturer specifications.



The 12 volt negative can be applied at the terminal board or direct to the negative wires to the headlights and taillights. The 5/16" ring terminal can be connected to B- or battery number 6 negative.

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