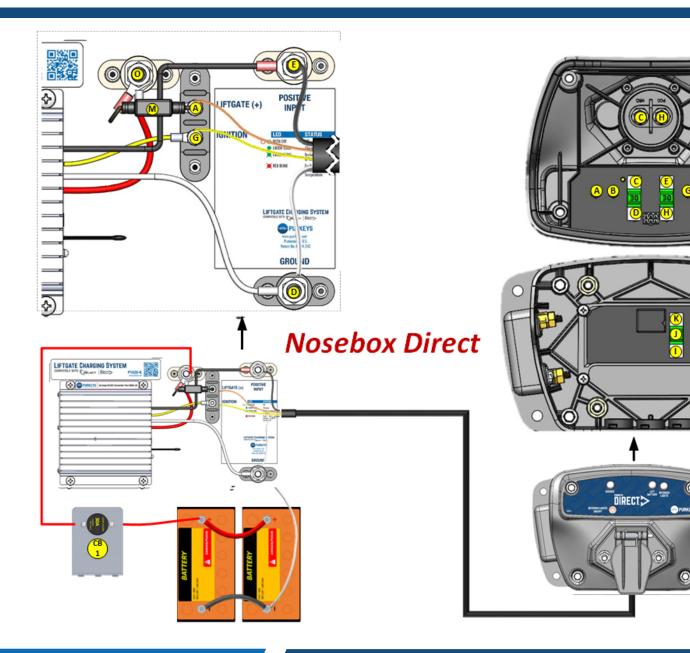
## **DIRECT NOSEBOX**





A Liftgate battery + (14 AWG orange)

**B** Interior light control (16 AWG gray)

**C** Input negative (8 AWG white/4 AWG black)

**D** Liftgate battery negative (ground)

**E** Input to converter (8 AWG black)

**G** Ignition (16 AWG yellow)

**H** Dual pole + (10 AWG orange in-line fuse/4 AWG red)

Input to interior lights

**J** Interior light fuse

**K** No wire

M 2 amp in-line fuse

**0** Converter output (10 AWG red)

**P** Interior light output



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## **Operation:**

If severe service is utilized, placing the switch to the OFF position bypasses our system and the batteries are being charged directly from the dual pole. This can be used when the batteries are in a very low state of charge to bring the batteries up quickly.

Placing the switch to the ON allows our system to charge the batteries.

At 13.2 volts the Direct waits 5 minutes or at 13.8 volts immediately, the direct sends a signal to the converter through the ignition wire to come on. This voltage needs to be 10 volts or higher. When the source voltage drops below 13.8 volts, the Direct goes into extend mode. Every 2 minutes, the Direct looks at the source voltage, if above 12.4 volts it remains on. The extend function is 1 hour unless source voltage drops below 12.4 volts, then the Direct removes the signal to the converter immediately.

The power source for the interior lights can be dual pole, reefer, aux or liftgate batteries. The source is connected to (M) ground and (I) dual pole positive.

## Installation tips:

1. Before starting installation, remove the positive cable from the battery or pull the 2 amp fuse out of the fuse holder on the charging plate.

2. If available, solder the ring terminals after crimping and before applying heat shrink to assure a solid connection.

3. Be sure all connections in the controller are tight before closing it up.

4. Be sure all connections are tight on batteries and charging plate before hooking the positive cable back up or installing the 2 amp fuse.

5. When running the 4-conductor cable main harness in the channel toward the back of the trailer, secure it with zip ties or cable clamps as you go and avoid sharp edges and possible chaffing points.

6. Make sure the 4-conductor main harness enters the liftgate battery box through a dome nut or rubber grommet to prevent chaffing the harness, which could result in a possible short in the system.

## Preventative Maintenance Torque Check

Purkeys would like to suggest that on all preventative maintenance checks or repairs to a Direct, all threaded stud junctions be checked for proper tightness, as the nuts may loosen over time. To reduce this chance of loose fasteners, Purkeys has changed the design to incorporate Nyloc nuts in future products.

Size	Recommended Torque
8/32	20 inch-lbs
10/32	25 inch-lbs
1/4-20	60 inch-lbs

