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| DOC #                              | PROCESS NAME                     | PAGE   | REVISION | STATION | BY     | DATE       |
| <b>Recall<br/>16V769</b>           | Engine May Start Without Warning | 1 OF 3 |          | SER     | C.Ward | 10/24/2016 |

Read process before beginning. If you do not understand any part please contact: Chris Ward, Director of Parts and Warranty at 1-866-953-5555 or by E-mail @ cward@ARBOCSV.com.

Good Mechanics safety practice must be followed on any repairs.

Safety practices should include but not be limited to properly supporting the chassis, axles, blocking tires, and a work area free of clutter.

Repair shops safety rules must be followed and safety equipment used. O.E.M. Battery and Auxiliary Battery MUST be disconnected.

**The purpose of Recall 16V769 is on certain vehicles, the rear run safety switch (lockout) was not wired properly. This allows the vehicle to start with the possibility of a mechanic working on the engine. This could increase the risk of mechanic safety causing injury and/or death.**

**Complaint:** Vehicle can possibly be started from driver compartment with mechanic in engine compartment

**Cause:** Electrical mis-wiring into the power distribution module (PDM)

**Correction:** Re-wire and add a relay to correct the circuit

**Vehicles Affected:** Selected 2016 ARBOC Spirit of Liberty Units

**Labor Operation Code:** **RC057301**

**Labor Time Allowance:** 1.5 hours per unit

**Tools Required**

Heat gun

Screw gun

**Parts List**

(1) 2003732 - Harness, Rear Run Box Jumper w/Relay

**Verifying Function:**

1. Open the rear engine compartment door

2. Locate the Rear Run Box Switches in the engine compartment



3. The Switch function should be:

a. Front - Vehicle will only start from the front (driver compartment) - checks to perform:

i. With the switch in the Front position (up), start the vehicle from the front. It should work.

ii. With the switch in the Front position (up), attempt to engine start the vehicle from the rear. It should NOT work.

b. OFF - Vehicle will NOT start from either the front (driver compartment) or the rear (engine compartment) - checks to perform:

i. With the switch in the OFF position, attempt to start the vehicle from the front. It should NOT work.

ii. With the switch in the OFF position, attempt to ignition start the vehicle from the rear. It should NOT work.

c. Rear - Vehicle will only start from the rear (engine compartment) - checks to perform:

i. With the switch in the Rear position (down), attempt to start the vehicle from the front. It should NOT work.

ii. With the switch in the OFF position (down), attempt to ignition start the vehicle from the rear. It should work.

4A. If the unit functions correctly, please submit warranty documentation including notation that NO further changes were required.

4B. If any of the functions of the rear run box are incorrect, please continue to the repair section for re-wiring instructions.

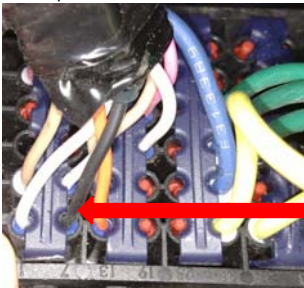
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**Repair Instructions:**

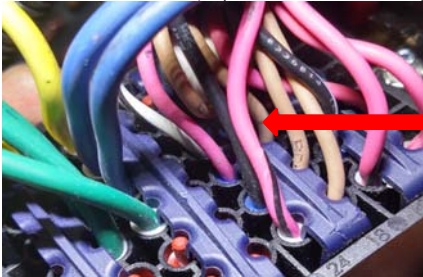
1. Disconnect batteries
2. Locate, unscrew, and pull out the Power Distribution Module (PDM) from the rear wall of battery compartment box



3. Locate the Black Wire (Bay 7 of PDM - next to white wire), cut, and connect to the Black wire in the Jumper Harness with butt connector (crimp and heat shrink)



4. Locate the Tan Wire (Bay 18 of PDM - 3rd wire up), cut, and connect to the Red wire in the Jumper Harness with butt connector (crimp and heat shrink)

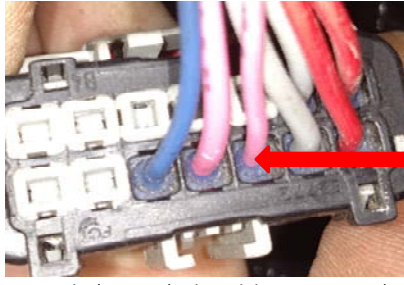
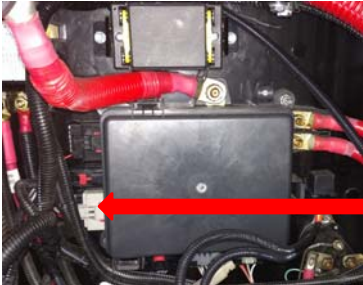


5. Re-secure PDM
6. Unplug Grey plug from the bottom left side of the compartment

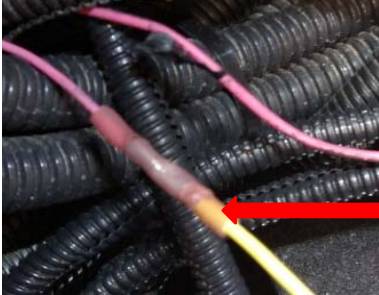


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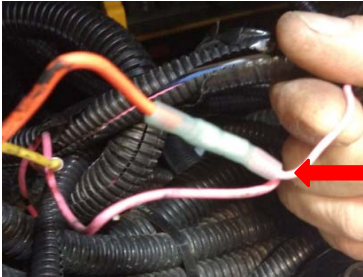
7. At the Grey Plug, locate smaller pink wire in the plug, follow the wire to a butt connection in the sheathing, and cut out the butt connector section (discard)



8. Connect the Yellow wire in the Jumper Harness to the Pink Wire on the 'Harness' side with butt connector (crimp and heat shrink)



9. Connect the Orange wire in the Jumper Harness to the Pink Wire on the 'Plug' side with butt connector (crimp and heat shrink)



10. Re-connect Grey plug

11. Mount relay on the back wall



12. Re-connect batteries

13. Complete the verification of the functions (above) to ensure it is operating correctly

14. Submit documentation for warranty claim including notation of required repairs