

## **SM300 ZTR Jumper TSB**

### **LAY-TSB-15-002**

**Date:** March 12, 2015

**Model:** SM300

**Product Issue:**

Laymor has determined that the ZTR module relay is wired to battery power causing a quiescent drain on the battery. Battery drain is expected if unit is left parked for 10-15 days or more.

**Units affected:**

SM300 units 35627, 35628 and 35629

**Parts kit:**

Sealed butt/solder splices two required

**Overview:**

Units involved in this are to follow the standard Laymor warranty procedure. See Illustrations below for an overview of the scope of the repair.

**Tools needed:**

Wire cutters/strippers, crimping pliers

**Approved SRT:**

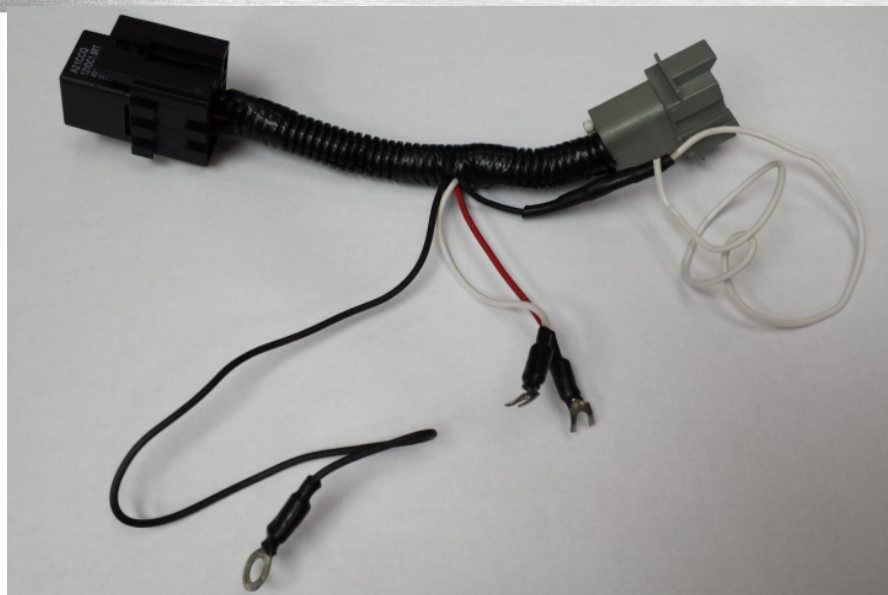
The Laymor approved standard repair time for this service bulletin is .5 hours.

**Instructions:**

Pull unit into approved level work area. Turn the engine off and place it in park.

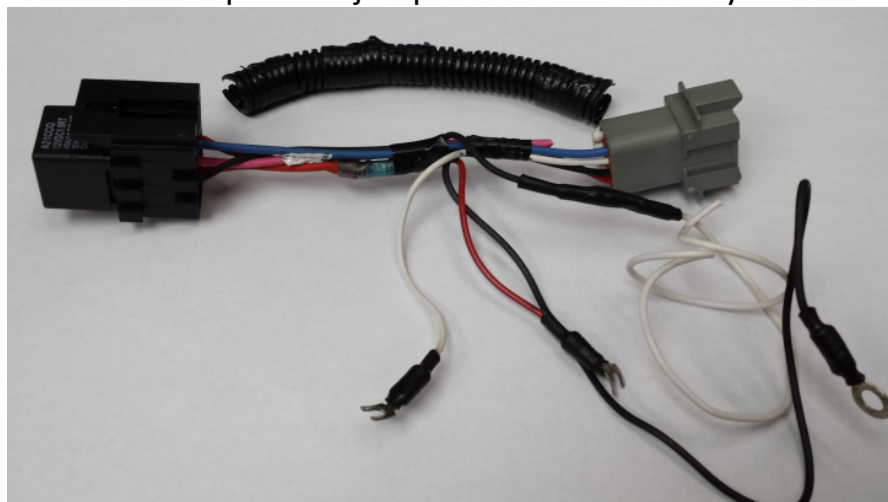
The primary goal of these rework instructions is to change the Relay power supply, pins 30 and 86, from battery power to ignition power.

1. Find ZTR jumper/relay under the right side of the dash panel.
  - a. You can follow the cable leading from the ZTR module, mounted to the right side of the dash support column, to the ZTR jumper.
2. Carefully note where the jumper connects into the SM300 electrical system.
  - a. At the end of this process the jumper will need to be re-installed in the same manner.
3. Disconnect the ZTR jumper, pictured below, from rest of unit's electrical system.
  - a. Cut the white wire in a way which is advantages for re-splicing during reconnection.



b.

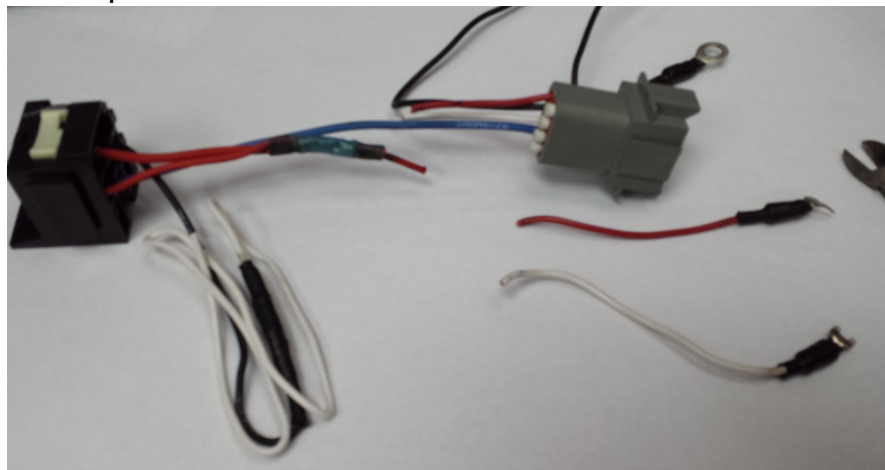
4. Remove loom and tape from jumper. Disconnect relay.



a.

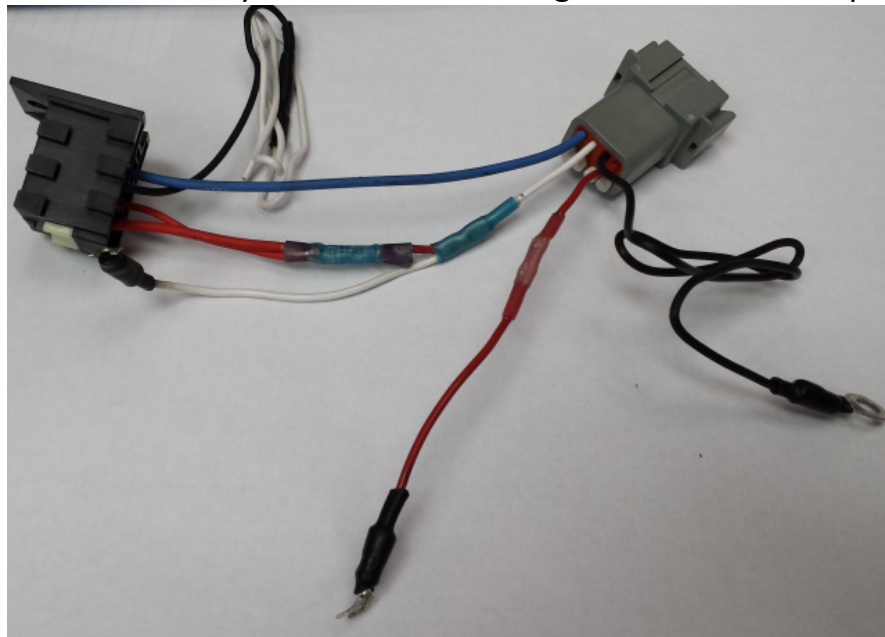


- b.
5. Cut the red and white wires leading from the grey connector as described and shown below.
    - a. Cut the red wire approximately 1 inch from the splice already present.
    - b. Cut the white wire at approximately the same location.
  6. Cut the red wire with ring terminal coming from the already present splice flush to the splice.



- a.
7. Strip the following wires
    - a. Red and white wires with terminals.

- b. Red and white wires extending from the grey connector.
- c. Red wire extending from the already present splice.
- 8. Splice the white wire (coming from the gray connector), the white wire (with the terminal), and the red wire (extending from the already present splice) together. Splice the red wire (coming from the gray connector) to the red wire (with the terminal).
  - a. Ensure that each wire is securely spliced and that the splice is environmentally sealed either through heat shrink or tape.



- b.
- 9. Tape the wires together into a bundle and re-loom the jumper.



- a.
10. Re-install the relay and connect the jumper back into the sweeper electrical system in the same manner in which it was installed prior to removal.

**REVISION HISTORY**

REVISION	DATE	DESCRIPTION OF CHANGE
0	03-12-15	NEW PROCEDURE

**APPROVALS:****DATE:**

AUTHOR	Danals Dunavan	03-12-15
Electrical Engineer	Nicholas Beardsley	03-12-15
Director of Engineering	Jim Keough	03-12-15
Director of Quality	Barbara McCullough	03-12-15