



# Spartan Motors Chassis, Inc.

## SERVICE BULLETIN

RSB13-810-001

NHTSA Id: 13V-066

3/4/2013

Transport Canada Id: TC13-066

**SUBJECT:** Spartan Motors Chassis, Inc. has determined a defect relating to Spartan APS supplied by Takata Protection Systems, Inc. may exist in certain emergency response chassis.

**CONDITION:** Inadvertent airbag deployment.

**APPLIES TO:** This bulletin applies to incomplete vehicles assembled by Spartan Motors Chassis, Inc. as emergency response chassis and equipped with Spartan APS during vehicle dates of manufacturing of 3-9-2012 and 1-30-2013.

**CORRECTION:** Sub-wire harness will be installed on the control module in the Spartan APS and connected to a new ground reference point.

**LABOR ALLOCATION:** 2 hrs.

**PARTS NEEDED:**

| <u>QTY</u> | <u>Part Number</u>       | <u>Description</u>             |
|------------|--------------------------|--------------------------------|
| 1          | S-2389-001               | Kit – RCM Ground Repositioning |
| As needed  | ECK® or equivalent       | Anti-corrosion spray           |
| As needed  | PlastiDip® or equivalent |                                |

**Kit # S-2389-001 Contains:**

| <u>QTY</u> | <u>Part Number</u> | <u>Description</u>                              |
|------------|--------------------|---|
| 1          | 1024050HWTC23Z     | Screw TC#10-24 X 1/2 Hex Zinc                   |
| 1          | 1024KNZ            | Nut-#10-24 KEPS Zinc                            |
| 1          | 3782-GG5A-001      | Harn-Air Bag Restraint Control Mod. GND. Rework |
| 1          | 3893-NN2-012       | Label-RCM Ground Warning                        |
| 2          | 0411-240-2005      | Deutsch Extraction Tool                         |
| 1          | 0636-GG5-H15       | H/Shrink Thin Wall                              |
| 1          | RSB13-810-001      | Document Instructions                           |

**GENERAL INSTRUCTIONS:**

Please thoroughly review entire work procedure before starting work. If there are questions and/or concerns with steps defined in this procedure, contact Spartan Motors Chassis, Inc. Customer & Product Support Group.

All applicable industry safety standards must be followed when performing work identified in this procedure.

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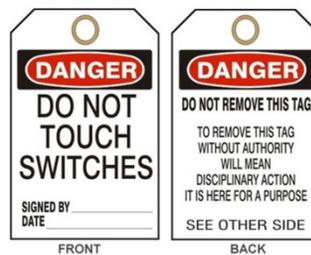


### STEP-BY-STEP INSTRUCTIONS:

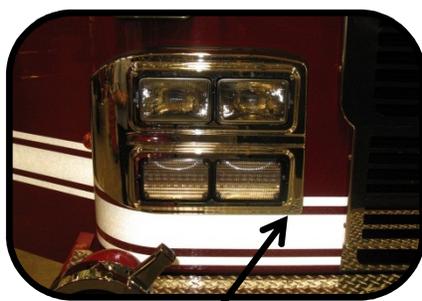


**Unit must be mounted, torqued, and connections installed in finished position before powering up. Failure to do so could result in an inadvertent airbag deployment which could result in personal injury or death.**

1. Ensure power is off to vehicle, both master and ignition; attach appropriate lock out tag on these switches.



2. Remove all items from the glove box.
3. Remove all equipment located on the officer's side dash near the glove box.
4. Remove the officer's side dash, which contains the glove box is fastened by screws. In a typical installation 3 screws are used but may vary based on the dash. Retain dash and screws for reuse.
5. Remove officer side headlight bezel mounting screws (4). Retain for reuse. Refer to FIG. 2-1.
6. Remove officer side headlight bucket mounting screws (4). Retain for reuse. Refer to FIG. 2-1.



**Headlight bezel**



**Headlight bucket**



**Inside view behind headlight bucket**

**FIG. 2-1**

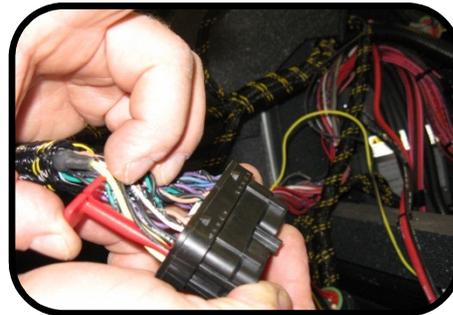
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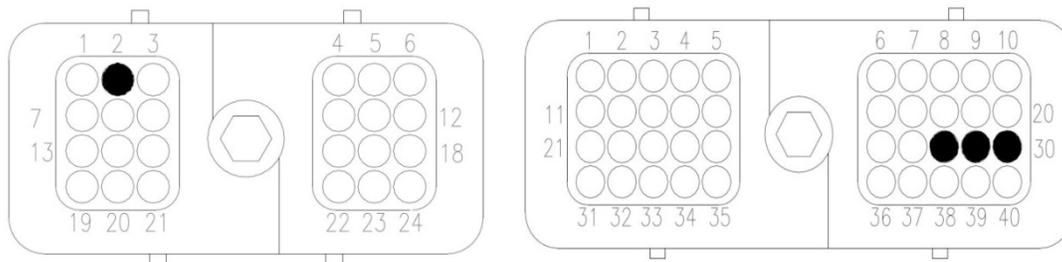
7. In the 24-way RCM interface connector using the supplied de-pinning tool (0411-240-2005), de-pin and remove wire SP1599B from cavity 2. Refer to FIG. 3-1.
8. In the 40-way RCM interface connector using the supplied de-pinning tool (0411-240-2005), de-pin and remove wires SP1599C from cavity 28; SP1599D from cavity 29; SP1599E from cavity 30. Refer to FIG 3-1.



**RCM 24-way interface connector**



**RCM 40-way interface connector**



**FIG. 3-1**

9. Cut terminals off the de-pinned SP1599 wires. Properly dispose of.
10. Loop and heat shrink. Refer to FIG. 3-2.



**FIG. 3-2**

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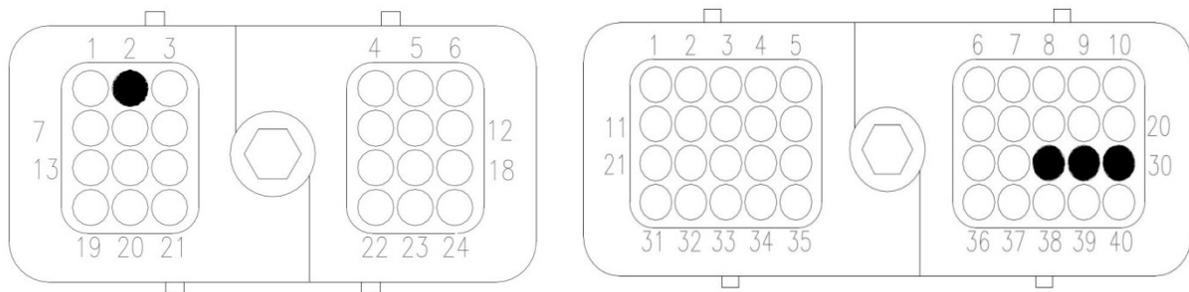
11. In 24-way interface connector pin ground wire from the RCM ground harness (supplied) into cavity 2. Refer to FIG. 4-1.
12. In 40-way interface connector pin ground wires from the RCM ground harness (supplied) into cavities 28, 29, and 30. Refer to FIG. 4-1.



**RCM ground harness to  
RCM interface connectors**



**Tape harness and any loose wires  
to existing harness**



**FIG. 4-1**

13. Locate and drill a 3/16 in. hole into the front bulkhead. Refer to FIG. 5-1.
14. Grind the surface area around the drilled hole both inside the cab and outside of the cab behind the headlight bucket leaving a minimum of 2 in. diameter bare aluminum around the hole. Refer to FIG. 5-1.

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**Drill 3/16" hole**



**Exposed raw surface area  
inside of cab bulkhead**



**Exposed raw surface area  
behind headlight bucket**

**FIG. 5-1**

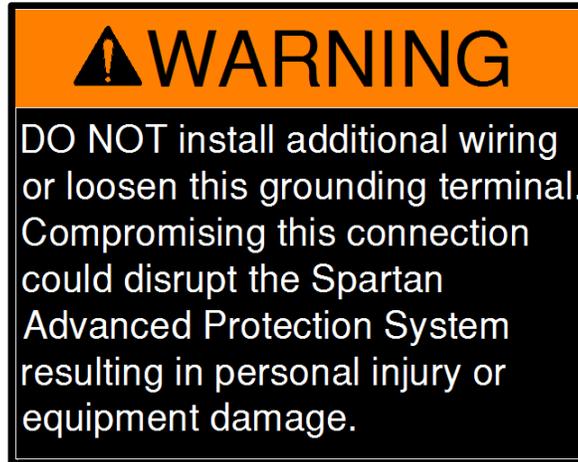
15. Attach mounting screw (1024050HWTC32Z) through the eyelet and place screw into the 3/16 in. hole located inside of the front bulkhead.
16. Attach nut (1024KNZ) to the mounting screw from the backside of the front bulkhead, tighten mounting screw (fully driven, seated, and not stripped) and spray external area with PlastiDip or equivalent. Refer to FIG. 5-2.
17. Apply ECK or equivalent to the head of the bolt, the ring terminal, and the bare aluminum cab surface. FIG. 5-2.



**FIG. 5-2**

18. Add warning label (3893-NN-012) to the front bulkhead inside of the cab next to the mounting screw. Refer to FIG. 6-1.

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**FIG. 6-1**

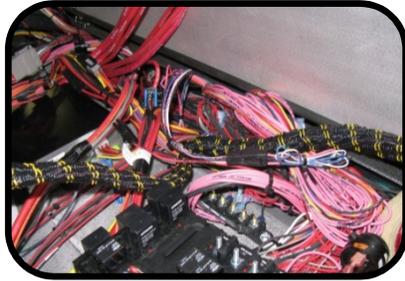
19. Re-install headlight bucket and headlight bezel using retained hardware. Refer to FIG. 6-2.



**FIG. 6-2**

20. Locate SP185 wire connected to SP1599, behind the rocker switch panel, center forward location, cut off the connector and terminal, loop and heat shrink the wire. Refer to FIG. 7-1.

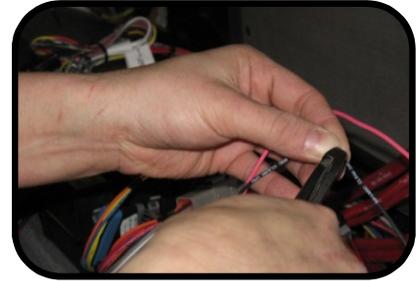
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**SP185 and SP1599 interface  
Connection center of dash**



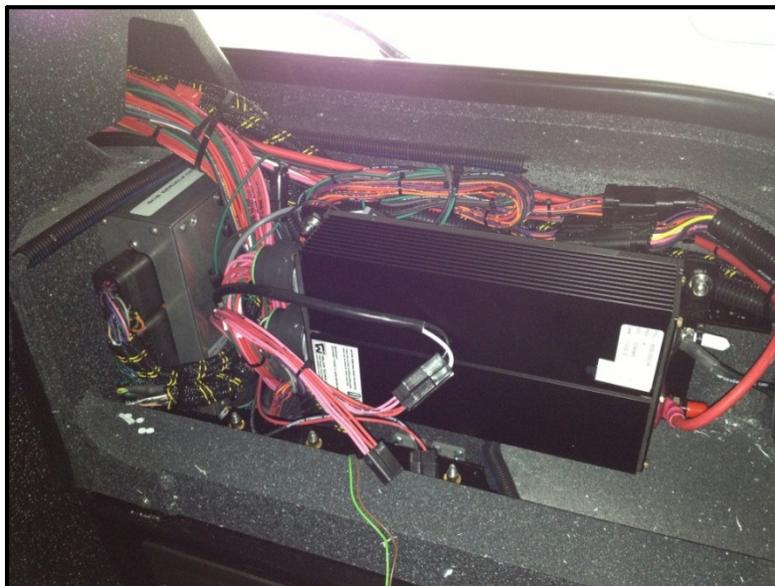
**SP185 Wire**



**Cut SP185 wire and loop  
heat shrink both ends**

**FIG. 7-1**

21. Connect supplied RCM to connectors as shown in the document below and torque the connections as shown with a 4mm Allen wrench. Torque 27 lbs. in. Connect the round connector located on bottom of the RCM. Be sure to install tamper evident sticker over the connection point.
22. Once RCM is installed, excess/service loop of harnesses must be zip tied back in place so remaining component(s) may be installed. Once this has occurred re-install the electrical device(s) in its mounting position. Refer to FIG. 7-2.



**FIG. 7-2**

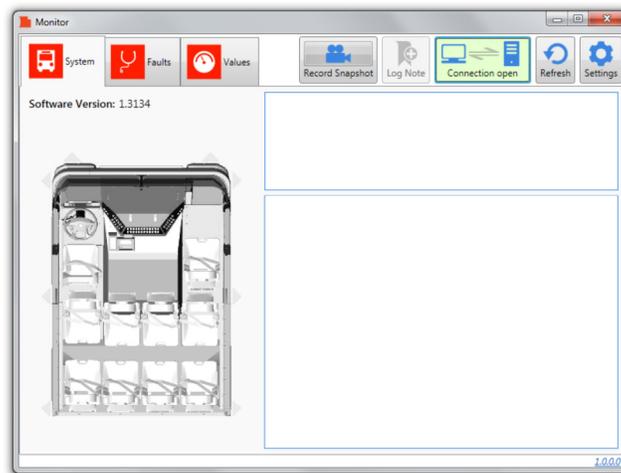
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23. Complete a diagnostic verification test prior to attaching the remaining parts of the dash. Ensure the RCM is firmly mounted in its location and all connections are firmly seated and connected before continuing with this portion of the installation.
24. Connect to the vehicle diagnostic plug using a typical transceiver (i.e. Dearborn 4 Plus adapter, NexIQ, etc...) while connected to the laptop with the Takata Monitor tool installed.
25. Turn on master, then ignition, (**Do Not start the vehicle**) and connect by double clicking the monitor tool icon (example shown below).



26. If configured previously the diagnostics will automatically connect, otherwise you will have to change your settings. All troubleshooting steps may be reviewed via the Takata Monitor User Guide which is installed in the software.
27. Once connected to the vehicle, the screen below will be shown though the software will be a different version. If the screen does not look like the picture, refer to FIG. 8-1 there may be faults. Any faults should be accompanied by the SRS light illuminated on the dash. Contact Spartan Motors Chassis, Inc. Customer & Product Support Group if there are faults but no light or vice versa. Select the appropriate item and follow the troubleshooting steps provided in the software. Contact Spartan Motors Chassis, Inc. Customer & Product Support Group to report any faults.

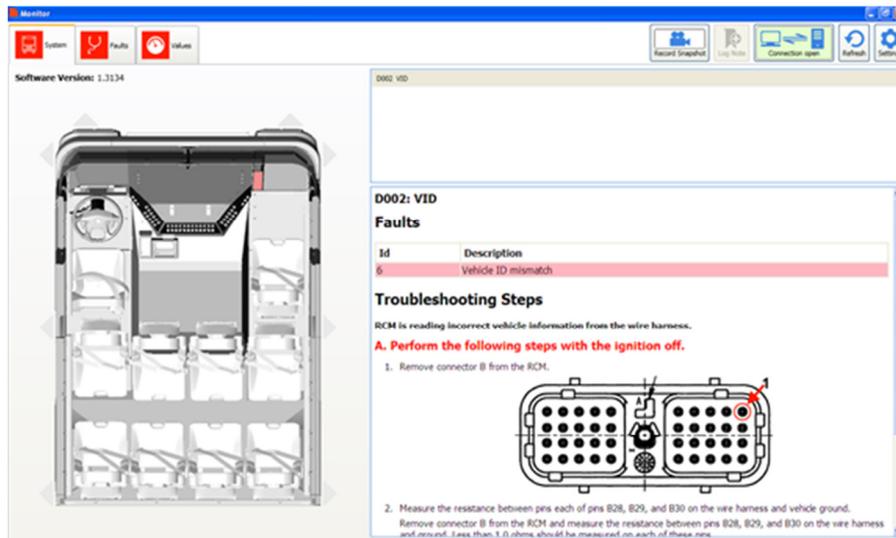


**FIG. 8-1**

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28. An example of a unit with a fault, which will require troubleshooting. Refer to FIG. 9-1.



**FIG. 9-1**

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