



Spartan Motors, Inc.
1000 Reynolds Road - Charlotte, MI - 48813

573 DEFECT & NONCOMPLIANCE REPORT

Description:	Inadvertent brake activation of a selected wheel
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Internal Code:	10010	Date of Report:	5/13/2010
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Submitted to: Associate Administrator for Safety Assurance
National Highway Traffic Safety Administration
1200 New Jersey Ave. SE
Washington, DC 20590

Attn: Mrs. Kelly Schuler, Office of Defects Investigation
Fax: (202) 366-7882
Email: RMD.ODI@dot.gov

Manufacturer Identification: Spartan Motors, Inc.
1000 Reynolds Road
Charlotte, MI 48813

Telephone: (517) 543-6400

Corporate contacts for recall information:

Customer Notification / Customer Service:

Wes Redfield
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Customer Service Operations
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Report prepared by:

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Preparer's Signature: _____

PART 573 Defect and Noncompliance Report

I. IDENTIFY THE VEHICLE MODELS INVOLVED IN THE RECALL

2. Identify the Vehicles Involved in the Recall:

Make:	Spartan Motors Chassis, Inc.		
Model:	Diamond, Furion, Gladiator and Metrostar		
Model Years Involved:	2007 through 2010		
Vehicle Type:	Incomplete fire apparatus and ambulanc chassis/cab		
Weight Range:	From GVWR: 26000 lbs	To GVWR:	86000 lbs
Weight Class:	From Class: 7	To Class:	8
Beginning VDM:	1/29/2008	Ending VDM:	1/25/2010
% Potentially Involved:	100%		

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:

Recalled vehicles categorized by this report are equipped with a Meritor Wabco Electronic Stability Control system.

II. IDENTIFY THE RECALL POPULATION

3. Furnish the total number of vehicles recalled potentially containing the defect or non-compliance

MODEL	MODEL YEAR	No. POTENTIALLY INVOLVED
Gladiator	2008	76
Metrostar	2008	28
Furion	2008	1
Diamond	2008	1
Gladiator	2009	205
Metrostar	2009	84
Furion	2009	5
Gladiator	2010	42
Metrostar	2010	24
Furion	2010	2
TOTAL:		468

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance.

Approximate Defect Percentage: 100%

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:

The recall population was determined by utilizing the part number of the ESC control module and querying bills of materials that contained the required part.

III. DESCRIBE THE DEFECT OR NONCOMPLIANCE

5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

In certain cases, the ESC system may inadvertently interpret vehicle instability, even though the vehicle may be stable, which would require intervention of brake activation to a selected wheel.

Describe the cause(s) of the defect or noncompliance condition.

Electromagnetic interference is simulating a false yaw event in the control module for the ESC system.

Describe the consequence(s) of the defect or noncompliance condition.

Inadvertent brake application to a selected wheel may cause the driver to try and over correct resulting in a vehicle crash.

Identify any warning which can (a) precede or (b) occur.

There are no warnings or detectable methods before brake application occurs.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address:	
Generic Component Name:	ESC Control Module
Supplier Part Number:	TBD
Spartan Part Number:	0374-GG3-015 0374-GG3-016
Supplier Corporate Name:	Meritor Wabco
Address:	2135 West Maple Road Troy, MI 48084
CEO or Knowledgeable Rep:	Elizabeth Woodhull

IV. PROVIDE THE CHRONOLOGY IN DETERMINING THE DEFECT/NONCOMPLIANCE

If the recall is for a defect, complete item 6, otherwise item 7

6. If defect, furnish a chronological summary with dates of all the principle events that were the basis for the determination of the defect. Include number of reports, accidents, injuries, fatalities, and warranty claims.

9/11/09 09V-208 SAS recall performed on unit in Sugarland, TX.

9/29/09 Received first complaint of erratic steering on same unit

10/2/09 Spartan attempted to duplicate the complaint but failed to do so.

10/5/09 Vehicle configuration was verified and components verified to be correct for configuration.

10/22/09 ESC module replaced

11/19/09 Meritor Wabco provided training on system for the fire department.

1/11/10 Received second complaint of erratic steering on the aforementioned unit.

2/3/10 Spartan & Meritor Wabco technicians observe truck & collect data

3/9/10 Spartan & Meritor Wabco engineers observe truck, the condition was reproduced. The ESC module was removed and the condition went away.

3/25/10 Follow up with fire chief indicates no further complaints

4/13/10 Wabco engineers travel to Spartan to evaluate chassis in production

4/14/10 Further investigation by Spartan engineers discovers condition occurs when the ESC module is subjected to a magnetic field caused by a specific current and frequency

4/27/10 Wabco provides report confirming Spartan findings

5/6/10 Spartan Motors, Inc. determines a defect related to motor vehicle safety exists in the units equipped with this system.

5/17/10 Investigative trip to Charlotte, NC to review customer complaint of issue. Electromagnetic interference was identified and proposed remedy applied then validated.

6/3/10 A "Stop Ship" of all affected producted is issued and all units quarantined for the remedy to be applied.

6/10/10 Investigative trip to Kentucky to review customer complaint of issue. Unit appeared to be operating as designed.

7. If noncompliance, identify and provide the test results or other data in chronological order with dates on which the noncompliance was determined.

N/A

V. IDENTIFY THE REMEDY

8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.

The cable providing electrical power for the transmission will be routed from the right side (curb) of the vehicle to the left side (street) of the vehicle eliminating the electro magnetic interference at the ESC module.

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

The location of the cable will physically be in two different locations.

Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.

The production remedy is the same as the field remedy. It was corrected in production on, or near, 16JUN10.

VI. IDENTIFY THE RECALL SCHEDULE

Furnish a schedule or agenda, with specific dates, for notification to other manufacturers, dealers/retailers, and purchasers. Please identify any foreseeable problems with implementing this recall.

25JUN10 - All communications regarding this recall are to be released.

VII. FURNISH RECALL COMMUNICATIONS

9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification.

DOCUMENT DESCRIPTION	DATE AND MANNER SUBMITTED
Notification letter to other manufacturers	25-Jun-10
Draft Notification letter to purchasers	25-Jun-10
Press release (if applicable)	N/A
Recall Service Bulletin (RSB)	25-Jun-10
Notification Envelope	Pre-approved

All documents to be faxed to 202-366-7882, then mailed.

The manufacturer's campaign identification number if not identical to the number assigned by NHTSA.

10010