



Spartan Chassis, Inc.
1000 Reynolds Road - Charlotte, MI - 48813
573 DEFECT & NONCOMPLIANCE REPORT

Description:	Fractured Fasteners
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Internal Code:	07024
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Date of Report:	6/18/2008
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08V-275
(15 pages)

Submitted to: Associate Administrator for Safety Assurance
National Highway Traffic Safety Administration
1200 New Jersey Ave. SE
Washington, DC 20590

Attn: Mrs. Pat Wallace, Office of Defects Investigation
Fax: (202) 366-1767

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

Telephone: (517) 543-6400

Corporate contacts for recall information:

Customer Notification / Customer Service:

Wayne Ridge
Product Improvement Administrator
Customer Service Operations
(517) 543-6400, ext. 3445
Fax: (517) 543-7764

Report prepared by:

Wes Chestnut
Senior Compliance Analyst
Product Assurance
(517) 543-6400, ext. 3275
Fax: (517) 543-7729

Preparer's Signature:

A handwritten signature in black ink, appearing to read "Wes Chestnut", is written over a horizontal line.

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 Chassis, Inc.		
Model:	K2, K3, MM, and SU		
Model Years Involved:	2007 and 2008		
Vehicle Type:	Motorhome		
Weight Range:	28000 - 54000 GVWR		
Weight Class:	Class 7	to	Class 8
Beginning VDM:	5/3/2007	Ending VDM:	7/18/2007
% Potentially Involved:	56%		

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

Suspect fasteners with potential hydrogen (H) embrittlement used in critical regions within models represented in this recall.

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
MM	2007	2
MM	2008	143
K2	2008	65
K3	2008	1
SU	2008	2
TOTAL:		213

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

Approximate Defect Percentage: 3%

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 suspect fastener part number was identified through a lot population provided by the fastener supplier. After identification, containment activities were performed on-site at both Spartan Chassis, Inc. and the OEM. A study was performed which identified the critical regions of the chassis in which the subject fasteners may have been used. The beginning of the population was determined by the date on which we received the suspect fasteners. The end date was established when our internal containment activities could no longer contain the issue.

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.

The suspect fasteners are from a lot that may have been subjected to hydrogen embrittlement. These fasteners were used in the following critical mounts to frame; steering gear support, IFS cradle and shock support.

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

The cause of the failure mode is hydrogen embrittlement that resulted from a temporary deviation in the heat treat process of the fasteners.

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

The potential consequences are as follows: 1) Steering gear mount could loosen at the frame mounting joint resulting in poor handling or loss of steering. 2) IFS cradle mounts could have a reduction in clamp force causing a reduced level of front suspension performance. 3) Shock mounts could be dismounted from the frame resulting in reduced performance of the suspension.

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

Warning signs maybe as follows: 1) Fractured fasteners at the steering gear mount could result in loose vehicle steering. 2) Fractured fasteners at the IFS cradle could result in loose steering and/or a loud "knocking" noise. 3) Fractured fasteners at the shock mounts could result in a loud "knocking" noise or poor suspension performance.

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:	5/8-11 x 1.50" Flanged Head Bolt
Supplier Part Number:	#62C150BHW8Y
Spartan Part Number:	#10110150FH8Y
Supplier Corporate Name:	House of Threads, Inc
Address:	144 Industrial Drive, Birmingham, AL 35211
CEO or Knowledgeable Rep:	Nick Deal

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.

15MAY07 - Fractured fasteners were identified on a delivery trailer subsequent to delivery of a chassis.
25JUN07 - More fractured fasteners were identified on Spartan Chassis, Inc premises.
25JUN07 - Fractured fasteners were outsourced for expert opinion.
27JUN07 - Received information from expert source.
28JUN07 - Notified the supplier of issue, to quarantine and begin containment activities.
06JUL07 - Identified 3 suspect lots with having hydrogen (H) embrittlement.
17AUG07 - Completed bolt change outs at OEM locations and on-site at Spartan Chassis, Inc.

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 remedy for the defect is to inspect all critical mount fasteners. If any fastener is found to be fractured, it will be replaced with a new bolt and nut combination. Refer to RSB08-940-002 for complete details on inspection and replacement.

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

The characteristics of the remedy bolt is that with proper torque it will secure mounts) to frame. The recalled bolt will not hold torque, could rotate out of the hole and/or could be missing.

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.

On 17AUG07 all fasteners on chassis at both Spartan Chassis, Inc. and OEM's as well as in inventory were completely quarantined by the supplier.

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.

All affected customers, service centers and OEM's have been notified through earlier campaign activities which started on 03JAN08. It is the intent of Spartan Chassis, Inc. to resend notification to the balance of the affected population no later than 27JUN08.

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	27-Jun-08
Draft Notification letter to purchasers	27-Jun-08
Press release (if applicable)	N/A
Recall Service Bulletin (RSB)	27-Jun-08
Notification Envelope	27-Jun-08

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.

07024 - RSB08-940-002 ---- Note: Of the 213 units, 94 were originally inspected and repaired as needed under Spartan Chassis, Inc. Campaign Service Bulletin CSB07-640-001



SPARTAN CHASSIS, INC.

Date: June 20, 2008

Re: Notice of Recall Service Bulletin: RSB08-940-002

NHTSA # 08V-???

Dear Valued Customer,

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Please note: The Vehicle Identification Number that is affected by this recall is on the address label that is on the front of the envelope that contained this letter.

Spartan Chassis Inc. has decided that a defect which relates to motor vehicle safety exists in certain Spartan Chassis Motorhomes having a VDM (Vehicle Date of Manufacture) of May 3, 2007 through July 18, 2007.

Defect or Noncompliance:

Certain chassis fasteners may fracture resulting in poor handling of the vehicle, loss of steering and/or reduced level of suspension performance.

Corrective Action:

Your authorized service center will inspect and replace fasteners as needed, per recall safety bulletin # 08V-???

Labor Time:

The labor time required to repair may vary from .5 to 1.5 hrs. Repair times may vary depending on inspection report. Due to some service scheduling times, your service center may need your vehicle for a longer period.

What You Should Do:

Call an authorized service center without delay. You do not need to call Spartan Chassis, Inc. to find the facility most convenient to you. These facilities can be located on Spartan's website: <http://www.spartanchassis.com>. Please call immediately to have this repair completed.

Leased Vehicles:

The lessor must notify the lessee by first class mail within ten (10) days from receipt of their owner notification letter from the manufacturer, both for the initial notification and all subsequent notifications.

Reimbursement:

If you had this repair performed before you received this letter, you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this recall. For more information contact Spartan at 800-543-4277 - Option 1.

Reply Card:

Please fill out the enclosed prepaid postcard and mail it to us if you have changed your address, sold, or traded the vehicle.

If the authorized service center has failed or is unable to remedy the defect without charge and within a reasonable time, contact Spartan Chassis at 800-543-4277 - Option 1. You may also submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street SW, Washington, D.C. 20590 or call the Auto Safety Hotline at 888-327-4236 (TTY: 1-800-424-9153); or go to <http://www.safercar.gov>.

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We regret any inconvenience this service may cause you. Your safety and continued satisfaction with the quality and performance of your Spartan Chassis vehicle is of the utmost concern to us.

Best Regards,

Wayne Ridge
Product Improvement Administrator
Spartan Chassis, Inc.

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SPARTAN CHASSIS, INC.

June 20, 2008

RE: NHTSA Recall No. 08V-???

Dear Service Manager:

Spartan Chassis, Inc. is recalling select chassis models manufactured having a vehicle date of manufacture (VDM) between May 3, 2007 through July 18, 2007.

Reason: The potential exists that chassis fasteners may fracture causing unstableness in the chassis. If this happens while the vehicle is in motion a crash could occur.

We will contact all owners of these units that are affected by this recall. They will be provided with a list of Spartan Chassis, Inc. Authorized Service Centers, including your facility. They will also be advised that they **do not** need to call Spartan Motors, but they should call the facility on the list that is nearest to them and make an appointment.

SCHEDULING THE WORK:

1. When the customer calls reporting receipt of a Recall Service Bulletin, schedule the work at your mutual convenience.
2. When the customer arrives for the appointment, ask him/her for his recall letter. You can use this to verify the chassis VIN.
3. It will be helpful to verify the "users" current address and phone number.

COMPLETING THE WORK:

1. **You do not need a work authorization number from Spartan Chassis, Inc. to complete this work.** Call Spartan customer service if you need technical assistance or to order a parts kit
2. Do the work following the instructions on the Recall Service Bulletin.

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DOCUMENTING THE WORK:

1. Document your work on your repair invoice. This will satisfy both our need for documentation of the completed recall and our requirement for an invoice to reimburse for the work.
2. **You will be reimbursed for .5 to 1.5 hours labor to inspect and/or repair if necessary. Repair times may vary depending on the inspection report.**

If there are contributing factors that cause the recall procedure to take longer than the allotted time, please report that information on your shop repair order including details of the circumstances that resulted in additional time.

Enter Recall # **08V-???** as the work authorization number. The time for these repairs will be considered for reimbursement on a case by case basis.

3. Documents submitted for Spartan reimbursement for this recall should not be combined with any other documents being sent to Spartan.

HANDLING A "USER" WITH NO CONFIRMATION LETTER:

1. If you are contacted by a "user" who has not received a recall letter, you should verify that they have an affected chassis and call Wayne Ridge at Spartan Motors (800-393-8861 – Option 3) for verification.
2. Complete the work as instructed.
3. Record the vehicle VIN along with the mileage on the invoice you submit for reimbursement.
4. Document the work and submit the claim as instructed under the Documenting the Work section above.

PARTS SUPPLY & DISPOSITION:

1. No parts should be needed for this recall. The shipment of any parts, if needed, would be identified with the recall number. If you need additional parts, please order them by calling Spartan Motors Customer Service at (800) 543-4277 (Option 1).

SPARTAN ASSISTANCE:

1. If you have **technical questions**, please call Spartan Motors' Customer Service Department at (800) 543-4277 (Option 1).
2. If you have questions about warranty claims call Wayne Ridge at (800) 393-8861 (Option 3) or 517-543-6400 ext.445.

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SPARTAN CHASSIS, INC.

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NHTSA # 08V-XXX

RSB08-940-002

June, 2008

Recall SERVICE BULLETIN

- SUBJECT:** Fasteners – 5/8” X 1.50” Grade 8 Yellow Flange Head Bolts
- APPLIES TO:** Certain Spartan Motorhomes having a VDM (Vehicle Date of Manufacture) of May 3, 2007 through July 18, 2007.
- CONDITION:** Fasteners Fractured
- CAUSE:** Hydrogen Embrittlement
- CORRECTION:** Inspect - Replace Fasteners as Needed

PLEASE READ THE ENTIRE BULLETIN BEFORE PROCEEDING WITH ANY WORK. CONTACT SPARTAN CHASSIS IF THERE ARE ANY CONCERNS WITH THE PROCEDURES CONTAINED IN THIS DOCUMENT

PART / SERVICE INFORMATION:

Hendrickson Airtek Front Suspension Inspection/Torque Time: .50 hrs.

Hendrickson Independent Front Suspension Inspection/Torque Time: 1.00 hrs.

Tuthill/Granning Independent Front Suspension & Steering Gear Mounting Inspection/Torque Time: 1.50 hrs.

Inspection report must be filled out and returned to Spartan Chassis, Inc. before payment will be authorized.

If defective bolts are found and need to be replaced the Labor Time must be preapproved by Spartan Chassis, Inc.

Fastener part numbers are listed below:

<u>Part Number</u>	<u>Description</u>
10110150FH8Y	Bolt – 5/8 – 11 x 1.50” Flanged head
1011FLN8Y	Nut – 5/8 – 11 Flanged Lock nut

STEP-BY-STEP INSTRUCTIONS:

1. Observe all industry safety standards, disconnect any necessary power source and secure vehicle for inspection and possible replacement of certain 5/8” X 1.50” grade 8 yellow flange head bolts.





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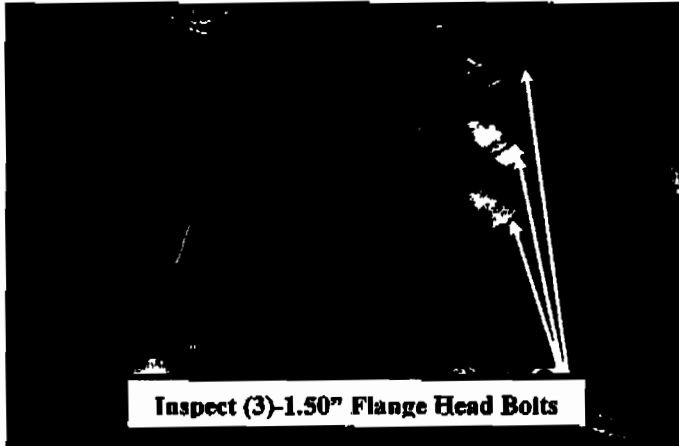
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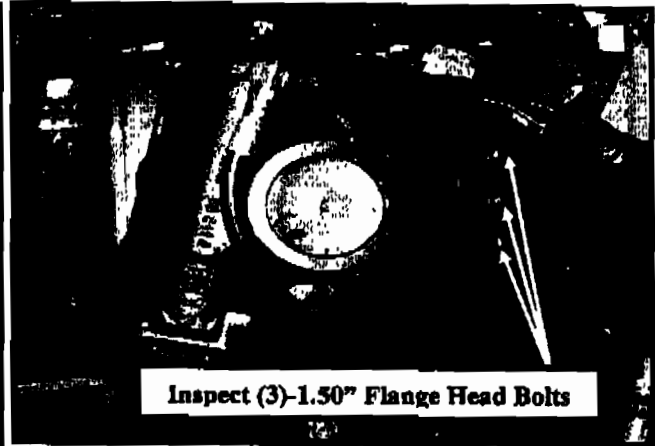
RSB08-940-002

June, 2008

Recall SERVICE BULLETIN



Inspect (3)-1.50" Flange Head Bolts



Inspect (3)-1.50" Flange Head Bolts

STEERING GEAR SUPPORT MOUNTING LOCATION

FIG. 2-1

If the unit is equipped with a Tuthill/Granning Independent Front Suspension (IFS) perform the following:

STEERING GEAR MOUNTING INSPECTION

2. Refer to FIG. 2-1. Visually inspect the six bolts attaching the steering gear support to the frame. If all of the bolts appear to be intact proceed to step 3. If any bolts are missing proceed to step 4.
3. Using a torque wrench set at 50 lbs. ft. attempt to rotate each bolt from which ever side is most accessible. If a bolt or nut rotates it must be replaced. If it does not rotate do not replace. Torque the new bolt and nut to 148 lbs. ft. from the nut, or 185 lbs. ft. from the bolt head.
4. Replace the missing bolts and nuts and torque them to 148 lbs. ft. from the nut or 185 lbs. ft. from the bolt head. Perform step 3 to the bolts that are not missing.
5. Refer to FIG. 3-1 & FIG. 3-2. Visually inspect the bolts attaching the IFS cradle to each frame rail. If all of the bolts appear to be intact proceed to step 6. If any bolts are missing proceed to step 7.
6. Using a torque wrench set at 50 lbs. ft. attempt to rotate each bolt from which ever side is most accessible. If a bolt or nut rotates it must be replaced. If it does not rotate do not replace. Torque the new bolt and nut to 148 lbs. ft. from the nut, or 185 lbs. ft. from the bolt head.
7. Replace the missing bolts and nuts and torque them to 148 lbs. ft. from the nut or 185 lbs. ft. from the bolt head. Perform step 6 to the bolts that are not missing.



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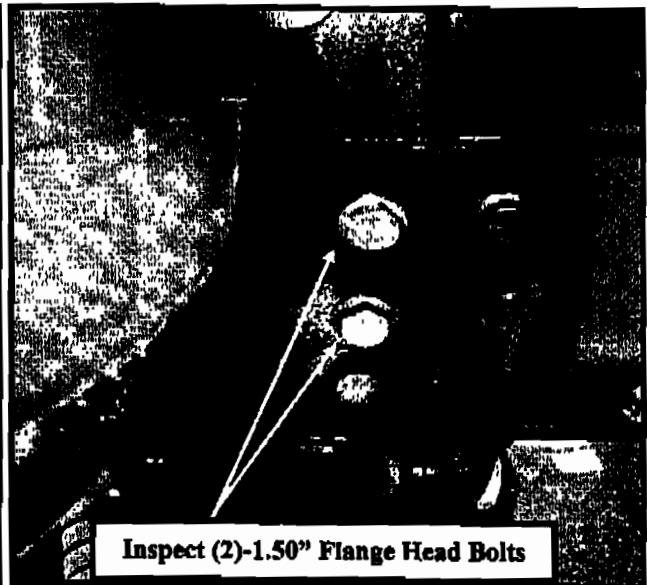
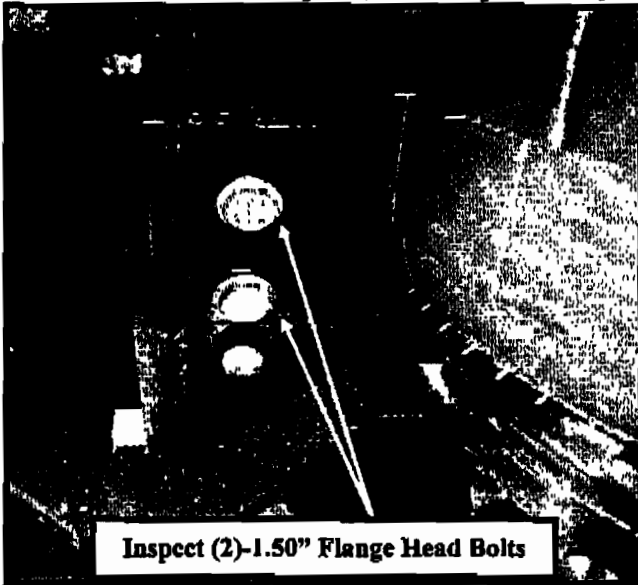
RSB08-940-002

June, 2008

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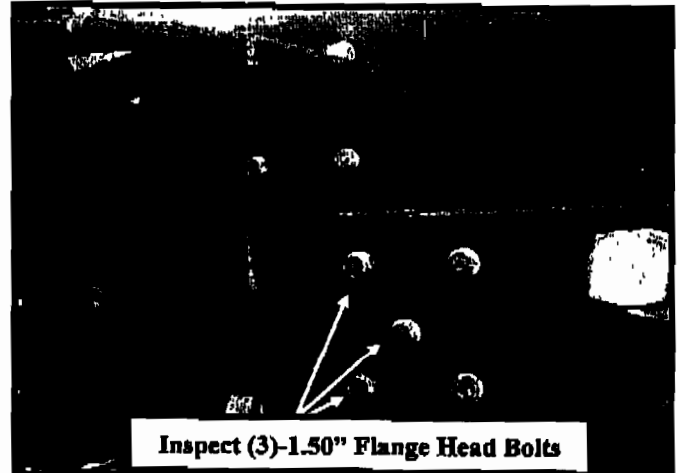
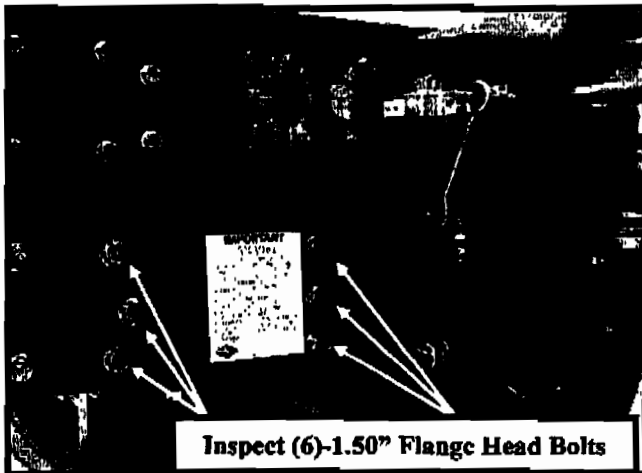
Recall SERVICE BULLETIN

8. Reconnect any power source previously disconnected.



**TUTHIL/GRANNING IFS CRADLE MOUNTING LOCATION
(BEHIND AIRSPRING)**

FIG. 3-1



TUTHIL/GRANNING IFS CRADLE MOUNTING LOCATION

FIG. 3-2

This Service Bulletin is intended for use by Professional Technicians only. The diagnosis and/or professional repair of vehicles, service of vehicles or products of this nature in conjunction with industry standards, professional technicians and/or operators trained to industry standards and have the tools and equipment to perform the work safely and properly.



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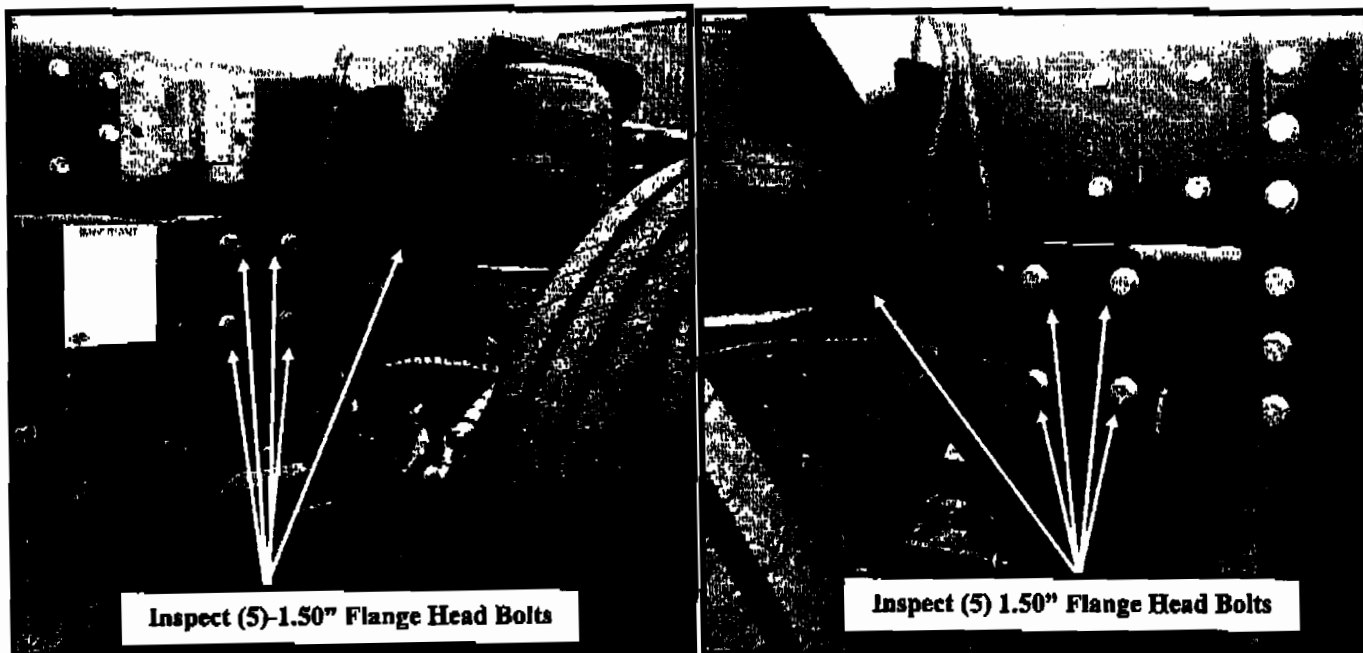
June, 2008

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Recall SERVICE BULLETIN

If the unit is equipped with a Hendrickson Independent Front Suspension (IFS) perform the following:

1. Refer to FIG. 4-1. Visually inspect the bolts attaching the IFS cradle to each frame rail. If all of the bolts appear to be intact proceed to step 2. If any bolts are missing proceed to step 3.
2. Using a torque wrench set at 50 lbs. ft. attempt to rotate each bolt from which ever side is most accessible. If a bolt or nut rotates it must be replaced. If it does not rotate do not replace. Torque the new bolt and nut to 148 lbs. ft. from the nut, or 185 lbs. ft. from the bolt head.
3. Replace the missing bolts and nuts and torque them to 148 lbs. ft. from the nut or 185 lbs. ft. from the bolt head. Perform step 2 to the bolts that are not missing.
4. Reconnect any power source previously disconnected.



HENDRICKSON IFS CRADLE MOUNTING LOCATION

FIG. 4-1



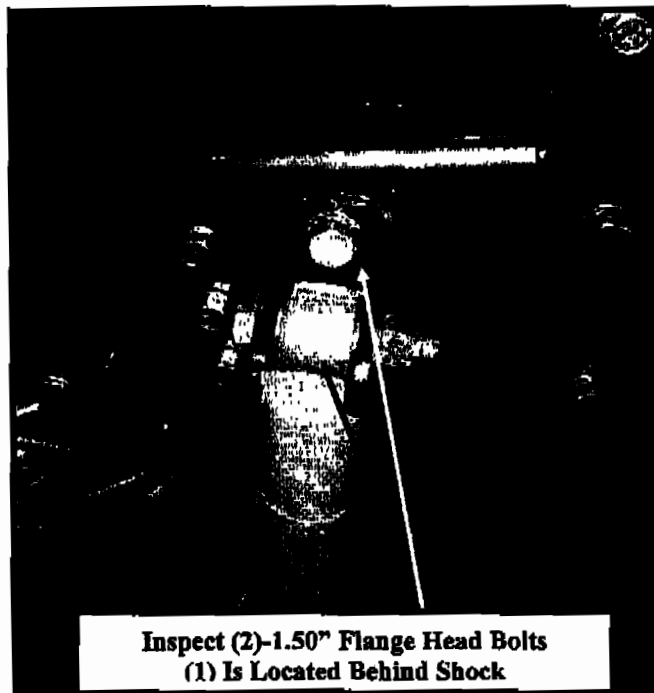
SPARTAN CHASSIS, INC.

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Recall SERVICE BULLETIN

If the unit is equipped with a Hendrickson Airtek Front Suspension perform the following:

1. Refer to FIG. 5-1. Visually inspect the bolts attaching the front suspension shock absorber upper mounting brackets to each frame rail. If the bolts appear to be intact proceed to step 2. If any bolts are missing proceed to step 3.
2. Using a torque wrench set at 50 lbs. ft. attempt to rotate each bolt from which ever side is most accessible. If a bolt or nut rotates it must be replaced. If it does not rotate do not replace. Torque the new bolt and nut to 148 lbs. ft. from the nut, or 185 lbs. ft. from the bolt head.
3. Replace the missing bolts and nuts and torque them to 148 lbs. ft. from the nut or 185 lbs. ft. from the bolt head. Perform step 2 to the bolts that are not missing.
4. Reconnect any power source previously disconnected.



**Inspect (2)-1.50" Flange Head Bolts
(1) Is Located Behind Shock**

HENDRICKSON AIRTEK SHOCK MOUNTING LOCATION

FIG. 5-1

Spartan Chassis, Inc. is a leading manufacturer of commercial chassis and truck bodies. Our products are designed to meet the highest standards of performance and reliability. We are committed to providing the best products and service to our customers. For more information, please contact us at 1-800-368-3683. © 2008 Spartan Chassis, Inc.



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Recall SERVICE BULLETIN

INSPECTION REPORT

Customer Name: _____	VIN # _____
Date of Inspection: _____	
Inspected By: _____	
Service Facility: _____	
Service Facility Address: _____	

The vehicle indicated above was inspected in our service facility according to instructions provided to us in the Spartan Chassis recall bulletin RSB08-940-002.

Please check & complete each area representing fastener inspections & or repairs that were performed by your service facility including the quantity of fasteners replaced in each location:

<input type="checkbox"/>	Tuthill / Granning IFS suspension fastener torque inspection: (We replaced the fasteners in this suspension because we found defective fasteners)	_____ Quantity
<input type="checkbox"/>	Tuthill / Granning IFS suspension fastener torque inspection: (We did not find any defective fasteners and did not replace any fasteners)	

<input type="checkbox"/>	Tuthill / Granning Steering Gear Support fastener torque inspection: (We replaced the fasteners in the steering gear support because we found defective fasteners)	_____ Quantity
<input type="checkbox"/>	Tuthill / Granning Steering Gear Support fastener torque inspection: (We did not find any defective fasteners and did not replace any fasteners)	

<input type="checkbox"/>	Hendrickson IFS suspension fastener torque inspection: (We replaced the fasteners in this suspension because we found defective fasteners)	_____ Quantity
<input type="checkbox"/>	Hendrickson IFS suspension fastener torque inspection: (We did not find any defective fasteners and did not replace any fasteners)	

<input type="checkbox"/>	Hendrickson Airtek front suspension shock absorber inspection: (We replaced the fasteners in this suspension because we found defective fasteners)	_____ Quantity
<input type="checkbox"/>	Hendrickson Airtek front suspension shock absorber inspection: (We did not find any defective fasteners and did not replace any fasteners)	

Signature: _____ Date: _____

We have validated and / or repaired all defective materials required as indicated above.

This form must be completed and returned to Spartan Chassis, Inc. before payment will be authorized.

