

Safety Defect and Noncompliance Report Guide for Vehicles  
**PART 573 Defect and Noncompliance Responsibility and Reports**<sup>1</sup>

On 2/24/10, 2007, SUTPHEN [MFR] decided that (a defect which relates to motor vehicle safety)(a noncompliance with Federal Motor Vehicle Safety Standard No. \_\_\_\_\_) exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 **Defect and Noncompliance Responsibility and Reports**.

Date this report was prepared: 2/25/10

Furnish the manufacturer's identification code for this recall (if applicable): \_\_\_\_\_

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

SUTPHEN CORPORATION 6450 EITERMAN ROAD  
Dublin, OH 43016 USA

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

ALLEN SHAW - SERVICE MANAGER

Telephone Number: 866/287-5549 Fax No.: \_\_\_\_\_

Name and Title of Person who prepared this report.  
RAND SMITH  
ENGINEERING MANAGER

Signed:

Rand Smith

<sup>1</sup> Each manufacturer must furnish a report, to the Associate Administrator for Enforcement, for each defect or noncompliance condition which relates to motor vehicle safety.

I. Identify the Vehicle Models Involved in the Recall

2. Identify the Vehicles Involved in the Recall, for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:

Make(s): SUTPHEN Model Years Involved: '04-'07 Model(s): SPH

Production Dates: Beginning: '04 Ending: '07

VIN Range: Beginning: SEE ATTACHED Ending: \_\_\_\_\_

Vehicle Type: TRUCK Bodystyle: FIRE FIGHTING

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

PRE 2007 SPH TRUCKS WITH DETROIT DIESEL SERIES-60 ENGINES

Make(s): SUTPHEN Model Years Involved: '07-'10 Model(s): SPH

Production Dates: Beginning: '07 Ending: '10

VIN Range: Beginning: SEE ATTACHED Ending: \_\_\_\_\_

Vehicle Type: TRUCK Bodystyle: FIRE FIGHTING

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

POST 2007 SPH TRUCKS WITH DETROIT DIESEL SERIES-60 OR CATERPILLAR C-13 ENGINES

Make(s): \_\_\_\_\_ Model Years Involved: \_\_\_\_\_ Model(s): \_\_\_\_\_

Production Dates: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

VIN Range: Beginning: \_\_\_\_\_ Ending: \_\_\_\_\_

Vehicle Type: \_\_\_\_\_ Bodystyle: \_\_\_\_\_

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

\_\_\_\_\_  
\_\_\_\_\_

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Vehicles equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the recalled Vehicles of all Vehicles manufactured during that time period.

Approx. 3.5%

II. Identify the Recall Population

3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.

<u>Model</u>	<u>Year</u>	<u>Number of Vehicles Potentially Involved</u>
SPH	Pre 2007	19
SPH	Post 2007	16

Total Number Potentially Affected by the Recall: 35

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

Pre 2007 Detroit Diesel Engines were mounted low  
in the frame, that caused our Driveline issue

Post 2007 A new suspension AND frame design caused  
the Drive line Angles of Detroit Diesel and  
Caterpillar engines to be slightly out of Tolerance.

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.

Drive line Angles out of tolerance. Engines mounted low with respect to carrier bearings and pump gear boxes caused the non compliance. 1<sup>st</sup> and 2<sup>nd</sup> Drive shafts

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

Engines mounted low with respect to carrier bearings and pump gear boxes caused the non compliance.

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

Vibration in the Drive line  
Premature Failure of U-Joints

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

Vibration in the Drive line

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

N/A

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:

#### IV. Provide the Chronology in Determining the Defect/Noncompliance

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

6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

One Fire Company with four Pre 2007 vehicles using Detroit Diesel 5-60 engines Reported in Early December 2009. That they had Drive Line Failures in more than one vehicle. Investigations in Early January 2010 Brought Concern An Issue May Exist. It wasn't until mid February that we Determined the Cause of the Issue

#### V. Identify the Remedy

8. A description of the manufacturer's program for remedying the defect or noncompliance. This program shall include a plan for reimbursing an owner or purchaser who incurred costs to obtain a remedy for the problem addressed by the recall within a reasonable time in advance of the manufacturer's notification of owners, purchasers and dealers, in accordance with §573.13 of this part. A manufacturer's plan may incorporate by reference a general reimbursement plan it previously submitted to NHTSA, together with information specific to the individual recall. Information required by §573.13 that is not in a general reimbursement plan shall be submitted in the manufacturer's report to NHTSA under this section. If a manufacturer submits one or more general reimbursement plans, the manufacturer shall update each plan every two years, in accordance with §573.13. The manufacturer's remedy program and reimbursement plans will be available for inspection by the public at NHTSA headquarters.

Sutphen will Contact All effected vehicle owners to coordinate the required Corrections at No charge to the vehicle owner. Crossmembers will be modified for Pre-2007 vehicles, while Drive shaft re-phasing will be done to Post-2007 vehicles. Drive shaft re-phasing will be coordinated with pre configured shafts to minimize Down time.

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

Pre 2007 w/Detroit Diesel 5-60: Modified X-member will Allow Drive line Angles to be within Tolerance. See Attached Description AND CHF-2718 For Details

Post 2007 w/Detroit Diesel 5-60 OR CAT C-13: Re-phase 1<sup>st</sup> Driveshaft yokes 90° out of phase

90° out of phase means the HARD PARTS of EACH END will NOT share the SAME Centerline.  
Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

Pre 2007: Modified X-member is notched (See CHF-2718)

Post 2007: 1<sup>st</sup> Drive shaft yokes will be 90° out of phase

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.

Production was corrected by providing every CHASSIS with A NOTCHED X-member similar to CHF-2718 so ALL Drive line Angles would be in tolerance. Change was implemented JANUARY 15<sup>th</sup> 2010.

#### VI. Identify the Recall Schedule

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

Purchasers of trucks Requiring Attention will be notified No later than 3/9/10. Changes will be coordinated by April 1<sup>st</sup>, 2010.

## VII. Furnish Recall Communications

11. 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 (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. *A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) or by E-Mail to [RMD.ODI@dot.gov](mailto:RMD.ODI@dot.gov) for review prior to mailing.*

Note that these documents are to be submitted separately from those provided in accordance with Part 579.5 requirements.

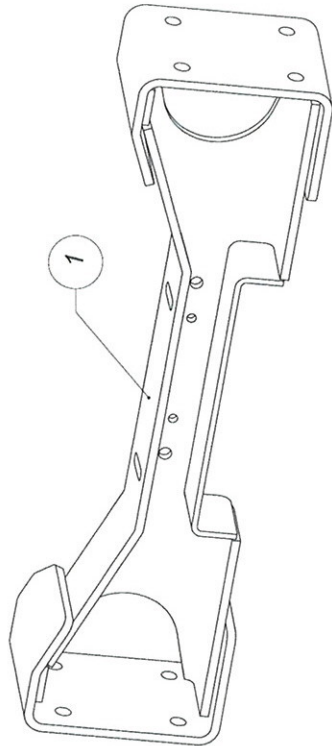
## Pre 2007: S-60 Driveline Modification

- 1) Tilt cab and measure from centerline of front driveshaft to bottom of air cleaner bracket to check to make sure it is 13 3/8" and needs the designed modification and if it does then proceed as follows:
- 2) Jack the truck up as necessary to ease access of underside of truck.
- 3) Raise the rear of the engine/trans. assemble by 1 7/8" by removing the 3 rear engine mount bolts on each side, jacking up the rear of the engine/trans. assy., install 5 spacers (#CHF-2583) each side and install new nuts & bolts provided.
- 4) Check for fan clearance, hose routing, air tube fit and anything else around the engine for proper fit and function.
- 5) Remove both drive shafts in front of the pump.
- 6) Cut out and modify front cross member per drawing #CHF-2582 by welding in part #CHF-2582-01 drilling two 9/16" holes and grinding welds appropriately.
- 7) Loosely install drop down bracket (#CHF-2582-02) with the two .406 holes up against cross member and installing two 9/16" bolts and nuts provided.
- 8) Install front drive shaft to transmission yoke using new bolts supplied and lifting up and attach to drop down bracket with two bolts and nuts provided.
- 9) Adjust the drop down bracket up or down accordingly to get the first shaft to be 0 degrees with the frame rail using a digital angle finder and tighten the bracket.
- 10) After rechecking to make sure the shaft is at 0 degrees, lock the bracket in place by drilling two 3/8" holes through the cross member and bolting it with the two bolts and nuts provided.
- 11) On the second shaft take the rubber seal loose from the solid portion of the shaft, pull the short section out of the splines and rotate it 90 degrees to put the joints out of phase on this shaft and re-install the seal.
- 12) Install the second shaft using new bolts provided.
- 13) Grease all joints.
- 14) Measure all angles and lengths as necessary and fill out the attached "Front Driveline Analysis" report and call the assigned person to run the analysis in the computer.

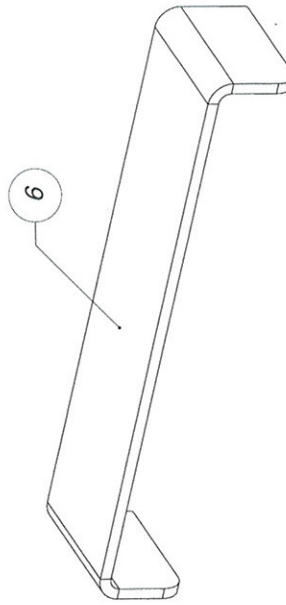
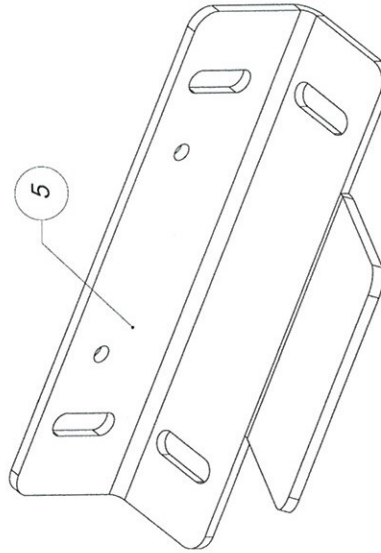
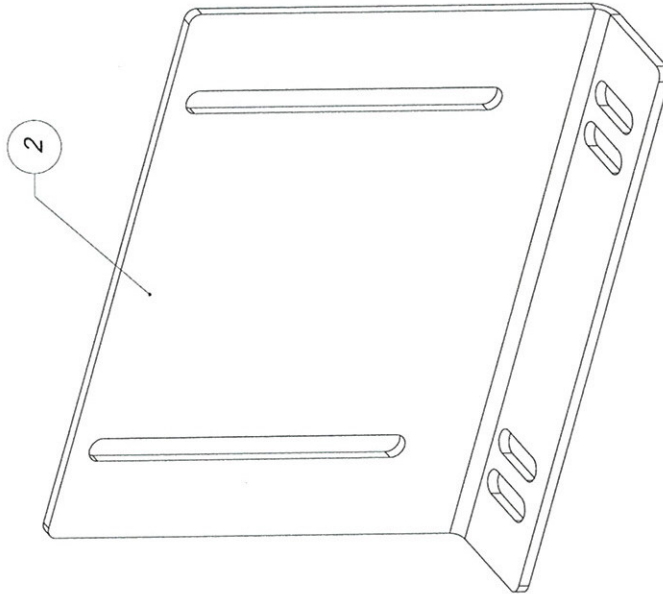
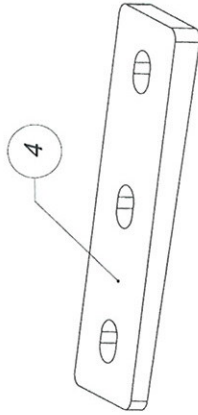
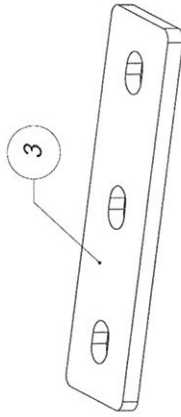
**Note: Any new or repair shafts to made as follows: 1710 HD Series=4.095" OD & .180 Wall Thickness  
1810 Series=4.5" OD & .134 Wall Thickness**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY PER TRUCK
1	CHF-2582	MODIFIED CROSS MEMBER ASSEMBLY	1
2	CHF-2584	ANGLE, LONG DROP CARRIER	SEE NOTE
3	CHF-2583	SPACER, REAR ENGINE MOUNT, ANGLED	8
4	CHF-2717	SPACER, REAR ENGINE MOUNT, ANGLED	2
5	CHF-2582-02	ANGLE, SHORT DRIVE SHAFT CARRIER	1
6	CHF-2582-01	CHANNEL, CROSS MEMBER NOTCH 5/8-11 X 5 1/2 LONG FLANGE HEAD BOLT (FOR REAR ENGINE MOUNT)	1
7	-		6
8	-	5/8-11 FLANGE HEAD NUT	6

ALL OTHER NUTS AND BOLTS SHOWN ON THE CHF-2582 DRAWING



MODIFIED CHF-424 CROSS MEMBER PER CHF-2582 DRAWING



THIS PART IS ONLY USED ON AERIALS WITHOUT FIRE PUMPS



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**SUTPHEN CHASSIS DIVISION**  
 FIRE APPARATUS SINCE 1890  
 1701 W. COUNTY LINE ROAD, P.O. BOX 2810  
 SPRINGFIELD, OH 45501-0158  
 Ph: 937-969-8381

UNLESS SPECIFIED DIMENSION TOLERANCES ARE:  
 .XX = +.05" .XXX = +.030" ANG. ±.5"

ALL DIMENSIONS ARE IN INCHES

PARTS LIST, AERIAL DRIVE DRIVELINE CORRECTION	
DRAWN BY	J. HAULMAN
DATE	2/09/10
NEXT ASSEMBLY	JNH 3241
FINISH	BY ECN
PER DETAILS	
CHF-2718	
HEIGHT (US)	
SHEET	
1 OF 1	

GENERAL NOTES: UNLESS OTHERWISE SPECIFIED:

- BREAK ALL SHARP EDGES
- TAG OR INDELIBLY MARK PARTS WITH PART NUMBER AND REV LTR

SPH Driveline Campaign

Pre-2007			
Modified X-Member CHF-2718			
HS#	Location	Pump	Status
3937	Sacramento, Ca	No Pump	
3962	Columbus, OH		
3963	Columbus, OH		
4015	Greensboro, NC		
4054	Rombout, NY		
4061	South Metro, CO		Complete -1/10
4062	South Metro, CO		Complete -1/10
4063	South Metro, CO		Complete -1/10
4064	South Metro, CO		Complete -1/10
4091	Winston Salem, NC		
4235	Orange Twp, CA		
4245	Springdale, AZ		
4255	State College, PA		
4257	Kenosha, WI		Complete -1/10
4262	Wheeling, WV		
4292	Central Campbell, KY		
4323	SouthLake, TX		
4329	Boynton Beach, FL		
4373	Cobb County, GA		
Post-2007			
Re-phased 1st shaft (cut/weld/phase/balance)			
HS#	Location	Pump	Status
4252	Brunswick, NY		
4339	Pittston		
4354	Solvay		
4359	North Tanawanda		
4357	Northstar		
4358	Freehold		
4382	Rostraver		
4386	Carrollton		
4410	South Union		
4415	Birmingham		
4455	Niagra Falls		
4495	Greensboro		
4508	Carrboro		
4526	Hamelton		
4541	Findley		
4589	Wethersford		