

**PE08029/HYUNDAI-KIA
EF LOWER A ARM
SEPARATION 01**

QUALITY INFORMATION REPORT

CONFIDENTIAL

Model Code		Subject Code		HMA Report Number	
EF		CHASSIS			
Creation date/time/user:		Analyst:		Co-analyst(s):	
12/06/06 08:11:34 AM by Randy Craley		RANDY CRALEY			
Distributor*		Country*		Date	
HMA		USA		12/06/06	
Model*		Engine or Transmission Number*		Production Date*	
SONATA		G6BVX039963		06/02/99	
Vehicle Identification Number*		Mileage*		Delivery Date*	
KMHWF35V2XA [REDACTED]		74507		08/10/99	
Subject*					
[A] 1999 SONATA RIGHT FRONT LOWER ARM SEPARATION FROM CROSSMEMBER ASSEMBLY - DURABILITY ISSUE - HMC					
Attachments					
<input checked="" type="checkbox"/> Photo					
<input checked="" type="checkbox"/> Part					
<input type="checkbox"/> Other					

1. Condition:

- Customer states right front lower arm assembly separated from crossmember assembly.

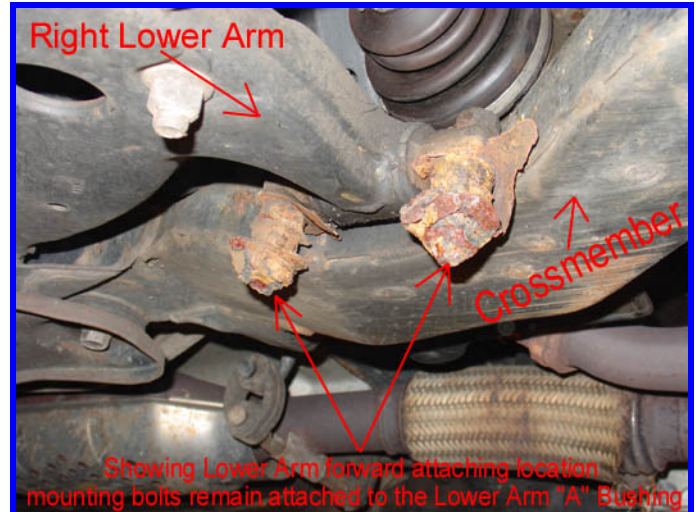
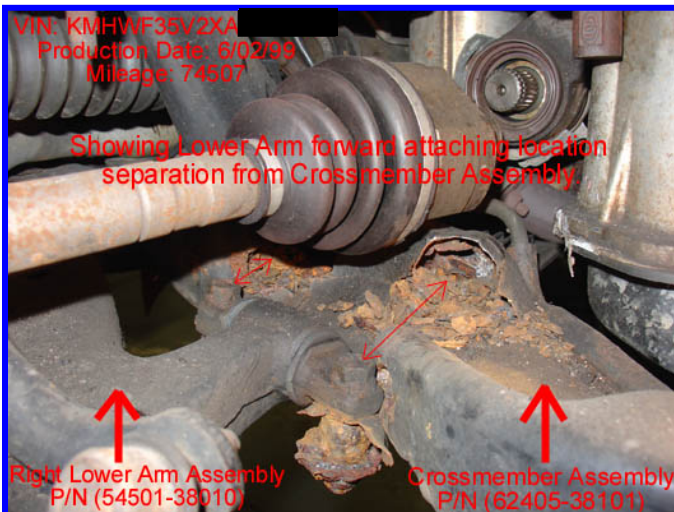
2. Analysis:

- Inspection of the crossmember assembly P/N (62405-38101) revealed the area around the right side lower arm assembly forward attaching location was corroded.

- Right front lower arm was separated from the crossmember assembly at the forward mount attaching location.

- Found right front lower arm forward mount bushing bolts remain attached to the arm.

- Root cause of the right front lower arm P/N (54501-38010) forward attaching location separating from the crossmember assembly appears to be as a result of corrosion to the crossmember assembly. See attached photographs.

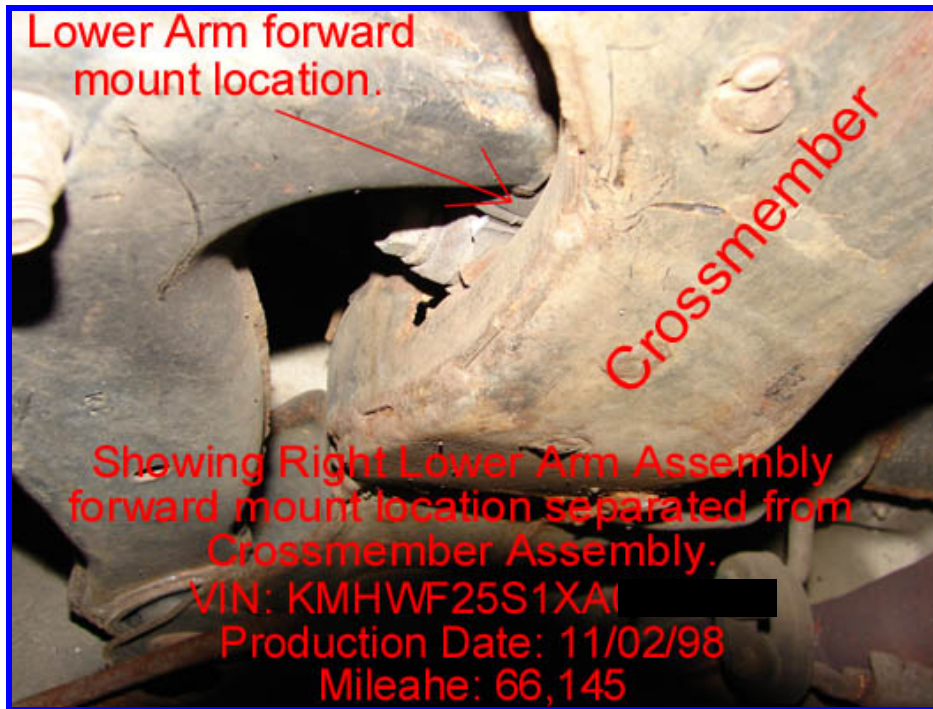


- Right Drive Shaft separated from the Center Bearing and Shaft Assembly as a result of the Lower Arm forward attaching location separating from the Crossmember Assembly. See attached photograph below.



ADDITIONAL VEHICLES WITH SIMILAR CONDITION			
VIN	Production Date	Mileage	Condition
* KMHWF35V2XA [REDACTED]	6/02/99	74,507	Right front Lower Arm separated from the Crossmember Assembly at the forward mount attaching location.
KMHWF35V5XA [REDACTED]	10/13/98	106,000	
KMHWF25S1XA [REDACTED]	11/02/98	66,145	
KMHWF25V5XA [REDACTED]	2/24/99	94,982	
KMHWF35VXXA [REDACTED]	12/29/98	92,395	
* Incident vehicle Crossmember Assembly and Lower Arm Assembly will be forwarded to HMA			



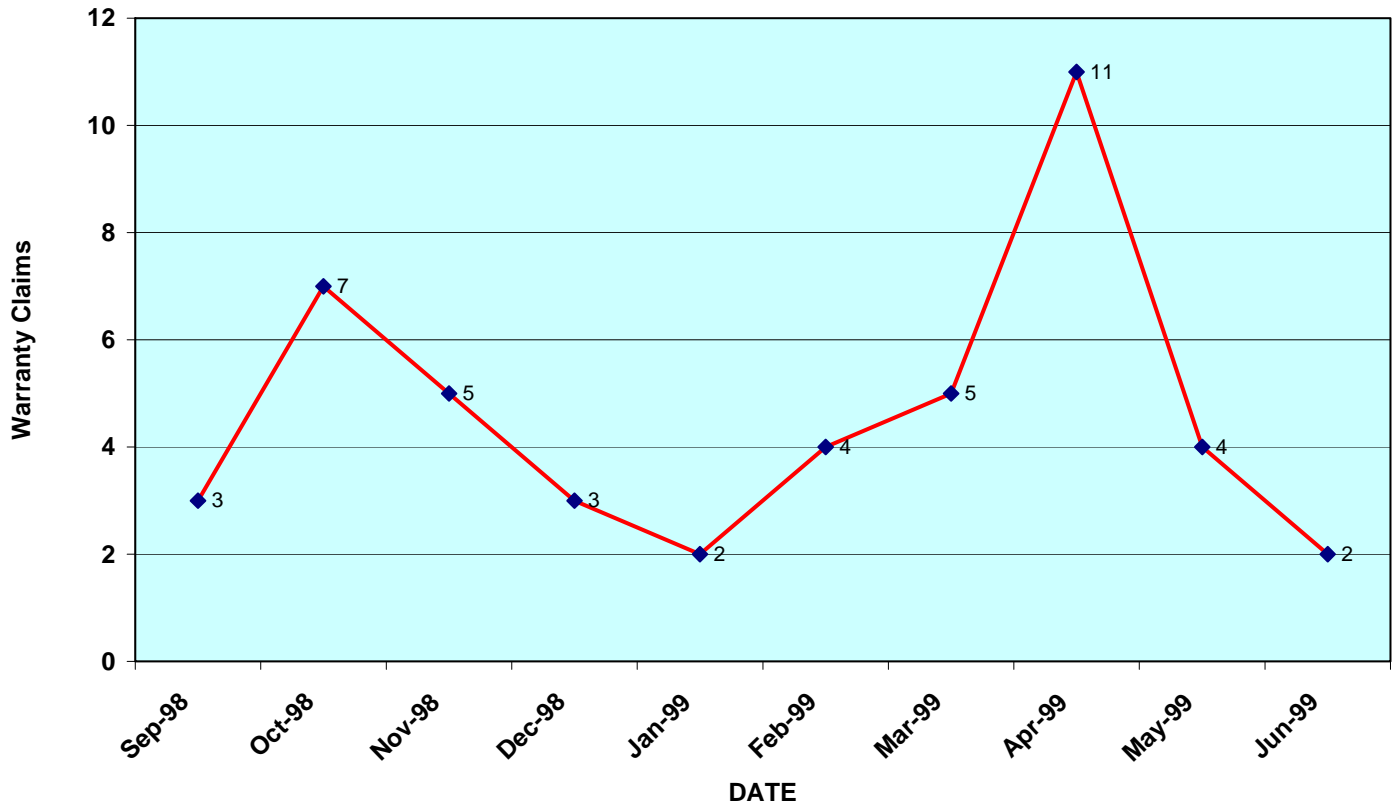


- Current warranty / goodwill data does not include current incident vehicles. Data may not accurately quantify condition.

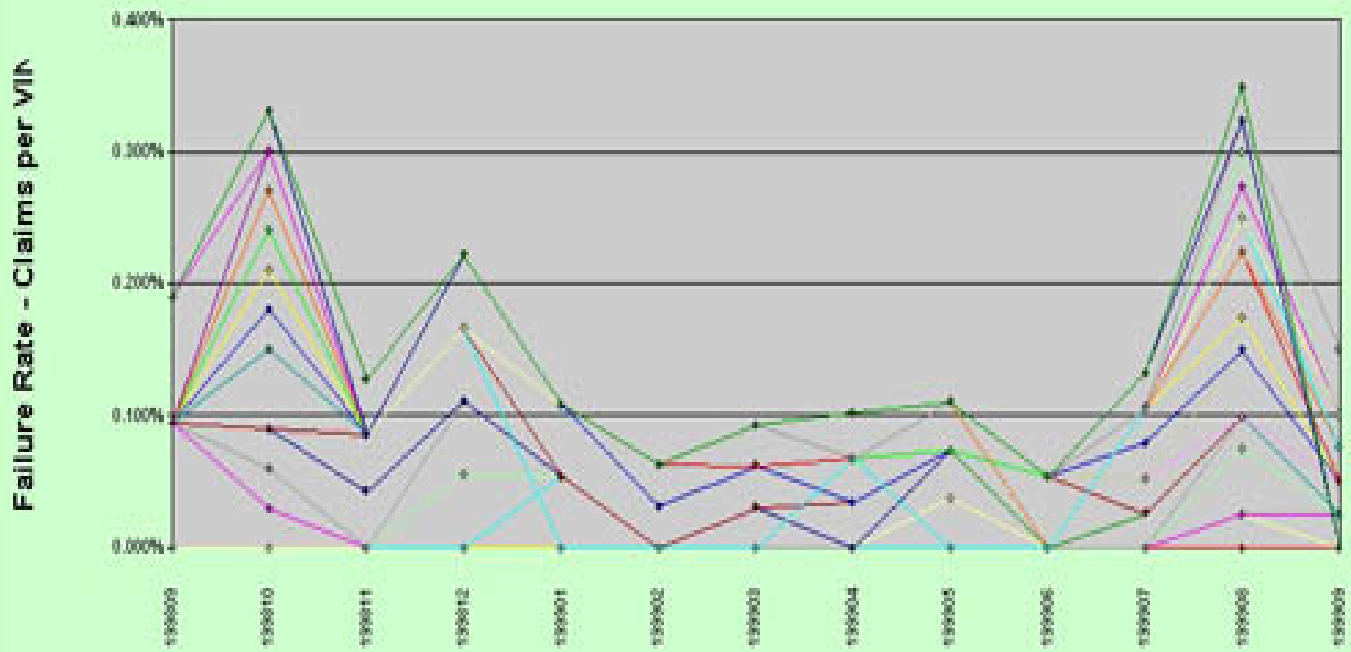
WARRANTY / GOODWILL CLAIM DATA ANALYSIS	
Labor Operation (62410R00) 1999 EF Sonata	
Total Number of Claims	46
With Parts	46
Total Cost	\$ 69,355
Average Cost Per Claim	\$ 1,508
Nature Codes:	%
N29 (Abnormal Noise)	46
N56 (Rust, Corrosion)	11
Cause Codes:	%
C06 (Broken, Split, Torn)	20
C05 (Rusty, Corroded)	41
Mileage Range:	%
0 – 25	0
26 – 6,000	0
6,001 – 12,000	0
12,001 – 18,000	0
18,001 – 24,000	4
24,001 – 30,000	9
30,001 – 36,000	0
36,001 – 48,000	11
48,000 – Over	76

In Service:	%
0 – (PDS)	0
1 – 90	0
91 – 180	0
181 – 270	0
271 – 365	0
366 – 730	0
731 – 1,096	0
1,097 – Over	100

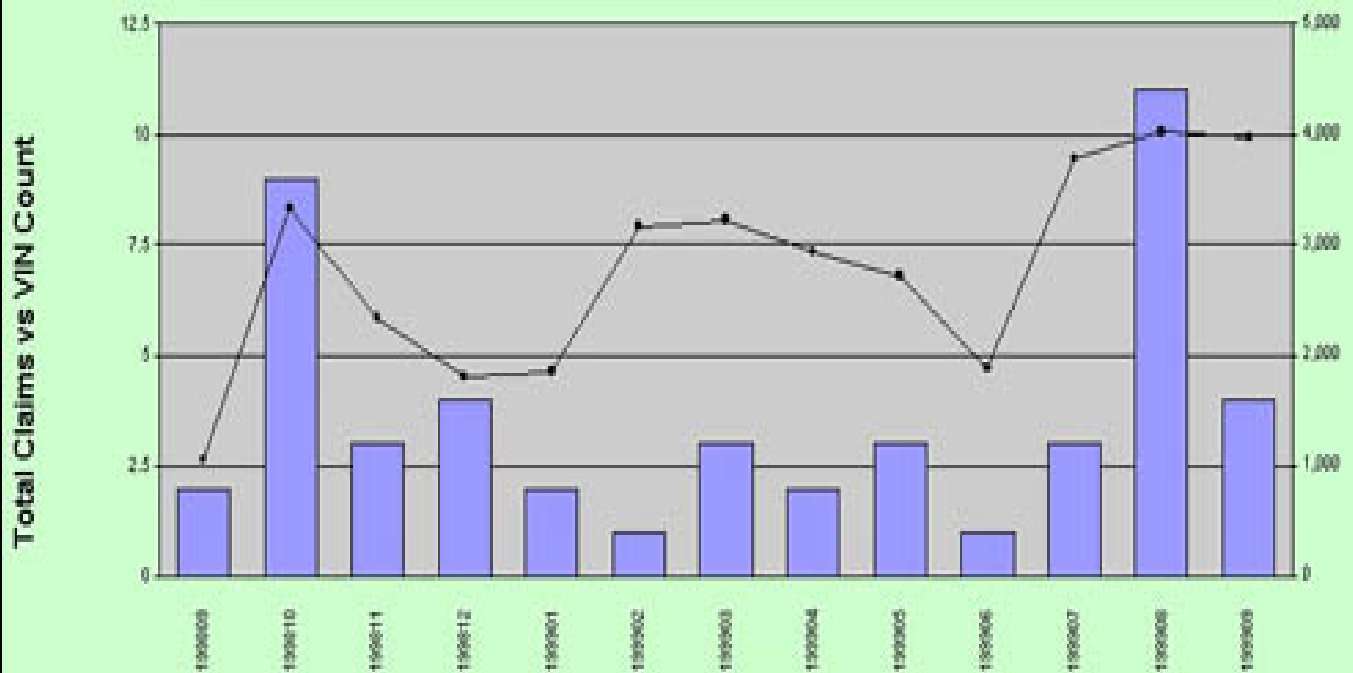
PRODUCTION DATE ANALYSIS



Op Code Waterfall Chart
Production Range - First 12 Months



Claims by Production Month vs VIN Count



- Crossmember Assembly Part Number Identification by vehicle production date:
 - 62405-38100 for vehicle produced from 9/14/98 - 4/14/99.
 - 62405-38101 for vehicle produced from 4/14/99 - 8/14/00.

3. Corrective Action:

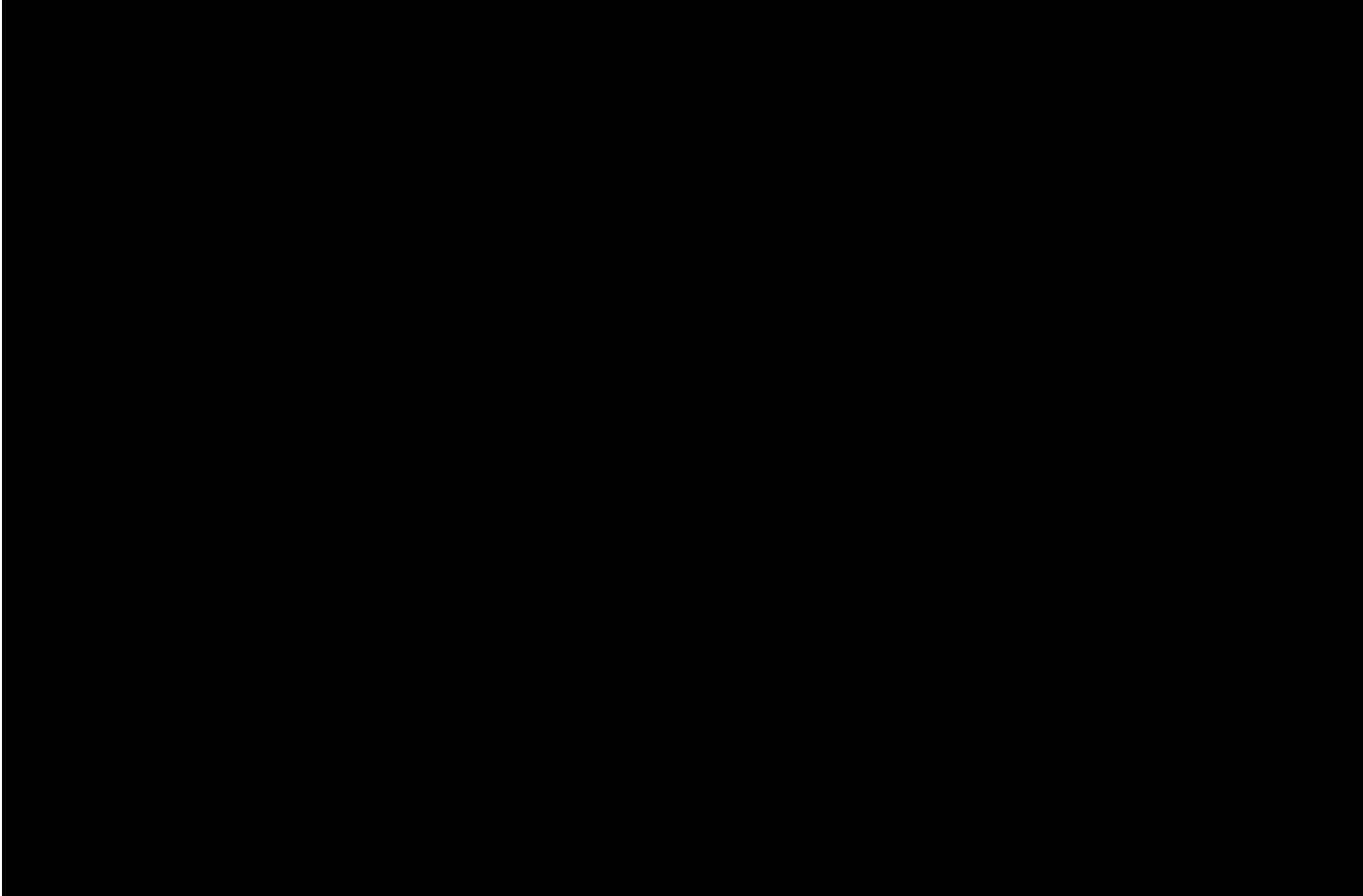
- Replace crossmember assembly P/N (62405-38101) and Right Front Lower Control Arm P/N (54501-38010).

4. Recommendation:

- HMC should investigate the Front Suspension Crossmember Assembly corrosion condition resulting in the Right Front Lower Control Arm separation.
- Customers who experience this condition may perceive an image of poor quality and durability.

5. Attachments:

PE08029/HYUNDAI-KIA
QAEF-C 061201



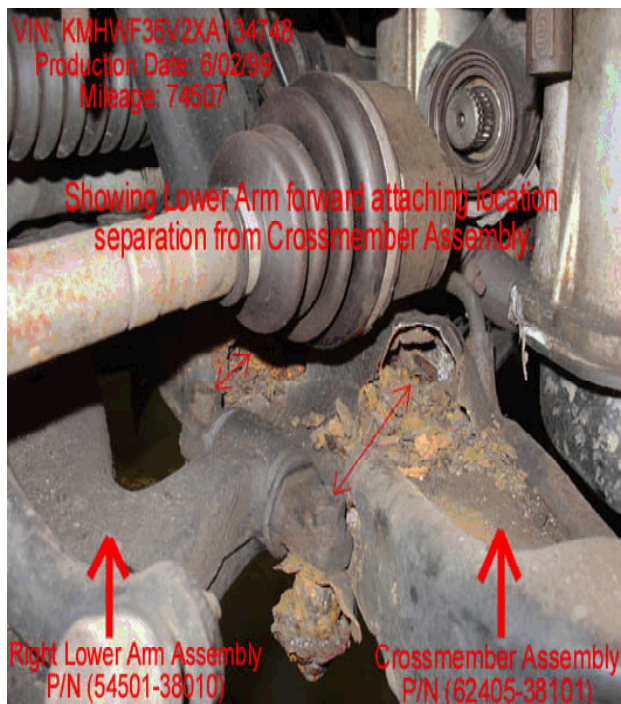
- Customer states right front lower arm assembly separated from crossmember assembly.

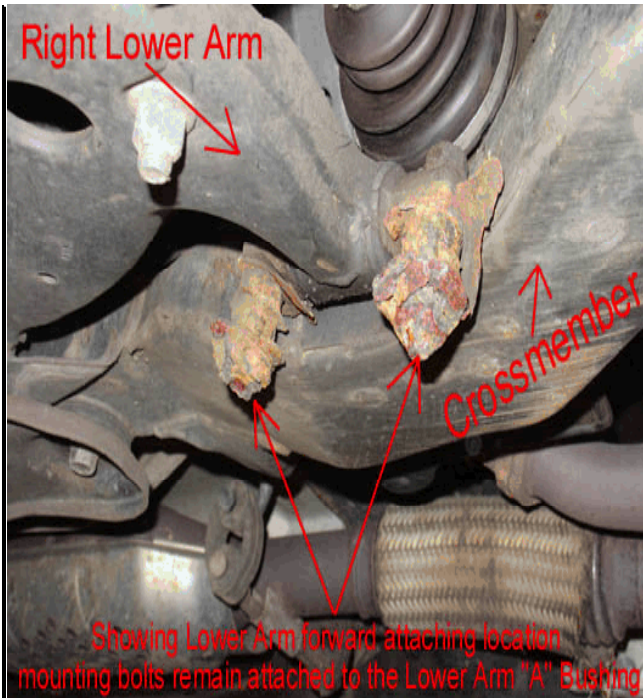
Analysis:

Date: 12/08/2006

Report Number :

- Inspection of the crossmember assembly P/N (62405-38101) revealed the area around the right side lower arm assembly forward attaching location was corroded.
- Right front lower arm was separated from the crossmember assembly at the forward mount attaching location.
- Found right front lower arm forward mount bushing bolts remain attached to the arm.
- Root cause of the right front lower arm P/N (54501-38010) forward attaching location separating from the crossmember assembly appears to be as a result of corrosion to the crossmember assembly. See attached photographs.





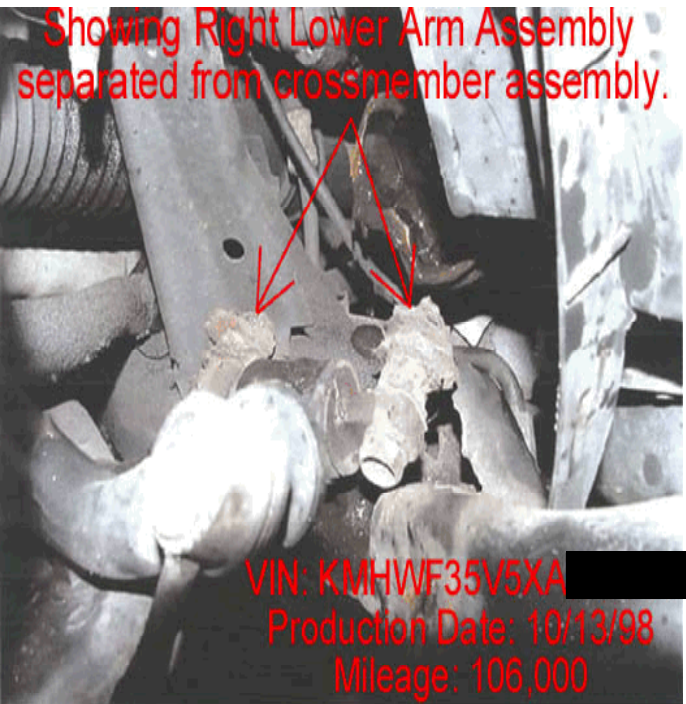
- Right Drive Shaft separated from the Center Bearing and Shaft Assembly as a result of the Lower Arm forward attaching location separating from the Crossmember Assembly. See attached photograph below.

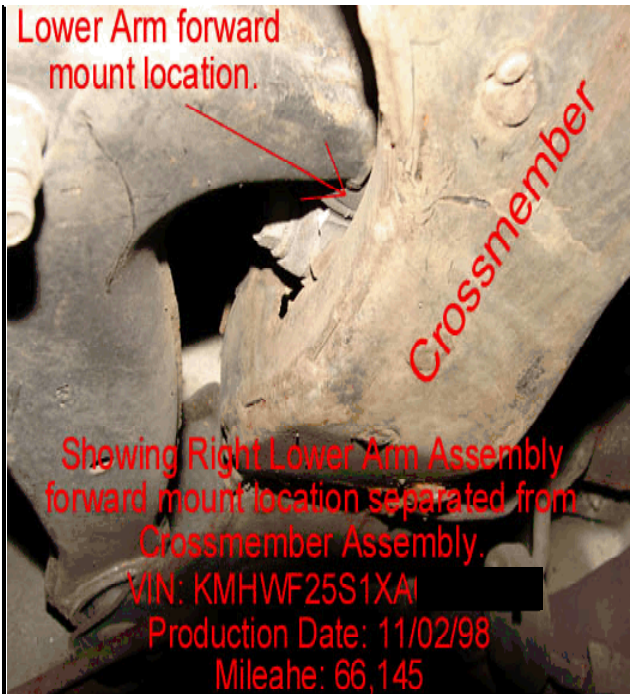


ADDITIONAL VEHICLES WITH SIMILAR CONDITION

VIN	Production Date	Mileage	Condition
* KMHWF35V2XA [REDACTED]	6/02/99	74,507	Right front Lower Arm separated from the Crossmember Assembly at the forward mount attaching location.
KMHWF35V5XA [REDACTED]	10/13/98	106,000	
KMHWF25S1XA [REDACTED]	11/02/98	66,145	
KMHWF25V5XA [REDACTED]	2/24/99	94,982	
KMHWF35VXXA [REDACTED]	12/29/98	92,395	

* Incident vehicle Crossmember Assembly and Lower Arm Assembly will be forwarded to HMA





- Current warranty / goodwill data does not include current incident vehicles. Data may not accurately quantify condition.

WARRANTY / GOODWILL CLAIM DATA ANALYSIS

Labor Operation (62410R00)

1999 EF Sonata

Total Number of Claims	46
With Parts	46
Total Cost	\$ 69,355
Average Cost Per Claim	\$ 1,508
Nature Codes:	%
N29 (Abnormal Noise)	46
N56 (Rust, Corrosion)	11
Cause Codes:	%
C06 (Broken, Split, Torn)	20
C05 (Rusty, Corroded)	41
Mileage Range:	%
0 – 25	0
26 – 6,000	0
6,001 – 12,000	0
12,001 – 18,000	0
18,001 – 24,000	4
24,001 – 30,000	9
30,001 – 36,000	0

36,001 – 48,000	11
48,000 – Over	76
In Service:	%
0 – (PDS)	0
1 – 90	0
91 – 180	0
181 – 270	0
271 – 365	0
366 – 730	0
731 – 1,096	0
1,097 – Over	100

Corrective Action:

Date: 12/08/2006

Report Number :

- Replace crossmember assembly P/N (62405-38101) and Right Front Lower Control Arm P/N (54501-38010).

Comments and Recommendations:

Date: 12/08/2006

Report Number :

- HMC should investigate the Front Suspension Crossmember Assembly corrosion condition resulting in the Right Front Lower Control Arm separation.
- Customers who experience this condition may perceive an image of poor quality and durability.

Attachments:

Date: 12/08/2006

Report Number :



EF 99 MY R Lower Arm Separation form Crossmember 01.jpg



1999 EF Crossmember.xls



EF 99 MY R Lower Arm Separation form Crossmember 09.jpg



EF 99 MY R Lower Arm Separation form Crossmember 08.jpg



EF 99 MY R Lower Arm Separation form Crossmember 07.jpg



EF 99 MY R Lower Arm Separation form Crossmember 06.jpg



EF 99 MY R Lower Arm Separation form Crossmember 03.jpg



EF 99 MY R Lower Arm Separation form Crossmember 02.jpg



EF Lower A Arm Separation 01.doc