# HYUNDAI AMERICA TECHNICAL CENTER, INC.

A Subsidiary of Hyundai Motor Company (Korea)

5075 Venture Drive Ann Arbor, MI 48108 Tel: (734) 747-6600 Fax: (734) 747-6699

May 9, 2005

Mr. Ronald Medford Acting Associate Administrator for Enforcement National Highway Traffic Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

RE: Recall Number 05V-187 Defect Information Report (additional information) (Hyundai Campaign 069)

Dear Mr. Medford:

Hyundai Motor Company previously submitted a Defect Information Report to NHTSA regarding a recall campaign of approximately 150 model year 2005 Hyundai Elantra and 111 model year 2005 Tiburon vehicles produced beginning February 22, 2005 through March 27, 2005 (NHTSA Recall Number 05V-187) pursuant to Part 573 of Title 49 of the Code of Federal Regulations.

Enclosed for NHTSA's files are final copies of the Technical Service Bulletin and dealer notification letters.

Sincerely,

Robert Babcock

Manager, Corporate Affairs

Attachments: 3

TO: ALL HYUNDAI DEALER PRINCIPALS/GENERAL MANAGERS:

**ALL HYUNDAI SALES MANAGERS:** 

ALL HYUNDAI DEALERSHIP SERVICE MANAGERS: ALL HYUNDAI DEALERSHIP PARTS MANAGERS:

Subject: Campaign 069 – 2005 MY Elantra and Tiburon – Steering Tie Rod Threaded Attachment

Hyundai Motor America is conducting a Recall Campaign on certain 2005 MY Elantra and Tiburon vehicles produced from February 22, 2005 to March 27, 2005 to inspect, and if necessary, to replace the steering gear box assemblies.

Affected 2005 Elantras and Tiburons may have internal cracks in the threaded portion of the steering gearbox assembly's left and right inner ball joint assemblies. Campaign 069 provides a procedure for inspecting and, if necessary, replacing the Power Steering Gear and Linkage Assembly.

In order to identify only those vehicles affected by Campaign 069, it will be necessary to access Hyundai Motor America's "Warranty Vehicle Information" screen via DCS Interactive or DCS On-line before the inspection or repair is started. The "Warranty Vehicle Information" screen will identify affected vehicles with an open Campaign 069. All affected in-stock vehicles must have Campaign 069 completed prior to retailing.

Enclosed with the Service Manager's letter are materials, which were developed for your use: Dealer Letter, five (5) copies of the Technical Service Bulletin (TSB#05-01-005) containing instructions on performing the service and submitting the campaign claim, and a VIN listing of both your dealer stock and your retail customers affected by this campaign. TSB #05-01-005 will be available on Hyundai's Website on May 6, 2005.

All affected customers have been notified to have their vehicle brought to a Hyundai dealership for repair.

It is IMPORTANT TO SUBMIT A CAMPAIGN CLAIM FOR EACH VEHICLE SERVICED so your dealership can be compensated for your work and Hyundai can maintain accurate records of campaign completions.

LEGAL LIABILITY NOTICE: You are required to keep confidential any and all information and documents provided to you by Hyundai Motor America in the conduct of carrying out work for this campaign. Hyundai Motor America dealers may use owner information provided for the campaign only for the purpose of conducting and performing this campaign, and for no other purpose.

Hyundai appreciates your cooperation and support. Questions may be directed to your District Parts and Service Manager.

//ALL HMABST?? 05/05/05 05/06/05 05/09/05

TO: All Hyundai Dealership General Managers, Sales Managers,

Service Managers, Parts Managers, and Warranty

Administrators

FROM: Hyundai Motor America

SUBJECT: Campaign 069 - 2005 MY Elantra and Tiburon - Steering Tie

Rod Threaded Attachment

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	Bulletin	Rullotin	CAMPAIGN			
	Dulletill	Dulletill		Number		
				05-01-005		
Subject			Date			
POWER STEERING GEAR AND LINKAGE ASSEMBLY				MAY, 2005		
REPLACEMENT PROCEDURE - CAMPAIGN 069			Model	2005 ELANTRA, 2005 TIBURON		
CIRCULATE TO:	[X] GENERAL MANAGER	[X] PARTS MANA	GER	[X] TECHNICIAN		
[X] SERVICE ADVISOR	[X] SERVICE MANAGER	[X] WARRANTY N	/IGR	[X] SALES MANAGER		

IMPORTANT: DEALERS MUST PERFORM THIS CAMPAIGN ON ALL AFFECTED

VEHICLES PRIOR TO CUSTOMER RETAIL DELIVERY AND WHENEVER AN AFFECTED VEHICLE IS IN THE SHOP FOR ANY

MAINTENANCE OR REPAIR.

IMPORTANT: WHEN A VEHICLE ARRIVES AT THE SERVICE DEPARTMENT,

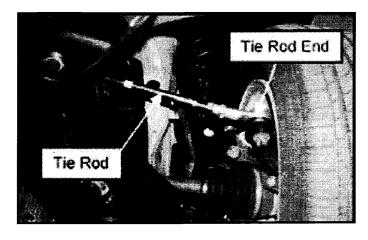
ACCESS HYUNDAI MOTOR AMERICA'S "WARRANTY VEHICLE INFORMATION" SCREEN VIA DCS INTERACTIVE OR DCS ON-LINE

TO IDENTIFY OPEN CAMPAIGNS.

#### **DESCRIPTION:**

Please review the entire contents of this package with the appropriate personnel at your dealership.

Some 2005 MY Elantra (XD) and Tiburon (GK) vehicles may have been manufactured with threaded portions of the steering gearbox assembly's left and right inner ball joint assemblies with internal cracks in the material structure. If the threaded portion of a steering gearbox assembly's inner ball joint assembly was to break as a result of the internal crack, the tie rod end assembly would no longer be attached to the steering gear box. This would prevent steering control of that front wheel by the separated tie rod.



This bulletin outlines the repair procedure for removal and replacement of the Steering Gear and Linkage Assembly with applicable part numbers.

## **AFFECTED VEHICLES:**

- Model: 2005 ELANTRA (XD) and 2005 TIBURON (GK) vehicles
- Affected vehicle production date range: February 22, 2005 March 27, 2005
- This service procedure applies to vehicles that have not been ultrasonically inspected, and to vehicles where a crack was confirmed to be present as a result of an ultrasonic inspection.

### **GENERAL INSTRUCTIONS:**

If you have affected vehicles in your inventory, you should:

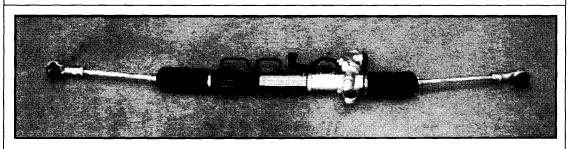
- Confirm that the vehicle is within the specified model production range and also identified on the "Warranty Vehicle Information" screen as having an open 069 Campaign.
- 2. Confirm that the recall has not been previously performed by checking the DCS "on-line" system and the "Warranty Vehicle Information" screen.
- 3. Complete a repair order and perform the procedure as described in this bulletin.
- 4. Submit a campaign claim in a timely manner as per the attached campaign submission information.



CAMPAIGN
Number
05-01-005

#### **PARTS INFORMATION:**

## STEERING GEAR AND LINKAGE ASSEMBLY



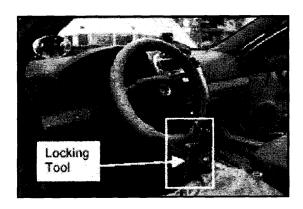
VEHICLE	PART NUMBER
Tiburon (GK)	57700-2C000
Elantra (XD) 4 DR	57700-2D000
Elantra (XD) 5 DR and 4 DR GT	57700-2D100

### **SERVICE PROCEDURE:**

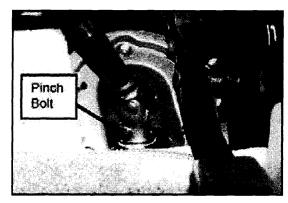
NOTE: Photos and instructions were created using an Elantra (XD) vehicle.

- 1. Turn the ignition to the OFF position.
- 2. Drain the power steering fluid as described in the shop manual.
- 3. Lock the steering wheel with a locking tool.

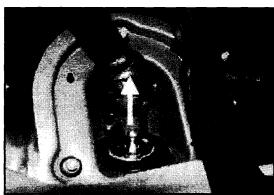
NOTE: It is important that the steering wheel is locked. Not doing this may cause damage to the air bag clock spring.



4. Remove the steering column shaft pinch bolt located behind the gas pedal.



5. Lift the steering shaft to separate it from the gear box.



6. Remove both front wheels.

Wheel lug nut tightening torque: 65 ~ 80 lb-ft (9.0 ~ 11.0 kgf-m)





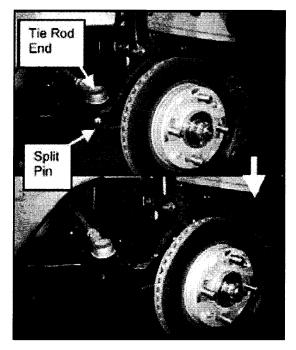
Group

**CAMPAIGN** 

Number

05-01-005

7. Remove the split pins and nuts from the outer tie rod ends. Disconnect the tie rod from the steering knuckle using Special Tool 09568-34000.



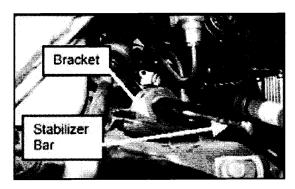
8. Remove the upper mounting bolt on both stabilizer bar link assemblies.

**Tightening torque:** 

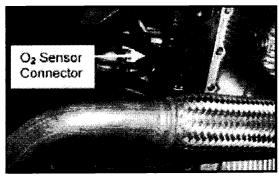
25 ~ 33 lb-ft (3.5 ~ 4.5 kgf-m)



 Remove both stabilizer bar brackets and remove the stabilizer bar. This will allow for easy access to steering gear and linkage mounting bolts.



10. Disconnect the oxygen sensor connector on the front muffler.

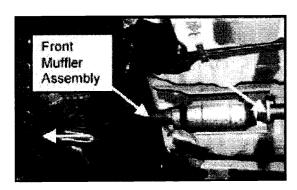


- 11. Remove the coupled catalytic converter (CCC) stay mounting bolt.
- 12. Remove the front muffler mounting bolts.

## Tightening torque:

31 ~ 40 lb-ft (4.3 ~ 5.5 kgf-m)

13. Remove the front muffler assembly.





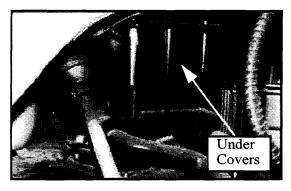
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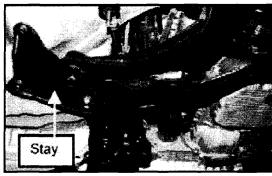
14. Remove the engine rear under covers on the left and right sides.



15. Remove both left and right stays.

**Tightening torque:** 

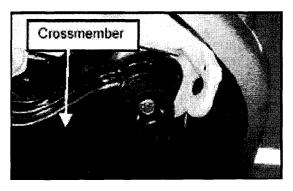
36 ~ 47 lb-ft (5.0 ~ 6.5 kgf-m)



16. Loosen both left and right front cross member assembly fixing bolts. Do not remove the bolts completely.

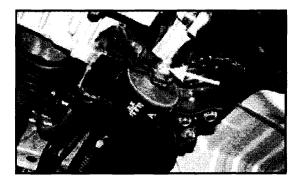
**Tightening torque:** 

36 ~ 47 lb-ft (5.0 ~ 6.5 kgf-m)



17. Remove the roll stopper rear bracket fixing bolt.

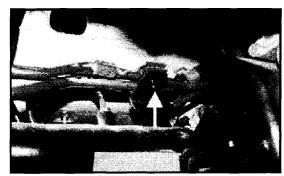
18. The front cross member bolts can now be loosened allowing the cross member to be lowered slightly. This will allow for more room to access the steering gear and linkage assembly mounting bolts.



19. Remove the power steering oil pressure tube mounting bolt.

Tightening torque:

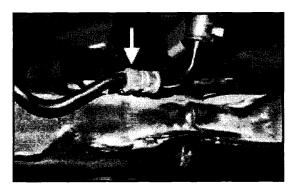
 $3 \sim 4.5$  lb-ft (0.4  $\sim 0.6$  kgf-m)



20. Remove the power steering return hose mounting bolt.

Tightening torque:

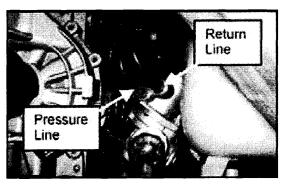
 $3 \sim 4.5$  lb-ft (0.4  $\sim 0.6$  kgf-m)



21. Remove the oil pressure and the return lines from the power steering gear box.

**Tightening torque:** 

7.5 ~ 12 lb-ft (1.0 ~ 1.6 kgf-m)





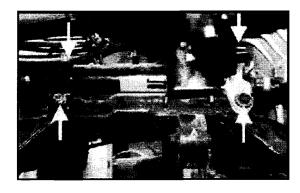
Group

**CAMPAIGN** 

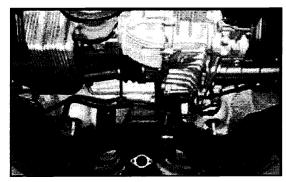
Number

05-01-005

22. Remove the 4 steering gear and linkage assembly mounting bolts.



23. Remove the steering gear and linkage assembly.

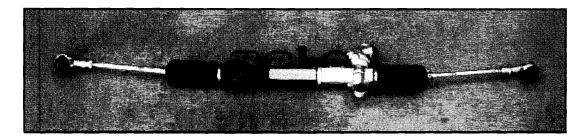


- 24. Install the new steering gear and linkage assembly in reverse order of removal.
- 25. Fill and bleed power steering system.

**Power Steering Fluid:** 

 $PSF-3 (0.79 \sim 0.84 qts)$ 

26. Adjust front wheel toe.



## NOTE: Disposition of the incident part instructions.

• Warranty Technical Center will be calling back all replaced steering gear and linkage assemblies.

## **CAMPAIGN CLAIM INFORMATION:**

OP CODE	OPERATION	OP TIME
51B007R0	XD 4DR - Power steering gear and linkage assembly replacement	1.9 M/H
51B007R1	XD 5DR/4DR GT - Power steering gear and linkage assembly replacement	1.9 M/H
51B007R2	GK - Power steering gear and linkage assembly replacement	2.1 M/H

NOTE: Submit claims using the campaign claim screen.