



# ODI RESUME

U.S. Department  
of Transportation

National Highway  
Traffic Safety  
Administration

INVESTIGATION: RQ99-002  
SUBJECT: Engine Cradle Separation  
PROMPTED BY: 97V-058, IE99-013  
PRINCIPAL ENGINEER: John Ridgley

DATE OPENED: 3/4/99

MANUFACTURER: General Motors Corporation  
MODEL(S): Chevrolet Lumina, Lumina APV & Monte Carlo, Buick Regal, Oldsmobile Cutlass & Silhouette, Pontiac Grand Prix & Trans Sport  
MODEL YEAR(S): 1989-1991  
VEHICLE POPULATION: 677,000

PROBLEM DESCRIPTION: The engine cradle front bolts and/or retainers may fail, allowing the front of the engine cradle to fall, possibly separating the steering intermediate shaft from the steering gear, with complete loss of steering control.

## FAILURE REPORT SUMMARY

|              | ODI | MANUFACTURER | TOTAL |
|--------------|-----|--------------|-------|
| COMPLAINTS:  | 26  | Unknown      |       |
| CRASHES:     | 2   | "            |       |
| INJ CRASHES: | 0   | "            |       |
| # INJURIES:  | 0   | "            |       |
| FAT CRASHES: | 0   | "            |       |
| # FATALS:    | 0   | "            |       |
| OTHER:       | 13  | "            |       |

DESCRIPTION OF OTHER: Loss of steering control

ACTION: An RQ has been opened.

ENGINEER: \_\_\_\_\_ DIV CHF: \_\_\_\_\_ OFC DIR: \_\_\_\_\_

\_\_\_\_\_  
DATE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
DATE

RQ99.002

SUMMARY: On April 1, 1997, General Motors Corporation filed a Defect Information Report to recall the subject vehicles, registered in 14 high corrosion states, to replace the rear engine cradle bolts and retainers. The rear engine cradle bolts would either fracture or pull through the retainers due to corrosion. As of September 1998, the sixth quarter, 59.3% of the subject vehicles had been repaired.

In addition to the complaints of front engine cradle bolt failures in the above Failure Report Summary, ODI has received six reports of possible front engine cradle bolt failures, including two crashes. An RQ is warranted to determine the extent of failures of the front engine cradle bolts and retainers on the subject vehicles.

*Place investigation and page numbers on subsequent pages  
Use Times New Roman, 12, font*