

CONFIDENTIAL BUSINESS INFORMATION

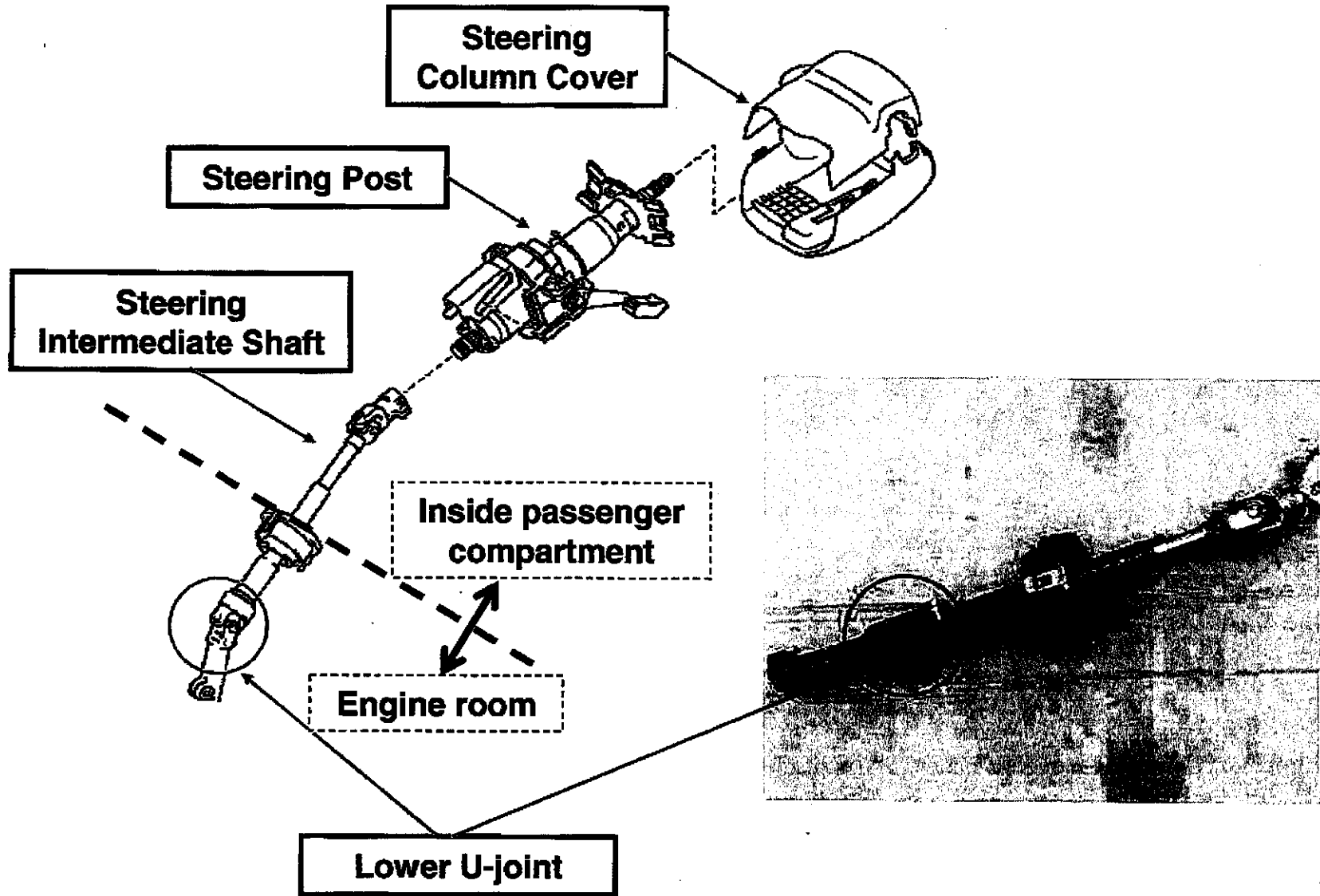


Toyota Sienna
Steering Intermediate Shaft

October 14, 2008

**Toyota Motor North America
Toyota Motor Corporation**

Steering Intermediate Shaft



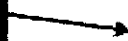
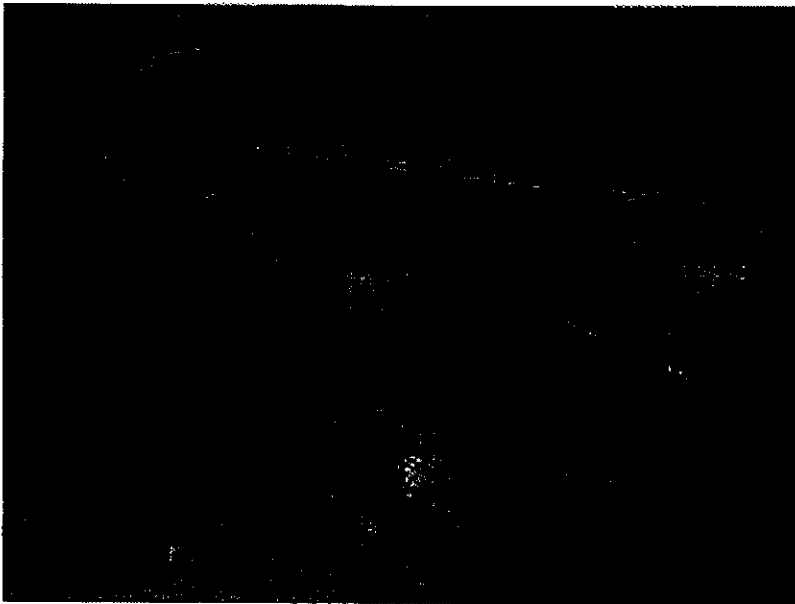
Phenomenon

Excerpt from 5 VOQs:

- The steering would become very difficult and felt as if it was locking up.
- A shaft in the power steering began to fail due to corrosion by road salt.
- The steering suddenly felt like it was sticking during turns.

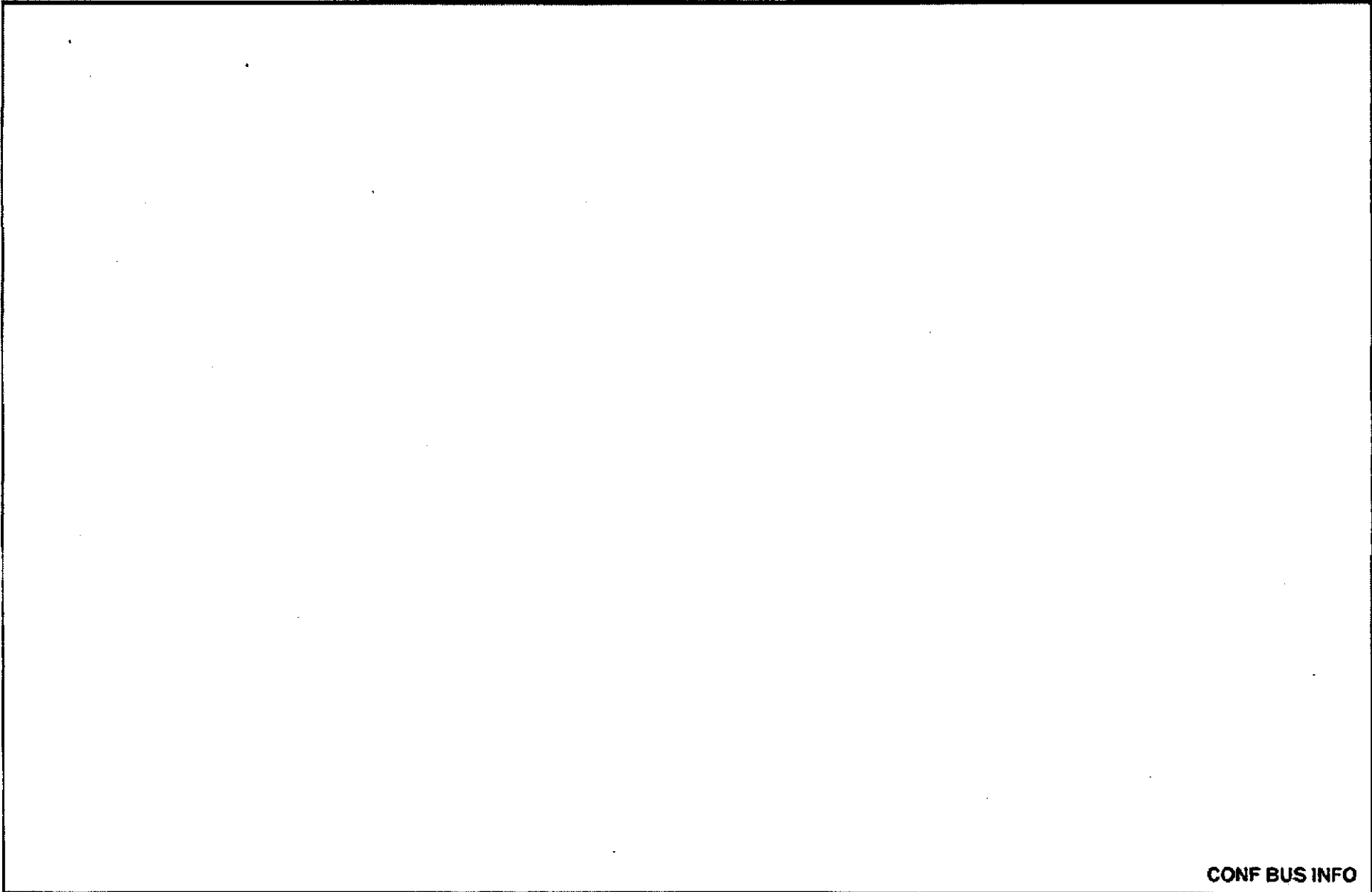
Excerpt from FTRs:

- Technician found one side of U-joint of steering shaft to be binding.

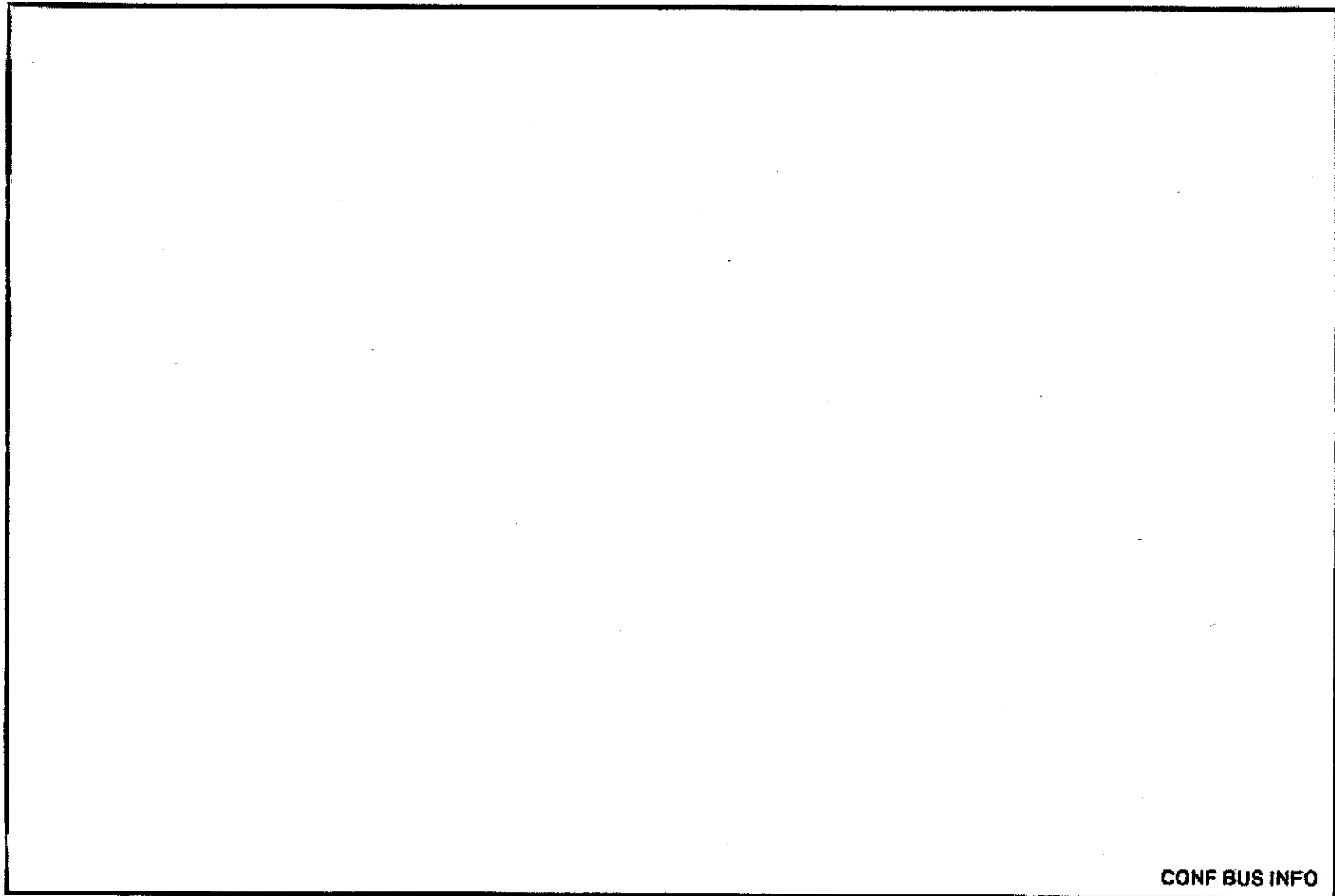


*Red direction: Stiff

Steering Intermediate Shaft Lower U-joint



Disassembly Investigation Results of Recovered Part



Mechanism

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Countermeasure

CONF BUS INFO

Field Information

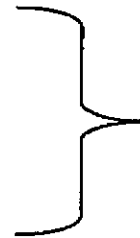
NHTSA VOQ

- Of the 5 VOQ's, there are no crashes or injuries reported within.

Customer Complaints

1. Reports

- Number of reports: 73 cases (70 unique vehicles)
- Population before the production change: 550,000



Rate: 0.013%
(=70/550,000)

2. Crashes

- Number of reports: 4
- It is highly unlikely that these reports are related to increased steering effort due to U-joint corrosion.

- **Extremely low rate of occurrence of increased steering effort.**
- **No accidents due to corrosion of the lower U-joint.**

Internal Investigation

Parts Recovery

- Three Go and See Activities to evaluate and recover components

Investigation Result of Steering Effort

Investigation Result of Steering Effort

Investigation Result of Steering Effort

Investigation Result of Steering Effort

Toyota's Assessment

- The issue occurs gradually and is noticeable to the operator well before the steering effort increases.
- There are no crashes as a result of corrosion of the lower U-joint.
- Occurrence rate of increased steering effort is extremely low.
- Dealers are aware of the issue via our service bulletin, and the condition can be repaired properly.



Toyota believes:

- Corrosion occurs gradually and is noticeable to the operator.
- Steering effort remains reasonable as corrosion develops.
- There is no unreasonable risk to motor vehicle safety.
- A safety-related defect does not exist in the steering system of the Sienna vehicles.