# TOYOTA MOTOR CORPORATION

I.S. OFFICE 9 West 57th Street, Suite 4550 New York, N. Y. 10019 Telephone (218) 285-0303

December 6, 1985

Mr. Philip Davis, Director Office of Defects Investigation, Enforcement National Highway Traffic Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

RE: NEF-12Ch, EA85-045

Dear Mr. Davis:

In response to your letter of September 20, 1985, in which you requested information concerning alleged sudden acceleration of certain 1981-1984 Toyota Cressida Vehicles, we hereby submit, in duplicate, the data you requested.

Please note that the information claimed to be confidential is deleted and is being sent to the Chief Counsel's office under separate cover in accordance with the directions in your letter above.

If you have any technical questions concerning this matter, please contact our Washington branch office at (202) 775-1707.

Sincerely,

Toyota Motor Corporation

Kenichi Kato General Manager

U.S. Office

KK:cc Enclosures

co: Mr. D. Koda

Mr. K. Suzuki

JOSEPHINE A. VIRGILI

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### RESPONSE TO ALLEGED SUDDEN ACCELERATION OF

# 1981 - 1984 TOYOTA CRESSIDA VEHICLES

(NEF-12 Ch, EA85-045 of September 20, 1985)

### General Comments:

As Toyota indicated in our response to EA83-20 on March 2, 1984, we are aware of complaints alleging sudden acceleration problem on certain 1981 through 1984 Cressida models.

However, in spite of our intense effort to duplicate the alleged problem, such as recovering some of the allegedly failed vehicles and/or cruise control units and sending them to Japan for investigation, w~ could not reproduce any of the alleged problems nor verify the existence of the problem so far (see Response 14).

In fact, the recent demonstration at your VRTC on the vehicle with the failed cruise control computer installed was the very first case in which Toyota was able to observe the alleged problem.

Based upon our observation above, we have again reviewed all complaints and reports alleging a sudden acceleration problem. However, we could not find any identifiable cause nor determine whether the computer failure could be a common cause of the alleged problem in the field. This is because of the fact that most of the complaints cannot be technically explained and are not detailed enough to make a technical judgement.

Under these circumstances, as in the past, we must indicate that it is impossible, from an engineering point of view, to provide technically meaningful analysis, such as requested in Q. 19. Rather, in order to analyze the cause of cruise control failure observed at VRTC, we hereby request to borrow the computer for further detailed investigation.

The following are specific responses to the information requested.

 Furnish the number of subject vehicles sold by Toyota in the U.S. by make, model and model year.

# kesponse 1:

Below . the list of the subject 1981-1984 Cressidas sold in the United States according to each model year:

Model Year	1981	1982	1983 1984	Total
2	<b>,</b> ,	•	1 1	
Cressida	24,355	35,464	39,016 36,428	135,263

Please note that all 1981 through 1984 Cressidas are equipped with or note control system as standard equipment.

2. Furnish the number and copies of all owner reports or consumer complaints received by Toyota, or of which Toyota is otherwise aware, pertaining to the alleged problem on the subject vehicles. Furnish all reports or complaints whether or not Toyota has verified each report. If the reports were verbal communications, provide written transcripts or summaries, including the data and persons involved, for each report.

#### Response 2:

See combined information in item 4 response.

3. Furnish the number and copies of all other reports, complaints, surveys, or investigations from all sources either received or authorized by Toyota, or of which Toyota is otherwise aware, pertaining to the alleged problem on the subject vehicles. Furnish all reports whether or not Toyota has verified each report, including all correspondence, notes, memoranda and other records pertaining or relating to the performance of the cruise control assemblies (or components thereof) on the subject vehicles. If the reports were verbal communications, provide a written transcript or summary, including the date of the communication and the name of the persons involved for each.

# Response 3:

See combined information in item 4 response.

4. Furnish the number and a description of each accident or subrogation claim (including the names, addresses and telephone numbers of the owner/occupants involved) of which Toyota is aware on the subject vehicles and which may have occurred due to circumstances, conditions, or problems caused by the alleged problem. Furnish all reports whether or not Toyota has verified each report. If the reports were verbal communications, provide a written transcript or summary, including the date of the communication and the name of the persons involved for each report.

#### Response 4:

This is in response to items 2, 3 and 4 above.

The following is information that was available as of August 31, 1985, but does not include the ones which have been submitted previously nor that provided by your office.

Other than those received from your office, we have received one. (1) additional report. A copy of this report is provide as Attachment ?.

(2) Verbal Poperts

We are aware of three (3) additional verbal reports which are provided as Attachment II.

/3) Field Reports

There are no field reports.

(4) Subrogation Claims

There are no subrogation claims.

(5) Accident Reports Man (5)

We are aware of nine (9) additional accident reports with alleged problem. Within these alleged cases, we are providing our investigation reports in those cases that we have investigated in Response 14.

3) Owner: Norman Lefton 200 C Occupant: Betty Lefton 19001 Jodi Terrace, Homeward, IL 60430 Address: Telephone: (312) 798-8268 Vehicle VIN: JT2MX63E6D000(917 Customer The vehicle was parked at a supermarket Description: parking lot. The engine was started and the driver turned backward to put her purse on rear seat. When the shift lever was put into reverse, the vehicle suddenly lurched backwards and hit at other vehicles.

Owner: Milaram Rosberger ת בוויב מנוססי Milgram Rosberger ለዕላ፣ \cdots 🔻 5715 Baltimore Dr., #137, La Mesa, CA 92041 Tre Jantonia (619) 465-2091 Webjerto Ritte JT2MX62E3C005+343 Chatamar When the ignition turned on, the vehicle Decemberion just took off. The shift lever was in "1" and was not in gear. After the vehicle took off, the vehicle can through the dation.

c) Owner: Pearl Verra
Occupant: Unknown
Address: Unknown

Telephone: Unknown

Vehicle VIN: JT2MX62E3C0003217

Customer Description:

Description:

The engine raced and she heard a loud noise. The vehicle suddenly accelerated forward out of the driveway, across the street and through a chainlink fence.

d) Owner: Antonetta Desiderato

Occupant: Margaret Riedel

Address: 347 Simmonsville Ave., Johnston, RI 02919

Telephone: (401) 353-7836 Vehicle VIN: JT2MX62WXC0036406

Customer To move forward, when the transmission was

shifted to "D", the vehicle shot forward at high speed. The vehicle crossed the safety island and crashed into a parking meter.

e) Owner: Peter Ligouri
Occupants: Peter Ligouri, his wife and daughter
Address: 14 Flora Drive, Holmdel, NJ

Telephone: (201) 946-2472 Vehicle VIN: JT2MX62W4E0088052

Customer When the shift lever was moved from "P" to Description: "D" position, the vehicle shot forward and

collided into two other vehicles.

f) Owner: Floyd Newson
Occupant: Floyd Newson

Address: 651 Ramblewood Road, Houston, TX 77079

Telephone: Unknown

Vehicle VIN: JT2MX63EXD0024411
Customer Due to a sudden unexpected strong

Description: acceleration of the vehicle from a dead stop, the vehicle collided into another

vehicle.

g) Owner: Bob Olian Occupant: Rubert Olian

Address: 3070 Pheasant Dr., Northbrook, IL

Telephone: (312) 480-1874 VIN: JT2MX62E8C0053496

Customer Driver put car into gear ('D'), stepped on the accelerator, and claims that the car accelerated to a full throttle condition on

its own, causing the accident.

h) Owner:

Hans Geesink Occupant: Maria Geesink

Address:

9352 Rose Ave., Montclair, CA

Telephone:

(714) 624-4838

VIN: Customer

JT2MX62E0C0057790

Description:

Driver was in the process of backing out of the garage door, the throttle cracked wide open causing the vehicle to run into a post adjacent to a concrete block wall. The vehicle then continued rearward, striking a second post and coming to rest against a second concrete block wall, engine was

turning at a high rpm.

i) Owner: Occupants: Joseph G. Erspamer Joseph G. Erspamer Adeles S. Erspamer

Address:

116 N. 40th St., Omaha, NE

Telephone:

(402) 556-1437

VIN:

JT2MX63U9E0071740

Customer Description:

With the vehicle's A/C system on, the driver placed the vehicle in drive - the

engine reved - and went forward, damaging

another vehicle.

With respect to Toyota's response to this letter, please define what Toyota has considered to be a failure, malfunction or unsatisfactory performance of the cruise control assemblies (or components thereof) on the subject vehicles.

# Response 5:

As we have stated in our general comments, although we observed the alleged problem at the VRTC, which was apparently caused by cruise control computer failure, we have not been able to identify any specific causes through examination of the complaints or our own investigation of vehicles and/or components.

Therefore, under these circumstances, we are unable to specifically define a failure, malfunction or unsatisfactory performance of the cruise control assembly or it components.

6. Identify all lawsuits, both pending and closed, by title, location and docket number in which Toyota is or was a defendant (or co-defendant) pertaining to, at least in part, the alleged problem on the subject vehicles. Provide a brief synopsis of each case including Toyota's analysis of the incident, the identification of the vehicle (model series,

model year and VIN), the date of the incident which was the basis for the lawsuit, the date the lawsuit was filed and the vehicle owners (name, address and telephone number). Identify all parties involved in the lawsuit.

### Response 6:

There are no lawsuits concerning the alleged problem on the subject vehicles other than those we have submitted previously.

7. Furnish the number of applicable warranty claims on the subject vehicles which may have been claimed as a result of failure, malfunction or similar performance of the cruise control assemblies (or components thereof) by model series code, calendar month and problem code to date. Each problem claim code must be identified. Furnish representative sample warranty claims on the matter.

### Response 7:

As there are no specific warranty claim problem codes applicable to alleged problem, all warranty claims on related components are being submitted by model year, calendar month and problem code, as Attachment III.

The problem claim codes applied are listed below:

# Warranty Claim Codes

Burnt Scarred, bruised Broken, split, torn Beformed Loss of tension, weakened Peeling Cracked Rusty corroded Wear
Broken, split, torn Deformed Loss of tension, weakened Peeling Cracked Rusty corroded
Broken, split, torn Deformed Loss of tension, weakened Peeling Cracked Rusty corroded
Deformed Loss of tension, weakened Peeling Cracked Rusty corroded
15 Peeling 16 Cracked 17 Rusty corroded
15 Peeling 16 Cracked 17 Rusty corroded
17 Rusty corroded
17 Rusty corroded
19 Wear
41 Poor contact
42 Out of balance
43 Excessive clearance/backlash
44 Lack of clearance/backlash
48 Porous, penhole
51 Poor welding
52 Incorrect part
53 Missing part
55 Lack of Jubricant/adhesive

# Warranty Claim Codes cont.

Code Number	Description		
56	Poor machining		
57	Poor assembly		
71	Open circuit/semiconductor		
73	Short circuit, poor contact		
81	Insufficient torque/tighten		
83	Sticking/seized		
88	Clogged		
99	Others		

Representative sample Warranty Claims are being submitted as Attachment IV.

- 8. Furnish the number of the following components or assemblies sold to date by model, series, model year application, component name, part number (both service and engineering), supplier (name, address and model year of supply application) and calendar month which may be used on the cruise control assemblies on the subject vehicles:
  - a. speed sensor,
  - b. main control switch,
  - c. cruise control computer,
  - d. actuator, and
  - e. cancel switches.

# Response 8:

The number of subject components sold from August 1980 to date are provided by applicable model, model year, part number, supplier and component name as Attachment V. Please note that, in the case of analog speedometer, the speed-sensor is an integral part of the speedometer assembly and is sold as such, thus the number of speedometers sold.

The suppliers' names and addresses are as follows:

Supplier	Λddress
Fujitsu Ten Dimited	1-2-28 Goshodori, Hiyogo-ku, Kobe-Shi, Hyogo-ken JAPAN
Aishin Seiki Co., Ltd.	2-1 Asahi-cho, Kariya-shi, Aichi-ken JAPAN
Nippondenso Co., Ltd.	l-1 Showa-cho, Kariya-shi, Aichi-ken JAPAN

Tokai Rika Co., Ltd.

No. 1 Unoda, Oaza Toyoda, Oguchi-cho tanba-gun, Aichi-ken JAPAN

Matsushita Electronic Components Co., Ltd.

No. 1006 Oaza Kadoma, Kadoma-shi, Osaka JAPAN

Wazaki Meter Co., Ltd.

1-4-28 Mita, Minato-ku, Tokyo JAPAN

9. If any of the components identified in item 8 are sold (or have been sold) as part of a kit or package, identify the number of such kits or packages sold by part number (both for the kits, sage and the components included), vehicle application and calendar year of sale to date.

# Response 9:

See Response 8 above.

10. Furnish the production code sequence of the VIN by calendar month for each assembly plant producing the subject vehicles.

### Response 10:

The subject vehicles for the U.S. market are produced only at our Motomachi Plant. The production code sequence of the VIN by calendar month are provided as Attachment VI.

11. Furnish copies of all correspondence between Toyota and the suppliers of the cruise control assemblies (or components thereof) pertaining to design, manufacturing, performance, durability, quality, testing or modification of the cruise control assemblies on the subject vehicles. If any communications on this subject were verbal, provide a wricten transcript or summary of each such communication and include a statement that identifies the participants and the date of the communication.

#### Response 11.

The copies of correspondence between Toyota and the respective suppliers are provided as Attachment VII (CONFIDENTIAL).

ittachment Vii - J with Fujitsu Ten Limited

- 2 with Aishin Seiki Co., Ltd.
- 3 with Nippondenso Co., Ltd.
- 4 with Tokai Fika Co., Ltd.
- 5 with Matsushita Electronic Components Co., Ltd.
- 6 with Yazaki Meter Co., Ltd.

12. Furnish a copy of all tests and analyses which Toyota is aware of which were used in developing the cruise control assemblies and components thereof for use on the subject vehicles.

#### Response 12:

All test results at the time of development related to components used are included in Response II. Additional venicle evaluation report at the time of development is submitted as Attachment VIII (CONFIDENTIAL).

13. Identify and describe any and all ongoing tests or analyses at (1) contractors, (2) suppliers or (3) Toyota entities (both in and outside the U.S.) pertaining to the cruise control assemblies on the subject vehicles.

# Response 13:

There are no ongoing tests or analyses on this matter because, other than the VRTC test, we have never encountered a failed system (although such failures have been alleged). Naturally, we would be anxious to test and evaluate any available failed system or component.

14. Identity any and all (1) suppliers, (2) contractors or (3) Toyota entities (both in and outside the U.S.) which have or may have conducted tests or investigations which may pertain to (a) the cruise control assemblies or components thereof or (b) the alleged problem by name, address, calendar date the work was first discussed and type of work performed or discussed.

Distinguish between that work which was actually completed from that which was not finalized. Furnish copies of all reports, noter, tables, graphs or similar documents which were Leveloped for each. Identify the reason(s) why an effort may not have been finalized for each effort.

#### mesponse 14:

The cests and/or investigations that may have been related to the cruise control assembly and/or its components on the alleged problem are listed blow.

Description	Вй	bate	Status	Attachment No.
investigate alleged ratifed vehicle*	Poyora Motor Corporation (Jepan)	4/84 2/84	Completed "	IX - 1 - 2

Investigation of re- covered alie ed mal- functioned cruise control assembly*	Toyota Motor Corporation (Japan)	7/84	Completed	IX - 3
Observation of failed computer w/NHTSA	Toyota Motor Corporation (U.S. Office)	10/85	Incomplete**	IX - 4
Investigate accident vehicles	Toyota Motor Sales, USA, Inc.	2/84 4/84 6/85 7/85 8/84 2/84	Completed	IX - 5 - 6 - 7 - 8 - 9 -10

\*: Purchased from complaining customer and returned to Japan for complete testing and analysis.

\*\*: We have not been allowed to investigate the failed cruise computer.

- 15. Identify and describe all changes or modifications in the design, manufacture, attachment or composition of the components listed in item 8. The description should include but not be limited to the following items for each change or modification:
  - a. the reason for the change or modification;
  - b. description of the change or modification;
  - the calendar date on which the change or modification was incorporated into production; and
  - d. describe whether the changed or modified component can be used as a replacement part for unchanged or unmodified components.

## Response 15:

The modification/change of the components listed in Response 8 is indicated in Attachment X.

- 16. Identify whether Toyota ever considered alternative cruise control assemblies in the subject vehicles. Include in the identification of each alternative component (or method) the following:
  - a. when each alternative component was first proposed;
  - b. a description of the alternative component; and
  - c. the disposition of the alternative component (i.e. whether the alternative component was approved, disapproved, or still undergoing evaluation) and the reason(s) for the disposition other than economic reasons.

Or er chan the modifications/changes identified in Response (%) Trysta has not considered alternative cruise control assemblies i tie subject venicles.

17 Furnish engineering specification drawings of the components identified in item 8 and uses on the subject vehicles.

# Response 47:

Son Rose Line

18. Sestion tent of inspection methods and procedures as well as instrumen's user to detect failure or malfunction of the orgish central mammare, in the subject vehicles.

# Response 18:

The second secon Under conditions such as those observed at VR C where actuator pulled the throttle to rall open position immediately after starting the engine, the computer itself can be sked to determine if it is rausing the alleged problem by checking certain voltage as described in Attachment EX-4.

Also, the computer itself can be checked by using a "Computer Checker". This checker; by connecting directly to the computer itself, can electronically duplicate various field use conditions, i.e., resume, set, cancel, etc. and can check if each of those functions work as designed. The functions that can be confirmed by this checker are described in Attachment XI. All production computers are subjected to such a functional check by the supplier before shipment to Toyota.

Please note, bowever, that this checker is only valid for functional chairs and is unable to identify the cause of computer failure such as pear soldering, short circuit, etc.

The only way to betest or consist the cause of computer failure or malfunction can be achieved by checking each and every circuit electronically in accordance with the engineering drawings.

Furnish of the alleged problem with the can the control assert her in the subject vehicles. Please in two or objessment of the following:

- the causal or contributory factors which may result in the alleged problem such as computer failure;
- b. the failure mode;c. the risk to motor vehicle safety created by the alleged problem; and
- d. any warning of the alleged problem.

# Response 19:

Toyota's past investigations could not substantiate nor simulate the unexpected or sudden vehicle acceleration alleged cases. Therefore, Toyota cannot provide, based on current known facts, a meaningful technical assessment related to the alleged problem.

In fact, the first defective computer ever observed by Toyota (and NHTSA also, we understand) was that recovered by your office. We are unable to technically explain the cause of this malfunction until we are able to make a detailed analysis on the failed computer.

20. Furnish a copy of all documents not specifically requested which Toyota believes are relevant or were used in formulating its assessment of the alleged problem. 

Response ZU:
There are no other such documents.

Furnish any new information of which Toyota is aware concerning any raport, document, or information which may have been previously provided by Toyota. Also, furnish any additional information of which Toyota is aware concerning the reports provided by the National Highway Traffic Safety Administration (NHTSA) on this matter.

#### Response 21:

This information is included in our Response 14.

21. Is the cruise control computer only used in the subject vehicles? If not, furnish the number of other Toyota vehicles using a similar computer sold in the U.S. by make, model and model year.

#### Response 22

There are no other Toyota vehicles which use the same computer.

# OYOTA MOTOR CORPORATION

U.S. OFFICE 9 West 57th Street, Suite 4550 New York, N. Y. 10019 Telephone (212) 223-0303

December 6, 1985

Erika Z. Jones Chief Counsel National Highway Traffic Safety Administration 400 Seventh Street S.W. Washington, D.C. 20590

RE: NEF-12Ch, EA85-045

Dear Mrs. Jones:

In response to the letter of September 20, 1985 from the Director, Office of Defects Investigation, requesting information concerning alleged sudden acceleration of certain 1981-1984 Toyota Cressida vehicles, please find enclosed two (2) copies of Toyota's response for which we request confidential treatment. This response, without the claimed confidential material, has been sent to the Office of Defects Investigation under separate cover.

We claim that certain attachments (Attachments VII and VIII) to the enclosed response contain confidential commercial information. These attachments include engineering specification drawings, project evaluation reports during the development stage and product inspection standards, all of which is our proprietary information documented through our own experiences and engineering capabilities. Release to competitors of any material which is claimed to be confidential may result in significant competitive damage to Toyota.

Therefore, we request that Attachments VII and VIII of this response, claimed to be confidential, be treated as such. Toyota appreciates your support of our claim of confidentiality with respect to the attachments so identified.

If this request and the supporting affidavit are found to be insufficient to establish Toyota's entitlement to confidential treatment, we ask that, pursuant to 49 CFR #5]2.4 (i) (2), you afford us the opportunity to supplement this request. We understand that in aucordance with #512.6 (b) (1), your determination to grant or deny confidentiality will be made within 30 days and communicated to us at that time.

Mrs. E. Jones Page 2

If we can be of further help, please contact our Washington branch office at (202) 775-1707.

Sincerely,

Toyota Motor Corporation

Kenichi Kato General Manager U.S. Office

KK:cc Enclosures

cc: Mr. Philip Davis

Mr. Dan Koda

Mr. K. Suzuki

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JOSEPHINE A. VINGILI
Metary Public, State of New York
No. 03-4803777
Ossalified in Bronk County
Commission Expires March 30, 18