

HONDA

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OFFICE OF DEFECTS
INVESTIGATION

June 30, 2003

Mr. Kenneth Weinstein,
Associate Administrator
Office of Defects Investigation
NATIONAL HIGHWAY TRAFFIC SAFETY
ADMINISTRATION
400 Seventh St., S.W.
Washington, DC 20590

03V-239 ① or ④

Dear Mr. Weinstein:

On June 23, 2003, Honda Motor Co., Ltd. (HMC) determined that a defect relating to motor vehicle safety exists in the brake master cylinder in the vehicles listed below. The following information is submitted pursuant to the requirements of 49 CFR 573.5.

573.5(c)(1)

Name of manufacturer: Honda Motor Co., Ltd. (HMC)

Manufacturer's Agent: William R. Willen
American Honda Motor Co., Inc. (AHM)
1919 Torrance Blvd.
Torrance, CA 90501-2746

573.5(c)(2)

Identification of potentially affected vehicles:

<u>Make/Model</u>	<u>Description</u>	<u>VINs/Dates of Manufacture</u>
Acura 3.5RL	Certain 2000 model year	JH4KA966*YC000013 - JH4KA966*YC001012 Aug. 4, 1999 to Sept. 8, 1999 (These dates are factory final inspection dates.)

Description of the basis for the determination of the recall population:

Our investigation indicates that the failure relates to August 1999—the beginning of the 2000 model year RL production. The VIN range listed above reflects vehicles produced in August 1999. No indications of a similar failure exist for vehicles produced after August 1999.

573.5(c)(3)

Total number of vehicles potentially affected: 814

573.5(c)(4)

Percentage of affected vehicles that contain the defect: Unknown

573.5(c)(5)

Defect description:

Summary

Some brake master cylinders may have internal corrosion, resulting in reduced braking performance and increased stopping distances. In the worst case, the corrosion could eventually cause a complete brake system failure.

Detail

Some brake master cylinders were exposed to an undetermined contaminate, which can cause internal corrosion. Corrosion of the master cylinder's inner wall can affect the sealing ability, allowing brake fluid to leak past the piston seals. This leakage would cause an inconsistent brake engagement point, noticeable only at low-speed, light-pedal force brake applications. Although no incidents have been reported, this condition might increase the potential for a low-speed vehicle crash. Braking performance is not affected during normal, at-speed driving or in a panic stop. Under both conditions, the driver applies greater pedal forces at more rapid rates. In the worst case, the corrosion could eventually cause a complete brake system failure.

573.5(c)(6)

Chronology:

May 23, 2002	AHM issued a report on three master cylinders that caused complaints of low brake pedal. The parts were sent to Japan for analysis.
May 30, 2002	HMC received the report and initiated an investigation.
Aug. 22, 2002	HMC found contamination of an unknown origin in the sample parts sent by AHM. This type of contamination would not be introduced during the manufacturing process.
Sept. 8, 2002	AHM issued a request to call in additional market parts.
Oct. 18, 2002	Due to difficulties in locating additional failed parts, the parts call-in was expanded to include other model years.
Oct. 22, 2002	One additional master cylinder was sent to HMC.
Nov. 29, 2002	Following a dimensional analysis, HMC asked the master cylinder supplier to analyze the returned part. HMC retained a sample of the brake fluid for analysis.
Dec. 10, 2002	HMC completed its analysis of the brake fluid sample. The sample contained chemicals that are not used in brake fluid.

573.5(c)(6) continued
Chronology:

- Dec. 26, 2002 HMC received the results of the master cylinder supplier's analysis. No problem was found.
- Jan. 15, 2003 HMC detected high levels of lead, chlorine and rust in the sample parts. Lead and chlorine are not introduced during the manufacturing process. A detailed analysis was initiated.
- Feb. 14, 2003 HMC completed the detailed analysis, which identified additional chemical contaminants that are not introduced during the manufacturing process. A brake fluid sample and specific parts were requested from the market.
- Mar.-Apr. 2003 AHM gathered and sent additional market samples from three vehicles manufactured in August 1999.
- May 27, 2003 HMC found no abnormalities in the market samples. HMC requested additional samples of failed parts, particularly brake fluid samples.

Note: Samples of brake fluid are difficult to obtain. AHM is notified of a replaced part after a dealer has replaced the master cylinder and disposed of the brake fluid.

- Jun. 19, 2003 HMC conducted a review of the situation. Based on the available information and examination of the sample parts, HMC has not been able to identify how or when the contamination was introduced into the brake master cylinders at the beginning of RL model production in August 1999. The Honda production processes have been carefully reviewed, all vendor processes were reviewed, and the brake fluid vendor's records were also carefully examined. Other models manufactured on the same line at the same time did not have any similar reports of corrosion. RLs manufactured in the subsequent months had no reported cases.

Although there is no evidence of a manufacturing or design defect, due to the serious nature of the failure, a recall recommendation was submitted for RL models produced in August 1999. A focus of the recall is the collection of brake fluid samples from any vehicles having the original brake fluid (the maintenance schedule specifies brake fluid replacement after 36 months). The brake fluid samples, and a number of master cylinders, will be analyzed by HMC in hopes of identifying the contamination source so it can be prevented in the future.

- Jun. 23, 2003 HMC determined that a safety-related defect exists.

573.5(c)(8)(i)

Program for remedying the defect:

Dealers will replace the master cylinder assembly, reservoir and brake fluid in all affected vehicles, free of charge.

573.5(c)(8)(II)

The estimated date to begin sending notifications to owners: July 21, 2003

The estimated date to begin sending notifications to dealers: July 15, 2003

The estimated date of completion of the notification: July 25, 2003

573.5(c)(9)

Representative copies of all notices, bulletins and other communications:

A copy of the dealer service bulletin and text of the final customer notification letter will be submitted to your office as soon as possible.

573.5(c)(10)

Proposed owner notification letter submission:

A draft of the owner notification letter will be submitted for your review.

Sincerely,

AMERICAN HONDA MOTOR CO., INC.



William R. Willen
Managing Counsel
Product Regulatory Office

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