

OJE-032 (1/9)

**Safety Defect and Noncompliance Report Guide for Equipment**  
**PART 573 Defect and Noncompliance Report**

**On May 5, 2003, Cardone Industries, Inc. decided that a defect which relates to motor vehicle safety exists in certain remanufactured rear brake callipers for the 1965 – 1982 Chevrolet Corvette, marketed and sold under the Cardone brand name, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573, Defect and Noncompliance Reports.**

**Date this report was prepared: May 7, 2003**

**1. Identify the full corporate name of the fabricating manufacturer/brand name/trademark owner of the recalled item of equipment.**

**Brand Name/Trademark Owner:**

Cardone Industries, Inc.  
5501 Whitaker Avenue  
Philadelphia, PA 19124-1799

**Fabricating Manufacturer (Remanufacturer):**

Alliance Remanufacturing  
450 E. Luzerne Street  
Philadelphia, PA 19124

RECEIVED  
2003 MAY 12 P 2 01  
OFFICE OF DEFECTS  
AND NONCOMPLIANCE

**Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.**

George Zauffik

Compliance Officer

Telephone Number: 215-912-3703 Fax No.: 215-912-3080

**Name and Title of Person who prepared this report.**

Dennis Mullen  
Director, Product Compliance

**Signed:**

*Dennis Mullen* 5/12/03  
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**I. Identify the Recalled Items of Equipment**

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**2. Identify the Items of Equipment Involved in this Recall.**

Remanufactured Rear Brake Caliper, Part Numbers 18-7019, 18-7020, 16-7019 & 16-7020

Application: 1965 - 1982 Chevrolet Corvette

Generic name of the item: Rear Brake Caliper

Make: Cardone

Model: Cardone

Part Number: 18-7019, 18-7020, 16-7019 and 16-7020 Size: NA

Function: Caliper compresses the rear brake pads and rotor to stop vehicle

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents.

100% of all subject part numbers manufactured from February 1, 2002 to April, 25 2003.

**II. Identify the Recall Population**

**3. Furnish the total number of items of equipment recalled potentially containing the defect.**

Number of Items: 15,899

**4. Furnish the approximate percentage of the total number of items of equipment estimated to actually contain the defect:**

Cardone believes that 100% of the recalled products contain the defective seal.

**Identify and describe how the recall population was determined:**

The recall population was determined by referencing the dates the defective seals were issued to production and the date the seals were pulled and quarantined, and all products in Cardone's inventory were removed.

### III. Describe the Defect

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#### **5. Describe the defect.**

The subject brake calipers were remanufactured using improperly manufactured piston seals obtained from a supplier. These seals are intended to prevent fluid leakage between the caliper housing and the pistons.

#### **Describe the cause of the defect condition.**

The manufacturer of the brake caliper purchased and installed piston seals that did not meet material specifications.

#### **Describe the consequence of the defect condition.**

Because these piston seals do not meet the manufacturing specifications, they are prone to premature deterioration, which can cause brake fluid leakage. If brake fluid leaks, rear braking performance could be reduced. However, the vehicle would still retain full front braking ability.

#### **Identify any warning which can (a) precede or (b) occur.**

A failure of the brake caliper seal will usually be evidenced by visible brake fluid leakage and/or a low brake pedal condition. In addition, the vehicles for which the subject brake calipers are intended (i.e., 1965 - 1982 Chevrolet Corvette) are equipped with indicator lights on the instrument panel to alert the driver when the brake fluid level is low.

#### **If the defect is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.**

Calipers were assembled by:  
Alliance Remanufacturing  
450 E. Luzerne Street  
Philadelphia, PA 19124  
Roger Tamo, CEO

Alliance purchased seals from:  
BRAKEWORKS, Inc.  
2205 126th St Unit A  
Hawthorne CA 90250  
Mathew Springs

### IV. Provide the Chronology in Determining the Defect

*If the recall is for a defect, complete item 6, otherwise item 7.*

**6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.**

Beginning on or about April 22, 2003, Cardone commenced an investigation of the subject brake calipers after observing an increased incidence of warranty returns for these products. Based upon this investigation, Cardone determined on May 5, 2003 to conduct this recall. There are no reported accidents, injuries or fatalities associated with this issue.

**7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.**

Not Applicable.

**V. Identify the Remedy**

**8. Furnish a description of the manufacturer's remedy for the defect. Clearly describe the differences between the recall condition and the remedy.**

Cardone will provide notification to its customers pursuant to 49 C.F.R. § 577. All unsold inventory will be repurchased, and Cardone will implement a campaign to recover as many units from consumers as possible. Cardone will provide a full refund to customers.

The returned products will be reworked with the proper seals before being resold.

**Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.**

The remedy seal meets the material specification. The recalled seals do not.

**Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.**

When the problem was discovered, Cardone advised the fabricating manufacturer, Alliance. Alliance is now using a different seal supplier. Material testing has confirmed that the seals from the new supplier meet all specifications.

**VI. Identify the Recall Schedule**

**Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.**

Cardone would like to begin customer notification on or about May 16, 2003.

## VII. Furnish Recall Communications

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**9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification.**

A copy of Cardone's draft Customer Notification letter, pursuant to 49 C.F.R. § 577, is attached.

## VIII. Reimbursement Program

**10. Pursuant to 49 C.F.R. § 577.11(e),**

Cardone requests that it be exempt from providing notification of a reimbursement plan. All of the affected units are covered by Cardone's lifetime warranty. Accordingly, no person would be eligible for reimbursement pursuant to § 573.13.

# CARDONE

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May \_\_, 2003

Dear Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Cardone Industries, Inc. has decided that a defect, which relates to motor vehicle safety, exists in certain remanufactured rear brake calipers marketed and sold under the Cardone brand name. The subject parts were manufactured between February 1, 2002 and April 25, 2003, and are intended for installation on Model Year 1965-1982 Chevrolet Corvettes. The affected part numbers and date codes are listed on the enclosed bulletin.

### REASON FOR THIS RECALL

The subject brake calipers were remanufactured using improperly manufactured piston seals obtained from a third-party supplier. These seals are intended to prevent fluid leakage between the caliper housing and the pistons. Because these piston seals do not meet the proper manufacturing specifications, they are prone to premature deterioration, which can cause brake fluid leakage. If brake fluid leaks, rear braking performance could be reduced. This condition will not affect front brake performance.

A failure of the brake caliper seal will usually be evidenced by visible brake fluid leakage and/or a low brake pedal condition. In addition, the vehicles for which the subject brake calipers are intended (i.e., 1965 - 1982 Chevrolet Corvette) are equipped with indicator lights on the instrument panel to alert the driver when the brake fluid level is low.

### WHAT WE WILL DO

Cardone Industries requests your assistance in returning ALL affected units to Cardone. Please return only the date codes noted on the enclosed bulletin. We will provide a full refund or credit for returned products upon their return to Cardone. All inventories at Cardone have been corrected and can be ordered to replace your inventory and customer returns.



# **CARDONE**

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## **WHAT YOU SHOULD DO**

The subject product should be immediately consolidated from distribution centers, warehouses and stores, and returned to Cardone using the following return procedure:

1. Please have your personnel return all Brake Calipers for the part numbers listed on the bulletin.
2. Return these units to the W.D. in the original box, marked "RETURN FOR INSPECTION".
3. Only return units with date codes DCA2032 through DCA3148.
4. After checking and marking W.D. and Jobber inventories, the W.D. should complete a Return Goods Memo marked "RETURN FOR INSPECTION".
5. Product should be returned to:  
Cardone Industries  
5501 Whitaker Avenue  
Philadelphia, PA 19124-1799
6. This merchandise may be returned with core or warranty returns, but must be packed separately.

Cardone regrets the inconvenience this may cause you. We place great importance on superior product performance and customer service, and have taken steps to ensure that this problem does not occur in the future.

Owners of affected product may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590 or call the toll free auto safety hotline at 888-327-4236, if the owner believes that Cardone has failed or is unable to remedy without charge the condition outlined above within a reasonable time.

Thank you for your assistance.

Sincerely,

**CARDONE Industries**





# Product Recall

MAY \_\_, 2003

**Subject:** Cardone Industries has decided that a defect which relates to motor vehicle safety exists in the following Brake Caliper part numbers:

**16-7019**

**16-7020**

**18-7019**

**18-7020**

One return only with date code  
DCA2032 through DCA3148



Date Code DCA2032 through DCA3148 (see chart)

## Summary

Rear Brake Calipers for 1965 – 1982 Chevrolet Corvette with incorrectly manufactured piston seals, which could result in brake fluid leakage. Brake Calipers affected were manufactured from February 1, 2002, through April 25, 2003.

## Consequence

If Brake Fluid leaks, reduced rear braking ability could occur. Prior to reduced braking ability the brake warning light will illuminate and a low brake pedal may be experienced.

## Remedy

Dealers will replace the Brake Calipers or provide a full refund. If you do not receive the replacement Brake Caliper in a reasonable time, contact Cardone Industries at 1-800-777-4780.

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CARDONE Industries, Inc.  
World Headquarters  
5501 Whittaker Avenue  
Philadelphia, PA 19124-1799

**SAFETY RECALL NOTICE**

Mr. Customer  
113 Main Street  
City, ST Zip

