

# 1974 Corvette: Product Safety Campaign: Fuel Tank Return Line Tube Fitting Leakage

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1974 Corvette built within serial range number 15,309 through 18,652 had a possibility of a fuel tank return line breaking.

**Subject:** Product Safety Campaign No. 74C13 - Fuel Tank Return Line Tube Fitting Leakage - 1974 Corvette

**Model and Year:** 1974 Corvette

**Source:** Chevrolet Dealer Product Campaign Bulletin

**Bulletin Number:** 74-C-13, Section VIII

**Date:** March, 1974



CHEVROLET MOTOR DIVISION  
General Motors Corporation  
Product and Safety Activities Dept.



## Chevrolet Dealer Product Campaign Bulletin

74-C-13  
Number:  
VIII  
Section:  
March, 1974  
Date:

Subject: PRODUCT SAFETY CAMPAIGN NO. 74C13 -  
FUEL TANK RETURN LINE TUBE FITTING  
LEAKAGE - 1974 CORVETTE

Attn: Service Manager

TO: ALL CHEVROLET DEALERS

Chevrolet Motor Division has determined a defect which relates to motor vehicle safety exists in some 1974 Corvettes assembled between January 23rd and February 22, 1974.

The fuel tank return line fitting in some of these vehicles may have a thin wall section that could break under operating conditions. If this should occur, fuel being returned to the gasoline tank will be spilled around the tail pipe outlet as long as the engine continues to run. If, under these conditions the vehicle backfires or sparks are emitted from the exhaust system, the fuel vapor can be ignited. The resultant fire may cause damage to the vehicle and any occupant remaining in the vehicle may receive burn injuries.

To prevent the possibility of this occurring on vehicles involved, dealers are to replace the fuel tank return line tube fitting. The Service Procedure is detailed in this bulletin.

### VEHICLES INVOLVED

1974 Corvettes assembled at the St. Louis Assembly Plant from Vehicle Identification Number 1Z37J4S415309 up to and including 1Z37J4S418652. The specific vehicles have been identified on the enclosed dealer computer listings. Dealers with no vehicles involved will receive only the Campaign Bulletin No. 74C13.

### SERVICE PROCEDURE

Plug in electric solder iron (300-500 watt range) so that it can heat up during fuel tank removal.

WARNING: DO NOT USE AN OPEN FLAME OR TRIGGER OPERATED SOLDERING IRON. Use of such equipment near gasoline can produce an explosion and fire which can cause personal injury.

SERVICE PROCEDURE - (Cont'd.)

FUEL TANK REMOVAL PROCEDURE

- 1) Remove battery negative cable.

WARNING: Before attempting fuel tank draining, always place "NO SMOKING" signs and a CO2 fire extinguisher near work area, wear safety glasses, and siphon or pump fuel from tank into an explosive proof container.

- 2) Remove gas cap and filler neck boot from top of tank and disconnect drain line.
- 3) Drain fuel from tank.
- 4) Raise vehicle on hoist.
- 5) Remove the spare tire from tire carrier.
- 6) Remove spare tire carrier bolted attachments and remove carrier.
- 7) Loosen "U" clamps and separate exhaust system at transmission support.
- 8) Remove rear muffler brackets at frame and slide exhaust system rearward.
- 9) Remove fuel tank retaining strap bolts.
- 10) Remove tank gauge unit wires and fuel lines.
- 11) Remove tank support to frame bolts and remove support.
- 12) Lower tank and disconnect fuel return hose and vapor canister hose. Rotating tank toward front of vehicle, remove from vehicle.

FUEL TANK PURGING PROCEDURE

- 1) Remove fuel metering unit and drain all remaining fuel from tank. Use care in removing gauge unit that gasket is not damaged.
- 2) Visually inspect interior cavity of tank; if any fuel is evident, drain again.
- 3) Move tank to flushing area (wash rack) and rinse the tank once with water.
- 4) Install gas cap and plug both the fuel return line and liquid separator line fittings.
- 5) With fuel tank resting on gas cap side, pour eight (8) ounces of "Product Sol 913" emulsifying agent into the tank through the metering unit hole.  

CAUTION: Be sure to wear safety glasses and avoid getting the emulsifying agent into the eyes. Avoid inhalation of fumes and if emulsifying agent comes into contact with skin, flush with water.
- 6) Fill tank (with water) to capacity and agitate for ten (10) minutes. This can be done by shaking or inserting an air line into the tank, continually moving the air line so that the solution is agitated thoroughly.
- 7) Empty contents into floor drain.
- 8) When empty, refill to overflowing with water to completely flush out remaining mixture and then empty tank.
- 9) If any fuel vapor is present, repeat Steps 5 through 8. Repeat as necessary until there is no evidence of fuel vapor.
- 10) Remove gas cap and fitting plugs and dry tank with compressed air.

REPLACEMENT OF DEFECTIVE TUBE FITTING  
(See Illustrations on Page 6)

CAUTION: The following precautions should be taken before proceeding to replace the tube:

- a) Use only an electric solder iron with a 300-500 watt rating.
  - b) Do not use open flame or trigger operated soldering gun.
  - c) Take all appropriate safety precautions when working on or around fuel tanks.
- 1) Prop tank on left end so that fuel return fitting points upward.
  - 2) Thread a piece of "coat hanger" wire, approximately three feet in length, through the return line fitting and reaching through the filler neck opening, pull the end of the wire through the opening. Bend the wire at the fitting end to retain in position. See Figure 1.
  - 3) Apply the hot solder iron to the solder joint around fitting and when the solder has melted push the fitting with a screwdriver, pliers, or other tool into the tank. The fitting will then slide down the wire and out through the filler neck opening.
  - 4) Plug fitting hole with a cork or piece of cloth, and lightly clean up solder area around fitting hole with a piece of emery cloth. Be careful not to remove any plating from the tank.
  - 5) Using emery cloth also lightly clean up area to be soldered on the replacement fitting.
  - 6) Insert the replacement fitting (small end first) on the wire at the filler neck opening end, and bend the wire at the filler neck end 90° to retain the fitting on the wire. See Figure 2.
  - 7) Pull the wire and fittings through the fitting hole until the tube is properly seated in place. A "popping" noise will most often be heard when fitting is properly seated, but in all cases the larger diameter section of the fitting will be visible as shown in Figure 3.

SERVICE PROCEDURE - (Cont'd.)

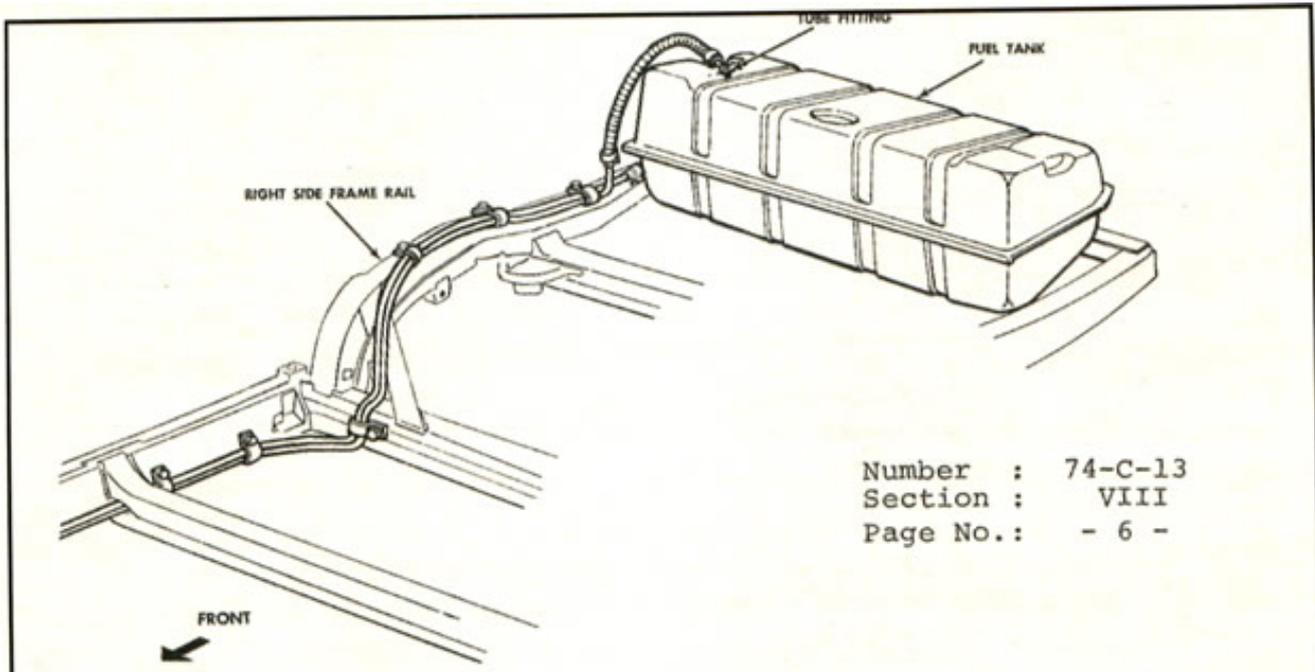
REPLACEMENT OF DEFECTIVE TUBE FITTING - (Cont'd.)

- 8) Place end of wire in vise or bend it in such a manner that fitting will be held firmly in place. See Figure 3.
- 9) Solder the fitting in place using a rosin-core solder. Do not use acid-core solder.
- 10) Allow solder joint to cool at least one minute and visually inspect to insure that a proper solder joint has been obtained.
- 11) Remove wire and clean up joint area as necessary.
- 12) Install fuel gauge unit.
- 13) Test for leaks around joint area by performing a fuel tank leak test as outlined in the 1974 Passenger Car Service Manual (Page 8-11).
- 14) Reinstall fuel tank assembly in vehicle again referring to procedure in the 1974 Passenger Car Service Manual (Page 8-6). Check fuel line connections for proper installation.

PARTS INFORMATION

Fuel tank return line fittings and 8oz. containers of "Product Sol 913" have been furnished to each Chevrolet Zone Service Manager based on only the number of vehicles on the Vehicle Identification Number computer list, furnished by Chevrolet.

Parts are to be requested by the dealer from the Zone for only those vehicles appearing on his computer list. Dealers who receive Campaign Bulletins without a computer list attached, are not involved. Parts are furnished by Chevrolet at no charge to involved dealers. Parts are not available from General Motors Parts Distribution Centers.



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FIGURE 1



FIGURE 2

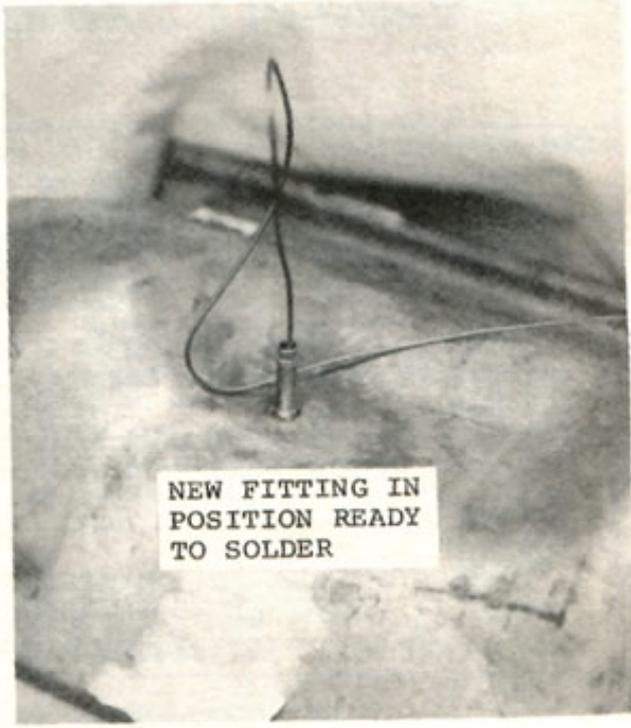


FIGURE 3

LABOR ALLOWANCE, FIX CODE AND CAMPAIGN CLAIM REPAIR CODE

Fix Code	Repair Code	Time Allowance	Description
1	A	2.6 Hours	R & R fuel tank, purge and repair.

Repair code(s) for				
Fix 1	Fix 2	Fix 3	Fix 4	Fix 5
A	*	*	*	*

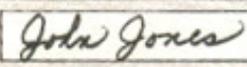
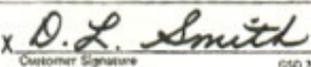
.1 Hours Dealer Administrative Detail Associated With This Campaign

IMPORTANT

It is imperative that only the applicable Repair Code be used for the modification being performed.

Do NOT use any markings in Fix Code Box (2); leave blank if not preprinted with an asterisk.

An example of a completed GSD-761 Campaign Claim Form is shown below:

CAMPAIGN CLAIM		Repair code(s) for										
Campaign Number	Servicing Dealer			Vehicle Identification Number	Mileage	Repair Order Number	R.O. Date Mo/Day/Yr	Fix 1	Fix 2	Fix 3	Fix 4	Fix 5
	Zone	Dealer	Zip Code									
74C13	99	999	48202	123774S415309	3120	006424	031574	A	*	*	*	*
<small>Dealer: Please Type Required Information Using These Areas To Align Form In Typewriter.</small> <small>"The undersigned dealer hereby certifies that he performed the indicated work in accordance with the terms of the 'Policies on Adjustments' section of the current 'Chevrolet Service Policies and Procedures Manual' and hereby applies for credit allowed thereunder based on the information shown herein."</small>												
<small>Do Not Fold</small>  <small>Type or Stamp Dealer Name and Address Below</small>				Document Number	WPC Use Only Sequence Number	WPC Use Only Date Received		<small>Do Not Fold</small>				
				223733								
Economy Chevrolet, Inc. 14197 Freedom Avenue Freedom, U.S.A.				99-999		Customer Name and Address D. L. Smith 38000 W. Ann Arbor Trail Hometown, U.S.A.						
See Back For Instructions				<small>"I hereby request that the repair work hereinafter set forth be performed on the described motor vehicle and authorize the use of necessary labor and materials therefor. Such vehicle may be operated for test, inspection and delivery purposes."</small>				x  <small>Customer Signature</small>				

COMPLETED CAMPAIGN CLAIM FORM, GSD-761

LABOR ALLOWANCE, FIX CODE AND CAMPAIGN CLAIM REPAIR CODE - (Cont'd.)

Upon completing the Campaign Claim Form, GSD-761, it should be immediately forwarded to:

Warranty Processing Center  
Chevrolet Motor Division  
P. O. Box 7000  
Detroit, Michigan

STOCK VEHICLES

The Campaign Claim Form, GSD-761, will identify those vehicles where no owner name and address is on file at the initiation of this campaign.

Upon completing the Campaign Claim Forms, GSD-761's, for "Stock" vehicles, they should be forwarded directly to the Warranty Processing Center.

OWNER NOTIFICATION

Owners of record known to Chevrolet at this time will be notified of this campaign on their vehicles in accordance with the procedures set forth in the Chevrolet Service Policies & Procedures Manual.

RECENTLY SOLD VEHICLES - (No longer in Dealer Stock)

On vehicles involved in this campaign that have been recently sold to a retail owner, where no owner's name and address was available at the time of campaign initiation, the dealer will determine the owner's name and address from the dealership sales records. The Campaign Claim Form, GSD-761, should then be completed.

Completed "stock" vehicle Campaign Claim Forms, GSD-761's, for vehicles which have been recently sold or are no longer in dealer stock, should be immediately forwarded to the Warranty Processing Center.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in the Product Campaign Bulletin will require a "Campaign Identification Label". Each label provides a space to include the five (5) digit Dealer Code of the dealer performing the campaign service. This information may be inserted with a typewriter or ballpoint pen.

CAMPAIGN IDENTIFICATION LABEL - (Cont'd.)



**DO NOT REMOVE**

Each "Campaign Identification Label" is to be located on the radiator core support in an area which will be visible when the vehicle is brought in for periodic servicing by the owner.

Apply "Campaign Identification Label" only on a clean dry surface.

CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign regardless of mileage, age of vehicle, or ownership. These corrections must be made on all affected vehicles in your new or used vehicle inventory prior to their sale from this time forward.

NOTE: In the event an owner has misplaced or lost the original Campaign Claim Form, GSD-761, he is NOT to be refused this important modification. Each dealer has been furnished a supply of blank Campaign Claim Forms for this purpose.

Please refer to the appropriate section of the Chevrolet Service Policies & Procedures Manual, Section 5, dated November 1, 1972, in your dealership.

Chevrolet Motor Division  
General Motors Corporation



**CHEVROLET MOTOR DIVISION**

General Motors Corporation

Central Office—Warren Annex  
30007 Van Dyke Avenue  
Warren, Michigan 48090

**CENTRAL OFFICE FOLLOW-UP LETTER**

Dear Chevrolet Owner:

During March, 1974, Chevrolet Motor Division announced a Product Campaign concerning your 1974 Corvette.

Owners, at the time of campaign initiation, were advised that the fuel tank return line fitting in some of these vehicles may have a thin wall section that could break under operating conditions. If this should occur, fuel being returned to the gasoline tank will be spilled around the tail pipe outlet as long as the engine continues to run. If, under these conditions the vehicle backfires or sparks are emitted from the exhaust system, the fuel vapor can be ignited. The resultant fire may cause damage to the vehicle and any occupant remaining in the vehicle may receive burn injuries.

To prevent this possibility, owners were requested to contact their Chevrolet dealer who will replace the fuel tank return line fitting at no charge to you.

Our records indicate that to date your vehicle has not been corrected. It is requested that you make your vehicle available to your local Chevrolet dealer as soon as possible. In the event you have already had this service performed, or you no longer own this vehicle, please complete the enclosed preprinted, self-addressed reply card and return to the sender.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products. Your prompt cooperation will be appreciated.

Enclosure

Chevrolet Motor Division  
General Motors Corporation



## CHEVROLET MOTOR DIVISION

General Motors Corporation  
(Certified Mail Notification Used by Chevrolet  
Motor Division for All Owners of Record.)

Central Office—Warren Annex  
30007 Van Dyke Avenue  
Warren, Michigan 48090

Dear Chevrolet Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Chevrolet Motor Division has determined that a defect which relates to motor vehicle safety, exists in some 1974 Corvettes.

The fuel tank return line fitting in some of these vehicles may have a thin wall section that could break under operating conditions. If this should occur, fuel being returned to the gasoline tank will be spilled around the tail pipe outlet as long as the engine continues to run. If, under these conditions the vehicle backfires or sparks are emitted from the exhaust system, the fuel vapor can be ignited. The resultant fire may cause damage to the vehicle and any occupant remaining in the vehicle may receive burn injuries.

You are requested to immediately contact your Chevrolet dealer who will replace the fuel tank return line fitting at no charge to you.

Instructions and parts for correcting this defect have been furnished to your Chevrolet dealer. The actual time necessary to perform the labor required to install the new fuel tank return line fitting is approximately 2-1/2 hours.

The enclosed Campaign Card identifies your vehicle. Presentation of this card to your dealer will assist him in making the necessary correction to your vehicle in the shortest possible time.

In the event you no longer own the vehicle identified on the enclosed reply card, please promptly complete and mail the post-paid card so that we can update our records.

Further assistance, if required, may be requested from the Chevrolet Zone Office nearest your residence. Your 1974 Owner's Manual will assist you in determining the location.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products. Your prompt cooperation will be appreciated.

Chevrolet Motor Division  
General Motors Corporation

Enclosure

Online URL:

<https://www.corvetteactioncenter.com/tech/knowledgebase/article/1974-corvette-product-safety-campaign-fuel-tank-return-line-tube-fitting-leakage-1241.html>

