



Current Product
Engineering

General Motors Corporation

July 3, 1990

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

Dear Mr. Brownlee:

This is in reply to your letter of June 26, 1990, in which you requested additional information regarding Recall 90V-115.

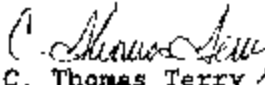
As indicated in our letter of June 6, 1990, General Motors first became aware of the condition that led to the recall in June, 1989 after a review of warranty claims. The subsequent investigation isolated the suspect populations that are involved in the recall.

The following are the VIN breakpoints which include the suspect populations.

Chevrolet	1988	JL163182 - JL169450
	1989	KL119448 - KL144587
	1989	KL184025 - KL201788
Pontiac	1988	KL241550 - KL245185
	1989	KL212471 - KL228219
	1989	KL251466 - KL259973

If you have further questions regarding this information, do not hesitate to contact me.

Very truly yours,


C. Thomas Terry
Manager
Product Investigations

RECEIVED
JUL 10 1990
OFFICE OF DEFECTS INVESTIGATION ENFORCEMENT



CHEVROLET

CHEVROLET MOTOR DIVISION
General Motors Corporation
Service Department

Geo

**Dealer
Product
Campaign
Bulletin**

89C22
Number:
6C
Section:
July, 1990
Date:

#1382

90V-115

Subject: **PRODUCT SAFETY CAMPAIGN 89C22
FUEL FEED HOSE ASSEMBLY**

Model and Year: **1988-89 CHEVROLET CAMARO WITH 2.8L V6 ENGINE**

To: All Chevrolet Dealers

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to repair within sixty (60) days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter that is being sent to owners, the owners are being instructed to contact the Chevrolet Customer Assistance Center if their dealer does not remedy the condition within five (5) days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

VEHICLES INVOLVED

Involved are certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines built within the following VIN breakpoints:

<u>YEAR</u>	<u>MODEL</u>	<u>PLANT</u>	<u>FROM</u>	<u>THROUGH</u>
1988	"F"	Van Nuys	JL163182	JL169450
1989	"F"	Van Nuys	KL119448	KL144587
1989	"F"	Van Nuys	KL184025	KL201788

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Chevrolet Motor Division (see copy of owner letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership, from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your new vehicle inventory are to be contacted by the dealer, and arrangements made to make the required correction according to instructions contained in this bulletin.

PARTS INFORMATION

Parts required to complete this campaign are to be obtained from General Motors Service Parts Operations (GMSPO). To ensure these parts will be obtained as soon as possible, they should be ordered from GMSPO on a "C.I.O." order with no special instruction code, but on an advise code (2).

PARTS INFORMATION (Con't)

<u>Part Number</u>	<u>Description</u>	<u>Quantity/ Vehicle</u>
10096109	Front Fuel Feed Hose Assembly	1
22514722	O-Ring (As Required)	2

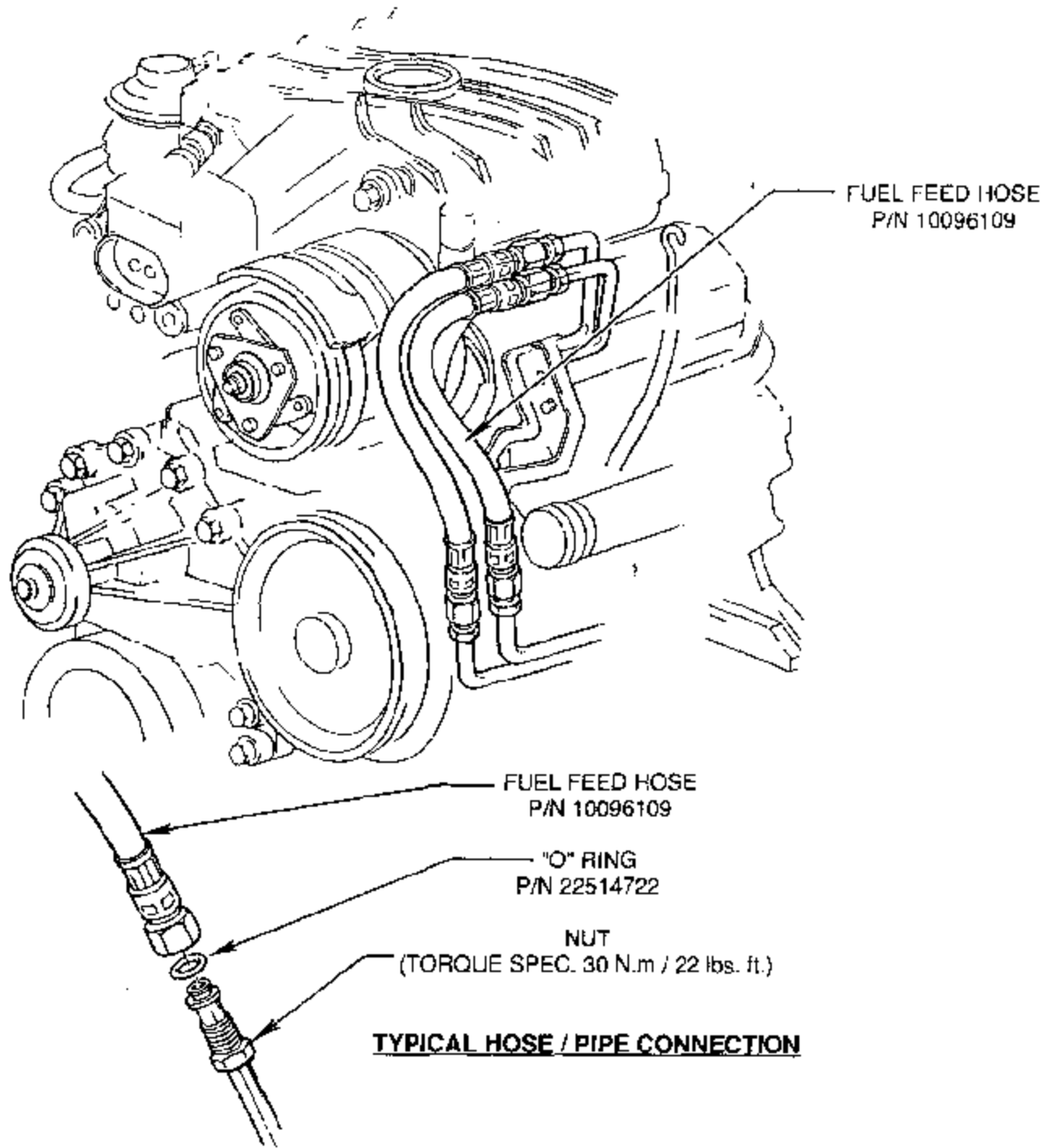
SERVICE PROCEDURE - Illustration on next page may be helpful in completing this procedure.

1. Raise hood.
2. Disconnect negative battery cable and remove fuel tank filler cap.
3. Relieve fuel system pressure following applicable shop manual procedure.
4. Disconnect engine fuel feed hose at engine and chassis pipe fittings utilizing backup (flare nut) wrench.

NOTICE: Care must be taken not to displace engine and chassis pipes during removal or installation of hose assembly. Doing so could result in possible future hose failure due to misrouting.

5. Clean and inspect engine and chassis fuel pipe O-Rings. Replace where required with new O-Rings, P/N 22514722.
6. Install new fuel hose assembly, P/N 10096109 insuring hose does not become twisted or kinked during installation.
7. Torque fittings to 30 Nm (22 lb. ft.) utilizing backup wrench.
8. Reconnect battery and install fuel tank filler cap.
9. Start engine, check for possible fuel leaks, and correct as required.
10. Install Campaign Identification Label.

F-CAR V6 (RPO LB8)



INSTALLATION INFORMATION

1. HOSE ASM. MUST NOT BE TWISTED WHILE BEING INSTALLED.
2. USE BACK UP WRENCH WHEN TIGHTENING FITTINGS.
3. INSPECT FOR "O" RINGS AT BOTH PIPE ENDS PRIOR TO HOSE ASM. INSTALLATION.
4. CHASSIS AND ENGINE PIPES MUST NOT BE DISPLACED DURING REMOVAL OR INSTALLATION OF HOSE ASM.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with the instructions outlined in this 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 a ball point pen.



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.

CLAIM INFORMATION

Submit a Product Campaign Claim with the information indicated below:

REPAIR PERFORMED	PC	FAILED PART NO.	PARTS ALLOW	CC-FC	LABOR OP	LAB HRS	* OTN HRS
Install New Front Fuel Feed Hose	3	10096109	**	SK-00	V6150	0.3	0.1

* Campaign Administrative Allowance.

** The "Parts Allowance" should be the sum total of the current GMSPO Dealer Net price plus 30% of all parts required for the repair.

Dealers will automatically receive the correct labor and material allowance based on the labor operation performed.

Refer to the Chevrolet Claims Processing Manual for details on Product Campaign Claim Submission.

COPYRIGHT 1990
 CHEVROLET MOTOR DIVISION
 GENERAL MOTORS CORPORATION
 ALL RIGHTS RESERVED

Chevrolet bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle has that condition. See your Chevrolet dealer for information on whether your vehicle may benefit from that information.

CHEVROLET



Central Office

(Notification Used By Chevrolet Motor Division)

July 23, 1990

Dear Chevrolet Owner:

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

REASON FOR THIS RECALL

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

WHAT WE WILL DO

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

This service will be performed for you at no charge.

WHAT YOU SHOULD DO

Please contact your Chevrolet dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and parts are available. The labor time necessary to perform this service correction is approximately 15 minutes. Please ask your dealer if you wish to know how much additional time will be needed to schedule and process your vehicle.

Your Chevrolet dealer is best equipped to obtain parts and provide service to insure that your vehicle is corrected as promptly as possible. If, however, you take your vehicle to your dealer on the agreed service date, and they do not remedy this condition on that date or within five (5) days, we recommend you contact the Chevrolet Customer Assistance Center by calling 1-800-222-1020.

After contacting your dealer and the Customer Assistance Center, if you are still not satisfied that we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590 or call 1-800-424-9393 (Washington D.C. residents use 366-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid reply card and returning it to us.

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.

Chevrolet Motor Division
GENERAL MOTORS CORPORATION

89C22

Enclosure



CHEVROLET

CHEVROLET MOTOR DIVISION
General Motors Corporation
Service Department

Geo

Dealer Product Campaign Bulletin

89C22
Number:
6C
Section:
July, 1990
Date:

#1382

90V-115

Subject: PRODUCT SAFETY CAMPAIGN 89C22
FUEL FEED HOSE ASSEMBLY

Model and Year: 1988-89 CHEVROLET CAMARO WITH 2.8L V6 ENGINE

To: All Chevrolet Dealers

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to repair within sixty (60) days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter that is being sent to owners, the owners are being instructed to contact the Chevrolet Customer Assistance Center if their dealer does not remedy the condition within five (5) days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

VEHICLES INVOLVED

Involved are certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines built within the following VIN breakpoints:

<u>YEAR</u>	<u>MODEL</u>	<u>PLANT</u>	<u>FROM</u>	<u>THROUGH</u>
1988	"F"	Van Nuys	JL163182	JL169450
1989	"F"	Van Nuys	KL119448	KL144587
1989	"F"	Van Nuys	KL184025	KL201788

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Chevrolet Motor Division (see copy of owner letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership, from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your new vehicle inventory are to be contacted by the dealer, and arrangements made to make the required correction according to instructions contained in this bulletin.

PARTS INFORMATION

Parts required to complete this campaign are to be obtained from General Motors Service Parts Operations (GMSPO). To ensure these parts will be obtained as soon as possible, they should be ordered from GMSPO on a "C.I.O." order with no special instruction code, but on an advise code (2).

PARTS INFORMATION (Con't)

<u>Part Number</u>	<u>Description</u>	<u>Quantity/ Vehicle</u>
10096109	Front Fuel Feed Hose Assembly	1
22514722	O-Ring (As Required)	2

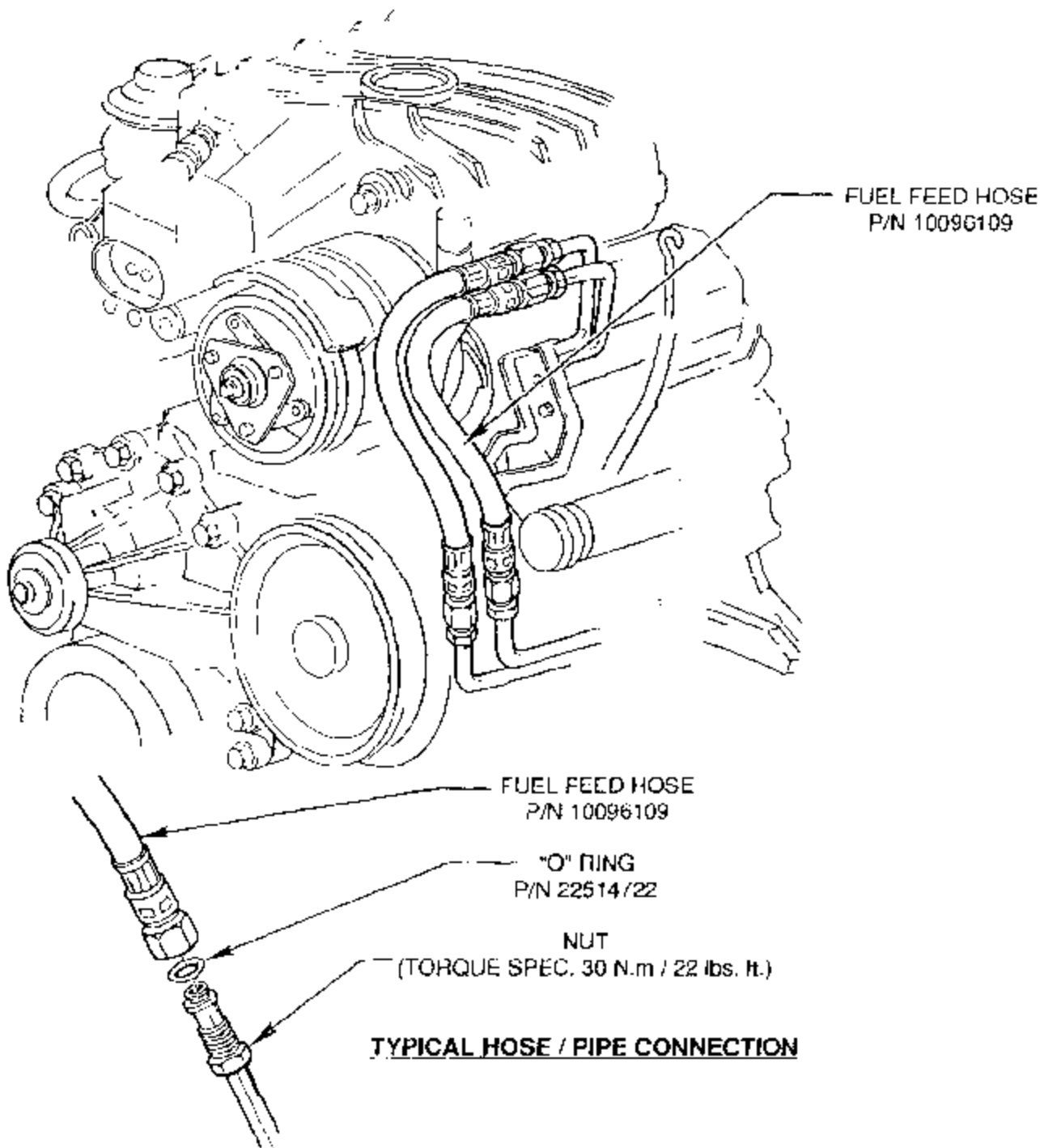
SERVICE PROCEDURE - Illustration on next page may be helpful in completing this procedure.

1. Raise hood.
2. Disconnect negative battery cable and remove fuel tank filler cap.
3. Relieve fuel system pressure following applicable shop manual procedure.
4. Disconnect engine fuel feed hose at engine and chassis pipe fittings utilizing backup (flare nut) wrench.

NOTICE: Care must be taken not to displace engine and chassis pipes during removal or installation of hose assembly. Doing so could result in possible future hose failure due to misrouting.

5. Clean and inspect engine and chassis fuel pipe O-Rings. Replace where required with new O-Rings, P/N 22514722.
6. Install new fuel hose assembly, P/N 10096109 insuring hose does not become twisted or kinked during installation.
7. Torque fittings to 30 Nm (22 lb. ft.) utilizing backup wrench.
8. Reconnect battery and install fuel tank filler cap.
9. Start engine, check for possible fuel leaks, and correct as required.
10. Install Campaign Identification Label.

F-CAR V6 (RPO LB8)



INSTALLATION INFORMATION

1. HOSE ASM. MUST NOT BE TWISTED WHILE BEING INSTALLED.
2. USE BACK UP WRENCH WHEN TIGHTENING FITTINGS.
3. INSPECT FOR "O" RINGS AT BOTH PIPE ENDS PRIOR TO HOSE ASM. INSTALLATION.
4. CHASSIS AND ENGINE PIPES MUST NOT BE DISPLACED DURING REMOVAL OR INSTALLATION OF HOSE ASM.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with the instructions outlined in this 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 a ball point pen.



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.

CLAIM INFORMATION

Submit a Product Campaign Claim with the information indicated below:

REPAIR PERFORMED	PC	FAILED PART NO.	PARTS ALLOW	CC-FC	LABOR OP	LAB HRS	* OTH HRS
Install New Front Fuel Feed Hose	3	10096109	**	SK-00	V6150	0.3	0.1

* Campaign Administrative Allowance.

** The "Parts Allowance" should be the sum total of the current GMSPO Dealer Net price plus 30% of all parts required for the repair.

Dealers will automatically receive the correct labor and material allowance based on the labor operation performed.

Refer to the Chevrolet Claims Processing Manual for details on Product Campaign Claim Submission.

COPYRIGHT 1990
CHEVROLET MOTOR DIVISION
GENERAL MOTORS CORPORATION
ALL RIGHTS RESERVED

Chevrolet bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle has that condition. See your Chevrolet dealer for information on whether your vehicle may benefit from that information.

CHEVROLET



Central Office

(Notification Used By Chevrolet Motor Division)

July 23, 1990

Dear Chevrolet Owner:

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

REASON FOR THIS RECALL

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

WHAT WE WILL DO

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

This service will be performed for you at no charge.

WHAT YOU SHOULD DO

Please contact your Chevrolet dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and parts are available. The labor time necessary to perform this service correction is approximately 15 minutes. Please ask your dealer if you wish to know how much additional time will be needed to schedule and process your vehicle.

Your Chevrolet dealer is best equipped to obtain parts and provide service to insure that your vehicle is corrected as promptly as possible. If, however, you take your vehicle to your dealer on the agreed service date, and they do not remedy this condition on that date or within five (5) days, we recommend you contact the Chevrolet Customer Assistance Center by calling 1-800-222-1020.

After contacting your dealer and the Customer Assistance Center, if you are still not satisfied that we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590 or call 1-800-424-9393 (Washington D.C. residents use 366-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid reply card and returning it to us.

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.

Chevrolet Motor Division
GENERAL MOTORS CORPORATION

89C22

Enclosure

#1382

Number 89-C-09

Date July, 1990

PONTIAC DIVISION



Subject: PRODUCT SAFETY CAMPAIGN 89-C-09
FUEL FEED HOSE ASSEMBLY

MODELS AFFECTED 1988-89 PONTIAC FIREBIRD
WITH 2.8L V6 ENGINE

90K-115

TO: ALL PONTIAC DEALERS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type, must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price, less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owners are being instructed to contact the Pontiac Customer Assistance Center if their dealer does not remedy the condition within five days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, owners are instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Pontiac Firebird model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

(CONTINUED)

Pontiac bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your Pontiac dealer for information on whether your vehicle may benefit from the information.

VEHICLES INVOLVED

Involved are certain 1988-89 Pontiac Firebird model vehicles with 2.8L V6 engines within the following VIN breakpoints:

<u>Year</u>	<u>Plant</u>	<u>Beginning</u>	<u>Up To And Including</u>
1988	Van Nuys	JL241550	JL245185
1989	Van Nuys	KL212471	KL228219
1989	Van Nuys	KL251466	KL259973

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to the involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Pontiac Division (see copy of Owner Letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership from this time forward.

Whenever a vehicle subject to this campaign is taken into your used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your used vehicle inventory are to be contacted by the dealer, and arrangements made to make the required modification according to instructions contained in this bulletin.

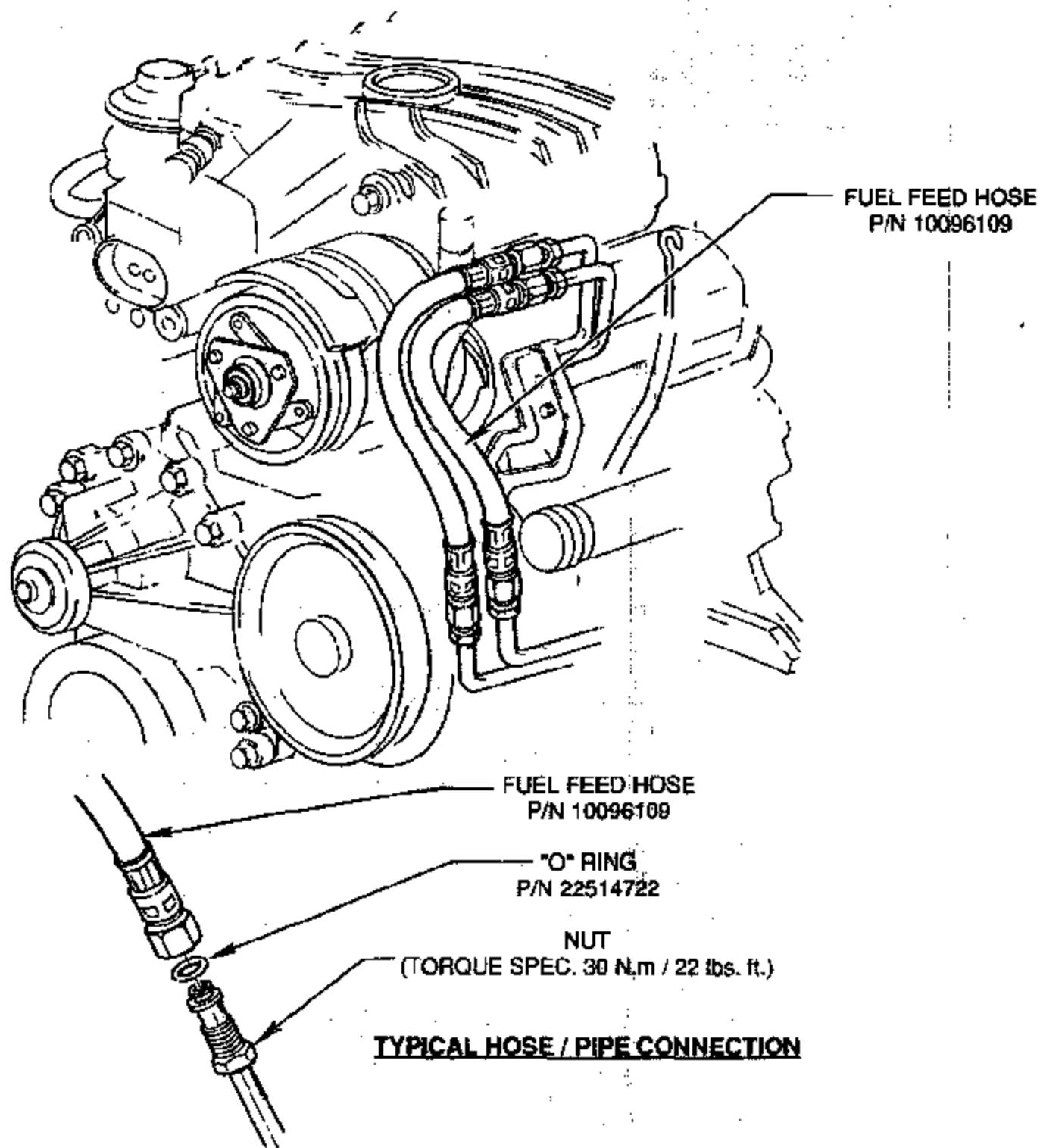
PARTS INFORMATION

Parts required to complete this campaign are to be obtained from General Motors Service Parts Operation (GMSP0). To ensure that these parts are obtained as soon as possible, they should be ordered on a C.I.O. order with no special instruction code, but on advise code (2).

<u>Description</u>	<u>Part Number</u>	<u>Quantity Per Vehicle</u>
Front Fuel Feed Hose Assembly	10096109	1
O-Ring (As Required)	22514722	2

SERVICE PROCEDURE Illustration on next page may be helpful in completing this procedure.

1. Raise hood.
 2. Disconnect negative battery cable and remove fuel tank filler cap.
 3. Relieve fuel system pressure following applicable service manual procedure.
 4. Disconnect engine fuel feed hose at engine and chassis pipe fittings utilizing backup wrench.
- NOTICE: Care must be taken not to displace engine and chassis pipes during removal or installation of hose assembly. Doing so could result in possible future hose failure due to misrouting.
5. Clean and inspect engine and chassis fuel pipe O-Rings. Replace where required with new O-Rings.
 6. Install new fuel hose assembly, insuring hose does not become twisted or kinked during installation.
 7. Torque fittings to 30 N.m (22 lb.ft.) utilizing backup wrench.
 8. Reconnect battery and install fuel tank filler cap.
 9. Start engine, check for possible fuel leaks, and correct as required.
 10. Install Campaign Identification Label.



INSTALLATION INFORMATION

1. HOSE ASM. MUST NOT BE TWISTED WHILE BEING INSTALLED.
2. USE BACK UP WRENCH WHEN TIGHTENING FITTINGS.
3. INSPECT FOR "O" RINGS AT BOTH PIPE ENDS PRIOR TO HOSE ASM. INSTALLATION.
4. CHASSIS AND ENGINE PIPES MUST NOT BE DISPLACED DURING REMOVAL OR INSTALLATION OF HOSE ASM.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in this Product Campaign Bulletin will require a "Campaign Identification Label." Each label provides a space to include the campaign number, the five digit dealer code of the dealer performing the campaign service, and the date the vehicle was campaigned. This information may be inserted with a typewriter or ball-point pen. Install the label only on a clean, dry surface of the radiator baffle where it is readily visible. (Additional campaign labels are available on stationery order as Form 7901-709).

POSTING CAMPAIGN	
NO.	89-C-09
ZN/LL CODE	00-000
DATE	7-30-90
DO NOT REMOVE	

CLAIM INFORMATION

A separate repair order must be used for each vehicle. A completed warranty claim is to be kept as a permanent record of completion.

DEALERS SHOULD SUBMIT WARRANTY CLAIMS FOR CREDIT IN THEIR NORMAL MANNER WHEN THEY PERFORM THE SERVICE AS FOLLOWS:

<u>Operation</u>	<u>Failure Code</u>	<u>Labor Operation</u>	<u>Labor Hours</u>	<u>*Other Labor Hours</u>
Install New Front Fuel Feed Hose	96	V6150	0.3	0.1

* In addition dealerships will receive 0.1 hours credit for dealer administrative services associated with this campaign. The 0.1 hours allowance is to be entered in the "Other Labor Hours" field with each campaign repair listed for credit. This entry will not require authorization.

FAILURE CODE 96 MUST BE USED WITH THE LABOR OPERATION.

Parts required are to be listed in your warranty claim in the normal manner. Parts will be credited at dealer net plus 30% dealer handling allowance.

Dealers will be credited via Warranty Document or Terminal Transmission, whichever is their normal method of submission for payment. Claim must contain all information required and should list the labor operation as outlined.

RECORDING COMPLETION

Repairs submitted for vehicles not involved in the campaign will not be paid.

Campaign completion will be recorded from "PROPERLY COMPLETED AND PAID WARRANTY CLAIMS." Owners are being asked to present the owner reply card for identification to their dealer at the time they bring in their vehicle to have the campaign performed.

COPYRIGHT 1990
SERVICE DEPARTMENT
PONTIAC DIVISION
GENERAL MOTORS CORPORATION
ALL RIGHTS RESERVED



PONTIAC

PONTIAC DIVISION
General Motors Corporation
One Pontiac Plaza
Pontiac, Michigan 48053

July, 1990

Dear Pontiac Owner:

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

REASON FOR THIS RECALL

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Pontiac Firebird model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

WHAT WE WILL DO

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

WHAT YOU SHOULD DO

Please contact your Pontiac dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and parts are available. The labor time necessary to perform this service correction is approximately 15 minutes; however, this does not include time to schedule and process your vehicle. Please ask your dealer if you wish to know how much additional time will be needed to process your vehicle.

Your Pontiac dealer is best equipped to obtain parts and provide service to ensure your vehicle is corrected as promptly as possible. However, if you take your vehicle to your dealer on the agreed service date, and he does not remedy this condition on that date, or within five days, we recommend you contact the Pontiac Customer Assistance Center by calling: 1-800-762-2737.



GM

After contacting your dealer and the Pontiac Customer Assistance Center, if you are still not satisfied that we have done our best to remedy this condition, without charge within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S. W., Washington, DC 20590 or call 1-800-424-9393 (Washington, DC residents use 366-0123).

The enclosed Campaign Owner Reply Card identifies your Pontiac vehicle. Presentation of the card to your dealer will assist in making the correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage-paid Owner Reply Card and returning it to us.

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.

PONTIAC DIVISION
General Motors Corporation

Enclosure

89-C-09

#1382

PONTIAC DIVISION

Number 89-C-09 Date July, 1990



Subject: PRODUCT SAFETY CAMPAIGN 89-C-09
FUEL FEED HOSE ASSEMBLY

MODELS AFFECTED 1988-89 PONTIAC FIREBIRD
WITH 2.8L V6 ENGINE

90V-115

TO: ALL PONTIAC DEALERS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type, must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owners are being instructed to contact the Pontiac Customer Assistance Center if their dealer does not remedy the condition within five days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, owners are instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Pontiac Firebird model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

(CONTINUED)

<p>Pontiac bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your Pontiac dealer for information on whether your vehicle may benefit from the information.</p>
--

Read, Initial & Pass On • Service Supervision

Parts

Accounting

VEHICLES INVOLVED

Involved are certain 1988-89 Pontiac Firebird model vehicles with 2.8L V6 engines within the following VIN breakpoints:

<u>Year</u>	<u>Plant</u>	<u>Beginning</u>	<u>Up To And Including</u>
1988	Van Nuys	JL241550	JL245185
1989	Van Nuys	KL212471	KL228219
1989	Van Nuys	KL251466	KL259973

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to the involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Pontiac Division (see copy of Owner Letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership from this time forward.

Whenever a vehicle subject to this campaign is taken into your used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your used vehicle inventory are to be contacted by the dealer, and arrangements made to make the required modification according to instructions contained in this bulletin.

(CONTINUED)

PARTS INFORMATION

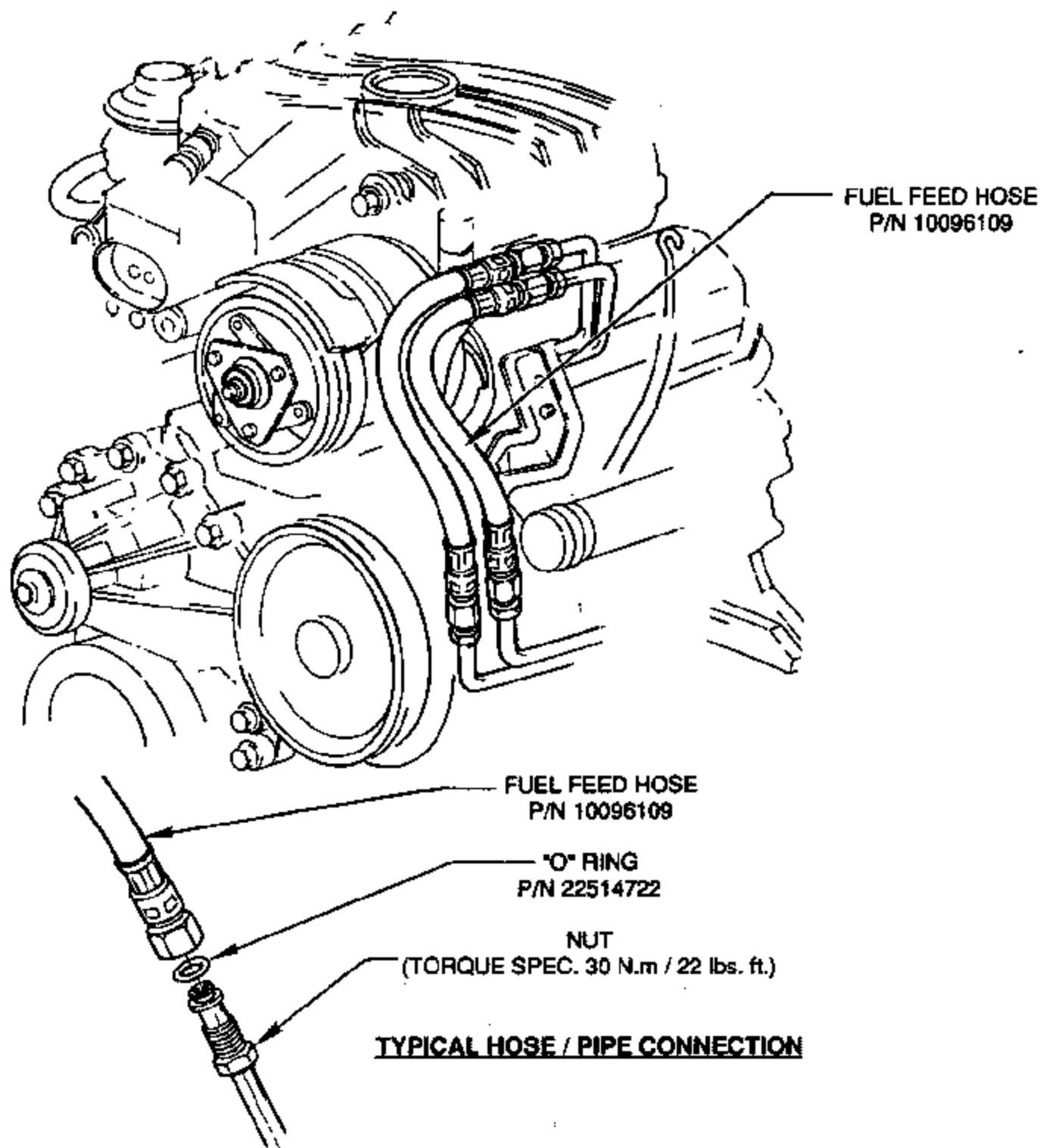
Parts required to complete this campaign are to be obtained from General Motors Service Parts Operation (GMSPO). To ensure that these parts are obtained as soon as possible, they should be ordered on a C.I.O. order with no special instruction code, but on advise code (2).

<u>Description</u>	<u>Part Number</u>	<u>Quantity Per Vehicle</u>
Front Fuel Feed Hose Assembly	10096109	1
O-Ring (As Required)	22514722	2

SERVICE PROCEDURE Illustration on next page may be helpful in completing this procedure.

1. Raise hood.
 2. Disconnect negative battery cable and remove fuel tank filler cap.
 3. Relieve fuel system pressure following applicable service manual procedure.
 4. Disconnect engine fuel feed hose at engine and chassis pipe fittings utilizing backup wrench.
- NOTICE: Care must be taken not to displace engine and chassis pipes during removal or installation of hose assembly. Doing so could result in possible future hose failure due to misrouting.
5. Clean and inspect engine and chassis fuel pipe O-Rings. Replace where required with new O-Rings.
 6. Install new fuel hose assembly, insuring hose does not become twisted or kinked during installation.
 7. Torque fittings to 30 N.m (22 lb.ft.) utilizing backup wrench.
 8. Reconnect battery and install fuel tank filler cap.
 9. Start engine, check for possible fuel leaks, and correct as required.
 10. Install Campaign Identification Label.

(CONTINUED)



INSTALLATION INFORMATION

1. HOSE ASM. MUST NOT BE TWISTED WHILE BEING INSTALLED.
2. USE BACK UP WRENCH WHEN TIGHTENING FITTINGS.
3. INSPECT FOR "O" RINGS AT BOTH PIPE ENDS PRIOR TO HOSE ASM. INSTALLATION.
4. CHASSIS AND ENGINE PIPES MUST NOT BE DISPLACED DURING REMOVAL OR INSTALLATION OF HOSE ASM.

CAMPAIGN IDENTIFICATION LABEL

Each vehicle modified in accordance with the instructions outlined in this Product Campaign Bulletin will require a "Campaign Identification Label." Each label provides a space to include the campaign number, the five digit dealer code of the dealer performing the campaign service, and the date the vehicle was campaigned. This information may be inserted with a typewriter or ball-point pen. Install the label only on a clean, dry surface of the radiator baffle where it is readily visible. (Additional campaign labels are available on stationery order as Form 7901-709).

FORTEC CAMPAIGN	
NO.	89-C-09
ZN/BLR CODE	00-000
DATE	7-30-90
DO NOT REMOVE	

CLAIM INFORMATION

A separate repair order must be used for each vehicle. A completed warranty claim is to be kept as a permanent record of completion.

DEALERS SHOULD SUBMIT WARRANTY CLAIMS FOR CREDIT IN THEIR NORMAL MANNER WHEN THEY PERFORM THE SERVICE AS FOLLOWS:

<u>Operation</u>	<u>Failure Code</u>	<u>Labor Operation</u>	<u>Labor Hours</u>	<u>*Other Labor Hours</u>
Install New Front Fuel Feed Hose	96	Y6150	0.3	0.1

* In addition dealerships will receive 0.1 hours credit for dealer administrative services associated with this campaign. The 0.1 hours allowance is to be entered in the "Other Labor Hours" field with each campaign repair listed for credit. This entry will not require authorization.

FAILURE CODE 96 MUST BE USED WITH THE LABOR OPERATION.

Parts required are to be listed in your warranty claim in the normal manner. Parts will be credited at dealer net plus 30% dealer handling allowance.

Dealers will be credited via Warranty Document or Terminal Transmission, whichever is their normal method of submission for payment. Claim must contain all information required and should list the labor operation as outlined.

(CONTINUED)

RECORDING COMPLETION

Repairs submitted for vehicles not involved in the campaign will not be paid.

Campaign completion will be recorded from "PROPERLY COMPLETED AND PAID WARRANTY CLAIMS." Owners are being asked to present the owner reply card for identification to their dealer at the time they bring in their vehicle to have the campaign performed.

COPYRIGHT 1990
SERVICE DEPARTMENT
PONTIAC DIVISION
GENERAL MOTORS CORPORATION
ALL RIGHTS RESERVED



PONTIAC

PONTIAC DIVISION
General Motors Corporation
One Pontiac Plaza
Pontiac, Michigan 48053

July, 1990

Dear Pontiac Owner:

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

REASON FOR THIS RECALL

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Pontiac Firebird model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

WHAT WE WILL DO

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

WHAT YOU SHOULD DO

Please contact your Pontiac dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and parts are available. The labor time necessary to perform this service correction is approximately 15 minutes; however, this does not include time to schedule and process your vehicle. Please ask your dealer if you wish to know how much additional time will be needed to process your vehicle.

Your Pontiac dealer is best equipped to obtain parts and provide service to ensure your vehicle is corrected as promptly as possible. However, if you take your vehicle to your dealer on the agreed service date, and he does not remedy this condition on that date, or within five days, we recommend you contact the Pontiac Customer Assistance Center by calling: 1-800-762-2737.



After contacting your dealer and the Pontiac Customer Assistance Center, if you are still not satisfied that we have done our best to remedy this condition, without charge within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S. W., Washington, DC 20590 or call 1-800-424-9393 (Washington, DC residents use 366-0123).

The enclosed Campaign Owner Reply Card identifies your Pontiac vehicle. Presentation of the card to your dealer will assist in making the correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage-paid Owner Reply Card and returning it to us.

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.

PONTIAC DIVISION
General Motors Corporation

Enclosure

89-C-09

POST-IT brand fax transmittal memo 7671 / # of pages = 1	
To: <i>MIKE Brownlee</i>	From: <i>J. Anderson</i>
Co: <i>NHTSA</i>	Co: <i>GM PR</i>
Dept:	Phone # <i>715-5040</i>
Fax #	Fax #

90V-054



GENERAL MOTORS CORPORATION
General Motors Building, Detroit, Michigan 48202



For Release

IMMEDIATELY, THURSDAY, JULY 19, 1990
2:30 P.M. (EDT)

Contact: Thomas J. Pyden
313-556-2099

DETROIT -- General Motors announced today it is voluntarily conducting safety recalls on certain 1988-90 vehicles.

Affected owners are being notified by letter, and GM dealers will perform the necessary repairs free of charge. The campaigns include:

- Approximately 516,000 midsize passenger cars are being recalled to strengthen the anchorage of the front seat shoulder belt guide loops. In a severe accident, the upper guide loop could separate from its door mounted anchor plate. If this happens, the shoulder belt would not properly restrain an occupant. GM dealers will install a larger flanged nut to strengthen the attachment. Vehicles involved include 1988-90 two-door Buick Regal, Pontiac Grand Prix and Oldsmobile Cutlass Supreme models, as well as 1990 two-door Chevrolet Lumina cars.

90V-115

- Nearly 40,000 model year 1988-90 Pontiac Firebird and Chevrolet Camaro models will be inspected for possible fuel hose connection problems. On 1988-89 models equipped with 2.8 liter V6 engines, the fuel feed hose could separate from the engine. On 1990 models equipped with 5.0 and 5.7 liter V8 engines, a fuel return hose may break. In both cases, fuel could leak into the underhood area. If an ignition source is present, this could result in an engine compartment fire. Dealers will install new fuel hoses on all involved vehicles.

90V-114

GM is unaware of any injuries resulting from the above conditions.

JUN 26 1990

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Mr. C. Thomas Terry
Manager, Product Investigations
General Motors Corporation
30200 Mound Road
Warren, MI 48090-9010

NEF-111paw
90V-115

Dear Mr. Terry:

This acknowledges receipt of your Defect Information Report submitted in accordance with 49 CFR Part 573, "Defect and Noncompliance Reports."

RECALL CAMPAIGN INFORMATION

NHTSA Recall Campaign ID Number: 90V-115
(Please refer to this number in all future correspondence.)

NHTSA Contact: Mr. Jon White, Chief Telephone: (202) 366-5227
Technical Analysis Branch

Date of Letter: June 6, 1990

Number Being Recalled: 29,331 Chevrolet 1988 through 1989 Camaro and Pontiac 1988 through 1989 Firebird vehicles equipped with 2.8L V6 engines and manufactured from April 1988 through June 1989.

Subject: These vehicles may have fuel feed hoses which pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate and an ignition source was present, an engine compartment fire could occur.

ADDITIONAL INFORMATION REQUIRED

In order for us to complete our file on this matter, please provide the following information:

1. Furnish a chronological summary of events which led to the discovery of the defect. The summary should include, but not be limited to owner

CONCORDANCES
RTG SYMBOL NEF-111
INITIALS/SIG. P Wallace
DATE 6/22/90
RTG SYMBOL NEF-111
INITIALS/SIG. [Signature]
DATE 6/22/90
RTG SYMBOL NEF-
INITIALS/SIG. [Signature]
DATE 6/22/90
RTG SYMBOL
INITIALS/SIG.
DATE
RTG SYMBOL
INITIALS/SIG.
DATE
RTG SYMBOL
INITIALS/SIG.
DATE
RTG SYMBOL
INITIALS/SIG.
DATE
RTG SYMBOL
INITIALS/SIG.
DATE

[Handwritten mark]

reports, field reports, accidents, lawsuits, warranty claim/part sales analyses, investigations or analyses, surveys, and meetings which occurred prior to the determination to conduct a safety recall.

2. Furnish the Vehicle Identification Number ranges and assembly plants of the Pontiac Firebird models which may be involved in this campaign.

Please provide this information, referencing the National Highway Traffic Safety Administration identification codes in the upper right hand corner by July 10, 1990.

The Safety Recall Should Begin Immediately

Section 111 of the National Traffic and Motor Vehicle Safety Act requires that a manufacturer and his distributors, repair or repurchase noncomplying or defective motor vehicles from dealers and distributors immediately. In addition, it is necessary to notify purchasers in accordance with Section 153 and 49 CFR Part 577, "Defect and Noncompliance Notification."

QUARTERLY STATUS REPORTS

The first quarterly status report for this campaign in accordance with section 573.6 is required to be submitted within 25 working days after the close of the calendar quarter in which owner notification begins. For instance, the current calendar quarter ends on September 30, 1990, and the first quarterly report for recalls where owner notification begins in this quarter is due by November 2, 1990. Quarterly reports are due for the first 6 consecutive quarters once owner notification has begun. In the case where the recall appears to be completed, quarterly reporting is required until your company is notified otherwise by this office. Each report is due within 25 working days after the close of the respective quarter.

Notification to purchasers should begin as soon as possible. A final copy of all the notification documents must be submitted to this office within 5 working days of when the documents are first sent to purchasers and dealers as required in Part 573.5(c)(9).

Sincerely,

Original signed by
Michael B. Brownlee

Michael B. Brownlee, Director
Office of Defects Investigation
Enforcement

NHTSA:NEF:ODI
NEF-11:PWALLACE:kjs:65227:6-21-90
Assign to: Powertrain
cc: NEF-01, NEF-10
NEF-111 Subj/Wkg. File (BJ)
RAP File:Document #16151



Mr. Michael B. Brownlee
Director
Office of Defects Investigation Enforcement
National Highway Traffic Safety Administration
Washington, D.C. 20590

June 6, 1990

90V-115 (61)

Dear Mr. Brownlee:

The following information is submitted pursuant to the requirements of 49 CFR 573.5 as it applies to a determination by General Motors of a defect related to motor vehicle safety involving certain 1988-89 "F" cars.

573.5(c)(1): Chevrolet and Pontiac Motor Divisions of General Motors Corporation.

573.5(c)(2)(3)(4): This information is shown on the attached sheet.

573.5(c)(5): General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 "F" model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate, and an ignition source is present, an engine compartment fire could occur.

573.5(c)(6): General Motors first became aware of this condition during June, 1989. An investigation was initiated to determine the cause and extent of the condition.

573.5(c)(8): This information is set forth in the dealer bulletin.

573.5(c)(9): Draft copies of the owner notification letter and dealer bulletin are attached. The final letter and bulletin will be forwarded when they are available.

Very truly yours,

C. Thomas Terry
Manager

Product Investigations

attachment

RECEIVED

JUN 12 1990

RECEIVED

573.5(c)(2), (3), (4)

VEHICLES POTENTIALLY AFFECTED BY MAKE, MODEL, AND MODEL YEAR
PLUS INCLUSIVE DATES OF MANUFACTURE

MAKE	MODEL SERIES	MODEL YEAR	NUMBER INVOLVED	INCLUSIVE MANUFACTURING DATES		DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.	EST. NO. W/CONDITION
				(FROM)	(TO)		
Chevrolet	"F"	1988	2,985	04/88	05/88	w/2.8L V6 Engine	*
Chevrolet	"F"	1989	16,454	10/88	06/89		
Pontiac	"F"	1988	1,028	04/88	05/88		
Pontiac	"F"	1989	8,864	10/88	06/89		

GM TOTAL 29,331

* All affected vehicles will be corrected

CHEVROLET



Central Office (Notification Used By Chevrolet Motor Division)

_____, 1990

Dear Chevrolet Owner:

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

REASON FOR THIS RECALL

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate, an engine compartment fire could occur.

WHAT WE WILL DO

AND AN IGNITION
SOURCE IS PRESENT,

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

This service will be performed for you at no charge.

WHAT YOU SHOULD DO

Please contact your Chevrolet dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and parts are available. The labor time necessary to perform this service correction is approximately 15 minutes. Please ask your dealer if you wish to know how much additional time will be needed to schedule and process your vehicle.

Your Chevrolet dealer is best equipped to obtain parts and provide service to insure that your vehicle is corrected as promptly as possible. If, however, you take your vehicle to your dealer on the agreed service date, and they do not remedy this condition on that date or within five (5) days, we recommend you contact the Chevrolet Customer Assistance Center by calling 1-800-222-1020.

After contacting your dealer and the Customer Assistance Center, if you are still not satisfied that we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590 or call 1-800-424-9393 (Washington D.C. residents use 366-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid reply card and returning it to us.

80V-115 (64)

-2-

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.

Chevrolet Motor Division
GENERAL MOTORS CORPORATION

89C__

Enclosure



CHEVROLET

CHEVROLET MOTOR DIVISION
General Motors Corporation
Service Department

GEO

Dealer Product Campaign Bulletin

89C	
Number:	6C
Section:	April, 1990
Date:	

Subject: PRODUCT SAFETY CAMPAIGN 89C##
FUEL FEED HOSE ASSEMBLY

90V-115 (05)

Model and Year: 1988-89 CHEVROLET CAMARO WITH 2.8L V6 ENGINE

To: All Chevrolet Dealers

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to repair within sixty (60) days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter that is being sent to owners, the owners are being instructed to contact the Chevrolet Customer Assistance Center if their dealer does not remedy the condition within five (5) days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate, an engine compartment fire could occur.

ADD AN IDENTICAL SOURCE IS PRESENT

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

90V-115 (06)

VEHICLES INVOLVED

Involved are certain 1989 Chevrolet Camaro model vehicles with 2.8L V6 engines built within the following VIN breakpoints:

<u>YEAR</u>	<u>MODEL</u>	<u>PLANT</u>	<u>FROM</u>	<u>THROUGH</u>
1988	"F"	Van Nuys	JL163182	JL169450
1989	"F"	Van Nuys	KL119448	KL144587
1989	"F"	Van Nuys	KL184025	KL201788

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Chevrolet Motor Division (see copy of owner letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership, from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your new vehicle inventory are to be contacted by the dealer, and arrangements made to make the required correction according to instructions contained in this bulletin.

PARTS INFORMATION

Parts required to complete this campaign are to be obtained from General Motors Service Parts Operations (GMSPO). To ensure these parts will be obtained as soon as possible, they should be ordered from GMSPO on a "C.I.O." order with no special instruction code, but on an advise code (2).

90V-115 (07)

PARTS INFORMATION (Con't)

<u>Part Number</u>	<u>Description</u>	<u>Quantity/ Vehicle</u>
10096109	Front Fuel Feed Hose Assembly	1
22514722	O-Ring (As Required)	2

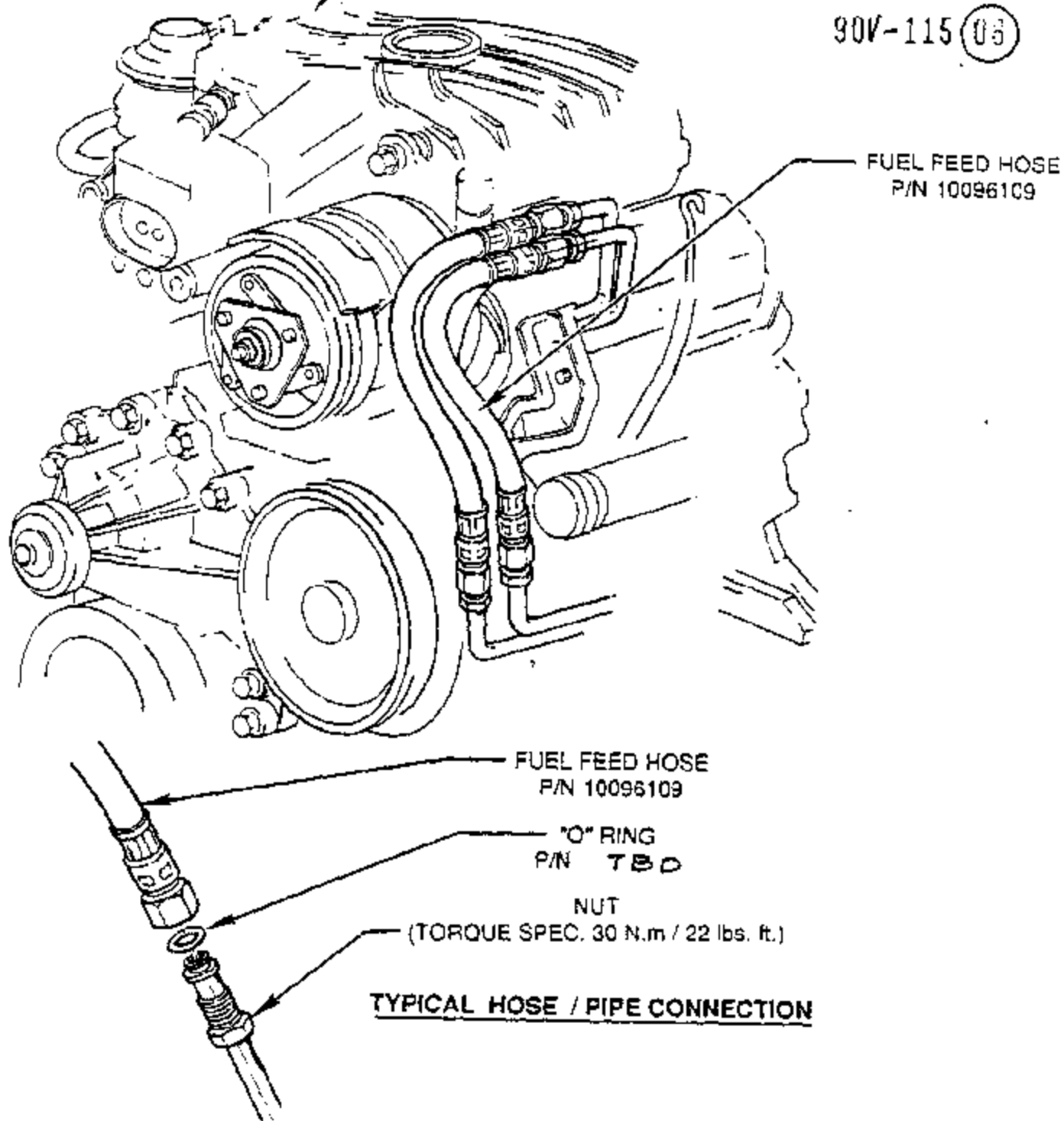
SERVICE PROCEDURE - Illustration on next page may be helpful in completing this procedure.

1. Raise hood.
2. Disconnect negative battery cable and remove fuel tank filler cap.
3. Relieve fuel system pressure following applicable shop manual procedure.
4. Disconnect engine fuel feed hose at engine and chassis pipe fittings utilizing backup wrench.

NOTICE: Care must be taken not to displace engine and chassis pipes during removal or installation of hose assembly. Doing so could result in possible future hose failure due to misrouting.

5. Clean and inspect engine and chassis fuel pipe O-Rings. Replace where required with new O-Rings.
6. Install new fuel hose assembly, insuring hose does not become twisted or kinked during installation.
7. Torque fittings to 30 Nm (22 lb. ft.) utilizing backup wrench.
8. Reconnect battery and install fuel tank filler cap.
9. Start engine, check for possible fuel leaks, and correct as required.
10. Install Campaign Identification Label.

90V-115 (05)

**INSTALLATION INFORMATION**

1. HOSE ASM. MUST NOT BE TWISTED WHILE BEING INSTALLED.
2. USE BACK UP WRENCH WHEN TIGHTENING FITTINGS.
3. INSPECT FOR "O" RINGS AT BOTH PIPE ENDS PRIOR TO HOSE ASM. INSTALLATION.
4. CHASSIS AND ENGINE PIPES MUST NOT BE DISPLACED DURING REMOVAL OR INSTALLATION OF HOSE ASM.

90V-115 (03)

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with the instructions outlined in this 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 a ball point pen.

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.

CLAIM INFORMATION

Submit a Product Campaign Claim with the information indicated below:

REPAIR PERFORMED	PC	FAILED PART NO.	PARTS ALLOW	CC-FC	LABOR OP	LAB HRS	OTH HRS
Install New Front Fuel Feed Hose	3	10096109	**	SK-00	V_____	0.3	0.1

* Campaign Administrative Allowance.

** The "Parts Allowance" should be the sum total of the current GMSPO Dealer Net price plus 30% of all parts required for the repair.

Dealers will automatically receive the correct labor and material allowance based on the labor operation performed.

Refer to the Chevrolet Claims Processing Manual for details on Product Campaign Claim Submission.

COPYRIGHT 1990
CHEVROLET MOTOR DIVISION
GENERAL MOTORS CORPORATION
ALL RIGHTS RESERVED

Chevrolet bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle has that condition. See your Chevrolet dealer for information on whether your vehicle may benefit from that information.



Current Product
Engineering

General Motors Corporation

Mr. Michael B. Brownlee
Director
Office of Defects Investigation Enforcement
National Highway Traffic Safety Administration
Washington, D.C. 20590

June 6, 1990

90V-115 (01)

Dear Mr. Brownlee:

The following information is submitted pursuant to the requirements of 49 CFR 573.5 as it applies to a determination by General Motors of a defect related to motor vehicle safety involving certain 1988-89 "F" cars.

573.5(c)(1): Chevrolet and Pontiac Motor Divisions of General Motors Corporation.

573.5(c)(2)(3)(4): This information is shown on the attached sheet.

573.5(c)(5): General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 "F" model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate, and an ignition source is present, an engine compartment fire could occur.

573.5(c)(6): General Motors first became aware of this condition during June, 1989. An investigation was initiated to determine the cause and extent of the condition.

573.5(c)(8): This information is set forth in the dealer bulletin.

573.5(c)(9): Draft copies of the owner notification letter and dealer bulletin are attached. The final letter and bulletin will be forwarded when they are available.

Very truly yours,

C. Thomas Terry

Manager

Product Investigations

attachment

RECEIVED

JUN 12 1990

RECEIVED

573.5(c)(2), (3), (4)

VEHICLES POTENTIALLY AFFECTED BY MAKE, MODEL, AND MODEL YEAR
PLUS INCLUSIVE DATES OF MANUFACTURE

<u>MAKE</u>	<u>MODEL SERIES</u>	<u>MODEL YEAR</u>	<u>NUMBER INVOLVED</u>	<u>INCLUSIVE MANUFACTURING DATES</u>		<u>DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.</u>	<u>EST. NO. W/CONDITION</u>
				<u>(FROM)</u>	<u>(TO)</u>		
Chevrolet	*F*	1988	2,985	04/88	05/88	w/2.8L V6 Engine	*
Chevrolet	*P*	1989	16,454	10/88	06/89		
Pontiac	*P*	1988	1,028	04/88	05/88		
Pontiac	*F*	1989	8,864	10/88	06/89		
<u>GM TOTAL</u>			<u>29,331</u>				

* All affected vehicles will be corrected

90V-115 (02)

CHEVROLET



Central Office (Notification Used By Chevrolet Motor Division)

_____, 1990

Dear Chevrolet Owner:

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

REASON FOR THIS RECALL

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate, an engine compartment fire could occur.

↑
AND AN IGNITION SOURCE IS PRESENT.

WHAT WE WILL DO

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

This service will be performed for you at no charge.

WHAT YOU SHOULD DO

Please contact your Chevrolet dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer and parts are available. The labor time necessary to perform this service correction is approximately 15 minutes. Please ask your dealer if you wish to know how much additional time will be needed to schedule and process your vehicle.

Your Chevrolet dealer is best equipped to obtain parts and provide service to insure that your vehicle is corrected as promptly as possible. If, however, you take your vehicle to your dealer on the agreed service date, and they do not remedy this condition on that date or within five (5) days, we recommend you contact the Chevrolet Customer Assistance Center by calling 1-800-222-1020.

After contacting your dealer and the Customer Assistance Center, if you are still not satisfied that we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590 or call 1-800-424-9393 (Washington D.C. residents use 366-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid reply card and returning it to us.

90V-115(04)

-2-

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.

Chevrolet Motor Division
GENERAL MOTORS CORPORATION

89C__

Enclosure



CHEVROLET

CHEVROLET MOTOR DIVISION
General Motors Corporation
Service Department



**Dealer
Product
Campaign
Bulletin**

Number:	89C
Section:	6C
Date:	April, 1990

Subject: **PRODUCT SAFETY CAMPAIGN 89C##
FUEL FEED HOSE ASSEMBLY**

90V-115 (05)

Model and Year: **1988-89 CHEVROLET CAMARO WITH 2.8L V6 ENGINE**

To: **All Chevrolet Dealers**

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to repair within sixty (60) days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter that is being sent to owners, the owners are being instructed to contact the Chevrolet Customer Assistance Center if their dealer does not remedy the condition within five (5) days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1988-89 Chevrolet Camaro model vehicles with 2.8L V6 engines. These vehicles may have fuel feed hoses which may pull out of the crimped coupling at the engine end of the hose assembly. If this coupling was to separate, an engine compartment fire could occur.

(And no mention SOURCE IS PRESENT)

To prevent this condition from occurring, a redesigned fuel feed hose will be installed on all involved vehicles.

90V-115 (06)

VEHICLES INVOLVED

Involved are certain 1989 Chevrolet Camaro model vehicles with 2.8L V6 engines built within the following VIN breakpoints:

<u>YEAR</u>	<u>MODEL</u>	<u>PLANT</u>	<u>FROM</u>	<u>THROUGH</u>
1988	"F"	Van Nuys	JL163182	JL169450
1989	"F"	Van Nuys	KL119448	KL144587
1989	"F"	Van Nuys	KL184025	KL201788

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Chevrolet Motor Division (see copy of owner letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to service all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership, from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your new vehicle inventory are to be contacted by the dealer, and arrangements made to make the required correction according to instructions contained in this bulletin.

PARTS INFORMATION

Parts required to complete this campaign are to be obtained from General Motors Service Parts Operations (GMSPO). To ensure these parts will be obtained as soon as possible, they should be ordered from GMSPO on a "C.I.O." order with no special instruction code, but on an advise code (2).

90V-115 (07)

PARTS INFORMATION (Con't)

<u>Part Number</u>	<u>Description</u>	<u>Quantity/ Vehicle</u>
10096109	Front Fuel Feed Hose Assembly	1
22514722	O-Ring (As Required)	2

SERVICE PROCEDURE - Illustration on next page may be helpful in completing this procedure.

1. Raise hood.
2. Disconnect negative battery cable and remove fuel tank filler cap.
3. Relieve fuel system pressure following applicable shop manual procedure.
4. Disconnect engine fuel feed hose at engine and chassis pipe fittings utilizing backup wrench.

NOTICE: Care must be taken not to displace engine and chassis pipes during removal or installation of hose assembly. Doing so could result in possible future hose failure due to misrouting.

5. Clean and inspect engine and chassis fuel pipe O-Rings. Replace where required with new O-Rings.
6. Install new fuel hose assembly, insuring hose does not become twisted or kinked during installation.
7. Torque fittings to 30 Nm (22 lb. ft.) utilizing backup wrench.
8. Reconnect battery and install fuel tank filler cap.
9. Start engine, check for possible fuel leaks, and correct as required.
10. Install Campaign Identification Label.

V-6

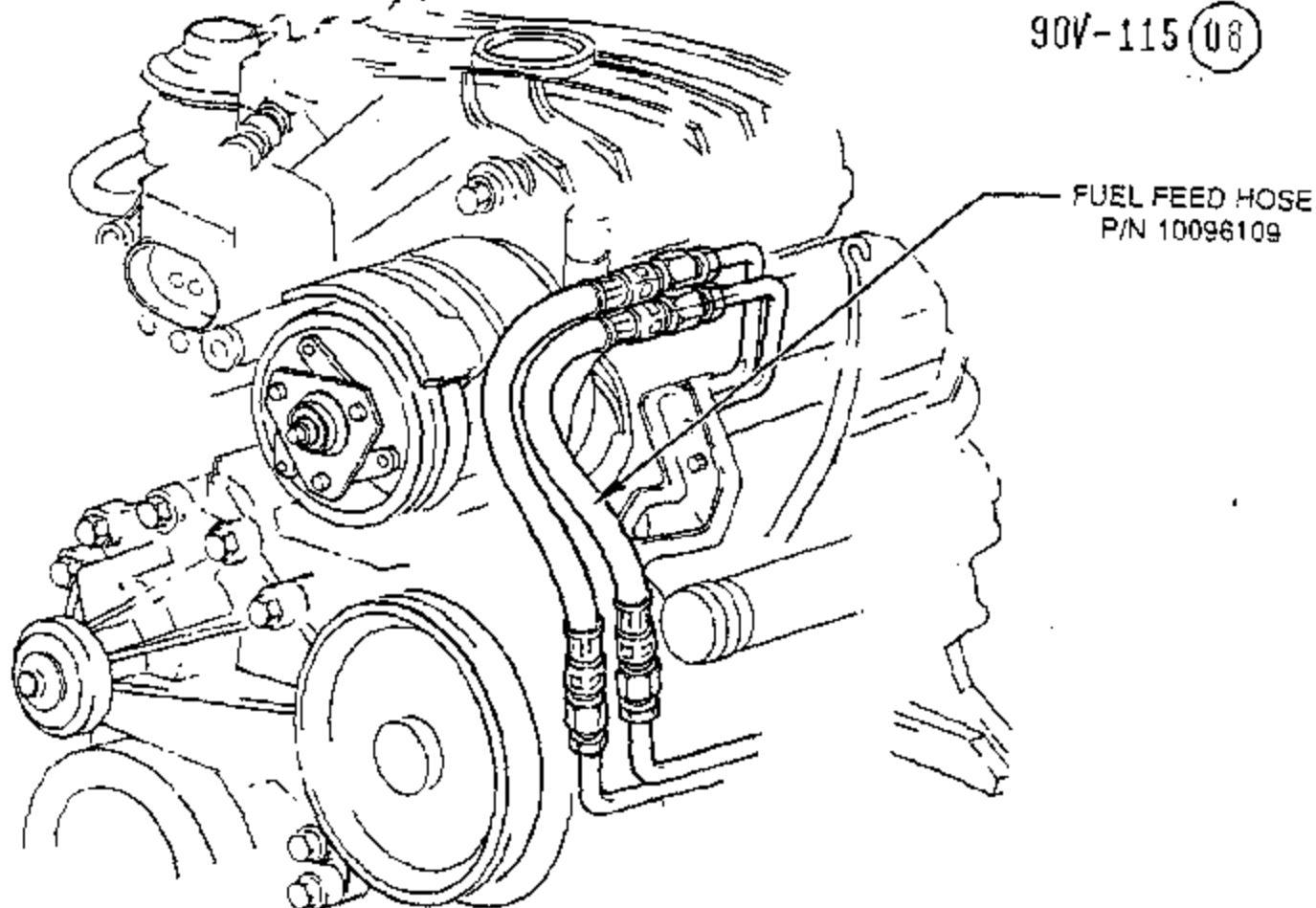
LB8

Number: 89C##

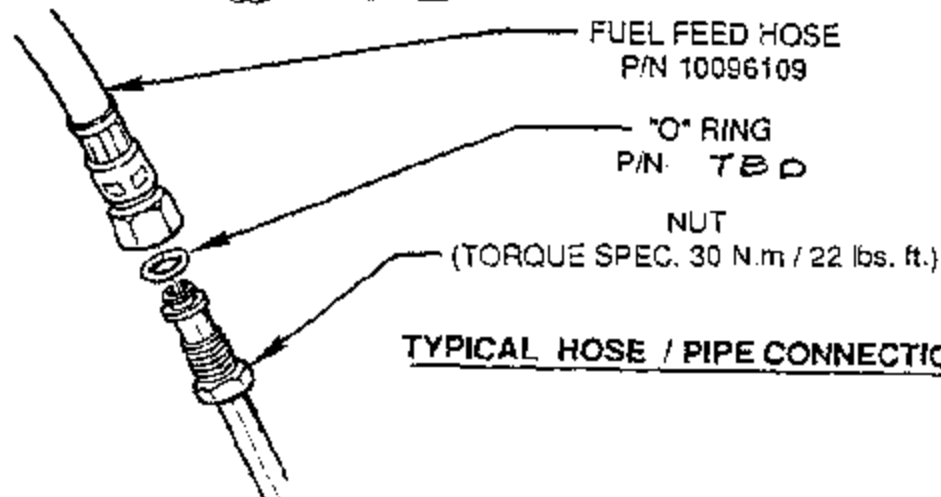
Section: 6C

Page No.: 4

90V-115 (08)



FUEL FEED HOSE
P/N 10096109



FUEL FEED HOSE
P/N 10096109

O' RING
P/N TBD

NUT
(TORQUE SPEC. 30 N.m / 22 lbs. ft.)

TYPICAL HOSE / PIPE CONNECTION

INSTALLATION INFORMATION

1. HOSE ASM. MUST NOT BE TWISTED WHILE BEING INSTALLED.
2. USE BACK UP WRENCH WHEN TIGHTENING FITTINGS.
3. INSPECT FOR O' RINGS AT BOTH PIPE ENDS PRIOR TO HOSE ASM. INSTALLATION.
4. CHASSIS AND ENGINE PIPES MUST NOT BE DISPLACED DURING REMOVAL OR INSTALLATION OF HOSE ASM.

90V-115 (09)

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with the instructions outlined in this 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 a ball point pen.

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.

CLAIM INFORMATION

Submit a Product Campaign Claim with the information indicated below:

REPAIR PERFORMED	PC	FAILED; PART NO.	PARTS ALLOW	CC-FC	LABOR DP	LAB HRS	* OTH HRS
Install New Front Fuel Feed Hose	3	10096109	**	SK-00	V_____	0.5	0.1

* Campaign Administrative Allowance.

** The "Parts Allowance" should be the sum total of the current GMSPO Dealer Net price plus 30% of all parts required for the repair.

Dealers will automatically receive the correct labor and material allowance based on the labor operation performed.

Refer to the Chevrolet Claims Processing Manual for details on Product Campaign Claim Submission.

COPYRIGHT 1990
CHEVROLET MOTOR DIVISION
GENERAL MOTORS CORPORATION
ALL RIGHTS RESERVED

Chevrolet bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle has that condition. See your Chevrolet dealer for information on whether your vehicle may benefit from that information.