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CAMPAIGN BULLETIN

Reference: Date:

NTB96-010 January 18,1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

APPLIED VEHICLES: 1985-1988 Maxima (U11)

1984-1989 300ZX (Z31)

APPLIED VIN: All

INTRODUCTION

Nissan has received reports of leaks in the fuel injection system on the above vehicles. Fuel leaks in the engine can result in a fire. Nissan has investigated these leaks and found that certain fuel additives approved for use in gasoline after these vehicles were designed have resulted in deterioration of the fuel injectors causing fuel leaks. In addition, Nissan has found fuel leaks due to worn out hoses which have not been replaced according to the maintenance schedule. Although Nissan has determined that these fuel leaks are not due to any defect in the vehicles, Nissan has decided to replace the fuel injectors and related hoses on these vehicles free of charge because we are concerned about the safety and satisfaction of our customers.

This campaign also covers the cost of replacing water or vacuum hoses that may be damaged during the repair procedure. This campaign does not cover normal maintenance items such as filters, belts, ignition wires, etc. A complete list of covered components (listed as "Related Parts") is provided at the end of this bulletin.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check and repair each vehicle within the range of the campaign which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in dealer inventory.

Effective with the receipt of this information, dealers should perform the campaign repair for any affected vehicle entering their dealership. The practice of replacing injectors as individual components or performing partial fuel injector system repairs on vehicles in this campaign, should be discontinued immediately. The only authorized fuel injector repair for the vehicles in the campaign is the installation of the complete campaign kit.

SERVICE PROCEDURE for the 300ZX Turbo and Non-Turbo

Preparation

- Record the radio presets
- Open the hood and protect the fenders with fender covers.
- 3. Release the fuel pressure
 - A. Remove the fuel pump fuse.
 - B. Start the engine and let it run until the engine stalls. Turn the ignition switch to "on" and crank the engine several times. This will ensure that no fuel pressure is remaining in the fuel rall. With the key off, reinstall the fuel pump fuse.
 - C. Connect a fuel pressure gauge to the engine side of the fuel filter to test the function of the fuel pressure regulator.
 - D. Start the engine and read the fuel pressure at idle. With the vacuum hose removed, the pressure should be less than 45 psi. If the pressure rises above 45 psi, you will need to replace the fuel pressure regulator later in this procedure.
 - NOTE: Damp fuel hoses/fuel pressure regulator may give the impression that the fuel pressure regulator is leaking fuel, however, most incidents are caused by a leaking fuel hose, not the fuel pressure regulator. If the fuel pressure regulator is suspected of leaking, remove the vacuum hose and inspect for fuel in the vacuum hose. Replace the fuel pressure regulator if fuel is found in the vacuum hose.
 - E. Remove the fuel pump fuse and release the fuel pressure following the procedure in step "3B" above.
 - F. Remove the fuel pressure gauge.

NOTE: This may trigger Code 22 in ECCS self diagnosis. Be sure to clear all codes from the ECCS memory before releasing the vehicle to the customer.

G. Disconnect the negative battery cable.

Disassembly - Right Side

- While wearing proper eye protection and respirator, blow the engine compartment free of dust.
- Starting on the right side of the engine (passenger side), disconnect the water hose above the air regulator. It is not necessary to drain the coolant to perform this procedure, however some coolant will spill when the upper plenum water hose is disconnected so use a rag to catch the spilled coolant. Leave the radiator cap in place to reduce the amount of coolant loss and the creation of air pockets in the system.



Remove water hose above air regulator

- Remove the PCV hose from the plenum.
- 4. Move the clamp on the air regulator hose, then remove the air regulator from the plenum with the electrical connector attached.

NOTE: Be careful not to drop the O-ring between the air regulator and the plenum.

 Remove the air regulator from the hose and disconnect the air regulator electrical connector. Remove the metal connector clip before removing the connector to prevent damage.

- Disconnect the vacuum hoses and the air hose from the plenum.
- Remove the wiring harness retaining clips and the ground wire.



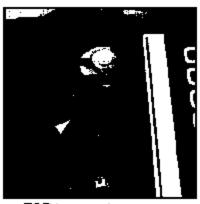
Disconnect all vacuum hoses and wiring harness clips

Remove the water temperature sensor (thermistor)
connector. Connectors may be brittle, use care when
disconnecting.



Water temperature sensor connector

- Remove the EGR valve upper tube nut and loosen the EGR lower tube nut. Applying Permatex FAST BREAK Super Penetrant or similar product will assist in loosening the nuts.
- Remove the EGR temperature sensor connector (California only).



EGR temperature sensor connector

- Remove the EGR solenoid connector. It is not necessary to remove the EGR valve bracket.
- Disconnect the vacuum hose from the front of the plenum then remove the two
 vacuum tube bolts.

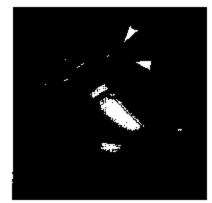
Disassembly - Left Side

- Make sure the accelerator and ASCD cables are tight in the bracket then remove
 the bracket with the cables from the manifold.
- Disconnect the accelerator cable and the ASCD cable from the throttle valve and position them out of the way. Be careful not to kink or pull on the cables.
- On turbo models, disconnect the AAC valve connector by applying pressure to the under side of the electrical connector release tab, then disconnect the FICD connector.
 - On non-turbo models, disconnect the four wire connector which serves both the AAC valve and FICD solenoid valve.



AAC - FICD connector

- Disconnect the electrical connectors from the throttle sensor and throttle sensor switch.
- Disconnect the four air hoses from the throttle body:
 One behind the throttle body, two on the side of the throttle body, and one beneath the throttle body.



Disconnect four air hoses (One beneath throttle body)

 Disconnect the bypass hose from the throttle body and then remove the water and vacuum hoses from the left side of the plenum. On some turbo models, disconnect the two cooling hoses below the throttle chamber that connect to the turbocharger. On all models, disconnect the A/C compressor harness connector.

On top feed turbo models, disconnect the electric cooling fan switch connector.

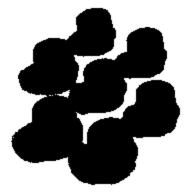


Fan awitch connector

- Disconnect the O2 sensor harness connector and remove the ground wire from the plenum.
- Disconnect the injector connectors from the three fuel injectors on the left side of the engine. This allows you to move the harness out of the way. Use a pick or similar tool to remove the metal clip from the injector connector.
- Remove the plenum ornament cover. Use an impact driver so you won't damage the screw heads.
- 11. On Turbo models, loosen both clamps and separate the rubber boot so it is free of the throttle chamber. Push the duct away from the throttle chamber. This will avoid damage to the duct when removing the plenum.
 - On non-turbo models, it is easier to loosen the clamp at the throttle chamber and the clamp at the lower portion of the duct then remove the entire air intake duct.
- 12. Using a breaker bar, remove the five plenum bolts. Tap the edge of the plenum with a plastic mallet to free it from the intake manifold and lift the plenum from the intake manifold.

NOTE: Be sure not to damage the air duct and wiring harness as you remove the plenum.

 Set the plenum aside and immediately cover the intake manifold and plenum holes with the 12 hole plugs, J42056, that were provided as part of this campaign.

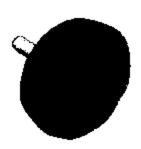


J42056 pluga



Manifold with plugs installed

- 14. Unplug the connectors from the three injectors on the right side of the engine. Be careful not to damage the connectors.
- 15. Clean the intake manifold gasket and plenum surfaces using a brown Scotch Brite pad P/N PMIP 2CD. (This pad is attached to an arbor). <u>DO NOT use a wire brush or gasket scraper.</u> This will damage the manifold and collector surfaces. Once the gasket is removed, blow all the dust from the engine compartment. Remember to use proper eye and respiratory protection.



Scotch Brite pad with arbor



Removing gasket with pad

16. Carefully cut both hoses from the fuel pressure regulator. Cut the hoses in the middle to avoid damaging the regulator tube surface. DO NOT cut the hoses near the fuel regulator outlets. Scratches or scoring of the fuel tubes can cause fuel leaks. Cut the crossover hose in the middle.

On top feed models, cut the inlet tube sub-hose.



Cut all fuel hoses in the middle to avoid damage to regulator or fuel tubes

- Remove the fuel rail bracket bolts (if equipped) and then the injector holder bolts.
- 18. Lift the fuel rail assembly from the engine. Be careful not to drop the injector spacers. Drain any residual fuel from the rails into a suitable container. Tag and retain the parts per Nissan's warranty policy and procedures.
- If the fuel pressure regulator failed the pressure test in step 3D (preparation), replace the fuel pressure regulator at this time.

If you are not replacing the fuel pressure regulator, remove the hose remnants from the regulator using **Mac HFL 4790** hose pliers or other suitable hose removal pliers. Be careful not to scratch, gouge, or damage the fuel tube inlet surfaces in any way. Remove the lower injector insulators from the Intake manifold. Also check to ensure that no injector spacers were left behind when you removed the fuel rail.

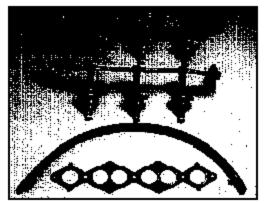
NOTE: On top feed models, the injector spacers will be re-used.



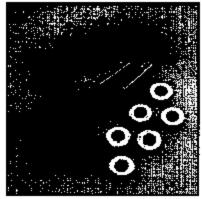
Do not leave injector insulators in manifold

Assembly - Injectors/Intake Plenum

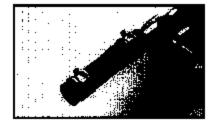
 Lay out both new fuel rails and new hardware supplied with this campaign. Note the new spring type clamps.



Fuel rail kit



Hardware kit



Spring type clamps

 On top-feed injectors, tape the spacers in place on the injector holders with masking tape. The spacers are pre-applied on bottom-feed injectors.



Top feed

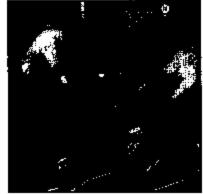


Battom feed

 Using a clean, fiber free applicator, such as a plastic coffee stirrer, lubricate the inside of <u>all</u> of the fuel hoses with a small amount of the Daikin CTFE oil that is provided with this campaign. <u>Do not use cotton swabs or similar type</u> applicators.



Daikin CTFE oil Nissan part no. 999MP-U5500



<u>Always</u> apply Daikin CTFE oil with fiber free applicator

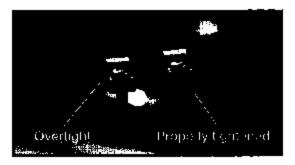
NOTE: <u>DO NOT</u> use <u>any type</u> of cleaning solvents on the hoses supplied in the kit.

<u>DO NOT</u> use any oll/lubricant other than the Daikin CTFE oil supplied in this campaign. Other oils/lubricants can react with the pre-applied adhesive on these replacement hoses.

- Lubricate the lower injector insulators with the Daikin CTFE oil and insert the Insulators into the intake manifold.
- On top-feed models, install the sub-hose to the inlet tube.
- Install the fuel rail assemblies. Set the assembly over the Intake manifold and connect each fuel rail to the fuel regulator. Connect the cross over hose.
- Lower the injectors into the injector insulators in the manifold and install the holder bolts and fuel rail bracket bolts. Torque the injector holder bolts to 22 to 28 in. lbs. (2.3 3.2 Nm) Torque the fuel rail bracket bolts to 13 16 ft. lbs. (18 22 Nm).
- Position the clamps on the sub tube, crossover tube, and the fuel regulator hoses.
 Make sure the fuel tubes and hoses are in proper alignment. If a hose is stressed, it can cause a leak.
- Install the fuel inlet hose. Tighten the hose clamps by hand. The clamp is properly tightened when a dime will just fit into the gap. An over tightened clamp may damage the hose and cause a fuel leak.



Setting clamp spacing with a dime



- 10. Inspect the injector connectors for damage. If any type of damage is found such as broken connectors, corroded terminals, pins pushed in or bent, install the subharness kit using the procedure beginning on page 19 of this builder. If the injector sub-harness(es) do not need replacing, continue with this procedure.
- 11. Attach the injector connectors to the fuel injectors on the right side of the engine. The left side injectors will be connected after the plenum is reinstalled.
- Blow all dirt and dust from the intake manifold, then remove the plastic intake
 manifold plugs. Be sure to wear protective goggles and respirator when removing
 dirt and dust.
- Brush a small amount of Permatex High Tack Adhesive Sealant P/N 98H on the intake manifold and set the gasket in place.
- 14. Remove the plastic air intake plugs from the plenum. Lower the plenum over the engine, align the air duct with the air intake, and rotate the plenum into place on the manifold. Be sure the air duct and wiring harness are not damaged during installation.
- Install the intake manifold bolts, and torque them to 13 16 ft. lbs. (18 22 Nm).
- Install the bypass hose onto the throttle body. On turbo models, properly align the rubber boot to the plenum and the air intake, then tighten the two clamps.
 - On non-turbo models, install the air duct assembly, properly align the rubber boot, throttle chamber and lower air intake, then tighten the two clamps.



Bypass hose and boot

Assembly - Left Side

- Assemble the left side of the engine by completing the following steps:
 - Reinstall the air hoses to the throttle body.
 - B. Reinstall the water and vacuum hoses to the left side of the plenum. (Pay close attention to the throttle chamber hoses near ASCD bracket.
 - C. Reinstall the AAC valve hose. Reconnect the connector for the AAC valve and the FICD solenoid valve.
 - D. Reconnect the connectors to the throttle sensor and the throttle sensor switch.
 - E. Reconnect the A/C compressor harness and exhaust gas sensor harness connectors.
 - F. Secure the ground wire at the plenum.
 - G. Connect the three injector connectors to the left side appropriate injectors.
 - H. Connect the accelerator and ASCD wires to the throttle valve and secure the bracket in place.

Assembly - Right Side

- Assemble the right side of the engine by completing the following steps:
 - A. Install the air regulator and its connector. Ensure the O-ring is in its proper location and tighten the bolts.



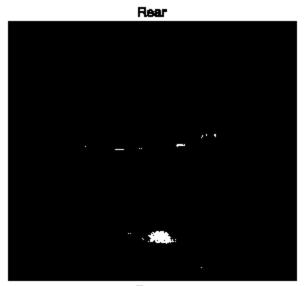
Air regulator O-ring

- Install the two water hoses.
- C. Install the PCV hose.
- D. Install the air hose and vacuum hoses.
- E. Install the EGR solenoid valve connector.
- F. Install the EGR valve upper and lower tube nuts and tighten to 24 32 ft. lbs. (34 - 44 Nm).
- G. Install EGR temperature sensor connector (California only).
- H. Reconnect the water temperature sensor connector.
- Install the two vacuum tube bolts and the vacuum hose to the front of the plenum.
- Install the plenum ornament cover. Clean all the plenum ornament cover bolt threads with a wire brush. Apply a small amount of Loctite #222 (purple) to the screw threads and torque each screw to 53 - 69 in. Ibs. (6 - 8 Nm).
- Reconnect the ground lead to the battery and recheck your work.
- Start engine and inspect for leaks.
- Test drive the vehicle and monitor for any driveability incidents. Erase any codes stored in ECCS memory and reset the clock and radio presets.
- Perform the "Final Inspection Checklist" on page 22 of this bulletin. Make a copy
 of this checklist for each vehicle that receives this campaign and attach the
 completed checklist to the vehicle repair order.

SERVICE PROCEDURE for the Maxima

Preparation

The Maxima engine is transverse mounted and rotated 90 degrees clockwise.



Front Maxima engine compartment

- Record the radio presets
- Open the hood and protect the fenders with fender covers.
- Release the fuel pressure
 - A. Remove the fuel pump fuse.
 - B. Start the engine and let it run until the engine stalls. Turn the ignition switch to "on" and crank the engine several times. This will ensure that no fuel pressure is remaining in the fuel rail. With the key off, reinstall the fuel pump fuse.
 - C. Connect a fuel pressure gauge to the engine side of the fuel filter to test the function of the fuel pressure regulator.
 - D. Start the engine and read the fuel pressure at idle. With the vacuum hose removed, the pressure should be less than 45 psl. If the pressure rises above 45 psl, you will need to replace the fuel pressure regulator later in this campaign.

NOTE: Damp fuel hoses/fuel pressure regulator may give the impression that the fuel pressure regulator is leaking fuel, however, most incidents are caused by a leaking fuel hose, not the fuel pressure regulator. If the fuel pressure regulator is suspected of leaking, remove the vacuum hose and inspect for fuel in the vacuum hose. Replace the fuel pressure regulator if fuel is found in the vacuum hose.

E. Remove the fuel pump fuse and release the fuel pressure following the procedure in step "4B" above. F. Remove the fuel pressure gauge.

NOTE: This may trigger Code 22 in ECCS self diagnosis. Be sure to clear all codes from the ECCS memory before releasing the vehicle to the customer.

G. Disconnect the negative battery cable.

Disassembly - Rear

 While wearing proper eye protection and respirator, blow the engine compartment free of dust.

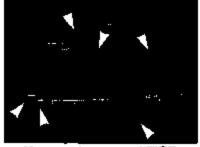
NOTE: The EGR valve, air regulator, and AAC/FICD will remain attached to the plenum during this procedure.

- Remove the PCV hose from the plenum.
- Remove the brake booster vacuum hose and AIV solenold hose when disassembling the rear of the plenum. Leave the air regulator attached to the plenum. Disconnect air regulator connector.
- 4. Disconnect the water hose under the plenum near the air regulator.



Brake hooster hose

- Disconnect all other vacuum hoses attached to the plenum.
- Disconnect the FICD solenoid connector.



Vacuum hoses and FICD connector

- Remove the EGR valve upper tube nut and loosen the EGR lower tube nut.
 Applying Permatex FAST BREAK Super Penetrant or similar product will assist in loosening the nuts.
- Remove the EGR solenoid connector. It is not necessary to remove the EGR valve bracket.
- Disconnect the vacuum hose from the front of the plenum then remove the two vacuum tube bolts.

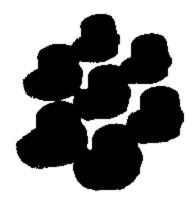
Disassembly - Front

- Remove the BCDD hose and evaporator vacuum hose (if equipped).
- Loosen the water hose clamp underneath the throttle valve
- Make sure the accelerator and ASCO cables are tight in the bracket then remove the bracket with the cables from the manifold.
- Disconnect the accelerator cable and the ASCD cable from the throttle valve and position them out of the way. Be careful not to kink or pull on the cables.
- Disconnect the electrical connectors from the throttle sensor and throttle sensor switch.
- Loosen the clamp for the air duct and remove the air duct from the throttle chamber.
- Remove the plenum ornament cover. Use an impact driver so you won't damage the screw heads.
- 8. Using a breaker bar, remove the five plenum bolts. Tap the edge of the plenum with a plastic mallet to free it from the intake manifold and lift the plenum from the intake manifold.

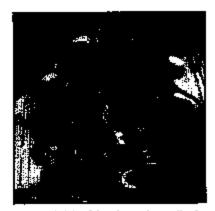
Since the wiring harness is out of the way, you will not need to disconnect any injectors until the plenum has been removed.

NOTE: Be sure not to demage the air duct and wiring harness as you remove the pienum.

 Set the plenum aside and immediately cover the intake manifold and plenum holes with the 12 hole plugs, J42056, that were provided as part of this campaign.



J42056 plugs



Manifold with plugs installed

- 10. Once the plenum has been removed and both the plenum and intake manifold has been plugged, disconnect the fuel injector connectors. Do not remove the fuel rails at this time.
- Remove and discard the fuel inlet hose between the fuel filter and fuel rail.
- Disconnect and discard the fuel filter injet hose. This is the pre-formed hose between the fuel filter and the vehicle frame.



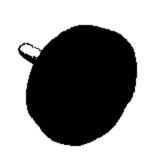
Pre-formed hose supplied with kit



Fuel injet hose location

- Install the new pre-formed fuel inlet hose between the filter and the vehicle frame.
- 14. Clean the intake manifold gasket and plenum surfaces using a brown Scotch Brite pad P/N PMIP 2CD. (This pad is attached to an arbor). <u>DO NOT use a wire brush or gasket scraper.</u> This will damage the manifold and collector surfaces.

Once the gasket is removed, blow all the dust from the engine compartment. Remember to use proper eye and respiratory protection.



Scotch Brite pad with arbor



Removing gasket with pad

- 15. A. Carefully cut both hoses from the fuel pressure regulator. Cut the hoses in the middle to avoid damaging the regulator tube surface. Do not cut the hoses near the fuel regulator outlets. Scratches or scoring of the fuel tubes can cause fuel leaks.
 - B. Cut the inlet tube sub-hose and the crossover hose in the middle.

Before removing the injector ralls remove the sub-tube.

(There are two bolts holding the tube in place).



Cut all fuel hoses in the middle to avoid demage to regulator or fuel tubes

- Remove the fuel rail bracket bolts (if equipped) and then the injector holder bolts.
- 17. Lift the fuel rail assembly from the engine. Be careful not to drop the injector spacers. Drain any residual fuel from the rails into a suitable container. Tag and retain the parts per Nissan's warranty policy and procedures.
- If the fuel pressure regulator failed the pressure test in step 4D (preparation), replace the fuel pressure regulator at this time.

If you are not replacing the fuel pressure regulator, remove the hose remnants from the regulator using **Mac HFL 4790** hose pilers or other suitable hose removal pilers. Be careful not to scratch, gouge, or damage the fuel tube inlet surfaces in any way.

 Remove the lower injector insulators from the Intake manifold. Also check to ensure that no injector spacers were left behind when you removed the fuel rail assembly.

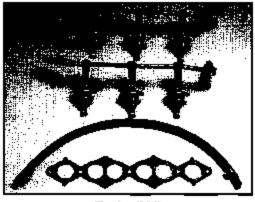
NOTE: On top feed models, the injector spacers will be re-used.



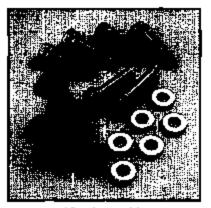
Do not leave injector ineulators in manifold

Assembly - Injectors/Intake Plenum

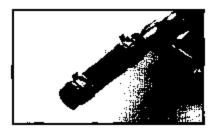
 Lay out both new fuel rails and new hardware supplied with this campaign. Note the new spring type clamps.



Fuel rail kit



Hardware kit

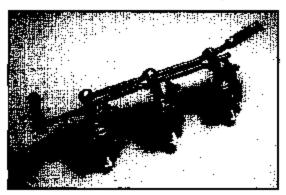


Spring type clamps

 On top-feed injectors, tape the spacers in place on the injector holders with masking tape. The spacers are pre-applied on bottom-feed injectors.



Top feed

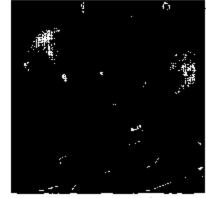


Bottom feed

Using a clean, fiber free applicator, such as a plastic coffee stirrer, lubricate the inside of <u>all</u> of the fuel hoses with a small amount of the Daikin CTFE oil that is provided with this campaign. <u>DO NOT use cotton swabs or similar type</u> applicators.



Dalkin CTFE oil Nissan part no. 999MP-U5500



<u>Always</u> apply Dalkin CTFE oil with fiber free applicator

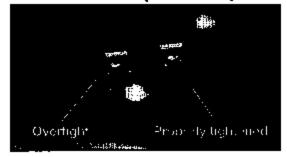
NOTE: <u>DO NOT</u> use <u>any type</u> of cleaning solvents on the hoses supplied in the kit.

<u>DO NOT</u> use any cil/lubricant other than the Dalkin CTFE oil supplied in this campaign. Other oils/lubricants can react with the pre-applied adhesive on these replacement hoses.

- Lubricate the outside diameter of the lower injector insulators with the Daikin CTFE
 oil and insert the insulators into the intake manifold.
- Install the sub-hose to the sub-tube and install the sub-tube. Tighten the fuel rall botts to 13 to 16 ft. ibs. (18 - 28 Nm).
- Install the fuel rail assemblies. Set the assembly over the intake manifold and connect each fuel rail to the fuel regulator. Connect the cross over hose.
- Lower the injectors into the injector insulators in the manifold and install the holder bolts. Torque the injector holder bolts to 22 to 28 in. ibs. (2.5 - 3.2 Nm).
- Position the clamps on the sub tube, crossover tube, and the fuel regulator hoses.
 Make sure the fuel tubes and hoses are in proper alignment. If a hose is stressed, it can cause a leak.
- Replace the fuel Inlet hose. Tighten the hose clamps by hand. The clamp is
 properly tightened when a dime will just fit into the gap. An over tightened clamp
 may damage the hose and cause a fuel leak.
- Install the fuel rail bracket bolts and torque to 13 16 ft. ibs. (16 28 Nm).



Setting clamp spacing with a dime



- 11. Inspect the injector connectors for damage. If any type of damage is found such as broken connectors, corroded terminals, pins pushed in or bent, install the subharness kit using the procedure beginning on page 19 of this bulletin. If the injector sub-harness(es) do not need to be replaced, continue with this procedure.
- Attach the injector connectors to the fuel injectors.
- Blow all dirt and dust from the Intake manifold, then remove the plastic Intake
 manifold plugs. Be sure to wear protective goggles and respirator when removing
 dirt and dust.
- Brush a small amount of Permatex High Tack Adhesive Sealant P/N 98H on the Intake manifold and set the gasket in place.
- 15. Remove the plastic air intake plugs from the plenum. Lower the plenum over the engine, align the air duct with the air intake, and rotate the plenum into place on the manifold. Be sure the air duct and wiring harness are not damaged during installation.
- Install the intake manifold bolts, and torque them to 13 16 ft. lbs. (18 22 Nm).
- Install the air duct and tighten clamps.

Assembly - Front

- Assemble the front of the engine by completing the following steps:
 - A. Reinstall the water and vacuum hoses to the left side of the plenum. (Pay close attention to the throttle chamber hoses near ASCD bracket.
 - B. Reconnect the connectors to the throttle sensor and the throttle sensor switch.
 - C. Secure the ground wires at the plenum.
 - Connect the accelerator and ASCD wires to the throttle valve and secure the bracket in place.

Assembly - Rear

- 1. Assemble the rear of the engine by completing the following steps:
 - Connect the air regulator connector and hose.
 - B. Connect the water hose under the air regulator.
 - C. Install the PCV hose.
 - D. Install the FICD air hose and vacuum hoses.
 - E. Install the EGR valve upper and lower tube nuts and tighten to 24 - 32 ft. lbs. (33 - 45 Nm).
 - G. Install EGR temperature sensor connector (California only).
- Install the plenum ornament cover. Clean all the plenum ornament cover bolt threads with a wire brush. Apply a small amount of Loctite #222 (purple) to the screw threads and torque each screw to 53 - 69 in. lbs. (6 - 8 Nm).

- Reconnect the ground lead to the battery and recheck your work. Erase any codes stored in ECCS memory and reset the clock and radio presets.
- Perform the "Final Inspection Checklist" on page 22 of this bulletin. Make a copy
 of this checklist for each vehicle that receives this campaign and attach the
 completed checklist to the vehicle repair order.

Injector Sub-Harness Assembly Procedure for All Models

NOTE: The following procedure describes how to replace one injector sub-harness. Repeat the procedure if necessary on the opposite side.

Since these vehicles use a group injection system, only one connection needs to be performed on each bank of injectors.

Cut off the two outside injector connectors (in this
procedure #1 and #5) from the main harness about two
inches away from the connector. (The middle lead will
be used later to splice in the new injector sub-harness.
Slide one piece of shrink tube supplied with this
campaign over each of the two outside leads.



Cutting injector lead

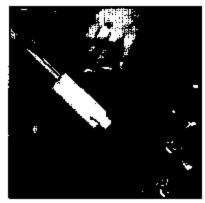
Position the shrink tubing so it covers the wire ends then shrink the tubing using a heat gun. Apply just enough heat so the tubing shrinks to size and seals the lead.



Shrink tubes supplied with campaign



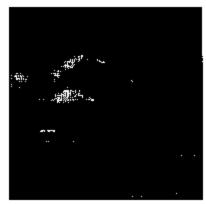
Applying shrink tube



Applying heat to shrink tube

NOTE: Shrink tubing can burn or melt if overheated. Be sure the leads are completely sealed, otherwise moisture could cause corrosion and driveability incidents.

 Using 3M automotive electrical tape #88, tape both sealed leads to the main harness.



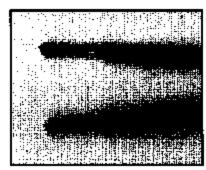
Tape harness

 Cut the connector from the middle injector lead. Cut close enough to the connector so you can use the plgtails for splicing.



Cutting middle injector lead

Strlp away the insulation so 3/8 in. of the wire is exposed.



Stripped pigtail wires

 Insert the end of each exposed wire into the appropriate sub-harness connector and crimp each connector. The wire colors should match, for example, red to red, green to green.

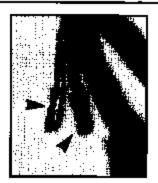


Insert wire into connector and crimp

Sub-harness supplied with kit



 Using a heat gun, heat the connector until the shrink tube (transparent part of the connector) conforms to the wire.
 Do not overheat the connector.



Apply heat to connectors

 Tape the entire connection from sub-harness to the main harness. This creates a finished look and provides an additional moisture barrier.



Tape new connection to main harness

 After the plenum has been installed, tie wrap the sub-harness to the main harness and attach the connectors to the appropriate fuel injectors.



Tie wrap sub-harness to main harness

- Repeat this procedure (if necessary) on the opposite side.
- Return to the appropriate repair procedure.

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES Final Inspection Checklist

NOTE: A copy of this form should be attached to the Repair Order of each vehicle that receives this campaign.

Customer Name	VIN
R.O. #	_ DATE
Check With Engine Off	
1. Fuel hoses positioned correctly on fuel lines	•
2. All hose clamps tightened correctly.	
3. All electrical connections secure.	
4. Vacuum hoses installed.	

Check With Engine Running

- Check all fuel hoses for leaks.
- Check for coolant and vacuum leaks.
- 7. Test Drive Check for driveability incidents.
- 8. Check radio pre-sets.
- Turn off engine and verify coolant reservoir at MAXIMUM level. Top off if necessary.

SPECIAL TOOLS

12 Intake manifold plugs, J42056 (supplied with this campaign). Additional manifold plugs are available from Tech-Mate at 800-NMC-2001.

Hose removal pliers, Mac HFL 4790 (or equivalent).

Scotch-Brite pad with arbor - P/N PMIP 2CD

Parts Information - Complete Injector and Sub-Tube Assembly Kits

Model	Year	Туре	Part Number	Quantity
Махіта	85	Тор	16603-01P25	1
Maxima	86	Тор	16603-01P25	1
ZX Non-Turbo	84	Тор	16603-01P26	1
ZX Non-Turbo	85	Тор	16603-01P26	1
ZX Non-Turbo	86	Тор	16603-01P27	1
ZX Turbo	84	Тор	16603-02P25	1
ZX Turbo	85	Тор	16603-02P25	1
Maxima	87	Bottom	16600-16E25	1
Maxima	88	Bottom	16600-19P25	1
ZX Non-Turbo	87	Bottom	16600-16E26	1
ZX Non-Turbo	88	Bottom	16600-19P26	1
ZX Non-Turbo	89	Bottom	16600-19P26	1
ZX Turbo	86	Bottom	16600-19P27	1
ZX Turbo	87	Bottom	16600-19P27	1
ZX Turbo	88	Bottom	16600-21P25	1
ZX Turbo	89	Bottom	16600-21P25	1

Parts Information - U11 Kit Individual Components (Parts included in fuel injector & tube kit - part #16603-01P25.)

	85 - 86 MY	1	87 MY		88 MY	
Description	Part #/PFP	Quantity	Part #/PFP	Quantity	Part #/PFP	Quentity
Fuel Injector & tube kit *	16803-01P25	1	16800-16E25	1	16600-19P25	1
Fuel injector essembly **	16603-01P01	6	18600-18E12	6	16800-19P24	- 6
	16803-01P11	6	18600-16E17	6	-	
Fuel tube - LH	17521-16E02	1	17521-1 9P1 1	1	17521-19P11	1
Fuel tube - RH	17522-16E02	1	17522-16E11	1	17522-18E11	1
Fuel injector hose socket	18815-35F00	6	16615-35F00	6	16615-35F00	6
Injector holder	16612-V5010	6	_		-	-
Injector insulator	16635-V5000	6	-	_		-
Snap ring	18618-V5000	6	_	_	-	-
Fuel hose	17524-V5003	3	17524-V5003	3	17524-V5003	3
Hose ofamp	16439-16E00	6	16439-16E00	6	16439-16E00	6
	_	_	18439-53A00	6	16439-63A00	6
Fuel injector insulator lower	18638-V5000	6	18638-V5000	6	18836-V5000	6
Collar	16613-V5000	- 6	18613-V5000	6	10813-V5000	6
8crew	08360-63062	- 6	08360-63062	6	08360-63062	5
Fuel hose	17524-V5003	1	17524-V5003	1	17624-V5003	1
Hose clamp	16459-16E00	2	18439-16E00	2	16439-16E00	2
Intake manifold gasket	14033-75P00	1	14088-75P00	1	14088-75P00	1
Fuel hose (frame to filter)	17552-13E60	1	17652-13E60	1	17652-13E60	1
Hose clamp	16439-N4710	2	16439-N4710	2	16439-N4710	2
Fuel feed hose	16441-58200	1	18441-88200	1	16441-86200	1
Fuel tube spacer	-	-	16614-D4200	5	16614-D4200	5
Washer	16611-V5000	10	16611-V5000	10	16611-V5000	10

^{*} Includes all parts listed below ** Selective use

Parts Information - Z31 Non-Turbo Kit Individual Components (Parts Included in fuel injector & tube kit - part #16603-01P26.)

	84 - 85 MY	1	86 MY	
Description	Part #/PFP	Quantity	Part #/PFP	Quantity
Fuel injector & tube kit*	16603-01P26	1	16603-01P27	1
Fuel injector assembly **	16603-01P01	6	18603-01P01	6
	16603-01P11	6	16603-01P11	6
Fuel tube - LH	17521-V5220	1	17521-V5220	1
Fuel tube - RH	17522-V5220	1	17522-V5220	1
Fuel injector hose socket	16615-35F00	6	16615-35F00	6
înjector holder	16612-V5010	6	16612-19P00	6
Injector Insulator	16635-V5000	6	16635-V5000	6
Snap ring	16616-V5000	6	16616-V5000	6
Fuel hose	17524-V5003	3	17524-V5003	3
Hose clamp	16439-16E00	6	16439-16E00	6
Fuel injector insulator lower	16636-V5000	6	16636-V5000	6
Collar	16613-V5000	6	16613-V5000	6
Screw	08360-63062	6	08360-63062	6
Fuel hose	17524-V5003	1	17524-V5003	1
Hose clamp	16439-16E00	2	16439-16E00	2
Intake menifold gasket	14033-75P00	1	14033-75P00	1
Hose clamp	16439-53A00	2	16439-63A00	2
Fuel feed hose	A6441-11P00	1	A6441-11P00	1
Washer	16611-V5000	10	16611-V5000	10

^{*} Includes all parts listed below

^{**} Selective use

Parts Information - Z31 Non-Turbo Kit Individual Components (continued) (Parts included in fuel injector & tube kit - part #16600-16E26.)

	87 MY		86 - 89 MY	
Description	Part #/PFP	Quantity	Part #/PFP	Quantity
Fuel injector & tube kit	16600-16E26	1	16600-19P26	1
Fuel injector assembly *	16600-16E12	6	16600-16E12	6
	16600-16E17	6	16600-16E17	6
Fuel tube - LH	17521-19P11	1	17521-19P11	1
Fuel tube - RH	17522-19P11	1	17522-19P11	1
Fuel injector hose socket	16615-35F00	6	16615-35F00	6
Injector holder	_	- 6	-	6
Injector insulator	16636-V5000	6	16636-V5000	6
Snap ring	-	6		6
Fuel hose	17524-V5003	3	17524-V5003	3
Hose clamp	16439-16E00	6	16439-16E00	6
	16439-53A00	_6	16439-53A00	6
Fuel injector insulator lower	16836-V5000	6	16636-V5000	6
Collar	16813-V5000	6	16613-V5000	6
Screw	08360-63062	6	08360-63062	6
Fuel hose	17524-V5003	1	17524-V5003	1
Hose clamp	16439-16E00	2	16439-16E00	2
Intake manifold gasket	14033-75P00	1	14033-75P00	1
Hose clamp	16439-53A00	2	A6439-53A00	2
Fuel feed hose	A6440-19P25	1	A6440-19P25	1

^{*} Selective use

Parts information - ZS1 Turbo Kit Individual Components (Parts included in fuel injector & tube kit - part #16803-02P25.)

	84 - 85 MY		86 -87 MY	1	88 - 89 MY	
Description	Part #/PFP	Quantity	Part #/PFP	Quantity	Part #/PFP	Quentity
Fuel injector & tube kit	16603-02P25	1	16600-19P27	1	16600-21P25	1
Fuel injector assembly *	16603-02P01	8	16600-19P12	6	16600-21P12	6
	16803-02P11	8	16600-19P17	6	16600-21P17	6
Fuel tube - LH	17521-V5220	1	17521-19P11	1	17521-19P11	1
Fuel tube - RH	17622-V6220	1	17 52 2-19P11	1	17621-19P11	1
Fuel injector hose socket	18615-35F00	6	16815-35F00	6	16615-35F00	6
injector holder	16612-V5010	6	-	_	_	
injector insulator	16835-Y5000	6	16638-V6000	6	16636-V5000	6
Snap ring	16616-V5000	6	_	_	_	_
Fuel hose	17524-V5003	3	17524-V5003	3	17624-V5003	3
Hose clamp	16439-16E00	8	15439-15E00	6	16439-16E00	6
	-	_	16439-53A00	6	18439-53A00	6
Fuel injector insulator lower	16836-V5000	e e	18838-V5000	6	1 0638-V500 0	ė
Collar	16613-V5000	6	18619-V5000	6	16613-V5000	6
Screw	08380-83082	6	08360-63082	6	08360-83062	8
Fuel hose	17524-V5003	1	17524-V5003	1	17824-V5003	1
Hose clamp	16439-16E00	2	16439-16E00	2	16439-16E00	2
intake manifold gasket	14033-75P00	1	14033-75P00	1	14033-75P00	1
Hoee clamp	16438-53A00	2	16439-53A00	2	16439-58A00	2
Fuel feed hose	A6441-11P00	1	A8440-19P25	1	A6440-19P25	1
Fuel tube apacer	-	•	16814-D4200	5	18614-D4200	5
Washer	16611-V5000	10	16611-V6000	10	16611-V5000	10

^{*} Selective use

Parts Information - U11 Related Parts (May be reptaced as part of the campaign if necessary.)

Part Name	Part Number	Year
Fuel sub-tube	17532-16E02	85 - 88
Hose clamp	16439-53A00	85 - 88
Pressure regulator	22670-16E02	85 - 88
Water hose	14056-16E00	85
	14056-16E01	86 - 88
	14056-16E10	85 - 88
Blow by hose	11827-D6100	85 - 88
	11828-V5200	85 - 88
Front vacuum hose	16255-16E01	85 - 88
Vacuum hose	B2318-N3301	85 - 88
	18730-01P01	85 - 88
	A8761-M4901	85 - 88
	B2320-28F10	85 - 88
Fuel return hose	A6445-16E00	85 - 88
Air regulator hose	14060-16E10	85 - 88
Hose clamp	16439-V5001	85 - 88
Connector spring	B4111-U7600	85 - 88
Engine sub-harness kit	24079-16E25	85 - 87
EGI sub-harness	24079-42E25	86 - 89
Band clip	01552-00083	85 - 88
	01552-00043	85 - 88
Fuel tube spacer	16614-V5000	85 - 86
AIV	14860-16E11	85 - 88
	14060-16E01	85 - 88
	14860-16E02	85 - 88
Air hose	14060-16E61	85 - 88
BCDD	16255-16E01	85 - 88

Parts Information - Z31 Non-Turbo Related Parts (May be replaced as part of the campaign if necessary.)

Part Name	Part Number	Year
Fuel sub-tube	17523-V5020	84 - 89
Fuel hose (body-filter)	01995-00341	84 - 89
Hose clamp	16439-53A00	84 - 89
Pressure regulator	22670-V5222	84 - 89
Water hose	14056-V5007	84 - 89
	14056-V5017	84 - 89
Blow by hose	11827-V5202	84 - 89
	11828-V5200	84 - 89
Front vacuum hose	23786-01P00	84 - 89
Vacuum hose	B2318-N3301	84 - 89
	18730-01P01	84 - 89
	A8761-M4901	84 - 89
	B2320-28F10	84 - 89
Fuel return hose	A6445-11P00	84 - 86
	A6445-19P00	87 - 89
Air regulator hose	14060-01P00	84 - 86
Hose clamp	16439-V5000	84 - 89
Connector spring	B4111-U7600	84 - 89
Engine sub-harness kit	24079-19P25	84 - 89
EGI sub-harness	24079-25P25	88 - 89
Harness protector	24299-79900	84 - 89
Band clip	01552-00043	84 - 89
Fuel tube spacer	18614-V5000	84 - 86

Parts Information - Z31 Turbo Related Parts (May be replaced as part of the campaign if necessary.)

Part Name	Part Number	Yeer
Fuel sub-tube	17532-V5020	84 - 89
Fuel hose (body-filter)	01995-00341	84 - 89
Hose clamp	18439-53A00	84 - 89
Pressure regulator	22670-V5222	84 - 89
Water hose	14036-V5007	84 - 89
	14058-V5017	84 - 89
Blow by hose	1 1827-02P0 1	84 - 89
-	11828-V5200	84 - 89
Front vacuum hose	23788-12P01	84 - 89
Vacuum hose	B2318-N3301	84 - 89
	18730-01P01	84 - 89
	A8761-M4901	84 - 89
	B2320-28F10	85 - 89
Fuel return hose	A6445-11P00	84 - 87
	A6445-19P00	87 - 89
	A6445-11P00	84 - 86
Air regulator hose	14060-01P00	84 - 86
Hose clamp	18439-V5000	84 - 89
Connector apring	B4111-U7600	84 - 89
Engine sub-harness kit	24079-19P25	84 - B9
EGI sub-harness	24079-25P25	88 - 89
	24079-19P25	84 - 87
Harness protector	24299-79900	84 - 89
Band clip	01552-00043	84 - 89
Fuel tube spacer	16614-V5000	84 - 88

Parts Information - Z31 Related Hoses (May be replaced as part of the campaign if necessary.)

_	Part Name	Part Number	Year
Water	Front plenum	14056-V5007	84 - 89
Т	hrottle chamber	14058-Y5017	84 - 89
		14056-V5203	84 - 89
_	Right side	14058-V5022	84 - 89
Tu	rbo cooling hose	14056-21P12	88 - 89
		14058-21P13	88 - 89
		14058-01P01	85 - 87
		14056-01P12	85 - 87
Air	Ву-разв	14060-01P00	84 - 89
	AAC valve	23788-01P00	84 - 89
		23788-12P01	84 - 89
L		16522-06800	B4
	Air duot (boot)	14463-V5310	84 - 89
	Air regulator	14061-01P00	B4 - 89
	Lower air duct	1 6 578-01P10	84 - 89

Parts Information - U11/Z31 Related Electrical Connectors

Description	Herness/Sensor Side	Kent Moore P/N
EGR solenoid,	Hamess	J38751-16
Engine temperature sensor		
EGR solenoid,	Sensor	J38751-17
Engine temperature sensor		
Throttle position sensor	Hamess	J38751-8
O2 sensor		<u> </u>
Throttle position sensor	Sensor	J38751-9
O2 sensor		
A/C compressor	Harness	J38751-98
AAC valve	Harness	J38751-10
Crank angle sensor		
O2 sensor		
AAC valve	Sensor	J38751-11
Crank angle sensor	i	
O2 sensor		
FICD	Harnees	J38751-6
EGR temperature sensor		
FICD	Sensor	J38751-7
EGR temperature sensor		

Parts Information - U11/Z31 Related Parts

(May be replaced as part of the campaign if necessary.)

 	<u> </u>	
Part Name	Part Number	Year
Air regulator connector	24027-80Y15	All
Dalkin CTFE off	999MP-U5500	All

Claims Information

Operation	OP Code	PNC ¹	Symptom	Diagnosis	FRT2
Inetall kit	P51370	R5137	ZZ	99	2.5 hrs. (Z31)
					2.3 hrs. (U11)
R & R fuel pressure	P51371		_		0.1 hrs.
regulator			-		(Z31/U11)
Install one	P51372				Q.1 hra.
sub-harness ³					(Z31/U11)
Install both	P61373				0.2 hrs.
sub-harnesses ³			[(Z31/UH1)

NOTES:

- New Claims System dealers: Submit a Campaign Line claim using P5137 as the Campaign I.D. and 01 as the Program Number.
- Flat Rate Time(s) include sufficient labor time for the replacement of any of the "Related Hoses/Parts/Electrical Connectors" listed in the Parts information tables above.
- 8. Use either P51372 OR P51373, but not both.
- If required, towing expenses to the nearest Nissan dealer should be submitted using SUBLT-TOWXC.
 New Claims System dealers use Expense Code 601.

Dear Nissan Owner:

Nissan has received reports of leaks in the fuel injection system in 1985-1989 Maxima and 1984-1989 300ZX vehicles. Fuel leaks in your engine could result in a fire. A fire in your engine compartment would pose a safety risk. To reduce the risk of engine fires, Nissan will replace all of the fuel injectors and related hoses on your car, free of charge, regardless of your car's age or mileage. We are taking this step because we are concerned about your safety and satisfaction, even though we do not believe that these fuel leaks are due to any defect in your vehicle.

The fuel injection system in your car was designed in the early 1980's using state-of-the-art technology at that time. Since then, however, certain fuel additives have been approved for use in gasoline. These additives have resulted in deterioration of the fuel injectors, causing fuel leaks. In addition, fuel hoses that wear out due to age can leak fuel, contributing to the risk of fire. Nissan's recommended maintenance practices call for the replacement of deteriorated injectors and worn out fuel hoses in the fuel injector systems of these vehicles. Nissan has become concerned that some owners have postponed or omitted necessary maintenance of their vehicles' fuel injection system due to the expense, therefore increasing the risk of engine fire.

Nissan urges you to take advantage of this free fuel injector and related fuel hose replacement offer. The new fuel injectors have been made to reduce the effects of additives used in today's gasoline and the new fuel hoses will further reduce the possibility of leaks. After the new injectors and hoses are installed, it will continue to be important for you to follow the recommended maintenance schedule for the fuel injection system, including an inspection every 30,000 miles.

Contact your Nissan dealer as soon as possible to arrange for an appointment to have this free replacement service. The replacement will take approximately 2 hours, but your dealer may require your vehicle for a longer period of time based upon work schedules. Please bring this notice with you when you keep your appointment. Instructions have been sent to your dealer. If the dealer fails, or is unable to make the necessary repairs free of charge, you may contact the National Consumer Affairs Office, Nissan Motor Corporation in U.S.A. at P.O. Box 191, Gardena, California 90248-0191. The toll free telephone number is: 1-800-NISSAN1 (1-800-647-7261). If you reside in Hawaii, please call: 808-836-0888.

The National Highway Traffic Safety Administration has a toll free auto safety hotline which can provide information to you concerning auto safety issues. Their number is: 1-800-424-9393 (Washington, D.C. area residents may call: 202-366-0123).

If you have paid to have your fuel injectors replaced due to leakage, Nissan will reimburse you for reasonable documented costs. Please complete the enclosed Customer Goodwill Reimbursement Request Form and submit it along with all supporting documents to the address indicated. Nissan is taking this action to ensure your continued satisfaction with our products.

Thank you for your cooperation. We hope that you will take advantage of this important and unique program. We look forward to serving your automotive needs now and for many years to come.

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Technical Communications Department

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NISSAN MOTOR CORPORATION U.S.A.

Post Office Box 181 Gardeoa, California 90248-0191 Talephone (310) 532-3111

CAMPAIGN BULLETIN

Reference

NTB96-010a

Date

March 15, 1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

This builetin contains revised Service Procedures, Parts and Claims Information and replaces NTB96-010.

Refer to page 2 of this builetin for details. Please discard all copies of NTB96-010.

APPLIED VEHICLES:

1985-1988 Maxima (U11)

1984-1989 300ZX (Z31)

APPLIED VIN:

All

INTRODUCTION

Nissan has received reports of leaks in the fuel injection system on the above vehicles. Fuel leaks in the engine can result in a fire. Nissan has investigated these leaks and found that certain fuel additives approved for use in gasoline after these vehicles were designed have resulted in deterioration of the fuel injectors causing fuel leaks. In addition, Nissan has found fuel leaks due to worn out hoses which have not been replaced according to the maintenance schedule. Although Nissan has determined that these fuel leaks are not due to any defect in the vehicles, Nissan has decided to replace the fuel injectors and related hoses on these vehicles free of charge because we are concerned about the safety and satisfaction of our customers.

This campaign also covers the cost of replacing water or vacuum hoses that may be damaged during the repair procedure. This campaign does not cover normal maintenance items such as filters, belts, ignition wires, etc. A complete list of covered components (listed as "Related Parts") is provided at the end of this bulletin.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check and repair each vehicle within the range of the campaign which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in dealer inventory.

Effective with the receipt of this information, dealers should perform the campalgn repair for any affected vehicle entering their dealership. The practice of replacing injectors as individual components or performing partial fuel injector system repairs on vehicles in this campaign, should be discontinued immediately. The only authorized fuel injector repair for the vehicles in the campaign is the installation of the complete campaign kit.

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TABLE OF CONTENTS

<u>Service Procedure</u> - Changes in the Service Procedure have been identified with a "highlight" background for easy identification.

<u>Parts Information</u> - All Parts Information has been reformatted for easier reading. Part numbers and descriptions have been updated for easier use.

<u>Claims Information</u> - The Campaign I.D./PNC has been corrected and the Flat Rate Time has been changed. Towing expense information, VOR freight reimbursement, rental vehicle expense assistance, and parts retention information has also been added.

Preparation - Oriveability Test

- With the vehicle partially warmed up (temperature gauge moved slightly from full cold), and in neutral gear position, check the following items:
 - A. Does the engine start easily?
 - B. Does the engine idle at 1200 rpm or below?
 - C. Does the engine idle smoothly?
 - D. Does the engine stall during Idle?
 - E. Are there any abnormal sounds such as vacuum leaks from the engine at idle?
 - F. Does the engine speed increase smoothly without hesitation, knocking and backfire?

NOTE ANY DRIVEABILITY PROBLEMS ON THE REPAIR ORDER AND ADVISE THE CUSTOMER OF THE CONDITION.

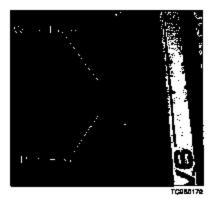
SERVICE PROCEDURE for the 300ZX Turbo and Non-Turbo

- Record the radio presets.
- Open the hood and protect the fenders with fender covers.
- Release the fuel pressure:
 - Remove the fuel pump fuse.
 - B. Start the engine and let it run until the engine stalls. Turn the ignition switch to 'on' and crank the engine several times. This will ensure that no fuel pressure is remaining in the fuel rail. With the key off, reinstall the fuel pump fuse.
 - C. Connect a fuel pressure gauge to the engine side of the fuel filter to test the function of the fuel pressure regulator.
 - D. Start the engine and read the fuel pressure at idle. Record this reading on the repair order. With the vacuum hose removed, the pressure should be less than 45 psl. If the pressure rises above 45 psl, you will need to replace the fuel pressure regulator and check fuel return lines for obstructions later in this procedure.
 - NOTE: Damp fuel hoses/fuel pressure regulator may give the impression that the fuel pressure regulator is leaking fuel, however, most incidents are caused by a leaking fuel hose, not the fuel pressure regulator. If the fuel pressure regulator is suspected of leaking, remove the vacuum hose and inspect for fuel in the vacuum hose. Replace the fuel pressure regulator if fuel is found in the vacuum hose.
 - E. Remove the fuel pump fuse and release the fuel pressure following the procedure in step "3B" above.
 - F. Remove the fuel pressure gauge.
 - G. DISCONNECT THE NEGATIVE BATTERY CABLE.

NOTE: The injector circuit has bettery voltage applied regardless of ignition switch position. Demage to injectors may occur if the bettery is left connected while performing this campaign.

Disassembly - Right Side

- While wearing proper eye protection and respirator, blow the engine compartment free of dust.
- Starting on the right side of the engine (passenger side), disconnect the water hose above the air regulator. It is not necessary to drain the coolant to perform this procedure, however some coolant will spill when the upper plenum water hose is disconnected so use a rag to catch the spilled coolant. Leave the radiator cap in place to reduce the amount of coolant loss and the creation of air pockets in the system.



Remove water hose above air regulator

- Remove the PCV hose from the plenum.
- 4. Move the clamp on the air regulator hose, then remove the air regulator from the plenum with the electrical connector attached.

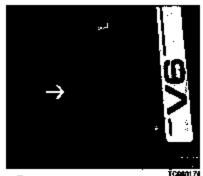
NOTE: Be careful not to drop the O-ring between the air regulator and the plenum.

- Remove the air regulator from the hose and disconnect the air regulator electrical connector. Remove the metal connector clip before removing the connector to prevent damage.
- Disconnect the vacuum hoses and the air hose from the plenum.
- Remove the wiring harness retaining clips and the ground wire.



Disconnect all vacuum hoses and wiring harness clips

Remove the water temperature sensor (thermistor)
connector. Connectors may be brittle, use care
when disconnecting.



Remove water temperature sensor connector

- Remove the EGR valve upper tube nut and loosen the EGR lower tube nut. Applying Permatex FAST BREAK Super Penetrant or similar product will assist in loosening the nuts.
- Remove the EGR temperature sensor connector (California only).

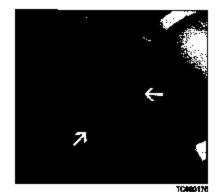


Remove EGR temperature sensor connector

- Remove the EGR solenoid connector. It is not necessary to remove the EGR valve bracket.
- Disconnect the vacuum hose from the front of the plenum, then remove the two
 vacuum tube bolts.

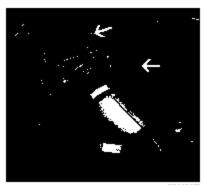
Disassembly - Left Side

- Make sure the accelerator and ASCD cables are tight in the bracket, then remove
 the bracket with the cables from the manifold.
- Disconnect the accelerator cable and the ASCD cable from the throttle valve and position them out of the way. Be careful not to kink or pull on the cables.
- On turbo models, disconnect the AAC valve connector by applying pressure to the under side of the electrical connector release tab, then disconnect the FICD connector.
 - On non-turbo models, disconnect the four wire connector which serves both the AAC valve and FICD solenoid valve.



Disconnect AAC - FICD connector

 Disconnect the electrical connectors from the throttle sensor and throttle sensor switch. Disconnect the four air hoses from the throttle body:
 One behind the throttle body, two on the side of the throttle body, and one beneath the throttle body.



Disconnect four air hoses (one beneath throttle body)

- Disconnect the bypass hose from the throttle body and then remove the water and vacuum hoses from the left side of the plenum. On some turbo models, disconnect the two cooling hoses below the throttle chamber that connect to the turbocharger.
- On all models, disconnect the A/C compressor harness connector.

On top feed turbo models, disconnect the electric cooling fan switch connector.



Disconnect fan switch connector

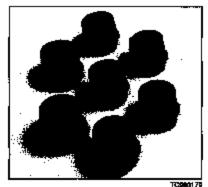
- Disconnect the O₂ sensor harness connector and remove the ground wire from the plenum.
- Disconnect the injector connectors from the three fuel injectors on the left side of the
 engine. This allows you to move the hamess out of the way. Use a pick or similar
 tool to remove the metal clip from the injector connector.
- Remove the plenum ornament cover. Use an impact driver so you won't damage the screw heads.
- 11. On turbo models, loosen both clamps and separate the rubber boot so it is free of the throttle chamber. Push the duct away from the throttle chamber. This will avoid damage to the duct when removing the plenum.

On non-turbo models, it is easier to loosen the clamp at the throttle chamber and the clamp at the lower portion of the duct, then remove the entire air intake duct. Cover the air duct on the vehicle with a shop rag to prevent debris from entering.

12. Using a breaker bar, remove the five plenum bolts. Tap the edge of the plenum with a plastic mallet to free it from the intake manifold and lift the plenum from the intake manifold.

NOTE: Be sure not to damage the air duct and wiring harness as you remove the plenum.

13. Set the plenum aside and immediately cover the intake manifold and plenum holes with the 12 hole plugs, J42056, that were provided as part of this campaign.



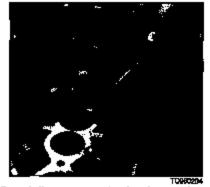
J42056 manifold plugs



Manifold plugs installed

- Unplug the connectors from the three injectors on the right side of the engine.
 Be careful not to damage the connectors.
- Using a sharp gasket scraper, <u>CAREFULLY</u> remove the intake manifold gasket from the intake manifold/ plenum surfaces.

NOTE: Some Intake manifold gaskets may contain asbestos. Use proper eye and respratory protection when removing the gasket.



Carefully remove the intake gasket

16. Carefully cut both hoses from the fuel pressure regulator. Cut the hoses in the middle to avoid damaging the regulator tube surface. DO NOT cut the hoses near the fuel regulator outlets. Scratches or scoring of the fuel tubes can cause fuel leaks. Cut the crossover hose in the middle.

On top feed models, cut the inlet tube sub-hose.



Cut all fuel hoses in the middle to avoid damage to the regulator or fuel tubes

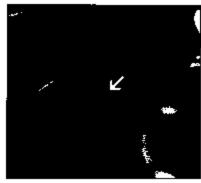
- 17. Remove the fuel rail bracket bolts (if equipped) and then the injector holder bolts.
- 18. Lift the fuel rail assembly from the engine. Be careful not to drop the injector spacers. Drain any residual fuel from the rails into a suitable container. Tag and retain the parts per Nissan's warranty policy and procedures.
- 19. If the fuel pressure regulator falled the pressure test in step 3D (Service Procedure), or if the fuel temperature sensor connector is broken off, replace the fuel pressure regulator at this time.

NOTE: Prior to replacing the fuel pressure regulator, use air pressure to make sure the fuel return line is not restricted.

if you are not replacing the fuel pressure regulator, remove the hose remnants from the regulator using **Mac HFL 4790** hose pliers or other suitable hose removal pliers. Be careful not to scratch, gouge, or damage the fuel tube inlet surfaces or fuel temperature sensor in any way.

 Remove the lower injector insulators from the intake manifold. Also check to ensure that no injector spacers were left behind when you removed the fuel rail.

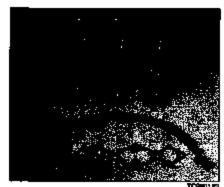
> NOTE: On top feed models, the injector spacers will be reused.



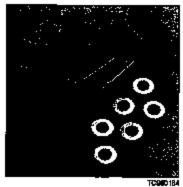
Do not leave injector **CORRECTOR Insulators in manifold

Assembly - Injectors/Intake Pierum

 Lay out both new fuel rails and new hardware supplied with this campaign. Note the new spring type clamps.



Fuel rail kit



Hardware kit



Spring type clamps:

On top-feed injectors, and on later bottom-feed kits, tape the spacers in place on the injector holders with masking tape. The spacers are pre-applied on early bottomfeed injector kits.



Top feed

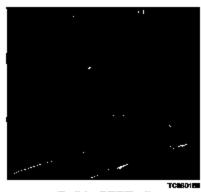


Bottom feed

3. Using a clean, fiber free applicator, such as a plastic coffee stirrer, lubricate the inside of all of the fuel hoses with a small amount of the Dalkin CTFE oil that is provided with this campaign. Do not use cotton swabs or similar type applicatora .

NOTE: DO NOT use any type of cleaning solvents on the hoses supplied in the kit.

> DO NOT use any oil/lubricant other than the Dalkin CTFE oil supplied in this campaign. Other oils/lubricants can react with the pre-applied adhesive on these replacement hoses.



Dalkin CTFE all Nissen part no. 999MP-U5500



Always apply Dalkin CTFE oil with fiber free applicator

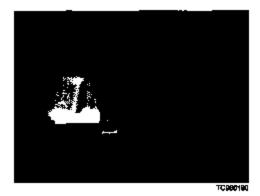
- Lubricate the inside and outside of the lower injector insulators with the Dalkin CTFE of and ment the insulators into the intake manifold.
- 5. On top-feed models, install the sub-hose to the inlet tube.

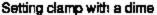
NOTE: Before installing the factoral assemblies, check all injector tips for Constant

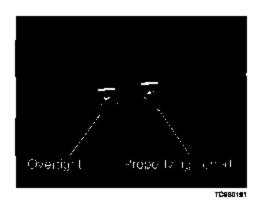
Install the fuel rall assemblies. Set the assembly over the intake manifold and 6. connect each fuel rail to the fuel regulator. Connect the crossover hose.

- Lower the injectors into the injector insulators in the manifold and install the holder bolts and fuel rail bracket bolts. Torque the injector holder bolts to 22 to 28 in. ibs. (2.3 3.2 Nm) Torque the fuel rail bracket bolts to 13 16 ft. ibs. (18 22 Nm).
- Position the clamps on the sub-tube, crossover tube, and the fuel regulator hoses.
 Make sure the fuel tubes and hoses are in proper alignment. If a hose is stressed, it can cause a leak.
- Install the fuel Inlet hose. Tighten the hose clamps by hand. The clamp is properly tightened when a dime will just fit into the gap.

NOTE: An over tightened clamp may damage the hose and cause a fuel leak.



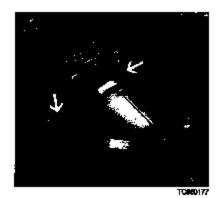




- 10. Inspect the injector connectors for damage. If any type of damage is found such as broken connectors, worm terminals due to corrosion, pins pushed in or bent, install the sub-harness kit using the procedure beginning on page 21 of this bulletin. If the injector sub-harness(es) do not need replacing, continue with this procedure.
- Attach the injector connectors to the fuel injectors on the right side of the engine.
 The left side injectors will be connected after the plenum is reinstalled.
- Blow all dirt and dust from the intake manifold, then remove the plastic intake manifold plugs. Be sure to wear protective goggles and respirator when removing dirt and dust.
- Brush a small amount of Permatex High Tack Adhesive Sealant P/N 98H on the intake manifold and set the gasket in place.
- 14. Remove the plastic intake plugs from the plenum. Lower the plenum over the engline, align the air duct with the air intake, and rotate the plenum into place on the manifold. Be sure the air duct and wiring harness are not damaged during installation.
- Install the intake manifold bolts, and torque them to 13 16 ft. lbs. (18 22 Nm).

 Install the bypass hose onto the throttle body. On turbo models, properly align the rubber boot to the plenum and the air intake, then tighten the two clamps.

On non-turbo models, install the air duct assembly, properly align the rubber boot, throttle chamber and lower air Intake, then tighten the two clamps.



Install bypass hose and boot

Assembly - Left Side

- Assemble the left side of the engine by completing the following steps:
 - A. Reinstall the air hoses to the throttle body.
 - B. Reinstall the water and vacuum hoses to the left side of the plenum. (Pay close attention to the throttle chamber hoses near ASCD bracket).
 - C. Reinstall the AAC valve hose. Reconnect the connector for the AAC valve and the FICD sciencid valve.
 - D. Reconnect the connectors to the throttle sensor and the throttle sensor switch.
 - E. Reconnect the A/C compressor harness and exhaust gas sensor harness connectors.
 - F. Secure the ground wire at the plenum.
 - G. Connect the three injector connectors to the left side appropriate injectors.
 - H. Connect the accelerator and ASCD wires to the throttle valve and secure the bracket in place.

Assembly - Right Side

- Assemble the right side of the engine by completing the following steps:
 - A. Install the air regulator and its connector. Ensure the O-ring is in its proper location and tighten the bolts.

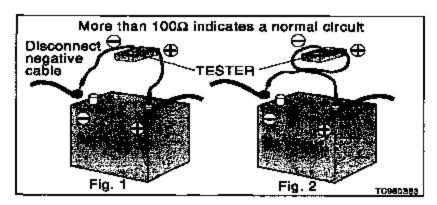


Install air regulator O-ring

- B. Install the two water hoses.
- Install the PCV hose.
- Install the air hose and vacuum hoses.
- E. Install the EGR solenoid valve connector.
- F. Install the EGR valve upper and lower tube nuts and tighten to 24 32 ft. lbs. (34 - 44 Nm).
- G. Install EGR temperature sensor connector (California only).
- H. Reconnect the water temperature sensor connector.
- Install the two vacuum tube bolts and the vacuum hose to the front of the plenum.
- Install the plenum ornament cover. Clean all the plenum ornament cover bolt threads with a wire brush. Apply a small amount of Loctite #222 (purple) to the screw threads and torque each screw to 53 - 69 in. lbs. (6 - 8 Nm).
- Perform an electrical circuit test using the following procedure.

NOTE: The negative battery cable must not be connected prior to performing this test.

- A. Turn the dome light switch off and close all doors and trunk lid.
- B. Check the resistance between the negative battery cable and the positive battery terminal with a volt/ohm meter. (Negative test lead to the negative battery cable; positive test lead to the positive battery terminal). Record this value on the repair order.



C. Reverse the tester leads and check the resistance. (Negative test lead to the positive battery terminal; positive test lead to the negative battery cable).
Record this value on the repair order.

If the resistance value is more than 100 ohms in either steps B or C, the circuit is normal.

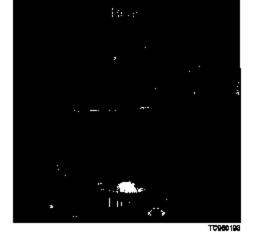
If the resistance reading is less than 100 ohms in both steps B and C, the circuit may be shorted. Check the sub-harness to see if it is shorted to ground or damaged.

- Reconnect the ground lead to the battery and recheck your work.
- Start engine and inspect for leaks.
- Perform the driveability test found on page 2 of this bulletin. Erase any codes stored in ECCS memory and reset the clock and radio presets.

SERVICE PROCEDURE for the Maxima.

Preparation

- The Maxima engine is transverse mounted and rotated 90 degrees clockwise.
- Record the radio presets.
- Open the hood and protect the fenders with fender covers.
- Release the fuel pressure:
 - Remove the fuel pump fuse.



- B. Start the engine and let it run until the engine stalls. Turn the ignition switch to 'on' and crank the engine several times. This will ensure that no fuel pressure is remaining in the fuel rail. With the key off, reinstall the fuel pump fuse.
- C. Connect a fuel pressure gauge to the engine side of the fuel filter to test the function of the fuel pressure regulator.
- D. Start the engine and read the fuel pressure at idle. Record this reading on the repair order. With the vacuum hose removed, the pressure should be less than 45 psl. If the pressure rises above 45 psi, you will need to replace the fuel pressure regulator and check fuel return lines for obstructions later in this procedure.
- NOTE: Damp fuel hoses/fuel pressure regulator may give the impression that the fuel pressure regulator is leaking fuel, however, most incidents are caused by a leaking fuel hose, not the fuel pressure regulator. If the fuel pressure regulator is suspected of leaking, remove the vacuum hose and inspect for fuel in the vacuum hose. Replace the fuel pressure regulator if fuel is found in the vacuum hose.
- E. Remove the fuel pump fuse and release the fuel pressure following the procedure in step "4B" above.
- F. Remove the fuel pressure gauge.
- NOTE: This may trigger Code 22 in ECCS self diagnosis. Be sure to clear all codes from the ECCS memory before releasing the vehicle to the customer.

G. DISCONNECT THE NEGATIVE BATTERY CABLE.

NOTE: The injector circuit has battery voltage applied regardless of ignition switch position. Damage to injectors may occur if the battery is left connected.

Disassembly - Rear

 While wearing proper eye protection and respirator, blow the engine compartment free of dust.

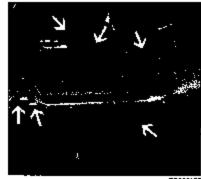
NOTE: The EGR valve, air regulator, and AAC/FICD will remain attached to the plenum during this procedure.

- Remove the PCV hose from the plenum.
- Remove the brake booster vacuum hose and AIV solenoid hose when disassembling the rear of the plenum. Leave the air regulator attached to the plenum. Disconnect air regulator connector.
- Disconnect the water hose under the plenum near the air regulator.



Remove brake booster hose

- Disconnect all other vacuum hoses attached to the plenum.
- Disconnect the FICD solenoid connector.



Disconnect vacuum hoses and FICD connector

- Remove the EGR valve upper tube nut and loosen the EGR lower tube nut.
 Applying Permatex FAST BREAK Super Penetrant or similar product will assist in loosening the nuts.
- Remove the EGR solenoid connector. It is not necessary to remove the EGR valve bracket.
- Disconnect the vacuum hose from the front of the plenum.

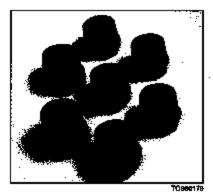
Disassembly - Front

- Remove the BCDD hose and evaporator vacuum hose (if equipped).
- Loosen the water hose clamp underneath the throttle valve.
- Make sure the accelerator and ASCD cables are tight in the bracket then remove the bracket with the cables from the manifold.
- Disconnect the accelerator cable and the ASCD cable from the throttle valve and position them out of the way. Be careful not to kink or pull on the cables.
- Disconnect the electrical connectors from the throttle sensor and throttle sensor switch.
- Loosen the clamp for the air duct and remove the air duct from the throttle chamber.
- Remove the plenum ornament cover. Use an impact driver so you won't damage the screw heads.
- Using a breaker bar, remove the five plenum bolts. Tap the edge of the plenum with a plastic mallet to free it from the intake manifold and lift the plenum from the intake manifold.

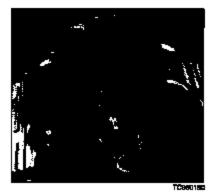
Since the wiring harness is out of the way, you will not need to disconnect any injectors until the plenum has been removed.

NOTE: Be sure not to damage the air duct and wiring harness as you remove the plenum.

Set the plenum aside and immediately cover the intake manifold and plenum holes with the 12 hole plugs, J42056, that were provided as part of this campaign.



J42056 plugs



Manifold with plugs installed

- Once the plenum has been removed and both the plenum and intake manifold have been plugged, disconnect the fuel injector connectors. Do not remove the fuel rails at this time.
- Remove and retain the fuel inlet hose between the fuel filter and fuel rail.
- Disconnect and retain the fuel filter inlet hose.
 This is the pre-formed hose between the fuel filter and the vehicle frame.



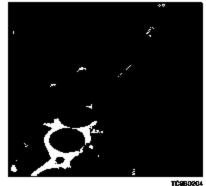
Pre-formed hose supplied with kit



Fuel Inlet hose location

- Install the new pre-formed fuel inlet hose between the filter and the vehicle frame.
- Using a sharp gasket scraper, <u>CAREFULLY</u> remove the intake manifold gasket from the intake manifold/ plenum surfaces.

NOTE: Some intake manifold gaskets may contain asbestos. Use proper eye and respiratory protection when removing the gasket.

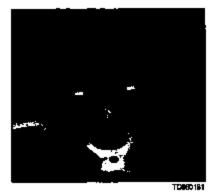


Carefully remove the intake pasket

- 15. A. Carefully cut both hoses from the fuel pressure regulator. Cut the hoses in the middle to avoid damaging the regulator tube surface. Do not cut the hoses near the fuel regulator outlets. Scratches or scoring of the fuel tubes can cause fuel leaks.
 - B. Cut the inlet tube sub-hose and the crossover hose in the middle.

Before removing the Injector rails remove the sub-tube.

(There are two bolts holding the tube in place).



Cut all hoses in the middle to avoid damage to regulator or fuel tubes

Remove the fuel rail bracket bolts (if equipped) and then the injector holder bolts.

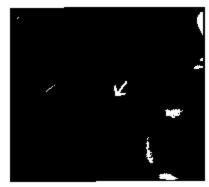
- 17. Lift the fuel rail assembly from the engine. Be careful not to drop the injector spacers. Drain any residual fuel from the rails into a suitable container. Tag and retain the parts per Nissan's warranty policy and procedures.
- 16. If the fuel pressure regulator falled the pressure test in step 3D (Service Procedure), or it the fuel temperature sensor connector is broken off, replace the fuel pressure regulator at this time.

NOTE: Prior to replacing the fuel pressure regulator, use air pressure to make sure the fuel return line is not restricted.

If you are not replacing the fuel pressure regulator, remove the hose remnants from the regulator using Mac HFL 4790 hose pilers or other sultable hose removal pilers. Be careful not to scratch, gouge, or damage the fuel tube inlet surfaces or fuel temperature sensor in any way.

 Remove the lower injector insulators from the Intake manifold. Also check to ensure that no injector spacers were left behind when you removed the fuel rail.

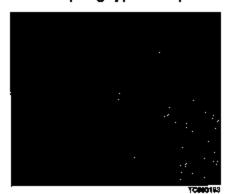
> NOTE: On top feed models, the injector spacers will be reused.



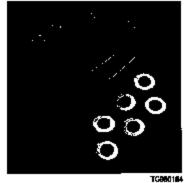
Do not leave injector insulators in manifold

Assembly - Injectors/Intake Plenum

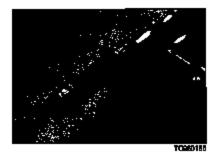
 Lay out both new fuel rails and new hardware supplied with this campaign. Note the new spring type clamps.



Fuel rail kit



Hardware kit



Spring type clamps

On the chart in bother, are not least parton, marriage from the branch it blances it between it reed impoter kite





Top feed

Bottom feed

Using a clean, fiber free applicator, such as a plastic coffee stimer, lubricate the 3. inside of all of the fuel hoses with a small amount of the Daikin CTFE oil that is provided with this campaign. DO NOT use cotton swabs or similar type applicators.



Dalkin CTFE oil Nissan part no. 999MP-U5500



Always apply Daikin CTFE oil with fiber free applicator

NOTE: DO NOT use any type of cleaning solvents on the hoses supplied in the kit.

> DO NOT use any oll/lubricant other than the Dalkin CTFE oil supplied in this campaign. Other oils/lubricants can react with the pre-applied adhesive on these replacement hoses.

- Cubrisate the buside and cutexte of Northwest Plagno Insulators with the Child CITE THE MENT THE MALE CONTROL OF THE PARTY OF TH
- Install the sub-hose to the sub-tube and install the sub-tube. Tighten the fuel rail 5. bolts to 13 to 16 ft. lbs. (18 - 28 Nm).

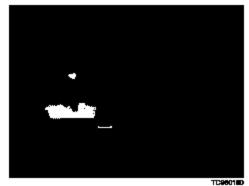
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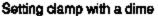
- Install the fuel rail assemblies. Set the assembly over the intake manifold and 6. connect each fuel rail to the fuel regulator. Connect the crossover hose.
- Lower the injectors into the injector insulators in the manifold and install the holder 7. bolts. Torque the injector holder bolts to 22 to 28 in. lbs. (2.5 - 3.2 Nm).

- Position the clamps on the sub-tube, crossover tube, and the fuel regulator hoses.
 Make sure the fuel tubes and hoses are in proper alignment. If a hose is stressed, it can cause a leak.
- Replace the fuel inlet hose. Tighten the hose clamps by hand. The clamp is properly tightened when a dime will just fit into the gap.

NOTE: An over tightened clamp may damage the hose and cause a fuel leak.

10. Install the fuel rall bracket bolts and torque to 13 - 16 ft. lbs. (18 - 28 Nm).







- It is part the injector commenters to demand. It sets type of demands is found out the subdiscussive personal comments forming a pink qualitating of bent install the subthereign at using the proceeding beginning or page 21 of this bulletin. If the injector sub-highestee) do not need to be replaced, continue with this procedure.
- Attach the injector connectors to the fuel injectors.
- 13. Blow all dirt and dust from the intake manifold, then remove the plastic intake manifold plugs. Be sure to wear protective goggles and respirator when removing dirt and dust.
- 14. Brush a small amount of Permatex High Tack Adhesive Sealant P/N 98H on the intake manifold and set the gasket in place.
- 15. Remove the plastic intake plugs from the plenum. Lower the plenum over the engine, align the air duct with the air intake, and rotate the plenum into place on the manifold. Be sure the air duct and wiring harness are not damaged during installation.
- Install the intake manifold bolts, and torque them to 13 16 ft. lbs. (18 22 Nm).
- Install the air duct and tighten clamps.

Assembly - Front

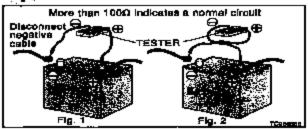
- Assemble the front of the engine by completing the following steps:
 - A. Reinstall the water and vacuum hoses to the left side of the plenum. (Pay close attention to the throttle chamber hoses near ASCD bracket).
 - B. Reconnect the connectors to the throttle sensor and the throttle sensor switch.
 - Secure the ground wires at the plenum.
 - Connect the accelerator and ASCD wires to the throttle valve and secure the bracket in place.

Assembly - Rear

- Assemble the rear of the engine by completing the following steps:
 - A. Connect the air regulator connector and hose.
 - B. Connect the water hose to the lower side of the collector.
 - C. Install the PCV hose.
 - D. Install the FICD air hose and vacuum hoses.
 - E. Install the EGR valve upper and lower tube nuts and tighten to 24 32 ft. lbs. (33 45 Nm).
 - F. Install EGR temperature sensor connector (California only).
- Install the plenum ornament cover. Clean all the plenum ornament cover bolt threads with a wire brush. Apply a small amount of Loctite #222 (purple) to the screw threads and torque each screw to 53 - 69 in. lbs. (6 - 8 Nm).
- Perform an electrical circuit test using the following procedure.

NOTE: The negative bettery cable must be disconnected prior to performing this test.

- A. Turn the dome light switch off and close all doors and trunk lid.
- B. Check the resistance between the negative battery cable and the positive battery terminal with a volt/ohm meter. (Negative test lead to the negative battery cable; positive test lead to the positive battery terminal). Record this value on the repair order.



C. Reverse the tester leads and check the resistance. (Negative test lead to the positive battery terminal; positive test lead to the negative battery cable).
Record this value on the repair order.

If the resistance value is more than 100 ohms in either steps B or C, the circuit is normal. If the resistance reading is less than 100 ohms in both steps B or C, the circuit may be shorted. Check the sub-harness to see if it is caught between the EGI harness clamps and/or other engine components.

- 4. Reconnect the ground lead to the battery and recheck your work.
- Start engine and inspect for leaks.
- Perform the driveability test as found on page 2 of this bulletin. Erase any codes stored in ECCS memory and reset the clock and radio presets.
- Perform the 'Final Inspection Checklist' on page 31 of this bulletin. Make a copy of this checklist for each vehicle that receives this campaign and attach the completed checklist to the vehicle repair order.

Injector Sub-Harness Assembly Procedure for All Models

DISCONNECT THE NEGATIVE BATTERY CABLE.

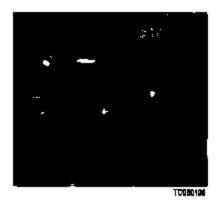
NOTE: The injector circuit has bettery voltage applied regardless of ignition switch position. Demage to injectors may occur if the battery is left connected while performing this repair.

The following procedure describes how to replace one injector sub-harness. Repeat the procedure if necessary on the opposite side.

Since these vehicles use a group injection system, only one connection needs to be performed on each bank of injectors. This connection must be made at #3 or #4 injector lead.

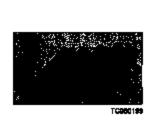
1. Cut off the two outside Injector connectors (In this procedure #1 and #5) from the main harness about two inches away from the connector. The middle lead will be used later to splice in the new injector sub-harness. Separate the wires and slide one piece of shrink tube supplied with this campaign over each of the two outside leads.

NOTE: A separate shrink tube must be used for each wire



Cutting injector head

Position the shrink tubing so it covers the wire ends then shrink the tubing using a
heat gun. Apply just enough heat so the tubing shrinks to size and seals the lead.
After cooling, make sure the shrink tubing cannot be pulled off the wire by hand.



Shrink tubes supplied with campaign



Applying shrink tube



Applying heat to shrink tube

NOTE: Shrink tubing can burn or melt if overheated. Be sure the leads are completely seeled, otherwise moisture could cause corrosion and driveability incidents.

 Using 3M automotive electrical tape #88, tape both sealed leads to the main harness.



Tape hamess

Cut the connector from the middle injector lead.
 (Cylinder #3 or #4 ONLY)
 Cut close enough to the connector so you can use the pigtails for splicing.



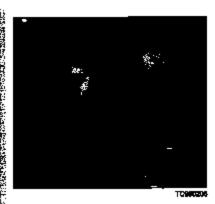
Cutting middle injector lead

- Strip away the Insulation so 3/8 in. of the injector harness wires are exposed.
- Comported the precipit interests with the process of thick to the composition of the comp

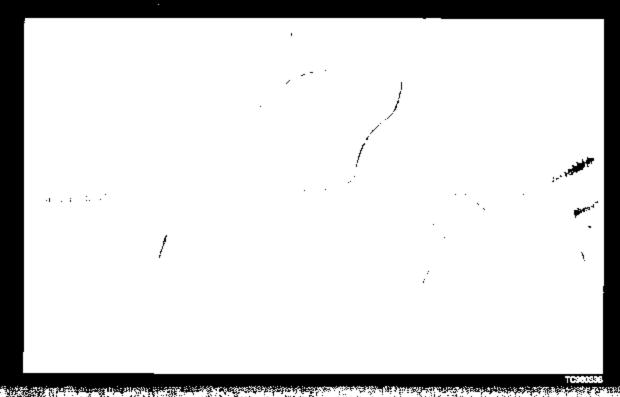


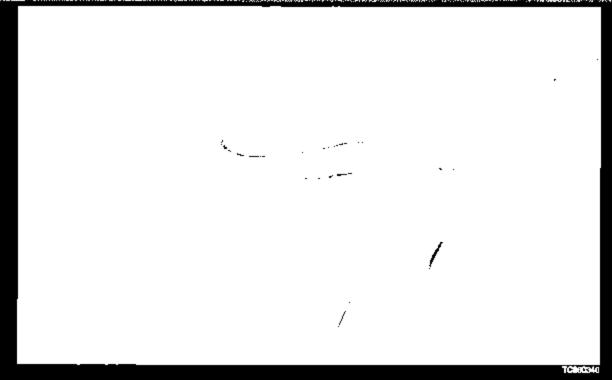
Sub-harness supplied with kit

Today Bro accessed approach of the process reached to the process of the process

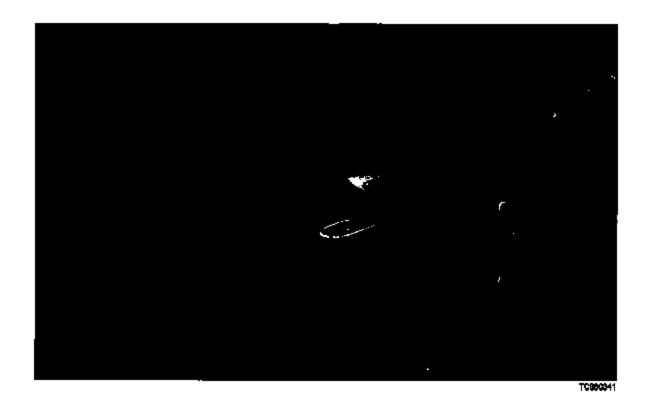


Insert wire Into connector and crimp





10. On all models, tape the entire connection from sub-harness to the main harness. This creates a finished look and provides an additional moisture barrier.



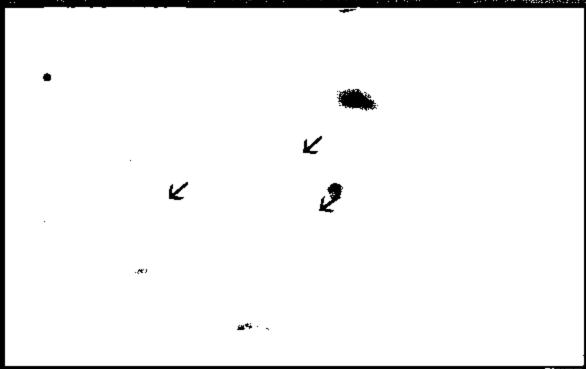
11. On the 300ZX, route the harness as shown below. Make sure the harness is resear.

<u>under</u> the Ignition wires. Connect the harness to the appropriate injectors. Installate strap as shown.



Right bank.

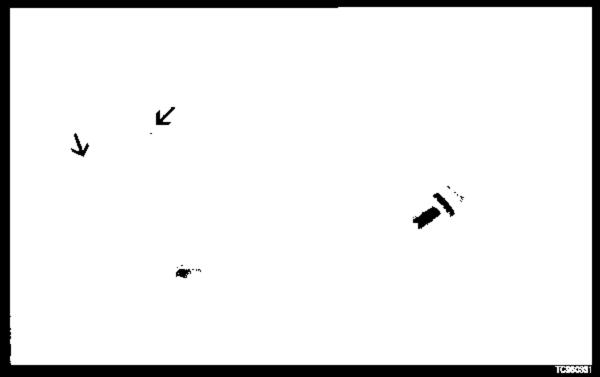
CAUTION: Hamess must not contact any sharp objects such as screws, hose clamps or brackets, or any source of high heat such as the EGR tube.



Left bank



14. Install the plenum. On the 300ZX, be sure the right side Injector harness is routed as shown. After installing the air PCV hose, make sure the hose clamp tabs face downward. This will prevent the clamp from chafing the main harness.



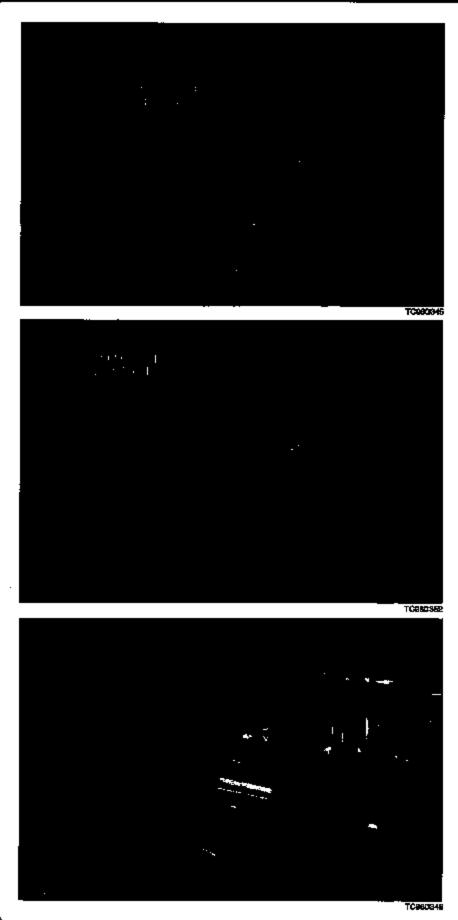
15. Install tie straps in the exact location shown.



Overall view of left side of 300ZX turbo



Make sure the injector harness and the main harness are not making contact with the throttle drum.



Make dure the main harness clamp is in position. The type of clamp may vary depending on model.

12. On the Maximum reside the harmonic an element bullow. Make our at 12 injector barrages in resident with a spiriture without some standard for the deposit of the deposit of the deposit of the section of the sectio



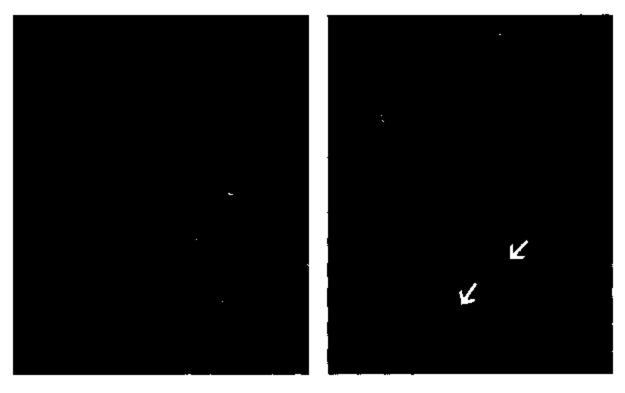
Overall view



Closse-up of right bank
CAUTION: Harness must not contact any sharp objects such as acrews, hose clamps or brackets, or any
source of high leaf such as the EUE tube



Overall view of Maxima



Close-up of rear

Close-up of front. Install tie straps as shown

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES FINAL DEALER INSPECTION CHECKLIST

CUST	OMER	R NAME VIN
R.O.	#	DATE
		_
CHE	K WIT	H ENGINE OFF
	(1.)	ELECTRICAL CIRCUIT TEST RESULTS
	(2.)	FUEL HOSES POSITIONED CORRECTLY ON FUEL LINES
	(3.)	ALL HOSE CLAMPS TIGHTENED CORRECTLY
	(4.)	ALL ELECTRICAL CONNECTIONS SECURE
	(5.)	VACUUM HOSES INSTALLED
CHEC	K WIT	H ENGINE RUNNING
	(6.)	CHECK ALL FUEL HOSES FOR LEAKS
	(7.)	TEST DRIVE - CHECK FOR COOLANT AND VACUUM LEAKS
□	(8.)	REPEAT DRIVEABILITY TEST FROM PAGE 2 AND CONFIRM NO CHANGE
	(9.)	CHECK FOR DRIVEABILITY PROBLEMS
	(10.)	CHECK RADIO PRESETS
	(11.)	TURN OFF ENGINE AND VERIFY COOLANT RESERVOIR AT MAXIMUM LEVEL. TOP OFF IF NECESSARY

SPECIAL TOOLS - REQUIRED TO PERFORM THE SERVICE PROCEDURE

 24 Intake manifold plugs, Kent-Moore P/N J42056 (initially supplied at no charge with this campaign).

NOTE: Additional manifold plugs (in packages of 24) may be purchased by calling Tech-Mate at 800-NMC-2001.

- Hose removal pilers, MAC Tools P/N HFL 4790 (or equivalent)
- 3. Daikin CTFE Oil, Nissan P/N 999MP-U5500

PARTS KIT INFORMATION

Complete injector and Sub-Tube Assembly Kits

Model	Year	Туре	Part Number	Qty
300ZX Non-Turbo	84 - 85	Тор	16603-01P26	1
300ZX Non-Turbo	66	Тор	16603-01P27	1
300ZX Non-Turbo	87	Bottom	16600-16E26	1
300ZX Non-Turba	88 - 89	Bottom	16600-19P26	1
300ZX Turbo	84 - 85	Тор	16603-02P25	1
300ZX Turbo	86 - 87	Bottom	16600-19P27	1
300ZX Turbo	88 - 89	Bottom	16600-21P25	1
Maxima	85 - 86	Тор	16603-01P25	1
Maxima	87	Bottom	16600-16E25	1
Mexima	88	Bottom	16600-19P25	1

PARTS INFORMATION - 300ZX Non-Turbo Individual Kit Components

	84-85 MY]	86MY	
DESCRIPTION	Part Number	QTY	Part Number	QTY
Fuel injector & tube kit (1)	16603-01P26	<u> </u>	16603-01P27	
Fuel injector assembly	16603-01P01	8	16603-01P01	8
	or	· . ·	Or	
	16603-01P11		18603-01P11	
Fuel tube - LH	17521-V5220	1	17521-V5220	1
Fuel tube - RH	17522-V5220	1	17522-V5220	1
Fuel injector hose socket	18615-35F00	6.	16615-35F00	6
Fuel injector holder	16612-V5010	- 6	16612-19P00	- 6
Fuel Injector insulator	18635-V5000	В	16635-V5000	6
Snap ring	16618-V5000	- 6	18616-V5000	8
Fuel hose	17524-V5003	3	17524-V5003	3
Hose clamp	18439-18E00	4	18439-16E00	2
Fuel injector insulator - lower	16636-V5000	6	18636-V5000	6
Collar	16613-V5000	6	16613-V5000	6
Screw	08360-63082	8	08360-83062	В
Fuel hose	17524-V5003	1	17524-V5003	
intake manifold gasket	14033-75P00	1	14033-75P00	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Fuel hose clamp	16439-53A00	2	16439-53A00	2
Fuel feed hose	16441-11P00	1	16441-11P00	1.
Washer	16611-V5000	8	16611-V5000	- 6

NOTE: 1. Includes all parts listed below

PARTS INFORMATION - 300ZX Non-Turbo Individual Kit Components (continued)

	87MY		YM 68 - 88	1
DESCRIPTION	Part Number	QTY	Part Number	QTY
Fuel injector & tube klt (1)	16600-16E26		16600-19P26	
Fuel injector assembly	16600-16E12 or 16600-16E17	6	16600-19P24	. 6
	10000-10217			
Fuel tube - LH	17521-19P11	1	17521-19P11	1
Fuel tube - RH	17522-19P11	1	17522-19P11	1
Fuel injector hose socket	16615-35F00	6	18815-35F00	6
Fuel injector holder		-		-
Fuel injector insulator	-	-	-	-
Snap ring	•	-	-	-
Fuel hose	17524-V5003	3	17524-V5003	3
Hose clamps	16439-16E00	8	16439-16E00	В
	16439-53A00	8	16439-53A00	8
Fuel Injector insulator - lower	16636-V5000	6	16636-V5000	6
Collar	16613-V5000	В	16613-V5000	6
Screw	08360-63062	6	08360-63062	ě
Fuel hose	17524-V5003	1	17524-V5003	1
intake manifold gasket	14033-75P00	1	14033-75P00	1
Fuel feed hose	16440-19P25	1	16440-19P25	1
Wesher	16611-V5000	В	18611-V5000	6

NOTE: 1. Includes all parts listed below

PARTS INFORMATION - 300ZX Non-Turbo Related Parts (May be replaced as part of the campaign if necessary)

Part Description	Part Number	Model
Fuel pressure regulator	22870-V5222	84 - 88
Fuel injector sub-harness	24079-19P25	84 - 87
kita Water hoses	24079-25P26 14058-V8007	88 - 89 84 - 89
	14058-V6017	84 - B9
	14058-V5022 14055-V5203	84 - 89
Blow by hoses	11827-V5202	84 - 89 84 - 89
	11828-V5200	84 89
By pass hose	1827-02P01 14060-04P00	84 - 86
Vacuum hoses	B2320-28F10 (2mm die.)	84 - 89
AAC valve floses	A8761-M4901 (3mm dia:) 23788-01P00	84 89
	23786-12P01	84 - 89 84 - 80
	6522-06580	84
Air regulator hose Air regulator hose clamp	14061-01PG0 16420-V8060	84 - 89 84 - 89
EL+Various number unique	16439-V8001	84 - 89
Lower air duct Fusi return hose (bulk)	18678-01P10 A8742-20030	84 - 89 84 - 89
	(or equivelent)	04 08
uel letern hoses (pre-eut)	A6446-(1P00	84 - 88
Fuel hose (body-filter)	A6445-19P90 01995-00941	87 - 89 84 - 89
Fue hose clamp	16439×53A00	84 - 89
Fuel sub-lubs Fuel tube spacer	17828-V8020 18814-V8000	84 - 86 84 - 86
Connector spring	B4111-07800	84 - 89
Band ollp Harness ollp (glastic)	01862-00043	84 - 89
Hemeve clo (netal)	24226-01P02 24218-08E00	84 - 89

PARTS INFORMATION - 300ZX Turbo Individual Kit Components

	84-85 MY		86 - 87 MY		88 - 89 MY	1
DESCRIPTION	Part Number	QTY	Part Number	QTY	Part Number	QTY
Fuel Injector & tube kit (1)	16603-02P25		16600-19P27		16800-21P25	\Box
Fuel injector assembly	16603-02P01	8	16600-19P12	6	16600-21P12	6
	or	Ì	.or			
	16603-02P11	[16600-19P17	L.		
Fuel tube - LH	17521-V5220	1	17521-19P11	1	17521-19P11	1
Fuel tube - RH	17522-V5220	1	17522-19P11	<u> </u>	17521-19P11	1
Fuel injector hose socket	16615-35F00	6	16615-35F00	6	16615-35F00	6
Fuel Injector holder	16612-V5010	6			-	
Fuel injector insulator	16635-V5000	6	-	-	-	-
Snap ring	18616-V5000	6	-	_	- ·	<u> </u>
Fuel hose	17524-V5003	3	17524-V5003	3	17524-V5003	3
Hose clamps	16439-16E00	8	16439-16E00	8	16439-16E00	8
	16439-53A00	8	16439-53A00	8	18439-53A00	B
Fuel Injector insulator -	16636-V5000	6	16638-V5000	6	16636-V5000	6
lower						
Collar	18613-V5000	B	16613-V5000	В	16613-V5000	6
Screw	08360-63062	₿	08360-63062	8	08360-63062	6
Fuel hose	17524-V5003	1	17524-V5003	1	17524-V5003	. 1
intake manifold gasket	14033-75P00	1	14033-75P00	1	14033-75P0D	1
Fuel feed hose	A6441-11P00	1	A6440-19P25	1	A8440-19P25	1
Fuel tube spacer	-	-	16614-D4200	6	16614-D4200	6
Washer	18611-V5000	6	16611-V5000	θ	18611-V5000	6

NOTE: 1. Includes all parts listed below

Part Description	Part Number	Model Year
Fuel pressure requistor	22676-V5222	84 - 89
Fuel Injector sub-harness	24070-10928	84 - 87
kita Turbo cooling hoses	24079-26P25 14056-01P01	86 - 89 85 - 87
	14056-01P12	85 - 87
	14056-21P12	88 - 89
Water hoses	14056-21P\$3 14056-V5007	86 - 89 84 - 80
Yeardi Hoedo	14050-V5017	84 - 89
Blow by hoses	11827-02P01	84 - 89
	11828-75200	84 - 89
By pass hose	1#060-01P00	84 - 89 84 - 86
Vectum hoses	62320-28F 10 (2mm dla.)	84 - 89
	A8761-M4901 (3mm dia.)	
AAC valve noses	23786-01P06 23786-12P01	84 - 89 84 - 89
	16522-0680D	84
Air regulator hose	**************************************	84 89
Air requistor hose clamp	19450-744000	84 - 89
PCV hose clamp - upper Air duct (beet)	184387V4074 64483-V8310	84 - 89 84 - 89
Fuel return hose (bulk)	A6742-20080	84 - 89
	(or equivelent)	
Fuel return hoses (pre out)	A8445-11P00 A8445-19P00	84 - 87 87 - 89
Fuel hose (body-filler)	01498-00347	84 - 89
Fuel hose clamp	100 100 100 100 100 100 100 100 100 100	84 - 89
Fuel sub-tube		84 - 82
Fuel (ube spacer Connector spring	(BE) 4-V5000 84/11-17800	84 - 68 84 - 89
Bine elp	01852-00645	84 - 89
Hamess clip (plastic)	24225-01P02	84 - 89

PARTS INFORMATION - Maxima individual Kit Components

	85-86 MY	l .	87 MY	1	SS MY	1
DESCRIPTION	Part Number	QTY	Part Number	QTY	Part Number	QTY
Fuel injector & tube kit (1)	18603-01P26		18600-18E25		18600-19P25	
Fuel injector	16603-01P01	6	16600-16E12	В	16800-19P24	6
assembly	or 16603-01P11		or 16600-15 <u>E</u> 17		- ;	ŀ
Fueltube - LH	17621-18E02	1	17521-19F11	1	17521-19 P 11	1
Fuel tube - RH	17522-16E02		17622-18E11	1	17522-16E11	
Fuel injector hose socket	18615-35F00	8	18615-35F00	6	16815-35F00	6
Fuel Injector holder	16612-V5010	6	-		-	- :
Fuel injector insulator	16635-V5000	8	•	-	-	•
8 nap ring	18816-V5000	6		-	-	
Fuel hose	17624-V6003	3	17524-V5003	3	17524-V5003	3
Hose clamps	16439-16E00	ð	16439-16E00	8	16439-16E00	a
	18439-53A00	2	16439-63A00	. 2	16439-53A00	2
Fuel Injector Insulator - lower	16636-V5000	8	18636-V5000	В	16636-V5000	6
Coller	16813-V5000		16613-V5000	6	16613-V5000	6
Screw	08360-83082	6	08360-63062	Ð	08360-63062	6
Fuelhose	17524-V5003	1	17524-V6003	¨ 1	17524-V5003	1
intake manifold	14033-75P00	1	14033-75P00	1	14033-75P00	1
Fuel hose (frame to filter)	17652-13E60	<u>1</u>	17552-13E60	1	17652-13E60	1
Fuel feed hose	16441-86200	1	18441-86200	1	18441-86200	1
Fuel tube spacer	-	•	18614-D4200	ß	18614-D4200	8
Washer	16 8 11-V5000	6	16811-V5000	8	18811-V5000	8

NOTE: 1. Includes all parts listed below

PARTS INFORMATION - Maxima Related Parts (May be replaced as part of the campaign if necessary)

Part Description	Part Number	Model Year
Fuel pressure regulator	22670-16E02	85 - 86
Fuel injector sub-hamess kits	24079-16E25	85 - 87
· ·	24079-42E25	88
Water hoses	14056-16E00	85
	14056-16E01	86 - 86
	14056-16E10	85 - 8 8
Blow by hoses	11827-D6100	85 - 88
	11828-V5200	85 - 88
AIV hoses	14880-18E11	85 - 88
	1486-16E02	85 - 88
Vacuum hoses	B2320-28F10 (2mm dia.)	85 - 88
	A8761-M4901 (3mm dia.)	65 - 88
Alr hoses	14060-16E61	85 - 88
	14060-16E01	85 - 88
BCDD hose	16255-16E01	85 - 88
Air regulator hose	14080-18E10	85 - 66
Air regulator hose clamp	16439-V5000	85 - 88
PCV hose clamp - upper	16439-V5001	85 - 88
Fuel return hose (bulk)	A8742-20030	85 - 88
	(or equivalent)	
Fuel return hose (pre-cut)	16445-16E00	85 - 88
Fuel sub-tube	17523-16E02	85 - 88
Fuel tube spacer	16614-V5000	85 - 86
Fuel hose clamp	16439-53A00	85 - 88
Connector spring	B4111-U7600	85 - 88
Band clip	01552-00043	85 - 88
Brake booster hose	47474-16E02	85 - 88

PARTS INFORMATION - 300ZX/Maxima Related Electrical Connectors (May be replaced as part of the campaign if necessary)

Connector Description	Harness/Sensor Side	Number of Pine in Connector	Kent-Moore Part Number	Number
FICD, EGR	Harness	2	J38751-6	B4342-0WFW0
temperature sensor				
FICD, EGR	Sensor	2	J38751-7	B4342-79905
temperature sensor		<u> </u>		
EGR solenoid,	Harness	2	J38751-16	B4342-0WFB0
Engine temperature				
26NS0F		<u> </u>		
EGR solenoid,	Sensor	2	J38751-17	B4342-79904
Engine temperature				i
sensor		L		
Throttle position	Harnese	3	J38751-8	84343-0WFW0
вепвог,				
O, sensor				
Throttle position	Sensor	3	J38751-9	B4343-79904
велаог,				
O, sensor		<u> </u>		
AAC valve,	Harness	4	J38751-10	B4344-79902
O, sensor				j
AAC valve,	Sensor	4	J38751-11	B4344-79903
O, sensor				
A/C compressor	Harness	1	J38751-88	B4341-79901
Air regulator	Harness	2	N/A	24027-60Y15
Turbo AAC valve sensor	Hamess	2	N/A	B4342-79901

PARTS INFORMATION

Part Description	Part Number	Model Year
Daikin CTFE oll (1)	999MP-U5500	All

NOTE:

- Order from NMC Parts.
- 2. Do NOT claim this P/N on the Campaign Claim

Claims Submission for Campaign RepainReplacement of the injectors:

The following is the updated coding information for this campaign. The information regarding Rental Vehicle Expense Assistance and VOR Freight Reimbursement was not included in the original/superseded Campaign Bulletin #NTB96-010.

OPERATION	OP CODE	CAMPAIGN LD/PNC	PROGRAM# (1)	5YM/DIAG (2)	FRT (3)
instali Kit	P51370	P5137	01	ZZ/90	2.8 hrs (231) 2.6 hrs (U11)
R&R Fuel Pressure Regulator	P51371				0.1 hrs (231/U11)
install One Sub- Harness (4)	P51372				0.1 hrs (Z31/U11)
Install Both Sub- Hamesses (4)	P51373			. " "	0.2 hrs (Z31/U11)

- NOTES: 1. New Claims System dealers only.
 - Old system dealers only.
 - Flat Rate Time(s) include sufficient labor time for the replacement of any of the "Related Hoses/Parts/Electrical Connectors" listed in the Parts information tables above.
 - Use either P51372 OR P51373, but not both.

TOWING EXPENSE

If required, towing expenses to the nearest Nissan dealer should be submitted using expense code 501 (New Claims System dealers) or part number SUBLTTOWXX (old system dealers).

VOR FREIGHT REIMBURSEMENT

For this campaign only, VOR freight expense, for VOR freight not prepaid by Nissan, may be submitted using expense code 600 (New Claims System dealers) or part number VRxxxxxxx (where xxxxxx is the invoice number - old system dealers).

RENTAL VEHICLE EXPENSE ASSISTANCE

If the vehicle is inoperative awaiting parts ordered through the *Customer Care* process, rental vehicle assistance may be submitted using Expense Code 502 (New Claims System dealers) or part number SUBLTRENTX (old system dealers). The maximum dollar reimbursement is \$30.00 per day for up to three days (\$90.00 total). Amounts exceeding \$90.00 will require regional claim approval.

New Claims System dealers should use the following procedure:

Expense Code	Coverage 1	Amount 1
502	CM	Actual Amount

PARTS RETENTION

For this campaign only, removed parts must be scrapped as soon as:

- The QC Inspection (if required) has been performed and the inspector concurs that
 the campaign repairs have been properly completed.
- The work order line has been reported as paid on the daily Claims Activity Report (New Claims System dealers - Report #VWO5020-R1. Old system dealers - Report #WDN0940-R1).

Dear Nissan Owner.

Nissan has received reports of leaks in the fact injection system in 1985-1988 Maxima and 1984-1989 300ZX vehicles. Fuel leaks in your engine could result in a fire. A fire in your engine compartment would pose a safety risk. To reduce the risk of engine fires, Nissan will replace all of the fuel injectors and related bases on your car, free of charge, regardless of your car's age or mileage. We are taking this step because we are concerned about your safety and satisfaction, even though we do not believe that these fact leaks are due to any defect in your vehicle.

The first injection system is your car was designed in the early 1980s using state-of-the-art technology at that time. Since then, however, certain first additives have been approved for use in gasoline. These additives have resulted in deterioration of the first injectors, causing first leaks. In addition, first hoses that wear out due to age can leak first, contributing to the risk of first. Nissan's recommended maintenance practices call for the replacement of deteriorated injectors and worn out first hoses in the first injector systems of these vehicles. Nissan has become concerned that some owners have postponed or omitted necessary maintenance of their vehicle's first injection system due to the expense, therefore increasing the risk of engine fire.

Nissan urges you to take advantage of this free fuel injector and related fuel hose replacement offer. The new fuel injectors have been made to reduce the effects of additives used in today's gasoline and the new fuel hoses will further reduce the possibility of leaks. After the new injectors and hoses are installed, it will continue to be important for you to follow the recommended maintenance schedule for the fuel injection system, including an inspection every 30,000 miles.

Contact your Nissan dealer as soon as possible to arrange for an appointment to have this free replacement service. The replacement will take approximately 2 hours, but your dealer may require your vehicle for a longer period of time based upon work schedules. Please bring this notice with you when you keep your appointment. Instructions have been sent to your dealer. If the dealer fails, or is unable to make the necessary repairs free of charge, you may contact the Maxima/300ZX. Campaign Headquarters, P.O. Box 2009, Bloomfield Hills, MI 48303. The toll free telephone number is: 1-800-867-7669. If you reside in Hawaii, please call: 808-836-0888.

The National Highway Traffic Safety Administration has a toll free auto safety hotline which can provide information to you concerning auto safety issues. Their number is: 1-800-424-9393 (Weshington, D.C. area residents may call; 202-366-0123).

If you have paid to have your fuel injectors replaced due to leakage, as a matter of customer goodwill. Nissan will reimburse you for reasonable documented costs. Please complete the enclosed Customer Goodwill Reimbursement Request Form and submit it along with all supporting documents to the address indicated. Nissan is taking this action to ensure your continued satisfaction with our products.

Thank you for your cooperation. We hope that you will take advantage of this important and unique program. We look forward to serving your automotive needs now and for many years to come.

NISSAN

タテエ-306 NISSAN MOTOR CORPORATION U.S.A.

Poet Office Bux 191 Gardena, California 90248-0191 Telephone (310) 532-3111

CAMPAIGN BULLETIN

Reference:

Date

NTB96-010b

March 18, 1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

The bulletin is a supplement to be used with NTB96-010a dated March 15, 1998.

APPLIED VEHICLES:

1985 - 1988 Maxima (U11)

1984 - 1989 300ZX (Z31)

1987 - 1988 200SX (S12), V-6 Engine ONLY

1990 - 1992 M30 (F31)

APPLIED VIN:

All

SERVICE INFORMATION

This is a supplement to campaign bulletin NTB96-010a. It advises you of changes in the Applied Vehicles, the Owner Notification time span, and informs you of a new quality control (QC) inspection process.

Applied Vehicles

The 1985-1988 Maxima (U11) and 1984-1989 300ZX (Z31) vehicles are included in the campaign. In addition, the 1987-1988 200SX (S12) <u>V-6 engine only</u>, and 1990-1992 Infiniti M30 vehicles for all VIN ranges are now included in the campaign. The repair procedure, flat rate times and claims processing coding applicable to the 200SX and M30s will be provided at a future date. Nissan dealers with 1990-1992 M30s on their used vehicle lots may wish to contact Infiniti dealers regarding the availability of the campaign corrections required for these vehicles before delivering any such vehicles to used vehicle purchasers.

Status of Owner Notifications

Owner notification is being spread over the next ten months until all owners have been informed of the campaign. Nissan's goal is to try to ensure a reasonable, manageable flow of vehicles requiring campaign action.

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Technical Communications Department

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Quality (QC) Inspection

Effective with campaign repairs begun Tuesday, March 19, 1996, dealers <u>must</u> request 3rd party quality inspection immediately following completion of campaign repairs (P5137). These inspections will be conducted by *Integrated Warranty Services*, *Inc.* (IWS).

Requests for QC inspections may be made by completing the attached IWS Inspection Request Form (Attachment "D") and faxing it to (310) 323-3636. Please photocopy the IWS Inspection Request form as needed to ensure an adequate supply of forms for future QC Inspections. Inspectors will be at the dealership within 36 hours, or will respond and explain when they will be on-site if not within 36 hours. Inspection requests sent by 10 a.m. dealer time will typically result in inspectors being at the dealership the same day the request is made.

An IWS Inspection Report stating that campaign repairs are complete and correct must exist before dealer submission of the campaign claim (P5137). Inspector determination that repairs are incomplete or incorrect will be reported to dealer service managers immediately following inspection and must be completed or corrected by the dealer (without cost to Nissan or the customer). Vehicles must then be inspected again.

Copies of both Quality Control Inspection Checklists used by inspectors to guide them through each vehicle Inspection are attached (Attachments "A" and "B"). A copy of the IWS Inspection Report has also been included for your information (Attachment "C"). This report will be supplied and completed by the IWS inspector for every inspected vehicle. The dealer copy of each report must be kept in the vehicle service file with all other repair documentation.

If a dealer fails to request QC inspection and receive inspector concurrence that all repairs have been properly completed, Nissan may charge back to the dealer the entire campaign claim amount.



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Post Office Box 191 Gerdans, California 90248-0191 Telephone (810) 532-3111

QUALITY CONTROL INSPECTION CHECKLIST (QC) 1985-88 Maxima (U11) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any discrepancies found. All inspections are visual.

		PRE-INSPECTION
		A) Verify the repair order was aigned by the Service Manager.
		b) Verify the engine check was performed. A checklist was provided with the bulletin and
		results recorded on repair order.
		 c) Verify the electrical circuit recistence, fuel pressure, and driveability tests were performed;
		all test results should be recorded by the technician on the repair order.
		SUB-HARNESS AND FUEL HOSE ROUTING
		ENGINE RIGHT SIDE - bulkhead
7.	SU	IB-HARNESS IDENTIFICATION
		Identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
2		LICING OF SUB-HARNESS
_		The splice of the new harness to the original equipment (OE) harness is fully wrapped by electrical tape and
	_	secured with a tie-wrap to the OE harness.
2	#2	AND #5 SUB-HARNESS WIRES SECURED
		Secured to main harness by tape at the OE harness (taped bundle).
		b) Connectors are secured to fuel injectors.
	_	c) #3 and #5 injector wires are routed above spark plug cables.
,		WIRE SUB-HARNESS SECURED
•		Secured to main harness by tie-wrap at the OE harness.
		b) Connector is secured to fuel injector.
	ŏ	c) OE clamp on rocker cover is secured to OE harness. If missing, the harness must be
	_	secured to air hose with a tie-wrap.
		d) #1 (njector wire is routed above spark plug cable.
5.	RO	OUTING OF HARNESS
_		a) Sub-harness does not come into contact with any sharp objects (such as screws, hose clamps, and brackets)
	_	or source of high heat (EGR tube).
		b) #1 and #5 cut-off harness injector leads must be sealed with shrink wrap and taped to OE harness.
ß.	FU	EL HOSE
		a) New fuel hoses from kit should be installed before the filter (pre-formed type) and after the filter.
		b) Return hose condition is not damaged or cracked.
7	FU	EL HOSE PROTECTOR (on return line)
•		Protector sleeve is installed on the return hose and located near the fuel filler bracket, air conditioner tube,
	_	and speedometer cable. Hose P/N A6445-18E00.
R	FU	EL HOSE CLAMPS
_		a) Kit clamps installed (4 clamps), no worm gear type.
	<u>=</u>	b) Tightened. Use a dime coin to measure the clamp opening. Check inlet and return hose.

SUB-HARNESS AND FUEL HOSE ROUTING

ENGINE RIGHT SIDE - bulkhead (continued)

	LITAINE FIGURE SIDE - DENDINGE (COMMIDGE)
9. FU	JEL FILTER
	Fully seated in the bracket.
	Note: If aftermarket, edvise customer the part is not original equipment and should be replaced.
10. F	UEL HOSE ROUTING
	a) Fuel inlet and return hoses are routed under the brake booster hose and the accelerator cable.
	b) Inlet and return hoses are clamped together with a loose tie wrap.
	c) Inlet and return fuel hoses are not stressed.
	ENGINE LEFT SIDE - radiator
11. S	UB-HARNESS IDENTIFICATION
	Identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
	PLICING OF SUB-HARNESS
	The splice of the new harness to the OE harness is fully wrapped by electrical tape and
	secured with a tie-wrap to the OE harnese.
13. G	ENERAL SUB-HARNESS ROUTING
_	The sub-harness does not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
14. #	2 SUB-HARNESS WIRE ROUTING
	a) is under the spark plug cable.
	b) Wires are tie-wrapped to OE harness near the branch.
	c) Connectors are secured to the fuel injectors.
15. #	4 AND #6 SUB-HARNESS WIRE ROUTING
	Connectors are routed straight to the injectors.
	b) Connectors are secured to the fuel injectors.
16. H	ARNESS SECURED
	 a) Sub-harness wires are secured to the OE harness by a tie-wrap between #4 and #6 injector wires.
	b) #2 and #6 cut-off humass injector lands must be sealed with shrink wrap and taped to OE harness.
	c) #4 and #6 injector wires are routed above spark plug cables.
	GENERAL INSPECTION
_	EFORE STARTING ENGINE
	8) No fuel small.
	b) Battery terminals tight.
	 c) All vacuum hoses leading into the pienum are securally attached and are not split or brittle.
_	Note: Vacuum and coolant hoses covered by this campaign are listed in the campaign bulletin.
	d) Check that the throttle cables (throttle, crulae control, A/T) are correctly installed in the throttle drum.
	Verify vacuum hose connections and electrical connections at any visible locations.
_	NGINE RUNNING
	8) No fuel smells.
	b) No fuel leaks. c) No coolant leaks.
	Y/ ITO VARIOUS INDIANA.



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QUALITY CONTROL INSPECTION CHECKLIST (QC) 1984-1989 300ZX (Z31) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any discrependes found. All trapections are visual.

	PNE-INSPECTION
	Verify the repair order was signed by the Service Manager.
	 b) Verify the engine check was performed. A checklet was provided with the bulletin and results recorded on repair order.
р	
	all test results should be recorded by the technician on the repair order.
	•
	SUB-HARNESS AND FUEL HOSE ROUTING
	ENGINE RIGHT SIDE (battery-side)
1. S	UB-HARNESS IDENTIFICATION
	Identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
2. Si	PLICING OF SUB-HARNESS
	The splice of the new harness to the original equipment (OE) harness is fully wrapped by electrical tape and secured
	with a tie-wrap to the PCV inces at the specified connecting point.
2 23	AND #5 SUB-HARNESS WIRES SECURED
	a) #3 injector wire routed under spark plug cable.
_	b) Connector is secured to fuel injector.
	c) The #3 and #5 Injector wire does not interfere with the water hose clamp.
_	WIRE SUB-HARNESS SECURED
	Secured to main harness by tie-wrap to the PCV hose, below the splice connection tie-wrap.
	b) Connector is secured to fuel injector. b) Connector is secured to fuel injector.
	c) Routed under spark plug cables.
_	OUTING OF HARNESS
_	- • · · · · · · · · · · · · · · · · · ·
_	
	E HARNESS
	,
7. FL	JEL HOSE
□	•
	b) Return hose and inlet hose before filter are not damaged or cracked.
8. Fl	JEL HOSE PROTECTOR (on return line)
	Two protector sleeves are installed on the return hose located near the radiator hose clamp
	and the canteter hoses and located at the fuel filter clamp.
9. F	JEL HOSE CLAMPS
Ģ	a) Kit clamps installed (2 clamps), no worm gear type.
	 b) Tightened. Use a dime coin to measure the clamp opening. Check inlet and return hose.
	 c) Body-to-fuel filter clamps on both the body-side and fuel-filter side set properly.

SUB-HARNESS AND FUEL HOSE ROUTING

ENGINE RIGHT SIDE (battery-side) [continued]

9. FUEL HOSE CLAMPS [continued]
 d) Are the fuel filter-to-fuel rall clamps on both the fuel-filter-side and fuel-rall-side ant property? e) Is the fuel return clamp set correctly?
10. FUEL FILTER
a) is the fuel filter properly seated in the bracket? (filter flange should sit on the bracket) Note: If offerworder part, exists a customer the part of all all accounts and about the replaced.
Note: If aftermarket part, advise customer the part is not original equipment and should be replaced.
11. FUEL HOSE ROUTING
 a) Inlet and return hoses are clamped together with metal clamps at the white stripe of the hose. b) Inlet and return fuel hoses are not stressed.
D) finglatic feltat ich noses till not these oc.
ENGINE LEFT SIDE (driver-side)
12. SUB-HARNESS IDENTIFICATION
Identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
13. SPLICING OF SUB-HARNESS
☐ The splice of the new harness to the OE harness is fully wrapped by electrical tape.
14. GENERAL SUB-HARNESS ROUTING
The sub-harness does not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
b) Verify that the subharness is passing below the spark plug cables.
Make sure that the clearance between the accelerator cable drum and the main and sub-harness is at least 20mm.
O Verify that the OE main harness is secured by three (3) clamps at the plenum.
15. #2 SUB-HARNESS WIRE ROUTING
🗖 🗈) is under the spark plug cable.
b) is the wrapped to AAC air hose.
C) Connector is secured to the fuel Injector.
 d) Sub-hamese is routed to the outside (fender side) of the blow-by hose.
16. #4 AND #6 SUB-HARNESS WIRE ROLITING
Sub-hameeses are under the spark plug cables.
D) Connectors are secured to the fuel injectors.
17. OE HARNEBS
a) le secured to three clamps located near the top of the plenum.
b) #2 and #6 cut-off harness injector leads must be sealed with shrink wrap and taped to OE harness.
GENERAL INSPECTION
FORE STARTING ENGINE
No fuel emeil.
Rettery terminals tight.
vacuum hoses leading into the plenum are escurely attached and are not split or brittle.
Vacuum and coolant hoses covered by this campaign are listed in the campaign bulletin.
k that the throttle cables (throttle, orules control, A/T) are consectly installed in the throttle drum,
Communications and effect rical connections and effect rical connections at any visible locations.

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IWS_{Inc.} INSPECTION REPORT

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

	1. Su 2. Sp 3. #3 4. #1	Model Year: Dealer code: Technican: Inspection Date: AlL ch required repair. necklist for details. 300ZX ub-harness identification plicing of sub-harness & #5 sub-harness wires secured
Inspection Iter y Control Inspe n es secured	1. Su 2. Sp 3. #3	Dealer code: Technican: Inspection Date: AIL ch required repair. necklist for details. 300ZX ub-hamess identification
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Inspection Iter y Control Inspe n es secured	1. Su 2. Sp 3. #3	Inspection Date: AIL ch required repair. necklist for details. 300ZX ab-hamess identification bicing of sub-hamess
Inspection Iter y Control Inspe n es secured	1. Su 2. Sp 3. #3	AIL ch required repair. necklist for details. 300ZX ub-hamess Identification
Inspection Iter y Control Inspe n es secured	1. Su 2. Sp 3. #3	ch required repair. necklist for details. 300ZX ub-hamess identification
n es secured	1. Su 2. Sp 3. #3 4. #1	300ZX ub-harness Identification bicing of sub-harness
es secured	2. Sp 3. #3 4. #1	b-hamess identification
es secured	2. Sp 3. #3 4. #1	blicing of sub-harness
	3. #3 4. #1	
	4. #1	3 & #5 sub-hamess wires secured
ured		,, ,
		wire sub-hamess secured
		outing of harness
_ · · · - ·		harness
return line)		iel hose
		iel hose protectors (on return line)
		iel hose clamps
		iel filter
<u> </u>		iel hose routing
		b-hamess klentification
		ollcing of sub-hamess
		eneral sub-harness routing
e routing		sub-hamess wire routing
		& #6 sub-harness wire routing
		fore starting engine
	ing ling e routing	12. Suing 13. Spring 14. Get 15. #2 16. #4 17. Of



Inspections can be ordered by the Nissan Dealer via FAX Number 310-323-3636

Dealer Name:	Region:	Zip Code:
Dealer Code: Dealer Co	ntact name:	
Dealer contact phone number:	FAX	lumber:
VIN#	Vehicle Mileaga	Requested Inspection Date
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NOTE: DEALERS MAY COPY THIS FORM



Inspections can be ordered by the Nissan Dealer via FAX Number 310-323-3636

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Dealer Code: Dealer Con	act name:
Dealer contact phone number:	FAX Number:
VIN #	Vehicle Requested Mileage Inspection Date
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NOTE: DEALERS MAY COPY THIS FORM

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NISSAN MOTOR CORPORATION U.S.A.

Post Office Box 191 Gardena, California 90248-0191 Telephone (810) 771-8111

CAMPAIGN BULLETIN

Reference: NTB96-052 Date

May 17, 1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

APPLIED VEHICLES: 1987-1988 V6 equipped 200SX (S12)

APPLIED VIN:

All

INTRODUCTION

Nissan has received reports of leaks in the fuel injection system on the above vehicles. Fuel leaks in the engine can result in a fire. Nissan has investigated these leaks and found that certain fuel additives approved for use in gasoline after these vehicles were designed have resulted in deterioration of the fuel injectors causing fuel leaks. In addition, Nissan has found fuel leaks due to worn out hoses which have not been replaced according to the maintenance schedule. Although Nissan has determined that these fuel leaks are not due to any defect in the vehicles, Nissan has decided to replace the fuel injectors and affected hoses on these vehicles free of charge because we are concerned about the safety and satisfaction of our customers.

This campaign also covers the cost of replacing water or vacuum hoses that may be damaged during the repair procedure. This campaign does not cover normal maintenance items such as air and oil filters, belts, spark plug wires, etc. A complete list of "Related Parts Information" and QC inspection information is provided at the end of this bulletin.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check and repair each vehicle within the range of the campaign which for any reason enters the service department. This includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in dealer inventory.

Effective with the receipt of this information, dealers should perform the campaign repair for any affected vehicle entering their dealership. The practice of replacing injectors as individual components or performing partial fuel injector system repairs on vehicles in this campaign should be discontinued immediately. The only authorized fuel injector repair for the vehicles in this campaign is as specifically described in this bulletin, and as coded in this bulletin (P5137), regardless of prior repair history.

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Preparation - Engine Performance Assessment Test

- With the vehicle partially warmed up (temperature gauge moved slightly from full cold), and in neutral gear position, check the following items:
 - A. Does the engine start easily?
 - B. Does the engine idle at 1200 rpm or below?
 - C. Does the engine idle smoothly?
 - D. Does the engine stall during idle?
 - E. Are there any abnormal sounds such as vacuum leaks from the engine at idle?
 - F. Does the engine speed increase smoothly without hesitation, knocking and backfire?

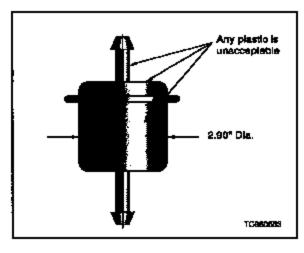
NOTE ANY DRIVEABILITY PROBLEMS ON THE REPAIR ORDER AND ADVISE THE CUSTOMER OF THE CONDITION.

SERVICE PROCEDURE

- Record the radio presets.
- Open the hood and protect the fenders with fender covers.
- Release the fuel pressure as follows:
 - Remove the fuel pump fuse.
 - B. Start the engine and let it run until the engine stalls. Turn the ignition switch to 'ON' and crank the engine several times. This will ensure that no fuel pressure is remaining in the fuel rail. With the key off, reinstall the fuel pump fuse.
 - C. Connect a fuel pressure gauge to the engine side of the fuel filter to test the function of the fuel pressure regulator.

NOTE: If the fuel filter shows any sign of leakage or is not designed for this specific application, the fuel filter must be replaced. Fuel filter require ments for this specific application are:

- All metal construction. (Nissan is concerned that a plastic fuel filter may be damaged during hose replacement and any damage may not be easily detected).
- b. Flow-through design with the inlet and outlet fittings aligned on the filter's center line.
- Fuel filter body diameter of 2.90 in., and fits the fuel filter holding bracket securely.



D. Start the engine and read the fuel pressure at Idle. Record this reading on the repair order. With the vacuum hose removed, the pressure should be no more than 45 psi. If the pressure rises above 45 psi, you will need to replace the fuel pressure regulator and check fuel return lines for obstructions later in this procedure.

NOTE:

Damp fuel hoses and/or fuel pressure regulator may give the impression that the fuel pressure regulator is leaking fuel, however, most incidents are caused by a leaking fuel hose, not the fuel pressure regulator. If the fuel pressure regulator is suspected of leaking, remove the vacuum hose and inspect for fuel in the vacuum hose. Replace the fuel pressure regulator if fuel is found in the vacuum hose.

- E. Remove the fuel pump fuse and release the fuel pressure following the procedure in step "3B" above.
- F. Remove the fuel pressure gauge and reinstall the fuel hose to its original position.
- G. DISCONNECT THE NEGATIVE BATTERY CABLE.

<u>CAUTION</u>: The injector circuit has battery voltage applied regardless of ignition switch position. Damage to injectors may occur if the battery is left connected while performing this campaign.

Disassembly - Passenger Side (Right Side)

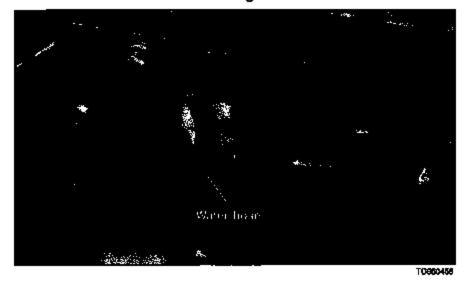
- While wearing proper eye protection and a respirator, blow the engine compartment free of dust.
- 2. Disconnect the water hose (plenum) above the air regulator. It is not necessary to drain the coolant to perform this procedure, however some coolant will spill when the upper plenum water hose is disconnected so use a rag to catch the spilled coolant. Leave the radiator cap in place to reduce the amount of coolant loss and the creation of air pockets in the system. Also disconnect the PCV hose.



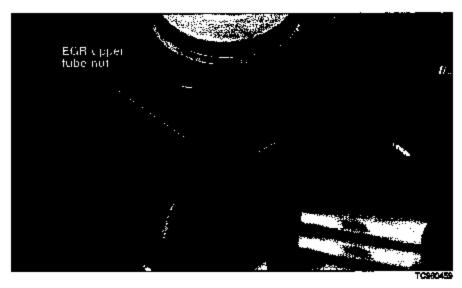
Unclip the accelerator and ASCD cables from the bracket. Do not remove the bracket.
Disconnect the air regulator electrical connector. Remove the air regulator (be careful not to lose the O-ring), the two ground wires attached to the IAA unit, and the IAA unit electrical connector.



Disconnect the water hose under the air regulator.



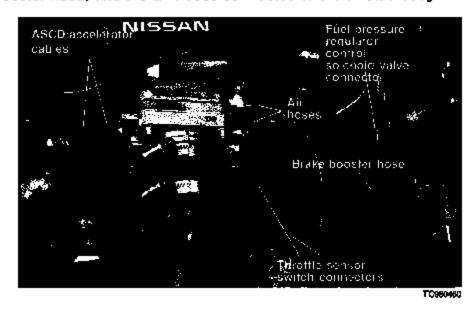
 Remove the EGR valve upper tube nut and loosen the EGR lower tube nut. Applying Permatex® FASTBREAK Super Penetrant or similar product will assist in loosening the nuts.



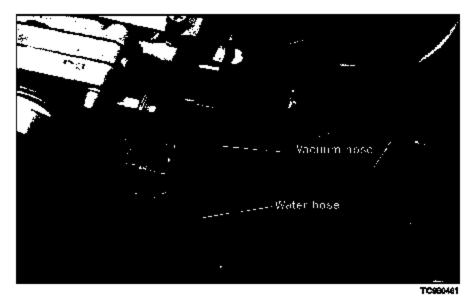
6. Disconnect the EGR temperature sensor connector (if equipped).

Disassembly - Driver's Side (Left Side)

- Make sure the accelerator and ASCD cables are tight in the bracket, then remove the bracket with the cables from the plenum.
- Disconnect the accelerator cable and the ASCD cable from the throttle valve and position them out of the way. Be careful not to kink or pull on the cables.
- Disconnect the EGR solenoid valve connector and the fuel pressure regulator control solenoid valve connector.
- Disconnect the throttle sensor and throttle switch connectors, #4 spark plug wire, the brake booster hose, and the air hoses connected to the throttle body.



Disconnect the water and vacuum hoses behind and underneath the throttle switch/ sensor. Loosen the air duct clamps.

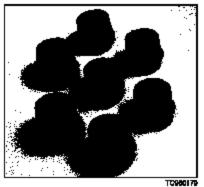


Remove the plenum ornament cover Allen head bolts, then remove the plenum ornament cover.

Remove any carbon from the plenum bolt heads. Then using a breaker bar, remove. the five plenum bolts. Tap the edge of the plenum with a plastic mallet to free it from the intake manifold and lift the plenum from the Intake manifold.

NOTE: Be sure not to damage the air duct and wiring harness as you remove the plenum.

Set the plenum aside and immediately cover the intake manifold and plenum holes with 12 manifold plugs, J42056, that were provided as part of this campaign. Also cover the intake duct opening.



J42056 manifold plugs



Manifold plugs installed

- Remove and discard the fuel hose between the fuel filter and fuel rail.
- Disconnect and discard the frame-to-filter hose.
- Install the new frame-to-filter hose supplied with the supplemental kit.
- Install a new Genuine Nissan fuel filter (if required per the criteria on page 2).
- Disconnect all injectors. Be careful not to damage the connectors.
- Using a gasket scraper, CAREFULLY remove the intake manifold gasket from the intake manifold and plenum surfaces. Also remove the plenum ornament cover gasket from the plenum and ornament cover.

NOTE: Some intake manifold gaskets may contain asbestos. Use proper eye and respiratory protection when removing the gasket.



Carefully cut both hoses from the fuel pressure regulator. Cut the hoses in the middle to avoid damaging the regulator tube surface. Do not cut the hoses near the fuel pressure regulator outlets. Scratches or scoring of the fuel tubes can cause fuel leaks. Cut the crossover hose in the middle.



- Remove the fuel rail bracket bolts and the injector holder bolts.
- 17. Lift the fuel rail assembly from the engine. Be careful not to drop the injector spacers. Drain any residual fuel from the rails into a suitable container. Tag and retain the parts per Nissan's warranty policy and procedures.
- 18. If the fuel pressure regulator failed the pressure test in step 3D (page 3, SERVICE PROCEDURE), or if the fuel temperature sensor connector is broken off, replace the fuel pressure regulator at this time.

<u>NOTE</u>: Prior to replacing the fuel pressure regulator, use air pressure to make sure the fuel return line is not restricted.

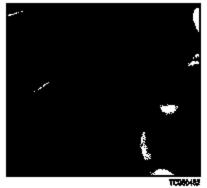
If you are not replacing the fuel pressure regulator, remove the hose remnants from the regulator using **Mac HFL 4790** hose pliers or other suitable hose removal pliers.

Be careful not to scratch, gouge, or damage the fuel tube inlet surfaces in any way or leaks may occur.

 Remove the lower injector insulators from the intake manifold. Also check that no injector spacers were left behind when you removed the fuel rail.

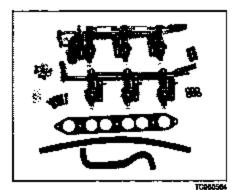
Assembly - Injectors/Intake Plenum

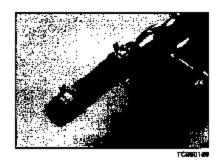
 Lay out both new fuel rails and new hardware supplied with this campaign. Note the new spring type clamps.



Do not leave injector insulators in manifold

NOTE: The 1987 Maxima Kit (16600-16E25) is used in combination with the 200SX Supplement Kit (14033-32F25) to perform this repair. Some parts from the '87 Maxima Kit are not used on the 200SX. They are: the fuel inlet hose, sub-tube hose and clamps, and the frame-to-filter fuel hose. The supplemental kit includes a new frame-to-filter hose, fuel inlet hose, and ornament cover gasket.





Fuel rail kit

Supplemental Kit

Spring type clamps

Tape the spacers in place on the injector holders with masking tape.



Injector rail assembly

Using a clean, fiber free applicator, such as a plastic coffee stirrer, lubricate the inside
of <u>all</u> of the fuel hoses with a small amount of the Dalfiell #10 oil that is provided with
this campaign. <u>Do not use cotton swabs or similar type applicators.</u>

NOTE: DO NOT use any type of cleaning solvents on the hoses supplied in the kit.

<u>DO NOT</u> use any oil/lubricant other than the Dalfiell #10 oil supplied in this campaign. Other oils/lubricants can react with the pre-applied adhesive on these replacement hoses.



Dalfiell #10 oil Nissan part no. 999MP-U5500



Always apply Daifloil #10 oil with fiber free applicator

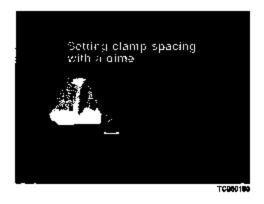
Lubricate the inside and outside of the lower injector insulators with the Daifloil #10
 CTFE oil and Insert the insulators into the intake manifold.

NOTE: Before installing the fuel rall assembles, check all injector tips for damage.

- Install the fuel rail assemblies. Set the assembly over the intake manifold and connect each fuel rail to the fuel regulator. Connect the crossover hose.
- Lower the injectors into the injector insulators in the manifold and install the holder bolts and fuel rail bracket bolts. Torque the injector holder bolts to 22-28 in-lbs (2.3 - 3.2 N·m). Torque the fuel rail bracket bolts to 13-16 ft-lbs (18 - 22 N·m).
- Position the clamps on the crossover tube and the fuel regulator hoses. Make sure the fuel tubes and hoses are in proper alignment. If a hose is stressed, it can cause a leak.

Install the fuel inlet hose. Tighten the hose clamps by hand. A clamp is over-tightened when a dime will not fit into the gap.

NOTE: An over-tightened clamp may damage the hose and cause a fuel leak.





- Inspect the injector connectors for damage. If any type of damage is found such as broken connectors, worn terminals due to corrosion, or pins pushed in or bent, install the sub-harness kit using the procedure beginning on Page 13 of this bulletin. If the injector sub-harness(es) do not need replacing, continue with this procedure.
- Attach the injector connectors to the fuel injectors on the passenger side of the engine.
 The driver's side injectors will be connected after the plenum is reinstalled.
- Blow all dirt and dust from the intake manifold, then remove the plastic intake manifold plugs. Be sure to wear protective goggles and respirator when removing dirt and dust.
- Brush a small amount of Permatex® High Tack Adhesive Sealant P/N 98H on the intake manifold and set the gasket in place.
- 13. Remove the plastic Intake plugs from the plenum and the cover from the air Intake. Lower the plenum over the engine, align the air duct with the air intake, and rotate the plenum into place on the manifold. Be sure the air duct and wiring harness are not damaged during installation.
- Install the intake manifold bolts, and torque them to 13 16 ft-lbs (18 22 N-m).
- 15. Tighten the air duct to the throttle body. Verify the air duct clamps do not interfere with the throttle valve opening.

Assembly - Driver's Side

- 1. Assemble the driver's side of the engine by completing the following steps:
 - Reinstall the air hoses to the throttle body.
 - B. Reinstall the water and vacuum hoses to the driver's side of the plenum.
 - C. Reinstall the AAC valve hose. Reconnect the connector for the AAC valve and the FICD solenoid valve.
 - D. Reconnect the connectors to the throttle sensor and the throttle sensor switch.

- E. Secure the ground wire at the plenum.
- F. Connect the three injector connectors to the appropriate injectors.
- G. Connect the accelerator and ASCD wires to the throttle valve and secure the bracket in place.
- H. Connect the #4 spark plug wire to the spark plug.
- Install the brake booster hose

Assembly - Passenger Side

- 1. Assemble the passenger side of the engine by completing the following steps:
 - A. Install the air regulator and its connector. Ensure the O-ring is in its proper location and tighten the bolts.
 - B. Install the water hose.
 - C. Install the PCV hose.
 - Install the air hose and vacuum hoses.
 - E. Install the EGR solenoid valve connector and pressure regulator control solenoid valve connector.
 - F Install the EGR valve upper and lower tube nuts and tighten to 24 32 ft-lbs (34 44 N·m).
 - G. Install EGR temperature sensor connector (if equipped).
 - H. Install two ground wires to the IAA unit.
- Install the plenum ornament cover with new gasket from the supplement kit. Clean all
 the plenum ornament cover bolt threads with a wire brush. Apply a small amount of
 Loctite® #222 (purple) to the bolt threads and torque each screw to 4 6 ft-lbs
 (6 8 N·m).
- Perform an electrical circuit test using the following procedure.

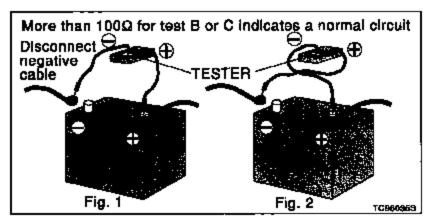
NOTE: The negative battery cable must not be connected prior to performing this test.

A. Turn the dome light switch off and close all doors and the trunk lid.



Install air regulator O-ring and connector

B. Check the resistance between the negative battery cable and the positive battery terminal with a volt/ohm meter. Make sure the contact points are clean and free of corrosion (Negative test lead to the negative battery cable; positive test lead to the positive battery terminal). Record this value on the repair order.



C. Reverse the tester leads and check the resistance, Fig. 2. (Negative test lead to the positive battery terminal; positive test lead to the negative battery cable). Record this value on the repair order.

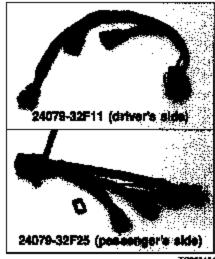
If the resistance value is more than 100 ohms in either step B or C, the circuit is normal.

If the resistance reading is less than 100 ohms in BOTH steps B and C, the circuit may be shorted. Check the injector harness to see if it is shorted to ground or damaged. Repair as necessary and recheck.

- Reconnect the ground lead to the battery and recheck your work.
- Start the engine and inspect for leaks.
- Perform the Engine Performance Assessment Test found on page 2 of this bulletin. Erase any codes stored in ECCS memory and reset the clock and radio presets.
- Perform the 'Final Dealer Inspection Checklist' on page 16 of this bulletin. Make a copy of this checklist for each vehicle that receives this campaign and attach the completed checklist to the vehicle repair order.

injector sub-harness installation

Perform this operation only if the connectors have been identified as being damaged per step 9 on page 10 of this bulletin. If the connectors are not damaged in any way, replacement of the injector harness(es) is not necessary.



DISCONNECT THE NEGATIVE BATTERY CABLE.

NOTE: This operation should be performed after replacing the injector and

tube kit with the plenum removed.

The injector circuit has battery voltage applied regardless of ignition CAUTION:

switch position. Damage to the injectors may occur if the battery is left

connected while performing this repair.

1. Remove the original engine sub-harness(es).

2. Layout the harness(es) on the appropriate bank.

The passenger side EGI harness female connector (located on the original vehicle 3. harness) has a moisture seal that must be replaced. Remove the seal with a small "pick" or similar tool. Install the new connector seal provided in connector kit P/N 24079-32F25. (On the driver's side, the moisture seal is pre-installed).



NOTE: The harnesses on the following pages have been wrapped in RED tape for clarity. Actual harnesses are wrapped in BLACK tape.

Passenger Side - #1, #3, and #5

A. Route the #1 harness below the spark plug cable. Route #3 & #5 above the spark plug cable. Connect the sub-harness to the appropriate injectors.



- B. Connect the coolant temperature sensor wire of new sub-harness to the coolant temperature sensor.
- C. Connect the new sub-harness to the EGI harness.
- D. After the plenum is installed, attach the connector band dip to the air hose.

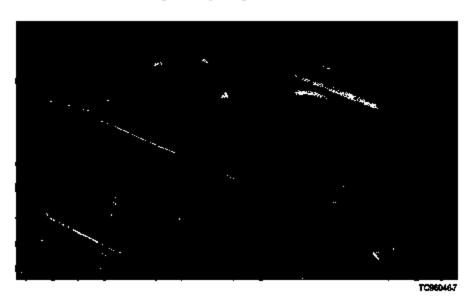
NOTE: Do not allow any portion of the harness to come in contact with any sharp objects.

Route #5 injector sub-harness away from the fuel hose clamp.

Driver's Side - #2, #4, and #6

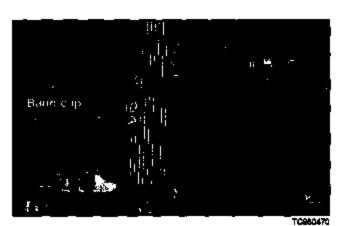
- A. Route the sub-harness <u>under</u> the spark plug cables. Connect the sub-harness to the appropriate injector connectors.
 - Make sure #4 injector wire does not come in contact with the accelerator cable bracket.
 - Allow enough clearance between the throttle wire drum and subharness.
- Connect the sub-harness to the EGI harness.

NOTE: Do not allow any portion of the hamess to come in contact with any sharp objects.









Overview after plenum installed

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES FINAL DEALER INSPECTION CHECKLIST

CUSTOMER	NAME VIN
R.O. #	DATE
CHECK WIT	TH ENGINE OFF
(1.)	ELECTRICAL CIRCUIT TEST RESULTS
(2.)	FUEL HOSES POSITIONED CORRECTLY ON FUEL LINES
(3.)	ALL HOSE CLAMPS TIGHTENED CORRECTLY
(4.)	ALL ELECTRICAL CONNECTIONS SECURE
(5.)	VACUUM HOSES INSTALLED
CHECK WIT	H ENGINE RUNNING
(6.)	CHECK ALL FUEL HOSES FOR LEAKS
(7.)	TEST DRIVE - CHECK FOR COOLANT AND VACUUM LEAKS
(8.)	REPEAT DRIVEABILITY TEST FROM PAGE 2 AND CONFIRM NO CHANGE
(9.)	CHECK FOR DRIVEABILITY PROBLEMS
(10.)	CHECK RADIO PRESETS
(11.)	TURN OFF ENGINE AND VERIFY COOLANT RESERVOIR AT MAXIMUM LEVEL. TOP OFF IF NECESSARY

SPECIAL TOOLS - REQUIRED TO PERFORM THE SERVICE PROCEDURE

 Intake manifold plugs (24), Kent-Moore P/N J42056 (initially supplied at no charge with this campaign).

NOTE: Additional manifold plugs (in packages of 24) may be purchased by calling Tech-Mate at 800-NMC-2001.

- Hose removal pliers, MAC Tools P/N HFL 4790 (or equivalent).
- Daifioil #10 (CTFE) oil, Nissan P/N 999MP-U5500 (the same oil as used in the Maxima/300ZX campaign).

PARTS KIT INFORMATION

Complete Injector and Supplemental Kits (both are required)

Part Description	Part Number	Quantity	
Main Fuel injector kit*	16600-16E25	1	
*Contains all of the following:			
Fuel injector assembly	16600-16E12	6	
	or		
	16600-16E17		
Fuel tube - LH	1 <u>7521</u> -1 <u>9</u> P11	1	
Fuel tube - RH	17522-16E11	1	
Fuel injector hose socket	16615-35F00	6	
Fuel hose	17524-V5003	3	
Hose clamps	16439-16E00	8	
Hose clamps	16439-53A00	2	
Fuel injector insulator - lower	16636-V5000	6	
Collar	16613-V5000	6	
Screw	08360-63062	. 6	
Intake manifold gasket	14033-75P00	1	
Fuel hose (frame to filter)	17552-13E60	1	DISCARD
Fuel feed hose	16441-S6200	1	DISCARD
Fuel sub-tube hose	17524-V5003	1	DISCARD
Fuel tube spacer	16614-D4200	6	
Washer	16611-V5000	6	

Supplemental kit	14033-32F25	1
(Order in addition to 16600-16E25)	{	
Contains all of the following:	(
Gasket - collector	A4033-32F01	1
Hose - fuel (frame to filter) bulk hose	Not available	1
Hose - fuel feed	Not available	1

RELATED PARTS INFORMATION

(May be replaced as part of the campaign if necessary)

Part Description	Part Number				
Sub-harness - LH (driver's side)	24079-32F11				
Sub-harness kit - RH (passenger skie)	24079-32F25				
Contains:					
Sub hamess - RH	Not available				
Connector seal	Not available				
Fuel pressure regulator assembly	22670-V5221				
Fuel filter	16400-N7600-JP				
Blow by hose A	11827-32F00				
Blow by hose B	11828-32F00				
Hose clamp - blow by	16439-V5002				
Hose clamp - blow by	16439-V5001				
Control valve assembly	11810-F0502				
Air hose	14060-32F10				
Air hose	14060-16E10				
Air hose	14060-32F01				
Fuel feed hose (bulk)	A6440-N7686				
Fuel return hose (bulk)	16445-32F00				
Hose clamp	17111-32F00				
Hose clamp	17111-32F01				
Air inlet hose	14463-17M00				
Hose clamp - air inlet hose	14464-W1503				
Water hose	14056-32F02				
Water hose	14056-32F12				
Water hose	14056-16E01				
Hose clamp - water hose	24220-05E00				
Vacuum hose (2 mm. dia. bulk)	B2320-28F10				
Vacuum hose (3 mm. dia. bulk)	A8761-M4901				
Hose clamp	24346-79981				
Hose band	01552-00083				
Hose band	24220-R2000				

RELATED PARTS INFORMATION

(May be replaced as part of the campaign if necessary)

Connector Description	Harnesa/Sensor Side	Number of Pins in Connector	Kent-Moore Pari Number	NMC Part Number	
FICD, EGR temperature sensor	Hamess	2	J38751-6	B4342-0WFW0	
FICD, EGR temperature sensor	Sensor	2	J38751-7	84342-79905	
EGR solenoid, Engine temperature sensor	Harness	2	J38751-16	B4342-0WFB0	
EGR solenoid, Engine temperature sensor	Sensor	2	J38751-17	B4342-79904	
Throttle position sensor, O _a sensor	Hamess	3	J38751-8	B4343-0WFW0	
Throttle position sensor, O, sensor	Sensor	3	J98751-9	B4343-79904	
Throttle position switch	Hamess	3	N/A	24027-80Y20	
AAC valve, O _z sensor	Herness	. 4	J38751-10	B4344-79902	
AAC valve, O, sensor	Sensor	4	J38751-11	B4344-79903	
Air regulator	Harness	2	N/A	24027-80Y15	

RELATED PARTS INFORMATION

Part Description	Part Number	Model Year		
Daifloil # 10 (CTFE) oil (1)	999MP-U5500 (2)	All		

NOTES:

- 1. Order from Nissan Parts.
- 2. Do NOT claim this P/N on the Campaign Claim

CLAIMS INFORMATION

Campaign I.D.: P5137 Program No.: 01

OPERATION	OP CODE	FHT (1)			
Install Kit	P51370	2.7 hrs.			
R&R Fuel Pressure Regulator	P51371	0.2 hrs.			
Install One Sub-Hamess (2)	P51372	0.1 hrs.			
Install Both Sub-Hamesses (2)	P51373	0.2 hrs			

NOTES: 1.

- Flat Rate Time(s) include sufficient labor time for the replacement of any of the "Related Hoses/Parts/Electrical Connectors" listed in the Parts Information tables on pages 17-19.
- Use either P51372 <u>OR</u> P51373, but not both.

TOWING EXPENSE

If required, towing expenses to the nearest Nissan dealer should be submitted using expense code 501.

VOA FREIGHT REIMBURSEMENT

For this campaign **only**, VOR freight expense, for VOR freight <u>not prepaid</u> by Nissan, may be submitted using expense code *600*.

RENTAL VEHICLE EXPENSE ASSISTANCE

If the vehicle is inoperative awaiting parts ordered through the *Customer Care* process, rental vehicle assistance may be submitted using Expense Code *502*. The maximum dollar reimbursement is \$30.00 per day for up to 3 days (\$90.00 total). Amounts exceeding \$90.00 will require regional claim approval.

Expense Code	Coverage 1	Amount 1
502	CM	Actual amount

PARTS RETENTION

For this campaign only, removed parts must be scrapped as soon as:

- The QC Inspection (if required) has been performed and the inspector concurs that the campaign repairs have been properly completed. (Details are provided in Nissan Campaign Bulletin NTB96-010b).
- The work order line has been reported as paid on the daily Claims Activity Report (New Claims System dealers - Report #VWO5020-R1).

Quality Control (QC) Inspection

Dealers <u>must</u> request 3rd party QC inspection immediately following completion of campaign repairs (P5137). The QC inspections will be conducted by *integrated Warranty Services*, *Inc.* (IWS). This requirement will stay in effect until further notice.

Requests for QC inspections may be made by completing the IWS inspection Request Form included in this bulletin and faxing it to (310) 323-3636. Please photocopy the IWS inspection Request Form as needed to ensure an adequate supply of forms for future QC inspections. Inspectors will be at the dealership within 36 hours.

An IWS Inspection Report stating that campaign repairs are complete and correct must exist before dealer submission of the campaign claim (P5137). Inspector determination that repairs are incomplete or incorrect will be reported to the dealer service manager immediately following inspection and must be completed or corrected by the dealer (without cost to Nissan or the customer). Vehicles must then be inspected again.

Copies of both Quality Control Inspection Checklists used by inspectors to guide them through each vehicle inspection are included in this bulletin. A copy of the IWS Inspection Report has also been included for your information. This report will be supplied and completed by the IWS inspector for every inspected vehicle. The dealer copy of each report must be kept in the vehicle service file with all other repair documentation.

If the dealer fails to request QC inspection and receive inspector concurrence that all repairs have been properly completed, Nissan may charge back to the dealer the entire campaign claim amount.

NISSAN

NISSAN MOTOR CORPORATION U.S.A

Poet Office Box 1: Gardone, California 90248-01 Telephone (810) 771-81

QUALITY CONTROL INSPECTION CHECKLIST 1987-88 200SX (S12) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any decrepancies found. All inspections are visual.

		PRE-INSPECTION
	a)	Verify the repair order was signed by the Service Advisor or Service Manager.
	b)	Verify the repair order has the following:
		An engine condition check was performed prior to work conducted on the vehicle.
		Fuel pressure regulator pressure reading was taken (replace if more than 45 p.s.i.)
		Electrical resistance test performed (two readings in Ohma)
	c)	A checklist (provided with the bulletin) should be signed by the technician and attached to the repair order.
		SUB-HARNESS AND FUEL HOSE ROUTING
		PASSENGER SIDE
1. Si	UB-I	HARNESS CONDITION
		New sub-harness installed if original harness has damaged or corroded connectors.
	۳,	Note: The new harness is not spliced into the original
	~. ~	,
		TING OF SUB-HARNESS FOR INJECTORS #1, #3, & #5
	-	#1 routed under spark plug cables.
	_	#3 & #5 routed above spark plug cable.
ш	C)	Attached to the tie-wrap on the EGI connector to the air hose.
-		If the tie-wap is missing, a regular type tie wrap can be applied.
		The harmess must not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
		Wires must not be pinched at the lower attachment of the air regulator.
	•	Connectors must be escured to fuel injectors.
_		#5 injector harmess not to contact fuel hose clamps.
		HOSE
_		New fuel hose, between filter and inlet tube, should be installed ("HI-PREX D" or "DII").
		Return hose must not be damaged or cracked.
	c)	One protector located near upper radiator hose clamp.
7. Fl	JEL	HOSE CLAMPS
	a)	Two (2) kit clamps installed on the new hose. No worm gear type on any hose.
	b)	Verify all fuel hose clamps are not over-tightened. Use a dline to measure the clamp opening.
		Check all inlet and return hoses.
8. FI	JEL	FLTER
	a)	Fuel filter properly seated in the bracket (filter flange should face up). It must be replaced if:
		Leaking
		Non-Nissan specification (wrong size or type)
		Plastic housing or hose fittings
g F1	JEI	HOSE ROUTING
:		Inlet and return hoses must be clipped together or locaety tie-wrapped together.
		Inlet and rober fuel been must not be storous!

SUB-HARNESS AND FUEL HOSE ROUTING

DRIVER'S SIDE

10. SUB-HARNESS CONDITION
New sub-hamess installed if original hamese has damaged or correded connectors.
Note: The new harness is not apliced into the original.
13. ROUTING OF SUB-HARNESS FOR INJECTORS #2, #4, ##6
a) Must be under the spark plug cable.
 b) The sub-hamess must not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
C) Make sure that the clearance between the eccelerator cable drum and the main and sub-hamess is at least 20 mm.
14. EGI HARNESS
B) Must be tie-wrapped to air by-pass hose.
GENERAL INSPECTION
15. BEFORE STARTING ENGINE
□ B) No fuel ameli.
□ b) Battery terminals tight.
 c) All vacuum hoses leading into the plenum are securely attached and are not split or brittle.
Note: Vacuum and coolant hoses covered by this campaign are listed in the campaign bulletin.
 d) Check that the throttle cables (throttle, cruise control, A/T) are correctly installed in the throttle drum.
Important: Verify the throttle moves emoothly and does not contact the air duct hose clamps.
 e) Verify vacuum hose connections and electrical connections at any visible locations.
The figure of the first programmed.
16. ENGINE RUNNING
🗀 a) No fuel smells.
b) No fuel leaks.

C No coolant leaks.

IWS_{Inc.} INSPECTION REQUEST FORM

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

Inspections can be ordered by the Nissan Dealer via FAX Number: (310) 323-3636

															R	egion:	ZIp Code:		
																Dealer Contact name FAX Number:			
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VIN #																Vehicle Mileage	Requested inspection Date		
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NOTE: DEALERS MAY COPY THIS FORM

IWS_{Inc.}

INSPECTION REPORT

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

Dealer Region: Dealer State: S F/ ion item(s) which reg	
Dealer State: S	Technican: Inspection Date:
Dealer State: S	Inspection Date:
S F/	AJL
ion item(s) which red	
rol Inspection Checkli	
(passenger side)	
s for injector #1, #3, and #5	
(départe side)	
(Oriver's side)	
	-
for injectors #2, #4, and #6	
	(passenger side) s for injector #1, #3, and #5 (driver's side) s for injectors #2, #4, and #6

Dear Nissan Owner:

Nissan has received reports of **leaks in the fuel injection system** in 1987-1988 200SX V6 equipped vehicles. **Fuel leaks in your engine could result in a fire**. A fire in your engine compartment would pose a safety risk. To reduce the risk of engine fires, **Nissan will replace all of the fuel injectors and affected hoses on your car, free of charge**, regardless of your car's age or mileage. We are taking this step because we are concerned about your safety and satisfaction, even though we do not believe that these fuel leaks are due to any defect in your vehicle.

The fuel injection system in your car was designed in the early 1980s using state-of-the-art technology at that time. Since then, however, certain fuel additives have been approved for use in gasoline. These additives have resulted in deterioration of the fuel injectors, causing fuel leaks. In addition, fuel hoses that wear out due to age can leak fuel, contributing to the risk of fire. Nissan's recommended maintenance practices call for the replacement of deteriorated injectors and worn out fuel hoses in the fuel injector systems of these vehicles. Nissan has become concerned that some owners have postponed or omitted necessary maintenance of their vehicle's fuel injection system due to the expense, therefore increasing the risk of engine fire.

Nissan urges you to take advantage of this free fuel injector and related fuel hose replacement offer. The new fuel injectors have been made to reduce the effects of additives used in today's gasoline and the new fuel hoses will further reduce the possibility of leaks. After the new injectors and hoses are installed, it will continue to be important for you to follow the recommended maintenance schedule for the fuel injection system, including an inspection every 30,000 miles.

Contact your Nissan dealer as soon as possible to arrange for an appointment to have this free replacement service. The replacement will take approximately 3 hours, but your dealer may require your vehicle for a longer period of time based upon work schedules. Please bring this notice with you when you keep your appointment. Instructions have been sent to your dealer. If the dealer fails, or is unable to make the necessary repairs free of charge, you may contact the 200SX injector Campaign Headquarters, P.O. Box 2009, Bloomfield Hills, MI 48303. The toll free telephone number is: 1-800-867-7669. If you reside in Hawaii, please call: 808-836-0888.

The National Highway Traffic Safety Administration has a toll free auto safety hotline which can provide Information to you concerning auto safety issues. Their number is: 1-800-424-9393 (Washington, D.C. area residents may call: 202-366-0123).

If you have paid to have your fuel injectors replaced due to leakage, as a matter of customer goodwill, Nissan will relmburse you for reasonable documented costs. Please complete the enclosed Customer Goodwill Reimbursement Request Form and submit it along with all supporting documents to the address indicated. Nissan is taking this action to ensure your continued satisfaction with our products.

Thank you for your cooperation. We hope that you will take advantage of this important and unique program. We look forward to serving your automotive needs now and for many years to come.

NISSAN MOTOR CORPORATION U.S.A.



Post Office Box 191 Gardena, California 90248-0191 Telephone (910) 771-3111

CAMPAIGN BULLETIN

NTB96-010e May 17, 1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

This bulletin contains revised Service Procedures and Parts Information. Use this bulletin as a supplement to NTB96-010a.

APPLIED VEHICLES:

1984-1989 300ZX (Z31)

1985-1988 Maxima (U11)

APPLIED VIN:

ΑII

SERVICE INFORMATION

New Service Procedures have been developed for this campaign. These new procedures include:

- Fuel filter inspection and replacement instructions.
- A new fuel injector sub-harness for easier installation, better fit, and improved protection. The new harnesses are marked with two tape identification stripes.
 The color of the stripes are model and model year specific. Refer to page 8 of this bulletin for complete details.



If the Injector sub-harness you are installing has only one tape identification stripe, refer to Campaign Bulletin NTB96-010a for complete installation instructions.

- An improved sub-harness routing procedure.
- New sub-harness part numbers.

Begin using these new procedures as soon as you receive this bulletin and the correct parts.

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Technical Communications Department

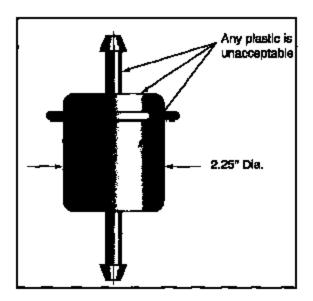
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SERVICE PROCEDURE

Fuel filter inspection/replacement for the 300ZX and Maxima

After installing a fuel pressure gauge and checking the fuel pressure, inspect the fuel filter. If the fuel filter shows any sign of leakage or is not designed for this specific application, the fuel filter must be replaced. Fuel filter regularments for this specific application are:

- All metal construction. (Nissan is concerned that a plastic fuel filter may be damaged during hose replacement and any damage may not be easily detected).
- Flow through design with the inlet and outlet fittings aligned on the fitter's center line.
- Fuel filter body diameter of 2.25 in., and fits the fuel filter holding bracket securely.



NOTE: If the fuel filter is replaced on the 300ZX, the frame-to-filter hose <u>must</u> be replaced. Refer to page 8 of this bulletin for the correct part number.

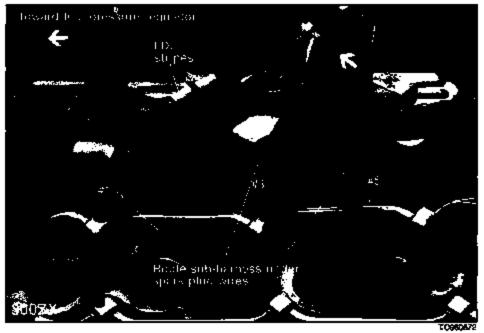
300ZX Sub-Harness Procedure

After splicing in the new injector sub-harness(es) (if necessary) and taping all connections, use the following revised routing procedures.

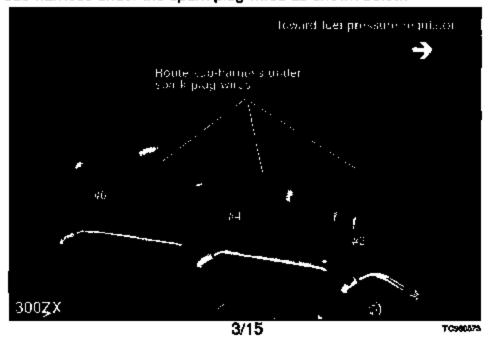
NOTE:

The injector sub-harnesses shown in the following pages are wrapped in green tape for clarity. Actual injector sub-harnesses are wrapped in black and have two tape stripes for identification. The color of the identification stripes varies depending on the model and model year. Refer to the Parts Information table on page 8 of this builetin for complete details.

 With the identification stripes toward the fuel pressure regulator, route the passenger side injector sub-harness as shown below. Make sure the injector sub-harness is routed <u>under</u> the spark plug wires. Note the tie strap location.



With the identification stripes toward the fuel pressure regulator, route the driver's side injector sub-harness under the spark plug wires as shown below.

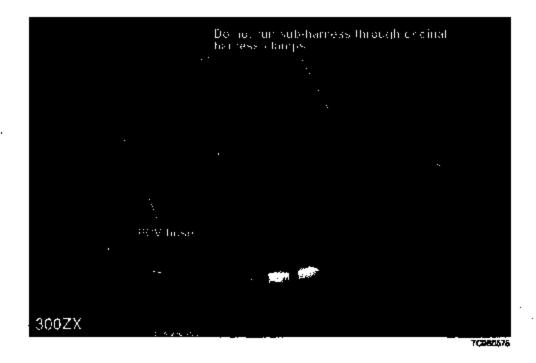


The Injector sub-harnesses should look like this after installation (if needed). Note the tie strap locations.



4. After the plenum is installed, make sure the passenger side injector sub-harness and main harness is routed exactly as shown below. Make sure the injector sub-harness does not come in contact with any sharp objects such as hose clamps and is not pinched in any area.

<u>Do not</u> route the injector sub-harness through the original harness clamps. Make sure the injector sub-harness is routed to the Inside of the PCV hose.



5. After the plenum is installed, the driver's side sub-harness should be routed exactly as shown. Make sure the injector sub-harness does not come in contact with any sharp objects such as hose clamps and is not pinched in any area. Make sure the injector sub-harness is not making contact with the throttle valve.

Tie wrap #2 injector sub-harness to the air bypass hose as shown below. Do not place the splice connection in the original harness clamp. Make sure the connection is routed under the IAA valve as shown.

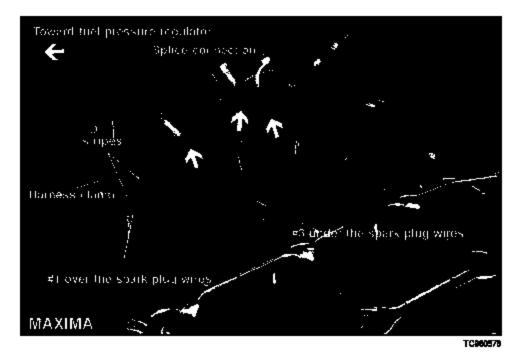


6. Route the EGI harness in the original harness clamps as shown. Replace any missing clamps with the part numbers as shown.

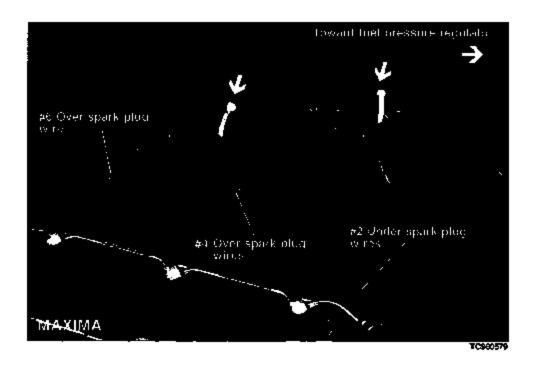


Maxima Sub-Harness Procedure

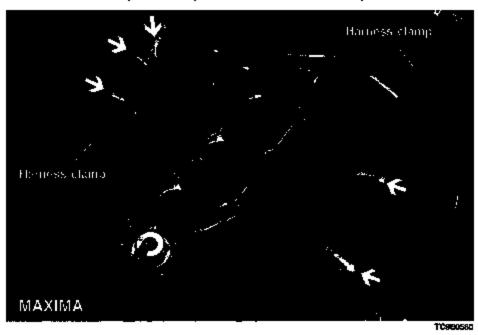
 With the identification stripes toward the fuel pressure regulator, the rear injector subharness should be routed exactly as shown below. The tie straps should be located exactly as shown.



With the identification stripes toward the fuel pressure regulator, route the front injector sub-harness exactly as shown below. The tie straps should be located exactly as shown.



 The injector sub-harnesses should be routed exactly as shown below. Make sure the original EGI harness clamps are in position and the tie straps are located exactly as shown.



After the plenum is installed, the rear injector sub-hamess should look like this.
 Note the tie strap locations.



PARTS and CLAIMS INFORMATION

RELATED PARTS INFORMATION

(May be replaced as part of the campaign if necessary)

300ZX

PART DESCRIPTION	PART NUMBER	MODELYEAR
Fuel filter	16400-0M200	84 - 89
Frame-to-filter hose	01995-00341	84 - 89
Fuel injector sub-hamess kit (yellow tape stripes)	24079-19P26	84 - 87
Fuel injector sub-harness klt (white tape stripes)	24079-25P26	88 - 89
Harness clamp	24210-01P02	84 - 89
Harness clamp	24210-01P05	84 - 89
Harness clamp	24210-05E00	84 - 89
Harness clamp	24225-01P02	84 - 89

Maxima

PART DESCRIPTION	PART NUMBER	MODELYEAR
Fuel filter	16400-0M200	85 - 88
Fuel Injector sub-hamess kit (grey tape stripes)	24079-16E26	85 - 87
Fuel injector sub-harness kit (blue tape stripes)	24079-42E26	88

CLAIMS INFORMATION

Sufficient labor time is provided in the FRT's for op codes P51370, P51372 and P51373 to accommodate the installation of these components, if required. Submit these parts, if any, as a part of the campaign claim.

300ZX PROCEDURE

 The injector sub-harnesses should look like this after installation (if needed). Note the tle strap locations.

MAXIMA PROCEDURE

PARTS and CLAIMS INFORMATION

RELATED PARTS INFORMATION

(May be replaced as part of the campaign if necessary)

300ZX

PART DESCRIPTION	PART NUMBER	MODEL YEAR		
Fuel filter	16400-0M200	84 - 89		
Frame-to-filter hose	01995-00341	84 - 89		
Fuel injector sub-hamess klt (yellow tape stripes)	24079-19P26	84 - 87		
Fuel Injector sub-harness kit (white tape stripes)	24079-25P26	88 - 89		
Harness clamp	24210-01P02	84 - 89		
Hamess clamp	24210-01P05	84 - 89		
Hamess clamp	24210-05E00	84 - 89		
Hamess clamp	24225-01P02	84 - 89		

Maxima

PART DESCRIPTION	PART NUMBER	MODELYEAR
Fuel filter	16400-0M200	85 - 88
Fuel injector sub-harness klt (grey tape stripes)	24079-16E26	85 - 87
Fuel injector sub-harness kit (blue tape stripes)	24079-42E26	88

CLAIMS INFORMATION

Sufficient labor time is provided in the FRT's for op codes P51370, P51372 and P51373 to accommodate the installation of these components, if required. Submit these parts, if any, as a part of the campaign claim.

Quality Control (QC) Inspection

Dealers <u>must</u> request 3rd party QC inspection immediately following completion of campaign repairs (P5137). These inspections will be conducted by *Integrated Warranty Services*, *Inc.* (IWS). This requirement will stay in effect until further notice.

Requests for QC inspections may be made by completing the IWS inspection Request Form included in this bulletin and faxing it to (310) 323-3636. Please photocopy the IWS inspection Request Form as needed to ensure an adequate supply of forms for future QC inspections. Inspectors will be at the dealership within 36 hours.

An IWS Inspection Report stating that campaign repairs are complete and correct must exist before dealer submission of the campaign claim (P5137). Inspector determination that repairs are incomplete or incorrect will be reported to the dealer service manager immediately following inspection and must be completed or corrected by the dealer (without cost to Nissan or the customer). Vehicles must then be inspected again.

Copies of both Quality Control Inspection Checklists used by inspectors to guide them through each vehicle inspection are included in this bulletin. A copy of the IWS Inspection Report has also been included for your information. This report will be supplied and completed by the IWS inspector for every inspected vehicle. The dealer copy of each report must be kept in the vehicle service file with all other repair documentation.

If the dealer fails to request QC inspection and receive inspector concurrence that all repairs have been properly completed, Nissan may charge back to the dealer the entire campaign claim amount.



NISSAN MOTOR CORPORATION U.S.A.

Post Office Box 191 Gardena, California 90248-0191 Telephone (310) 771-3111

QUALITY CONTROL INSPECTION CHECKLIST 1984-1989 300ZX (Z31) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any discrepancies found. All inspections are visual.

		PRE-INSPECTION
_		a) Verify the repair order was signed by the Service Advisor or Service Manager.
		b) Verify the repair order has the following:
		An engine condition check was performed prior to work conducted on the vehicle.
		Fuel pressure regulator pressure reading was taken (replace if more than 45 p.s.l.)
		Electrical resistance test performed (two readings in Ohms) c) A checklist (provided with the bulletin) should be signed by the technician and attached to the repair order.
		G) 15 October (A-O-1000) with the condition of Significancy and Experimental and American is a to repair a rest.
		SUB-HARNESS AND FUEL HOSE ROUTING
		ENGINE RIGHT SIDE (battery-side)
1.	SU	B-HARNESS IDENTIFICATION
		a) Two (2) bands of white or yellow identification taps should be on the new sub-harness and
		located near the fuel pressure regulator (front of engine).
		Note: If the harmose has a single tape band, use the old inspection checklist.
		LICING OF SUB-HARNESS
	무	a) The shrink sleeves should be fully shrunk.b) The splicing of the new harness to the original harness should be fully wrapped with electrical tape.
		c) Secured with a tie wrap to the middle of the PCV hose near the splice of the sub-harness.
	_	AND #5 SUB-HARNESS WIRES SECURED
	~·	a) #3 injector wire routed under spark plug cable.
	=	b) Connector is secured to fuel injector.
		c) The #3 and #5 injector wires should not interfere with the water hose clamp on the vertical hose going to the plenum
	₽	d) For bottom feed injectors: verify the fuel hose clamp screw at the #3 injector, does not contact
		the vertical coolant hose to the plenum.
	_	WIRE SUB-HARNESS SECURED
		g) Secured to the PCV hose by a tie-wrap about 1" above the valve cover. Be sure the PCV hose clamp does not contact the harness. The #1 harness should be routed around the outside of the hose.
		b) The connector must be secured to fuel injector.
	ā	c) Routed under the #3 & #5 spark plug cables.
5.	RO	UTING OF HARNESS
		a) The sub-harness must not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
		b) Verify that wires are not pinched at the lower attachment of the air regulator.
6.	0E	HARNESS
	□	Must be secured to two clamps located near the top of the plenum.
	ᄆ	b) #1 and #5 cut-off harness injector leads are sealed with shrink wrap and taped to CE harness.
	o.	c) The spliced connections and cut-off connector ends must not be inside any clamp.
1.	7U)	EL HOSE A) New first book (III-II DDEV DV or FDIE), between filter and joint tube, what he installed
	=	 a) New fue! hose ("HI-PREX D" or "DIF), between filter and inlet tube, must be installed. b) Return hose and frame-to-filter hose are not damaged of cracked.
	ă	c) If the dealer installed a new fuel filter, the frame-to-filter hase must also be replaced (P/N 01995-00341).
8.	FUI	EL HOSE PROTECTOR (on return line)
		a) Two protectors: (1) located near radiator hose clamp and canister hoses, and (2) located at fuel filter clamp.
9.	FUI	EL HOSE CLAMPS
		g) Two (2) kit clamps installed on the new hose. No worm gear type allowed.
		b) Verify all fuel hose clamps are not over-tightened. Use a dime to measure the clamp opening.

Check all inlet and return hose clamps.

SUB-HARNESS AND FUEL HOSE ROUTING

10. FUEL FILTER a) The fuel filter must be properly seated in the bracket (filter fienge should sit on the bracket). It must be replaced if:	_	ENGINE RIGHT SIDE (battery-side) [continued]							
Leaking Non-Nissan spedification (wrong size or type) Plastic housing or plastic hose fittings If the filter is replaced, be sure the frame-to-filter hose is also replaced. 11. FUEL MOSE ROUTING a) Inlet and return hoses must be clemped together with metal clemps (or loose tie wraps) at two points (preferably at the withe stripe of the hose.) b) Inlet and return fuel hose must not be stressed. ENGINE LEFT SIDE (driver-side) 12. SUB-HARNESS IDENTIFICATION a) Two (2) bands of white or yellow identification tape should be on the new sub-harness and located near the fuel pressure regulator (front of engine). Note: if the harness has a single band, use the old inspection checkliet. 13. SPLICING OF SUB-HARNESS a) The stirrink sleeves should be fully shrunk. b) The splicing of the new harness to the original harness should be fully wrapped with electrical tape. c) The spliced connections and cut-off connector ends must not be inside any damp. d) The spliced connection should be located below the IAA valve. 14. GENERAL SUB-HARNESS ROUTING a) The sub-harness must not come into contact with any sharp objects (such as screws, hose clamps, and brackets), b) Varify that the sub-harness is passing below the spark plug cables. c) Connector is secured to the fuel injector. d) The sub-harness must be content the screen of the fuel injector. d) The sub-harness must be content the screen of the PCV hose. 18. #4 AND #5 SUB-HARNESS WIRE ROUTING a) If a sub-harness must be under the #4 & #6 spark plug cable. c) Connector is secured to the fuel injector. d) The sub-harness must be under the #4 & #6 spark plug cable. d) The sub-harness must be under the #4 & #6 spark plug cable. d) The sub-harness must be under the #4 & #6 spark plug cable. d) The sub-harness must be under the #4 & #6 spark plug cable. d) #4 sub-harness must be under the #4 & #6 spark plug cable. d) #6 sub-harness must be under the #6 spark plug cable. d) The spliced connector is and cut-off connector ends must not be in	10. F	O. FUEL FILTER							
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Description of the hose of the hose.]	11. F	UEL HOSE ROUTING .							
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12. SUB-HARNESS IDENTIFICATION a) Two (2) bands of white or yellow identification tape should be on the new aub-harness and located near the fuel pressure regulator (front of engine). Note: if the harnesa has a single band, use the old inspection checklist. 13. SPLICING OF SUB-HARNESS a) The shink sleeves should be fully shrunk. b) The splicing of the new harness to the original harness should be fully wrapped with electrical tape. c) The splicad connections and cut-off connector ends must not be inside any damp. d) The splicad connection should be located below the IAA valve. 14. GENERAL SUB-HARNESS ROUTING e) The sub-harness in paneling below the spark plug cables. c) Make sure that the clearance between the accelerator cable drum and the OE and sub-harness is at least 20 mm. 15. #2 SUB-HARNESS WIRE ROUTING a) Must be under the spark plug cable. b) Must be the wrapped to air by-pass hose and routed under this hose. c) Connector is secured to the fuel injector. 18. #4 AND #8 SUB-HARNESS WIRE ROUTING a) #4 sub-harness must be under the #4 \$ #6 spark plug cables. b) #6 sub-harness must be under the #4 \$ #6 spark plug cables. c) Connector must be secured to the fuel injector. 17. OE HARNESS a) Must be secured by three (3) clamps or tie-wraps located near the top of the plenum. b) #2 & #6 cut off harness injector wires must be assaid with shrink skeeves and taped to the OE harness. The splicad connections and cut-off connector ends must not be inside any clamp. c) The splicad connections and cut-off connector ends must not be inside any clamp. GENERAL INSPECTION 18. BEFORE STARTING ENGINE a) No fuel smell. b) Battery terminals light. c) All vacuum hoses leading into the plenum are securely attached and are not split or brittle. Vacuum hoses (and coolant hoses) are covered by this campalgn if they are damaged. d) Check that the throttle cables (throttle, cruise corricle) at an armaeling in the throttle drum. d) Check has the effective former of the plenum		b) Inlet and return fuel hose must not be stressed.							
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_ , •		· · · · ·							
	H	f) Radio pre-sets programmed.							

19. ENGINE RUNNING

- a) No fuel smells.
 b) No fuel leaks.
 c) No coolant leaks.

NISSAN MOTOR CORPORATION U.S.A.



Post Office Box 191 Gardena, California 90248-0191 Telephone (810) 771-8111

QUALITY CONTROL INSPECTION CHECKLIST 1985-88 Maxima (U11) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any discrepancies found. All inspections are visual.

	PRE-INSPECTION
	_,
	An engine condition check was performed prior to work conducted on the vehicle.
	Fuel pressure regulator pressure reading was taken (replace if more than 45 p.s.i.). Electrical resistance test performed (two readings in Ohms).
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	SUB-HARNESS AND FUEL HOSE ROUTING
	ENGINE RIGHT SIDE - bulkhead
1. St	UB-HARNESS IDENTIFICATION
	 a) Two (2) bands of blue or gray identification tape should be on the new sub-harness and located
	near the fuel pressure regulator (front of engine).
	Corrugated tubing was also applied to the revised harness for the #5 injectors.
	Note: If the harmess has a single tape band, use the old inspection checklist.
	PLICING OF SUB-HARNESS
무	
8	
_	-,
	AND #5 SUB-HARNESS WIRES SECURED a) Connector must be secured to fuel injector.
0	•
	c) #3 routed under the #5 spark plug cable.
ō	
4. #1	WIRE SUB-HARNESS SECURED
_	secured to air hose with a tie-wrap.
	OUTING OF SUB-HARNESS
ш	 a) Harness must not come into contact with any sharp objects (such as screws, hose clamps, and brackets) or source of high heat (EGR tube).
8 EI	UEL HOSE
<i>-</i>	
_	b) Return hose condition must not be damaged or cracked. (P/N 16445-16E00).
□	
7. F(JEL HOSE PROTECTOR (on return line)
	a) A protector sleeve should be over the hose and located near the fuel filler bracket, brake tube,
	and speedometer cable. Hose P/N A6445-16E00.
8. FL	JEL HOSE CLAMPS
	a) Kit clamps installed (4 clamps), no worm gear type.
	 b) Tightened. Use a dime to measure the clamp opening. Check inlet and return hose.

SUB-HARNESS AND FUEL HOSE ROUTING

ENGINE RIGHT SIDE - bulkhead (continued)

9. FU	EL FILTER						
	a) Fully seated in the bracket. It must be replaced if:						
_	Leaking						
	Non-Nissan specification (wrong size or type)						
	Plastic housing or plastic hose fittings						
	If the filter is replaced, be sure the frame-to-filter hose is also replaced.						
	in the mass is replaced, be able the mains-to-interactions is also replaced.						
10. FI	UEL HOSE ROUTING						
	 g) Fuel inlet and return hoses must be routed under the brake booster hose and the accelerator cable. 						
_	b) Inlet and return hoses must be clamped together with a loose tie wrap.						
┌	c) Inlet and return fuel hose must not be stressed.						
_	of the total fact the book to a factor						
	EMONE LETT CIDE						
	ENGINE LEFT SIDE - radiator						
11. S	UB-HARNESS IDENTIFICATION						
•	a) Two (2) bands of blue or gray identification tape should be on the new sub-harness and located						
	near the fuel pressure regulator (front of engine).						
	Corrugated tubing was also applied to the revised harness.						
	Note: If the harness has a single tape band, use the old inspection checklist.						
12. S	PLICING OF SUB-HARNESS						
	a) The shrink sleeves should be fully shrunk.						
	b) The splicing of the new harness to the original harness should be fully wrapped with electrical tape.						
ä	and the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contra						
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13. G	ENERAL SUB-HARNESS ROUTING						
	 a) The sub-harness must not come into contact with any sharp objects (such as screws, hose clamps, and brackets). 						
_	b) Secured to the EGI harness with one tie-wrap. The tie-wrap should be in the area of the splice and connect:						
_	the original #4 injector cut-off portion, sub-harness coupler area, and EGI harness.						
	c) Sub-hamess wires must be secured to the main harness by a tie wrap between #4 & #6.						
_							
14. #	2 SUB-HARNESS WIRE ROUTING						
	a) Must be under the #2, #4, & #6 spark plug cables.						
	b) Connector must be secured to the fuel injector.						
15 4	AND #6 SUB-HARNESS WIRE ROUTING						
	a) Must be routed so the wires go straight to the injector and over spark plug cables.						
	b) Connectors be secured to the fuel injectors.						
16. E	GI HARNESS						
	a) Harness secured in guide clip located near the distributor.						
=	b) EGI harness tie-wrap located near the throttle body.						
_	•,						
	OFNERAL INCRECTION						
	GENERAL INSPECTION						
17. B	EFORE STARTING ENGINE						
	a) No fuel smell.						
ă	b) Battery terminals tight.						
_							
	c) All vacuum hoses leading into the plenum are securely attached and are not split or brittle.						
_	Vacuum hoses (and coolant hoses) are covered by this campaign if they are damaged.						
	d) Check that the throttle cables (throttle, cruise control, A/T) are correctly installed in the throttle drum.						
	e) Verify vacuum hose connections and electrical connections at any visible locations.						
	f) Radio pre-sets programmed.						
18. E	NGINE RUNNING						
	a) No fuel smells.						
	→						
₽	b) No fuel leaks.						
	c) No coolant leaks.						

IWS_{Inc.} INSPECTION REQUEST FORM

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

Inspections can be ordered by the Nissan Dealer via FAX Number: (310) 323-3636

De	Dealer Name: R						tegion:					Zip Code:															
De	aler Code: Dealer Contact name																										
Dealer Contact Phone Number:						FAX Number:																					
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NOTE: DEALERS MAY COPY THIS FORM

IWSInc. INSPECTION REPORT

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

A FUICTE	INFORMATION		
Į	☐ MAXIMA ☐ 300ZX NON	-TURBO	☐ 300ZX TURBO
VIN:			Model Year:
Dealer Nam	e:		Dealer code:
Repair Orde	or #:		Technican:
WS Inspect	tor No:		Inspection Date:
	PASS If FAIL, check the inspection its Refer to the Quality Control Insp		nich required repair.
	MAXIMA		300ZX
	Sub-harness identification	1.	Sub-hamess identification
	2. Splicing of sub-harness		Splicing of sub-harness
	3. #3 & #5 sub-harness wires secured		#3 & #5 sub-harriess wires secured
	4. #1 wire sub-harness secured		#1 wire sub-harness secured
	5. Routing of harness		Routing of hamess
	5. Fuel hose		OE harness
7	7. Fuel hose protector (on return line)	7.	Fuel hose
	B. Fuel hose clamps	8.	Fuel hose protectors (on return line)
	9. Fuel filter		Fuel hose clamps
10	D. Fuel hose routing	10.	Fuel filter
	Sub-harness identification	11.	Fuel hose routing
12	2. Splicing of sub-hamess		Sub-hamess identification
	3. General sub-harness routing		Splicing of sub-harness
	4. #2 sub-harness wire routing		General sub-hamess routing
15	5. #4 & #6 sub-harness wire routing	15.	#2 sub-harness wire routing
	6. Harness secured	16.	#4 & #6 sub-harness wire routing
17	7. Before starting engine		QE harness
	3. Engine running	18.	Before starting engine
		19.	Engine running

REFINITI Division 18501 South Figueroa Street Gardena, Celifornia 90248-4500 Telephone \$10-771-3111



CAMPAIGN BULLETIN

Classification

Data

ITB96-024

May 17, 1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES.

APPLIED VEHICLES: 1990-1992 M30 (F31)

APPLIED VIN:

ΑII

INTRODUCTION

Infiniti has received reports of leaks in the fuel injection system on the above vehicles. Fuel leaks in the engine can result in a fire. Infiniti has investigated these leaks and found that certain fuel additives approved for use in gasoline after these vehicles were designed have resulted in deterioration of the fuel injectors causing fuel leaks. In addition, Infiniti has found fuel leaks due to worn out hoses which have not been replaced according to the maintenance schedule. Although Infiniti has determined that these fuel leaks are not due to any defect in the vehicles, Infiniti has decided to replace the fuel injectors and affected hoses on these vehicles free of charge because we are concerned about the safety and satisfaction of our customers.

This campaign also covers the cost of replacing water or vacuum hoses that may be damaged during the repair procedure. This campaign does not cover normal maintenance items such as oil and air filters, belts, spark plug wires, etc. A complete list of "Related Parts Information" is provided at the end of this bulletin.

A Quality Control (QC) inspection is required for all repairs performed in this campaign. See page 26 of this bulletin for further details.

DEALER RESPONSIBILITY

It is the dealer's responsibility to check and repair each vehicle within the range of the campaign which for any reason enters the service department. This Includes vehicles purchased from private parties or presented by transient (tourist) owners and vehicles in dealer inventory.

Effective with the receipt of this information, dealers should perform the campaign repair for any affected vehicle entering their dealership. The practice of replacing injectors as individual components or performing partial fuel injector system repairs on vehicles in this campaign, should be discontinued immediately. The only authorized fuel injector repair for the vehicles in the campaign is specifically described in this bulletin, and as coded in this bulletin (P5137), regardless of prior repair history.

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Technical Communications Department

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Preparation - Engine Performance Assessment Test

- With the vehicle partially warmed up (temperature gauge moved slightly from full cold), and in neutral gear position, check the following items:
 - A. Does the engine start easily?
 - B. Does the engine idle at 1200 rpm or below?
 - C. Does the engine idle smoothly?
 - D. Does the engine stall during idle?
 - E. Are there any abnormal sounds such as vacuum leaks from the engine at idle?
 - F. Does the engine speed increase smoothly without hesitation, knocking and backfire?

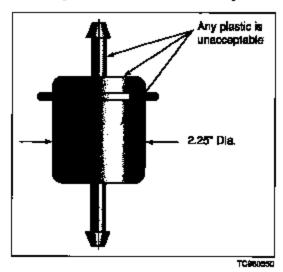
NOTE ANY DRIVEABILITY PROBLEMS ON THE REPAIR ORDER AND ADVISE THE CUSTOMER OF THE CONDITION.

SERVICE PROCEDURE

- Record the radio presets.
- Open the hood and protect the fenders with fender covers.
- Release the fuel pressure as follows:
 - Remove the fuel pump fuse.
 - B. Start the engine and let it run until the engine stalls. Turn the ignition switch to 'on' and crank the engine several times. This will ensure that no fuel pressure is remaining in the fuel rail. With the key off, reinstall the fuel pump fuse.
 - C. Connect a suitable high pressure fuel pressure gauge to the engine side of the fuel filter to test the function of the fuel pressure regulator.

<u>NOTE</u>: If the fuel filter shows any sign of leakage or is not designed for this specific application, the fuel filter must be replaced. Fuel filter requirements for this specific application are:

- All metal construction. (Infiniti is concerned that a plastic fuel filter may be damaged during hose replacement and any damage may not be easily detected).
- Flow through design with the inlet and outlet fittings aligned on the filter's center line.
- 2.25 in, diameter body and fits the fuel filter holding bracket securely.



<u>NOTE</u>: If the fuel filter is replaced, the frame-to-filter hose <u>must</u> be replaced. Refer to page 22 of this bulletin for the correct part number.

D. Start the engine and read the fuel pressure at idle. Record this reading on the repair order. With the vacuum hose removed, the pressure should be no more than 45 psi. If the pressure rises above 45 psi, you will need to replace the fuel pressure regulator and check fuel return lines for obstructions as outlined later in this procedure.

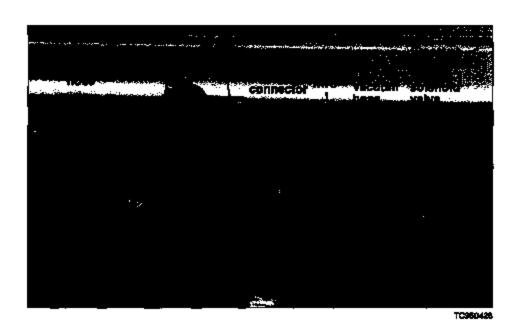
<u>NOTE</u>: Damp fuel hoses/fuel pressure regulator may give the impression that the fuel pressure regulator is leaking fuel, however, most incidents are caused by a leaking fuel hose, not the fuel pressure regulator. If the fuel pressure regulator is suspected of leaking, remove the vacuum hose and inspect for fuel in the vacuum hose. Replace the fuel pressure regulator if fuel is found in the vacuum hose.

- E. Remove the fuel pump fuse and release the fuel pressure following the procedure in step "3B" on page 2 of this bulletin.
- F. Remove the fuel pressure gauge and reinstall the fuel hose to its original location.
- G. DISCONNECT THE NEGATIVE BATTERY CABLE.

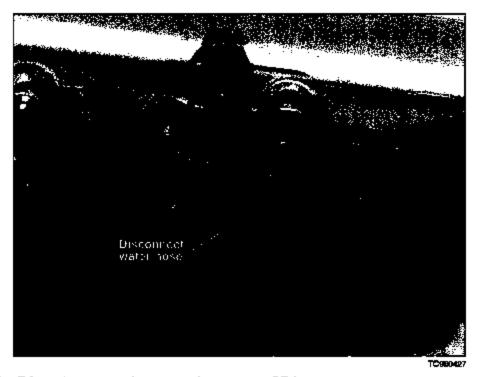
<u>NOTE</u>: Damage to injectors may occur if the battery is left connected while performing this campaign. The injector circuit has battery voltage applied regardless of ignition switch position.

Disassembly - Passenger Side (Right Side)

- While wearing proper eye protection and a respirator, blow the engine compartment free of dust.
- Disconnect the water hose above the air regulator. It is not necessary to drain the coolant to perform this
 procedure, however some coolant will spill when the upper plenum water hose is disconnected so use a
 rag to catch the spilled coolant. Leave the radiator cap in place to reduce the amount of coolant loss and
 the creation of air pockets in the system.
- Disconnect the brake booster hose, PCV hose, air regulator electrical connector, ground wire, and fuel pressure regulator vacuum hose at the fuel pressure regulator control solenoid valve.



4. Remove the air regulator from the plenum (be careful not to lose the O-ring) and then remove the water hose below the air regulator.



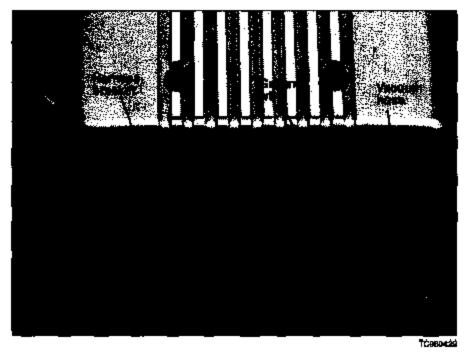
Remove the EGR valve upper tube nut and loosen the EGR lower tube nut.Applying Permatex® FASTBREAK Super Penetrant or similar product will assist in loosening the nuts.



- Disconnect the EGR temperature sensor connector (if equipped).
- 7. Remove the EGR solenoid connector. It is not necessary to remove the EGR valve bracket.

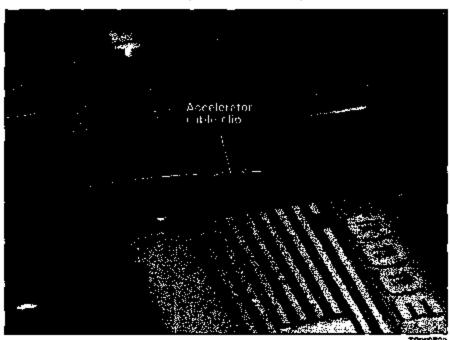
Disassembly - Front

 Disconnect the vacuum hose from the front of the plenum, then remove the hamess bracket and ground wire.



Disassembly - Driver's Side (Left Side)

1. Disconnect the accelerator cable from the clip at the rear of the plenum.



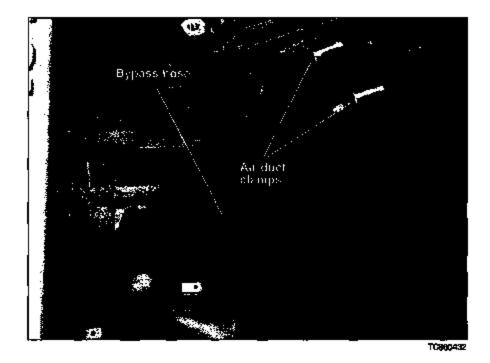
- Make sure the accelerator and ASCD cables are tight in the bracket, then remove the bracket with the cables from the manifold.
- Disconnect the accelerator cable and the ASCD cable from the throttle valve and position them out of the way. Be careful not to kink or pull on the cables.



Disconnect the AAC valve connector, the FICD connector, the throttle sensor and throttle sensor switch
connectors (not shown), the IAA air hose, the plenum ground wire and the driver's side injector connectors
(#2, #4, & #6).

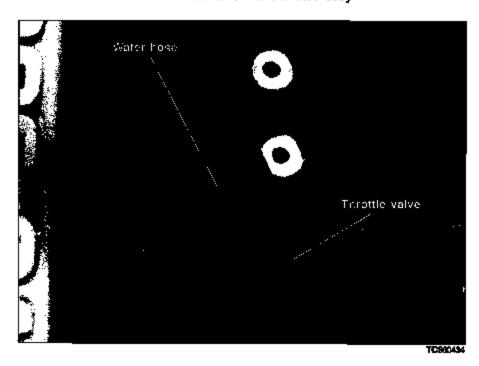


Disconnect the bypass hose, water and vacuum hose from the throttle body and plenum and loosen the air duct clamps.





6. Disconnect the water hose under the throttle valve of the throttle body.

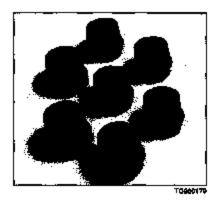


7. Remove the plenum ornament cover. Use an impact driver so you won't damage the screw heads.

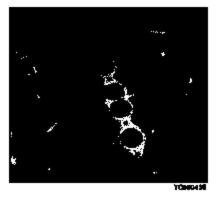
8. Using a breaker bar, remove the five plenum bolts. Tap the edge of the plenum with a plastic mallet to free it from the intake manifold and lift the plenum from the intake manifold.

NOTE: Be sure not to damage the air duct and wiring harness as you remove the plenum.

 Set the plenum aside and immediately cover the intake manifold and plenum holes with 12 manifold plugs, J42056, that were provided as part of this campaign. Also cover the air duct opening.



J42056 manifold plugs



Manifold plugs Installed

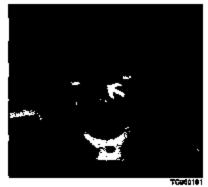
- Unplug the connectors from the three injectors on the passenger side of the engine.
 Be careful not to damage the connectors.
- Using a sharp gasket scraper, <u>CAREFULLY</u> remove the intake manifold gasket from the intake manifold/plenum surfaces.
 - CAUTION:

Some intake manifold gaskets may contain sebestos. Use proper eye and respiratory protection when removing the gasket.



Carefully remove the Intake gasket

12. Carefully cut both hoses from the fuel pressure regulator. Cut the hoses in the middle to avoid damaging the regulator tube surface. DO NOT cut the hoses near the fuel regulator cutlets. Scratches or scoring of the fuel tubes can cause fuel leaks. Cut the crossover hose in the middle.



Cut all fuel hoses in the middle to avoid damage to the regulator or fuel tubes

- Remove the fuel rail bracket bolts and then the injector holder bolts.
- 14. Lift the fuel rail assembly from the engine. Be careful not to drop the injector spacers. Drain any residual fuel from the rails into a sultable container. Tag and retain the parts per Infiniti's warranty policy and procedures.
- 15. If the fuel pressure regulator failed the pressure test in step 3D (Service Procedure page 3), or if the fuel temperature sensor connector is broken off, replace the fuel pressure regulator at this time.

<u>NOTE</u>: Prior to replacing the fuel pressure regulator, use minimal air pressure to make sure the fuel return line is not restricted.

If you are not replacing the fuel pressure regulator, remove the hose remnants from the regulator using **Mac HFL 4790** hose pliers or other suitable hose removal pliers. Be careful not to scratch, gouge, or damage the fuel tube inlet surfaces or fuel temperature sensor in any way.

16. Remove the lower injector insulators from the intake manifold. Also check to ensure that no injector spacers were left behind when you removed the fuel rail.



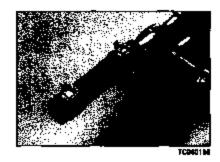
Do not leave injector insulators in manifold

Assembly - Injectors/Intake Plenum

Lay out both new fuel rails and new hardware supplied with this campaign.
 Note the new spring type clamps.

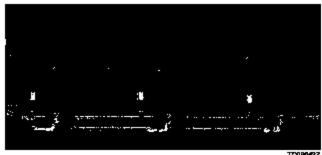


Fuel rail kit



Spring type clamps

Tape the spacers in place on the injector holders with masking tape.



Fuel rail assembly

 Using a clean, fiber free applicator, such as a plastic coffee stirrer, lubricate the inside of <u>all</u> of the fuel hoses with a small amount of the Dalfloil #10 that is provided with this campaign. <u>Do not use cotton</u> <u>swabs or similar type applicators.</u>

<u>CAUTION</u>: <u>DO NOT</u> use <u>any type</u> of cleaning solvents on the hoses supplied in the kit.

<u>DO NOT</u> use any oll/lubricant other than the Dalfioli #10 oil supplied in this campaign. Other oils/lubricants can react with the pre-applied adhesive on these replacement hoses.



Daiffoil #10 oil Infiniti part no. 999MP-U\$500



Always apply Daiffoil #10 oil with fiber free applicator

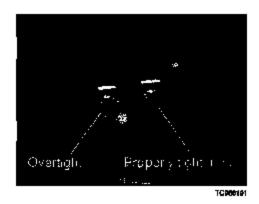
 Lubricate the Inside and outside of the lower injector insulators with the Daifloil #10 oil and insert the Insulators Into the intake manifold.

NOTE: Before installing the fuel rail assembles, check all injector tips for damage.

- Install the fuel rail assemblies. Set the assembly over the intake manifold and connect each fuel rail to the fuel regulator. Connect the crossover hose.
- Lower the injectors into the injector insulators in the manifold and install the holder bolts and fuel rail bracket bolts. Torque the injector holder bolts to 22 - 28 in-lbs (2.3 - 3.2 N-m). Torque the fuel rail bracket bolts to 13 - 16 ft-lbs (18 - 22 N-m).

- Install the fuel rall inlet hose provided with the injector kit. Tighten the hose clamps by hand. A clamp is
 properly tightened when a dime will just fit into the gap as shown in the photo below.
- B. If the fuel filter did not meet the requirements on page 2 of this bulletin, then replace it with a Genuine Infiniti fuel filter. When replacing the fuel filter, also replace the frame-to-lilter hose.





NOTE: An over tightened clamp may damage the hose and cause a fuel leak.

- 9. Inspect the injector connectors for damage. If any type of damage is found such as broken connectors, wom terminals due to corrosion, plns pushed in or bent, install a connector kit using the procedure beginning on page 15 of this bulletin. If an injector connector does not need replacement, continue with this procedure.
- Attach the injector connectors to the fuel injectors.
- 11. Blow all dirt and dust from the Intake manifold. Be sure to wear protective goggles and a respirator when removing dirt and dust. Remove the plastic intake manifold plugs and air duct cover.
- 12. Brush or spray a small amount of Permatex® High Tack Adhesive Sealant P/N 98H on the intake manifold and set the gasket in place.
- 13. Remove the plastic intake plugs from the plenum. Lower the plenum over the engine, align the air duct with the air intake, and rotate the plenum into place on the manifold. Be sure the air duct and wiring harness are not damaged during installation.
- Install the intake manifold bolts, and torque them to 13 16 ft-lbe (16 22 N·m).
- Install the air duct to the throttle body and tighten the clamps. Verify the clamps do not interfere with throttle operation.

Assembly - Driver's Side

- Assemble the driver's side of the engine by completing the following steps:
 - A. Reinstall the vacuum and air hoses to the throttle body.
 - Reinstall the water hoses under the throttle body.
 - Reinstall the air hose to the IAA unit.
 - D. Reconnect the connector for the AAC valve and the FICD solenoid valve.
 - E. Reconnect the connectors to the throttle sensor and the throttle sensor switch.
 - F. Reconnect the canister and vacuum hoses at the plenum.
 - G. Secure the ground wire at the plenum.
 - H. If no injector sub harness was replaced, reconnect #2, #4, & #6 injector connectors. (Refer to Page 6 of this bulletin for proper routing).
 - Connect the accelerator and ASCD wires to the throttle valve and secure the bracket in place.

Assembly - Front

Reinstall the vacuum hose, harness bracket and ground wire.

Assembly - Passenger Side

- Assemble the passenger side of the engine by completing the following steps:
 - A. Install the water hose under the air regulator.
 - B. Install the air regulator and its connector. Ensure the O-ring is in its proper location and tighten the bolts.



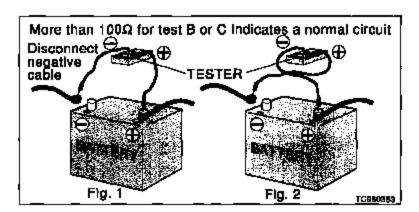
- Install the PCV hose.
- Install the brake booster hose.
- E. Install the EGR solenoid valve connector, pressure regulator control valve connector and vacuum hose.
- F. Install the EGR valve upper and lower tube nuts and tighten to 24 32 ft-lbs (34 44 N·m).
- G. Install the EGR temperature sensor connector (if equipped).
- Install the plenum ornament cover. Clean all the plenum ornament cover bolt threads with a wire brush. Apply a small amount of Loctite® #222 (purple) to the screw threads and torque each screw to 53 - 69 in-lbs (6 - 8 N·m).

NOTE: After the plenum is installed, make sure the EGI hamess is installed in the original clamps. If clamps are missing or broken, replace them using the following part numbers:

Driver's side: 24228-89964 and 24220-35F01

Passenger side: 24220-D5100

- Perform an electrical circuit test using the following procedure.
 - NOTE: The negative battery cable must not be connected prior to performing this test. If the terminal is corroded, clean with a wire brush.
 - A. Turn the dome light switch off and close all doors and trunk lid.
 - B. Check the resistance between the negative battery cable and the positive battery terminal with a volt/ohm meter. Make sure the contact points are clean and free of corrosion. (Negative test lead to the negative battery cable; positive test lead to the positive battery terminal). Record this value on the repair order.



C. Reverse the tester leads and check the resistance. (Negative test lead to the positive battery terminal; positive test lead to the negative battery cable).
Record this value on the repair order.

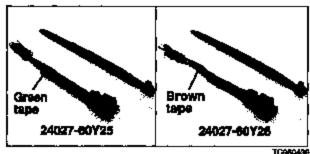
If the resistance value is more than 100 ohms in either step B or C, the circuit is normal.

If the resistance reading is less than 100 ohms in both steps B and C, the circuit may be shorted. Check the injector harness to see if it is shorted to ground or damaged. Repair as necessary and recheck.

- Reconnect the ground lead to the battery and recheck your work.
- Start engine and inspect for leaks.
- Perform the Engine Performance Assessment Test found on Page 2 of this bulletin. Erase any
 codes stored in ECCS memory and reset the clock and radio presets.
- Perform the 'Fina! Inspection Checklist' on page 20 of this bulletin. Make a copy of this checklist for each vehicle that receives this campalgn and attach the completed checklist to the vehicle repair order.

Intector Connector Kit Installation

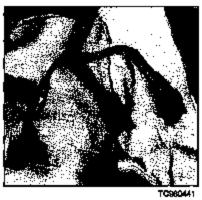
This procedure describes how to replace damaged individual connectors. Repeat this procedure on as many connectors as necessary. Replacement connector kits can be ordered individually through infiniti Parts and are designated as P/N 24027-60Y25 (passenger side, identified with green tape) and P/N 24027-60Y26 (driver's side, identified with brown tape).



Using the following chart, cut the damaged connector wire to the appropriate length. Do not cut more off
of the harness than is shown in the chart. Removing more harness than necessary will result in a
harness that is too short.

ĺ	Injector Number	Cutting Length instructions
1	1, 2, 3, 4, 6	2 in. (50 mm) from the branch of the E.G.1. harness
Ĺ	5	6 in. (150 mm) from the branch point of the E.G.I. harness







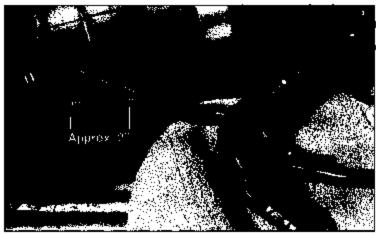
Injector #1 or #3

Injector #5

Injector #2, #4 or #6

Remove approximately 2 in. of the harness cover and separate the wires.

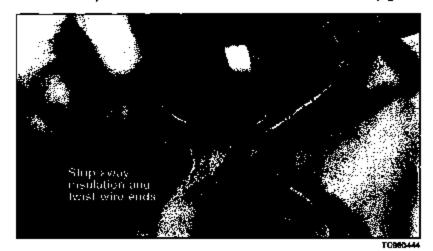
NOTE: Do not damage the wire when removing the wire harness cover.



TC9604

NOTE: The harnesses shown on the following pages are wrapped in red tape for clarity. Actual harnesses are wrapped in black tape.

Strip away the insulation to expose 3/8 in. of each wire. Twist the wires into a "pigtail".



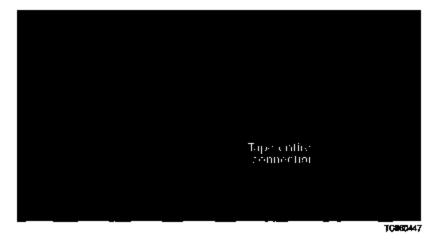
4. Match the same size wires and insert the end of each exposed wire into the connector. Crimp the connection with a suitable tool. Make sure that all strands of the wires are inside the connector and that after the connector is crimped, the connector cannot be pulled off by hand.



Using a heat gun, heat the connector until the shrink tube (transparent part of the connector) conforms to the wire. Do not overheat the connector.



Tape each wire individually, then tape the entire connection. This provides a finished look and additional moisture barrier.



After all of the necessary connectors have been replaced, perform the following steps to ensure proper harness routing and installation.

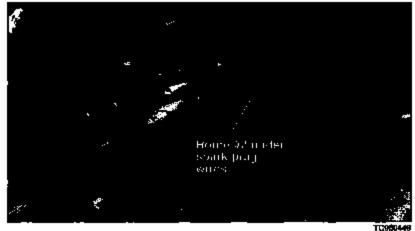
Driver's Side (#2, #4 & #6)

1. If one or more connectors on the driver's side have been replaced, remove and discard <u>all of the original injector tape and guides.</u> This will allow for proper injector harness routing.



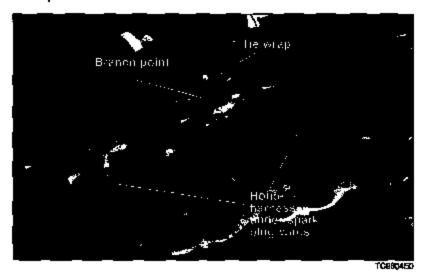
ICSER344K

The #2 Injector wire should pass under the spark plug wires. The harness should not touch any sharp objects (such as screws, hose clamps, or brackets) and should be tie wrapped at the elbow of the bypass hose.

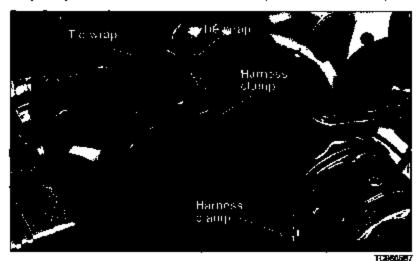


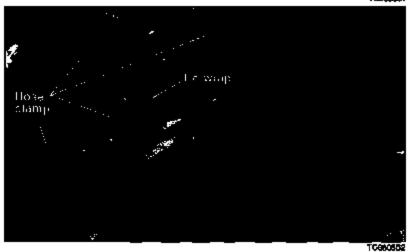
17/30

3. Houte #4 injector wire under #6 and #4 spark plug wires and just in front of the spark plug wire clamp. Houte #6 injector wire under the #6 spark plug wire and just in front of the #6 spark plug wire clamp. Tie wrap the EGI hamess to the blow-by hose (connected to the air duct) at the branch point just above the spark plug wire clamp.



Attach the E.G.I. harness to the original harness clamps. Turn all three blow-by hose clamps and the air bypass hose clamp away from the harnesses. Add tie wrap as shown in lower photo.





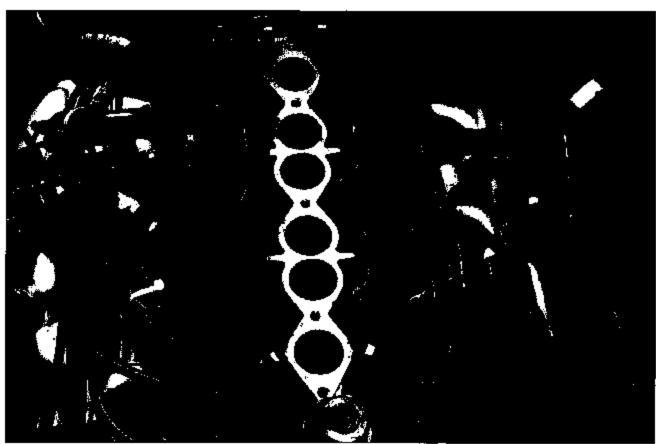
Passenger Side (#1, #3 & #5)

1. Tie wrap the connector area of #1 and #3 injector connectors to the EGI harness.

NOTE: If installed, #1 and #3 injector sub-harmesses <u>must be routed behind</u> (the rocker side) and from the <u>bottom</u> of the EQI harmess.



- 2. Route #5 injector harness below the PCV hose and tie wrap to the EGI harness.
- 3. When all harness connections have been made, the harness should look like this. Make sure the harness is not plnched and does not come in contact with any sharp objects.



TC960453

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES FINAL DEALER INSPECTION CHECKLIST

CUSTOMER	NAME VIN
R.O.#	DATE
CHECK WIT	H ENGINE OFF
(1.)	ELECTRICAL CIRCUIT TEST RESULTS
(2.)	FUEL HOSES POSITIONED CORRECTLY ON FUEL LINES
(3.)	ALL HOSE CLAMPS TIGHTENED CORRECTLY
(4.)	ALL ELECTRICAL CONNECTIONS SECURE
(5.)	VACUUM HOSES INSTALLED
CHECK WIT	<u>'H ENGINE RUNNING</u>
(6.)	CHECK ALL FUEL HOSES FOR LEAKS
(7.)	TEST DRIVE - CHECK FOR COOLANT AND VACUUM LEAKS
(8.)	REPEAT DRIVEABILITY TEST FROM PAGE 2 AND CONFIRM NO CHANGE
(9.)	CHECK FOR DRIVEABILITY PROBLEMS
(10.)	CHECK RADIO PRE-SETS
(11.)	TURN OFF ENGINE AND VERIFY COOLANT RESERVOIR AT MAXIMUM LEVEL. TOP OFF IF NECESSARY

SPECIAL TOOLS - REQUIRED TO PERFORM THE SERVICE PROCEDURE

1. Twenty four intake manifold plugs, Kent-Moore P/N J42056 (initially supplied at no charge with this campaign).

NOTE: Additional manifold plugs (in packages of 24) may be purchased by calling Tech-Mate at 800-NMC-2001.

- Hose removal pliers, MAC Tools P/N HFL 4790 (or equivalent).
- 3. Dalfloil #10 Oll, Infiniti P/N 999MP-U5500. (One bottle will be shipped to each dealer as part of the campaign).

PARTS KIT INFORMATION

Part Description	Part Number	Quantity
Fuel injector and tube kit *	16600-F6625	1
*Contains the following		
Fuel injector assembly	16600-F6612	6
, ,	or	
	16600-F6617	
Fuel tube - LH	17521-19P11	1
Fuel tube - RH	17522-19P11	1
Fuel injector hose socket	16615-35F00	6
Fuel injector insulator - lower	16636-V5000	6
Fuel injector holder	16612-19P11	6
Collar	16613-V5000	6
Screw	08360-63062	6
Fuel hose	17524-V5003	3
Fuel inlet hose (with protector)	16440-F6600	1
Hose clamp - fuel	16439-N4710	8
H <u>ose clamp - fuel</u>	16439-16E00	6
Intake manifold gasket	14033-75P00	1
Washer	16611-V5000	6
Spacer - fuel tube	16614-D4200	6

RELATED PARTS INFORMATION

(May be replaced as part of the campaign if necessary)

Part Description	Part Number
Sub-harness kit - RH	24027-60Y25
Contains: Sub-harness - PH	Not applicable
Tie wrap	01552-00043
Sub-harness kit - LH	24027-60Y26
Contains: Sub-harness - LH	Not applicable
Tie wrap	01552-00043
Fuel pressure regulator	22670-F6602
Control valve assembly (PCV)	11810-F0502
Intake manifold gasket (Ornament cover gasket)	14009-V5210
Blow by hose	11826-F6600
Blow by hose	11828-F6600
Hose clamp - blow by	16439-V5001
Hose damp - blow by	16439-V5002
Hose damp - air	16439-V5000
Air hose	14060-01P 0 0
AAC valve hose	23786-F6600
Air duct hose	16578-V5011
Air regulator hose	14061-01P00
Hose clamp - air	14484-45V12
Fuel return hose (bulk)	A8742-20030
Fuel return hose (pre-cut)	16440-F6610
Fuel hose - frame to filter (bulk)	A6440-N7686
Fuel filter	16400-0M200
Protector - fuel hose	17576-51\$60
Hose band - fuel	01552-00401KK
Hose damp - fuel	16439-53A00
Vacuum hose (2 mm dia.)	B2320-28F10
Vacuum hose (3 mm dia.)	A8761-M4901
Vacuum hose	22318-02P00
Vacuum hose	14912-F6802
Vacuum hose	22318-F6602
EGI harness damp (passenger side)	24220-D5100
EGI harness damp (driver's side)	24228-89964
EGI hamess clamp (driver's side)	24220-35F01

RELATED PARTS INFORMATION

(May be replaced as part of the campaign if necessary)

Connector Description	Harness/Sensor Side	Number of Pins in Connector	Kent-Moore Part Number	infiniti Part Number
EGR	Hamess	2	J38751-6	B4342-0WFW0
temperature sensor, FICD			1	
EGR	Component	2	J38751-7	B4342-79905
temperature sensor, FICD	· 			
EGR solenoid valve, Fuel pressure solenoid valve	Hamess	2	J38751-24	N/A
Air regulator	Hamess	2	N/A	24027-60Y15
Throttle position sensor	Harness	3	J38751-8	B4343-0WFW0
Throttle position sensor	Component	3	J38751-9	B4343-79904
Throttle position switch	Hamess	3	N/A	24027-60Y20
AAC valve	Harness	2	N/A	B4342-79903
Ground wire	Hamess	1	J38751-65	N/A

RELATED PARTS INFORMATION

Part Description	Parl Number	Model Year
Daifioil #10 (1)	999MP-U5500 (2)	All

NOTES:

- 1. Order from Infiniti Parts.
- 2. Do NOT daim this P/N on the Campaign Claim.

CLAIMS INFORMATION Campaign I.D.: P5137

Program No.: 01

OPERATION	OP CODE	FRT
instali Kit	P51370	2.6 hrs.(1)
R&R Fuel Pressure Regulator	P51371	0.2 hrs.
Install One connector kit	P51374	0.1 hrs.
Install up to 5 additional connector kits at 0.1 hrsper-kit. (2)	P51375	up to 0.5 hrs. maximum

NOTES:

- FRT includes sufficient labor time for the replacement of any of the Related Hoses! Parts/Electrical Connectors (except connector kits, see below)" listed in the Parts Information tables on the pages 21-23.
- For Example: 1 kit only, use P51374 for 0.1 hrs.
 - 2 kits, use P51374 for 0.1 hrs, and P51375 for 0.1 hrs.
 - 3 kits, use P51374 for 0.1 hrs. and P51375 for 0.2 hrs.
 - 4 kits, use P51374 for 0.1 hrs, and P51375 for 0.3 hrs.
 - 5 kits, use P51374 for 0.1 hrs. and P51375 for 0.4 hrs.
 - 6 kits, use P51374 for 0.1 hrs, and P51375 for 0.5 hrs.

TOWING EXPENSE

If required, towing expenses to the nearest infiniti dealer should be submitted using expense code 501.

VOR FREIGHT REIMBURSEMENT

For this campaign **only**, VOR freight expense, for VOR freight <u>not</u> pre-paid by Infiniti, may be submitted using expense code 600.

RENTAL VEHICLE EXPENSE ASSISTANCE

If the vehicle is inoperative awaiting parts ordered through the Customer Care process, rental vehicle assistance may be submitted using Expense Code 502. The maximum dollar reimbursement is \$30.00 per day for up to 3 days (\$90.00 total). Amounts exceeding \$90.00 will require regional claim approval.

Expense Code	Coverage 1	Amount 1
502	СМ	Actual amount

PARTS RETENTION

For this campaign only, removed parts must be scrapped as soon as:

- 1. The QC Inspection (if required) has been performed and the inspector concurs that the campaign repairs have been properly completed.
- 2. The work order line has been reported as paid on the daily Claims Activity Report. (New Claims.) System dealers - Report #VWO5020-R1).

Dear (Personalized to each customer)

Infiniti has always been dedicated to providing the highest quality products and services. To support our commitment, we closely monitor in-use vehicles for long term durability and performance. As a result, Infiniti has determined that certain conditions can cause **leaks in the fuel injection system** in 1990-1992 M30 vehicles. Leakage of the fuel injector system can be caused by the use of certain fuel additives, approved for use after the system was designed, which result in deterioration of the fuel injectors. In addition, fuel hoses that wear out due to age can also leak fuel. Postponed or omitted maintenance of the fuel injector system increases the chance of fuel leakage.

Fuel leaks in your engine could result in a fire. A fire in your engine compartment would pose a safety risk. To reduce the risk of engine fires, infiniti will replace all of the fuel injectors and affected fuel hoses on your M30, free of charge, regardless of your car's age or mileage.

The new fuel injectors better withstand the effects of additives used in gasoline and the new fuel hoses further reduce the possibility of any leakage. After the new injectors and hoses are installed, it will continue to be important for you to follow the inspection interval (every 30,000 miles for the fuel injection system) as listed in the maintenance log and owner's manual that came with your vehicle when it was new.

Please contact your Infiniti dealer as soon as possible to arrange for an appointment to have this free replacement service. The work will take approximately 3 hours, but your dealer may require your vehicle for a longer period of time based upon work schedules. In this event, service loan cars are available with scheduled appointments.

If you have any questions or concerns about this service, you may contact the M30 injector Campaign Headquarters at P.O. Box 2009, Bloomfield Hills, MI 48303. The toll free telephone number is: 1-800-867-7669. If you reside in Hawaii, please call: 808-836-0888.

Additionally, the National Highway Traffic Safety Administration has a toll free auto safety hotline which can provide information to you concerning auto safety issues. Their number is: 1-800-424-9393 (Washington, D.C. area residents may call: 202-366-0123).

If you have paid to have your fuel injectors replaced due to leakage, Infiniti will reimburse you for reasonable documented costs. Please complete the enclosed Customer Goodwill Reimbursement Request Form and submit it along with all supporting documents to the address Indicated. Infiniti is taking this action to ensure your continued satisfaction with our products.

Please make an appointment as soon as possible with your infiniti dealer. We will do our best to minimize your inconvenience with this service action.

Sincerely.

Roger Jolicoeur Vice President Infiniti Division

Quality Control (QC) Inspection

Dealers <u>must</u> request 3rd party QC inspection immediately following completion of campaign repairs (P5137). These inspections will be conducted by *integrated Warranty Services*, *Inc.* (IWS). This requirement will stay in effect until further notice.

Requests for QC inspections may be made by completing the attached IWS Inspection Request Form *Included* in this bulletin, and faxing it to (310) 323-3636. Please photocopy the IWS Inspection Request Form as needed to ensure an adequate supply of forms for future QC Inspections. Inspectors will be at the dealership within 36 hours.

An IWS Inspection Report stating that campaign repairs are complete and correct must exist before dealer submission of the campaign claim (P5137). Inspector determination that repairs are incomplete or incorrect will be reported to the dealer service manager immediately following inspection and must be completed or corrected by the dealer (without cost to Infiniti or the customer). Vehicles must then be inspected again by IWS.

Copies of the Quality Control Inspection Checklist used by inspectors to guide them through each vehicle inspection is included in this bulletin. A copy of the IWS Inspection Report has also been included for your information. This report will be supplied and completed by the IWS inspector for every inspected vehicle. The dealer copy of each report must be kept in the vehicle service file with all other repair documentation.

If the dealer fails to request QC inspection and receive inspector concurrence that all repairs have been properly completed, infiniti may charge back to the dealer the entire campaign claim amount.



NISSAN MOTOR CORPORATION U.S.A.

Post Office Box 191 Gardens, California 90248-0191 Telephone (S10) 771-8121

QUALITY CONTROL INSPECTION CHECKLIST 1990-92 M30 (F31) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any discrepancies found. All inspections are visual.

			PRE-INSPECTION							
_		a)	Verify the repair order was signed by the Service Advisor or Service Manager.							
		b)	Verify the repair order has the following:							
			An engine condition check was performed prior to work conducted on the vehicle.							
			Fuel pressure regulator pressure reading was taken (replace if more than 45 p.s.l.)							
	_		Electrical resistance test performed (two readings in Ohms)							
		C)	A checklist (provided with the bulletin) should be algred by the technician and attached to the repair order.							
	SUB-HARNESS AND FUEL HOSE ROUTING									
	PASSENGER SIDE									
,	SUB-HARNESS CONDITION									
	_		New sub-harness(es) installed if original harness(es) has damaged or corroded connectors.							
	_	,	Note: 0 to 3 sub-harmesses may be installed.							
			New harness has corrugated tubing. P/N 24027-60Y25							
,	96	7 H	CING OF SUB-HARNESSES							
_			Shrink sleeves fully shrunk.							
		•	The splicing of the new harness to the original harness should be fully wrapped by electrical tape.							
Ł	ЯΟ	UT	TNG OF SUB-HARNESS FOR INJECTORS #1, #3, & #5							
			#1 Injector sub-harness routed under the EGI harness.							
		b)	#1 injector sub-harness coupler area wrapped with tape and tie-wrapped to the EGI harness.							
		c)	#3 injector sub-harness coupler area wrapped with tape and tie-wrapped to the EGI harness.							
		d)	Verify the #3 fuel hose clamp screw does not contact the vertical coolant hose at the planum.							
		0)	#5 Injector sub-harness routed below the PCV hose,							
		f)	#5 injector sub-harness wrapped with tape at the coupler area, and tie-wrapped to the PCV hose.							
			Verify the #5 injector sub-harness is not being plached at the air regulator.							
		h)	Connectors must be ascured to fuel injectors.							
			Note: If no sub-harnesses are replaced on the passenger side, the original harness must be routed such that:							
			#1 and #3 go directly to the fuel injector, #5 goes around the air regulator. See illustration references.							
ı.	GΕ	NE	RAL ROUTING OF SUB-HARNESSES							
		_	Harness must not come into contact with any sharp objects (such as screws, hose clamps, and brackets).							
		b)	Verify that the wires are not pinched.							
1	ΕĢ	H	ARNESS							
		a)	Must be secured to a holder clamp located near the front of the plenum and 3 fie-wraps along the harness. (One at front and two on the driver's side.)							
ī.	FU	EL	HOSES							
		a)	New fuel hose, filter-to-fuel injector rall, should be installed ("HI-PREX D" or "Dif"). P/N A8440-N7686 (bulk).							
		b)	Return hose must not be damaged or cracked. P/N A8742-20030 (bulk).							
		c)	If dealer installed a new fuel filter, the frame-to-filter hose must be replaced.							
			Two protectors: (a) located on the return hose, and (b) fuel filter-to-fuel injector rall hose.							
1.	FU		HOSE CLAMPS							
			Two (2) kit clamps installed on the new hose. No worm gear type.							
			Verify all fuel hose clamps are not over-tightened. Use a dime to measure the clamp opening.							
		•	Check all inlet and return hoses.							

SUB-HARNESS AND FUEL HOSE ROUTING (Cont.)

PASSENGER SIDE

9. <i>F</i>	UE.	L FILTER a) Fuel filter properly seated in the bracket (filter flange should sit on the bracket). It must be replaced if: Leaking Non-Nissan specification (wrong size or type) Plastic housing or hose fittings If the filter is replaced, be sure the frame-to-filter hose is also replaced. L HOSE ROUTING a) Inlet and return fuel hose must not be stressed. b) Loose the wrep at fuel inlet and return hoses where they cross. SUB-HARNESS AND FUEL HOSE ROUTING
		DRIVER'S SIDE
10.	su	B-HARNESS CONDITION
	•	New sub-harness(es) installed if original harness(es) has damaged or corroded connectors.
		Note: 0 to 3 sub-hamesses may be installed. The replacement hamess on this side does not have corrugated tubing.
		NERAL SUB-HARNESS ROUTING
] :	 All "spilnes" removed from the original harness, if any sub-harness was spliced into the original harness. Removing the "splines" will allow proper wire routing.
	3 t	The sub-harness must not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
_	_	2) Make sure that the clearance between the accelerator cable drum and the main and sub-harness is at least 20 mm.
	-	f) The branch portion between EGI harness and sub-harness must be tie-wrapped to the blow-by hose that is connected to the air duct.
12.	SP	LICING OF SUB-HARNESSES
E] 8	i) Shrink sleeves fully shrunk.
	3 t	The splicing of the new harness to the original harness should be fully wrapped by electrical tape.
13.	RO	UTING OF SUB-HARNESS FOR INJECTORS #2, #4, & #6
		i) #2 Injector sub-harness must be under the spark plug cable.
Ē		2) #4 Injector sub-harness must be under the spark plug cables and just in front of the #4 & #6 spark plug cable clamp.
		2) #8 injector sub-harness must be under the spark plug cables and just in front of the #6 spark plug cable clamp. 1) Consequent an example a second to the first interest.
		i) Connectors must be secured to the fuel injectors.
		HARNESS I) FICD switch connector tie-wrapped to the harness.
		 FIGE switch connector he-wrapped to the namess. EGI harness secured to the air hose near the distributor at two locations: a "double C" clip and a clamp.
-	•	If a "double C" clip is not available, a tie-wrap may be used.
		OFNERAL INORECTION
		GENERAL INSPECTION
_		FORE STARTING ENGINE
	_	i) No fuel smell. i) Battery terminals tight.
Ē	_	All vacuum hoses leading into the plenum are securely attached and are not split or brittle.
-	•	Note: Vacuum and coolant hoses covered by this campaign are listed in the campaign bulletin.
] ;	Check that the throttle cables (throttle, cruise control, A/T) are correctly installed in the throttle drum.
	_	Important: Verify the throttle moves smoothly and does not contact the air duct hose clamps.
_		Verify vacuum hose connections and electrical connections at any visible locations.
_ 		f) Radio pre-sets programmed.
		SINE RUNNING) No fuel smalls
	_	a) No fuel smells. a) No fuel leaks.
Ė) No coolent leaks.
_		,

IWS_{Inc.} INSPECTION REQUEST FORM

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

Inspections can be ordered by the Nissan Dealer via FAX Number: (310) 323-3636

D€	aler	Nan	ne:												R	eglon:				Zip Cod	le:			
De	Pealer Code:										Dealer Contact name													
De	Dealer Contact Phone Number:										<u>.</u> .	FAX Number:												
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NOTE: DEALERS MAY COPY THIS FORM



VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

				Model Year:			
Ponsir	Name		Dealer code:				
JOHOII	Order	· #:	Dealer Region:	Technican:			
WS In:	specto	or No:	Dealer State:	Inspection Date:			
			FAIL on item(s) which required the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the c				
~		INFINITI M30					
	1.	Sub-harness condition	(passenger side)	-			
	2.	Splicing of sub-harnes:					
二丁	3.		for injectors #1, #3, and #	5			
\longrightarrow	4.	General routing of sub	-hamesses				
\longrightarrow	5.	EGI harness					
\longrightarrow	6.	Fuel hose					
	<u>7. </u>	Fuel hose clamps Fuel filter					
-+	8. 9.	Fuel hose routing		-			
\vdash	10.	Sub-harness condition	(drivar's elda)	i			
	11.	General sub-harness ro	<u> </u>	-			
\neg	12.	Splicing of sub-harness					
\neg	13.		for injectors #2, #4, and #	6			
	14.	EGI harness					
	15.	Before starting engine					
	16.	Engine running					



Poet Office Box 191 Gardana, California 90248-0191 Telephane: (310) 532-3111

SERVICE OPERATIONS BULLETIN

Reference:	Date:	
Service Operations Bulletin SB N-0	May 17, 1996⊴	

To:

ALL NISSAN SERVICE MANAGERS

Subject:

FUEL INJECTORS AND HOSES VOLUNTARY SERVICE CAMPAIGN

TECHNICIAN QUALIFICATION PROGRAM

INTRODUCTION

The Maxima, 300ZX and 200SX fuel injector and hoses replacement campaign and its associated inspection requirements have placed additional administrative requirements on Nissan's dealer body, NMC National and NMC's regional personnel. Although NMC understands that the injector replacement campaign must continue, NMC is in favor of discontinuing the inspection requirements for Technicians who have demonstrated a consistently high degree of competency and quality standards in completing the campaign procedures. Many Technicians are consistently performing the campaign without any inspection failures. It is for these Technicians that Nissan is offering a Technician qualification option. Qualified Technicians will be exempt from the current IWS inspection requirements.

OUALIFICATION PROCEDURE

This program applies to units that are inspected from the inception date of this Technician Qualification Program. Units completed prior to the start of this program are not to be included in the four (4) unit requirement.

- For each Technician performing the campaign, the IWS inspector will indicate the inspection result as either "OK" or "CR" onto the *Technician Qualification Tracking* Form (attached).
 - An "OK" vehicle is defined as a vehicle that did not require ANY additional work to be brought into compliance.
 - A "CR" (correction required) vehicle is defined as a vehicle that required ANY
 correction(s) for the vehicle to be brought into compliance with the Nissan standard.
 The Technician Qualification Tracking Form should be stored at the dealership but
 maintained by the IWS inspector. The IWS inspector will also retain a copy.
- Qualified Technicians will be exempt from the current inspection requirement on one of the three models when they perform four (4) consecutive "OK" service campaign repairs. Technicians must be qualified separately for each model (Maxima, 300ZX, 200SX).

 Dealers should stop requesting IWS inspections for service campaigns completed by their qualified Technicians. However, inspections must continue to be requested for nonqualified Technicians.

If a dealership prefers to continue the third party IWS inspections without qualifying any of its Technicians, this is OK. The qualification procedure is not a mandatory program for dealers. However, the IWS inspector will complete and maintain the Technician Qualification Tracking Form (in his/her own possession) for all Technicians regardless of dealer preference.

4. The Qualified Technician List (attached) shall be completed and maintained by the dealer. Dealers must fax completed sheets to NMC Quality Assurance at (310) 771-6804. Note: the Qualified Technician List must be complete and include the names of all qualified Technicians, their ID numbers and qualification dates. All additions to the Qualified Technician List should be faxed to NMC on the same day that the status change occurs. It is important that each individual Technician has his/her own unique ID number. As each individual Technician must qualify separately, a "Team Number" is not acceptable. This individual Technician number must also be used when submitting the warranty claim.

Dealerships that elect not to participate in the qualification program need not maintain the Qualified Technician List and should not fax the list to NMC Quality Assurance.

- If a Technician completes twenty (20) service campaigns without four (4) consecutive "OK" inspections per model, that Technician will not be allowed to perform this service campaign.
- 6. The NMC Warranty Department has modified its current system to cross check campaign claims against the Qualified Technician List. A claim filed for the fuel injector and hoses service campaign that is performed by an unqualified Technician (without having the vehicle inspected by IWS) will be charged back to the dealership. In addition, customers must be requested to return these vehicles to the dealership to have the IWS inspection performed.

QUALIFICATION KEY POINTS

A Technician becomes qualified by:

- Getting four (4) consecutive "OK" ratings on IWS inspections per model
- A Technician retains qualification by:
 - Continuing to pass IWS random inspections
- A Technician will be permanently disqualified from performing the repair if the Technician:
 - Performs 20 repairs without passing four (4) consecutive inspections per model

PROCEDURE FOR MAINTAINING OUALIFICATION

- 1. It is STRONGLY recommended that qualified Technicians perform at least one (1) fuel injector and hoses service campaign repair every thirty (30) days to retain their skill level.
- IWS will continue to monitor the repair quality of "qualified" Technicians by performing random inspections of completed and in-process units.
- 3. The IWS inspector will indicate the result of the random inspection in the Technician Qualification Tracking Form. The inspector will complete the IWS INSPECTION REPORT form as usual. However, in addition, he/she will indicate an "OK" or "CR" result by writing the words "RANDOM/OK" or "RANDOM/CR" in the upper right hand corner of the form. If no vehicles are available upon arrival at the dealer, he/she shall write "NO VEHICLES AVAILABLE FOR INSPECTION". These forms will be sent to IWS for accounting purposes. IWS will forward summary reports of these random inspections to NMC Quality Assurance.
- 4. If a previously qualified Technician gets a "CR" rating on a random inspection, his/her qualification will be immediately revoked. Inspection requests are required for all subsequent repairs performed by the Technician until he/she qualifies once again. The Technician must again complete the four (4) consecutive "OK" service campaign repairs to regain qualification.
- 5. If a qualified Technician should have a vehicle fail a random inspection, the dealer must notify NMC Quality Assurance of the status change by using the Qualified Technician List. Updates to the list must be faxed to NMC Quality Assurance on the same day that the status change occurs.
- If a Technician loses his qualification status three (3) times, that Technician will no longer be allowed to perform the fuel injector and hoses service campaign.

RE-QUALIFICATION KEY POINTS

Qualification will be revoked if the qualified Technician:

- Fails a random IWS inspection
- A Technician will be permanently disqualified from performing the repair if the Technician:
 - Fails a re-qualification inspection three (3) times

SUMMARY OF KEY POINTS

- The Technician Qualification Program is a dealer optional program.
- A Technician becomes qualified after the IWS inspector has verified that the Technician has
 completed four (4) consecutive "OK" repairs. Vehicles repaired by qualified Technicians are
 exempt from the IWS inspection requirement.
- Qualification is granted by model.
- IWS inspectors will continue to perform random, unannounced inspections on qualified Technicians on a regular basis. If a previously qualified Technician fails a random inspection, his/her qualification will be revoked immediately, and the dealer must request an IWS inspection on all subsequent repairs performed by the Technician. The Technician can regain qualification by performing the four (4) consecutive "OK" service campaign and repair inspection procedure once again.
- Technicians who cannot demonstrate satisfactory repair performance will not be allowed to perform the fuel injector and hoses service campaign.
- The qualification plan is valid until the entire IWS inspection program ends.

NISSAN MOTOR CORPORATION USA SERVICE CAMPAIGNS AND RECALLS

FUEL INJECTOR AND HOSES SERVICE CAMPAIGN- TECHNICIAN QUALIFICATION TRACKING FORM

DEALER NO.:	REGION NO.:	 MODEL:
DEALER NAME:		

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Technician Name	Toch No.		1	2	3	4	5		7	8	,	10	11	12	13	14	15	16	17	18	19	20
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FUEL INJECTOR AND HOSES SERVICE CAMPAIGN- QUALIFIED TECHNICIAN LIST DEALER NAME: _____ DEALER NO.: ____ MODEL: ____

	Technician Name (first name, last name)	Tech's Dir. ID Number	Technician SSN	Inspector No.	Inspector Signature (first name, last name)	Date Qualified	Date Revoked 1st time	Date Revoked 2nd time	
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Notes:

- The Technicians above have been qualified by the IWS inspector to perform the Fuel Injector and Hose replacement campaign on Maxima, 300ZX and 200SX vehicles. If any Technician other than those listed above performs this repair, an inspection must be ordered.
- Changes in Technician qualification status (as tracked by this form) are to be communicated to NMC Quality Assurance by same day fax transmission. Send faxes to NMC Quality Assurance at (310)771-6804.
- The Technician employee number will be cross referenced with the Technician's SSN. If the numbers do not match, it may cause delays in processing of warranty claims. Please update your TRACS systems to prevent delays.

INJECTOR CAMPAIGN: TECHNICIAN QUALIFICATION TRACKING FORM

FORM COMPLETION:

All items on the form must be completed by the IWS inspector for each repair completed by the named Technician. Since this program qualifies Technicians to perform noninspected repairs by model, a separate form must be completed for each model (Maxima, 300ZX, 200SX).

Technician Name	Enter the full First and Last name of the Technician
Tech. No.	Enter the Nissan issued TRACS ID no. of the Technician
Date	Enter the date that the inspection was performed
OK / CR	 Enter the result of the inspection as "OK" or "CR" An "OK" vehicle is defined as a vehicle that did not require any additional work to be brought into compliance. A "CR" (correction required) vehicle is defined as a vehicle that required ANY correction(s) for the vehicle to be brought into compliance with the Nissan standard.
Insp. App.	The IWS inspector who performs the inspection shall initial here to indicate approval.
Insp. No.	Enter the IWS inspector ID number

NISSAN MOTOR CORPORATION USA Service Operations Department

MPEVM

NISSAN MOTOR CORPORATION U.S.A.

Post Office Box 191 Gardena, California 90248-0191 Telephone (310) 532-3111

CAMPAIGN BULLETIN

95I-006

leferance:

NTB96-010g

August 28, 1996

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

This bulletin contains revised Service and Parts Information. Use this bulletin as a supplement to NTB96-010s and NTB96-052. Refer to NTB96-010s and NTB96-052 for complete campaign details.

APPLIED VEHICLES:

1984-1989 300ZX (Z31)

1965-1988 Maxima (U11)

1987-1988 200SX (S12) - V6 engine only

APPLIED VIN:

All

SERVICE INFORMATION

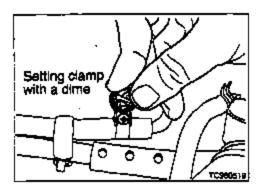
The Voluntary Service Campaign - Fuel Injectors and Hoses, covers all fuel hoses in the engine compartment. All campaign kits come with a new fuel inlet hose (filter-to-fuel rail). The frame-to-filter hose is also supplied with the 300ZX and 200SX kits. The frame-to-filter hose on the 300ZX and the fuel return hoses on all applied vehicles are covered under the campaign if they are damaged. Damaged is described as:

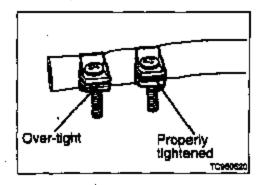
- Over-tightened hose clamps
- Incorrect clamps installed (worm type clamps)
- Hose protector(s) missing.

NOTE: The 300ZX has two protectors on the return hose. The Maxima and 200SX have only one protector. If the hose protectors are missing on the return hose, the hose must be replaced (the protectors are not available separately). Refer to the Parts Information table on page 3 of this bulletin for the appropriate part numbers.

Hose Clamps

Hose clamps are over-tightened if a dime will not fit between the bands at the end of the clamp. Whenever a hose is replaced the clamps must also be replaced.





NOTE: A dime is only used as a gauge for an over-tight clamp. A clamp should be sufficiently tight so there is no fuel leak when the fuel system is pressurized.

Fuel Hoses

The short fuel rail hoses that attach to the fuel rail with spring clamps have adhesive on the inner hose surface. As the fuel rail heats during normal driving conditions, the adhesive bonds the hoses to the fuel rail. The adhesive also helps to prevent fuel leakage. If the adhesive is compromised by the use of an assembly jubricant other than Dalfioll #10, a fuel leak may develop. If the fuel rail is disassembled for any reason after the campaign is performed (such as replacing the fuel pressure regulator), the short fuel rail hoses and their clamps must be replaced. These hoses are available separately and are identified as P/N 17524-V5003.

NOTE:

Due to packaging requirements, the 300ZX bottom feed kit contains an extra short fuel rail hose.

PARTS INFORMATION

Description	Applied Models	Part Number
Fuel inlet hose (filter-to-rail)	300ZX 84-86 non-turbo 300ZX 84-85 turbo	A6441-11P00
	300ZX 87-89 non-turbo 300ZX 86-89 turbo	A6440-19P25
•	Maxima, 200SX	A6440-N7686 (cut to 450 mm)
Fuel return hose w/protector(s)	300ZX (all)	A6445-11P001 (has two protectors)
	Maxima	A6445-16E00 (has one protector)
	200SX	A6445-32F00 (has one protector)
Frame-to-filter hose	300ZX (all)	01995-00341
	Maxima	17552-13E60
_	200SX	A6440-N7686
	<u> </u>	(cut to 90 mm)
Hose clamp (spring type)	300ZX, Maxima, 200SX	16439-16E00
Hose clamp (screw type)	300ZX, Maxima, 200SX	16439-53A00
Short fuel rail hoses	300ZX, Maxima, 200SX	17524-V5003

NOTE: 1. Previously listed as A6445-19P00 (the protectors on this part are incorrectly positioned).



NISSAN MOTOR CORPORATION U.S.A.

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CAMPAIGN BULLETIN

955-006

Raferegye

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NTB97-035 April 30, 1997

VOLUNTARY SERVICE CAMPAIGN - FUEL INJECTORS AND HOSES

This bulletin contains revised part number information for NT995-010a and NTB95-010k. Refer to NTB96-010a and NTB95-052 for complete campaign details.

Please correct NTB95-010a and NTB96-010k by hand.

APPLIED VEHICLE:

1984-89 300ZX Turbo (Z31)

APPLIED VIN:

ΑII

SERVICE INFORMATION

The incorrect part number was published for the Z31 turbo AAC valve electrical connector in NTB96-010a page 40/43 and NTB96-010k page 3/4.

The correct part number is B4342-79903.

PARTS INFORMATION - Harness Connectors

Connector Appearance	Connector Description	Applied Models	Number of pine	NMC Part Number
	AAC valve	300ZX turbo	2	B4342-79903
TC480787			Di	





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QUALITY CONTROL INSPECTION CHECKLIST (QC) 1985-88 Maxima (U11) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicians are required to repair any discrepancies found. All inspections are visual,

		PRE-INSPECTION
		Verify the repair order was signed by the Service Manager.
		b) Verify the engine check was performed. A checkflat was provided with the bulletin and
		results recorded on repair order.
		 c) Verify the electrical circuit resistance, fuel pressure, and driveability tests were performed;
		all test results should be recorded by the technician on the repair order.
		SUB-HARNESS AND FUEL HOSE ROUTING
		ENGINE RIGHT SIDE - bulkhead
1.	SU	B-HARNESS IDENTIFICATION
••		Identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
•		LICING OF SUB-HARNESS
٤,		The splice of the new harness to the original equipment (OE) harness is fully wrapped by electrical tape and
	_	secured with a tie-wrap to the OE harness.
,	ща	AND #5 SUB-HARNESS WIRES SECURED
3.		Secured to main harness by tape at the OE harness (taped bundle).
		b) Connectors are secured to fuel injectors. c) #3 and #5 injector wires are routed above spark plug cables.
_		. , , -
٠.		WIRE SUB-HARNESS SECURED
	_	a) Secured to main harmess by tie-wrap at the OE harmess.
		b) Connector is secured to fuel injector.
		 c) OE clamp on rocker cover is secured to OE harness. If missing, the harness must be secured to air hose with a tie-wrap.
		d) #1 injector wire is routed above spark plug cable.
_	_	· ·
		UTING OF HARNESS a) Sub-hamess does not come into contact with any sharp objects (such as screws, hose clamps, and brackets)
	₩.	or source of high heat (EGR tube).
		b) #1 and #5 cut-off harness injector leads must be sealed with shrink wrap and taped to OE harness.
_		
٥.		EL HOSE
		New fuel hoses from kit should be installed before the filter (pre-formed type) and after the filter.
		b) Return hose condition is not damaged or cracked.
7.		EL, HOSE PROTECTOR (on return line)
	_	Protector sleave is installed on the return hose and located near the fuel filler bracket, air conditioner tube,
		and speedometer cable. Hosa P/N A6445-16E00.
8.	_	el hoşe Clamps
		b) Tightened. Use a dime coin to measure the clamp opening. Check injet and return hose.

#OSE ROUTING

ENĜINE RIGHT SIDE - bulkhead (continued)

	, and the older business (bolishings)
9. FL	IEL FILTER
	Fully seated in the bracket.
	Note: If effermanket, advise customer the part is not original equipment and should be replaced.
10. F	UEL HOSE ROUTING
	 a) Fuel inlet and return hoses are routed under the brake booster hose and the accelerator cable.
	b) Inlet and return hoses are clamped together with a loose tie wrap:
□	c) Inlet and return fuel hoses are not stressed.
	•
	ENGINE LEFT SIDE - radiator
11. 8	UB-HARNESS IDENTIFICATION
	identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
12. 8	PLICING OF SUB-HARNESS
	The splice of the new harness to the QE harness is fully wrapped by slectrical tape and
	secured with a tis-wrap to the OE harness.
13. 0	ENERAL SUB-HARNESS ROUTING
	The sub-harness does not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
14. #	2 SUB-HARNESS WIRE ROUTING
<u>_</u>	e) is under the spark plug cable.
	b) Wires are tis-wrapped to OE harries near the branch.
	c) Connectors are secured to the fuel injectors.
	4 AND #6 SUB-HARNESS WIRE ROUTING
	a) Connectors are routed streight to the injectors.
	b) Connectors are secured to the fuel injectors.
_	ARNESS SECURED
⊒	a) Sub-harness wires are secured to the OE harness by a tie-wrap between #4 and #6 injector wires.
	b) #2 and #8 cut-off harness Injector leads must be sealed with shrink wrap and taped to OE harness.
	c) #4 and #6 injector wires are routed above spark plug cables.
	GENERAL INSPECTION
_	EFORE STARTING ENGINE
	a) No fuel smell.
. 🗖	b) Sattery terminals tight.
	c) All vacuum hoses leading into the plenum are securely attached and are not split or brittle.
□	Note: Vacuum and coolant hoses covered by this campaign are flated in the campaign bulletin.
	 d) Check that the throttle cables (throttle, cruise control, A/T) are correctly installed in the throttle drum. e) Verify vacuum hose connections and electrical connections at any visible locations.
_	NGINE RUNNING
18. E.	a) No fuel smelis.
	b) No fuel leeks.
	c) No coolant leaks.



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QUALITY CONTROL INSPECTION CHECKLIST (QC) 1984-1989 300ZX (Z31) Fuel Injectors and Hoses

Please verify that each of the inspection items listed below meets the conditions specified. Service technicisms are required to repair any discrepancies found. All inspections are visual.

		PRE-INSPECTION
		Verify the repair order was signed by the Service Manager.
		b) Verify the engine check was performed. A checklist was provided with the builetin and
	_	regults recorded on repair order.
		 c) Verify the electrical circuit resistance, fuel pressure, and driveability tests were performed;
		all test results should be recorded by the technician on the repair order.
		SUB-HARNESS AND FUEL HOSE ROUTING
		ENGINE RIGHT SIDE (battery-side)
1.	SU	18-HARNESS IDENTIFICATION
		Identification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
2.	SP	LICING OF SUB-HARNESS
_	_	The spilce of the new harness to the original equipment (OE) harness is fully wrapped by electrical tape and secured
	_	with a tie-wrap to the PCV hose at the specified connecting point.
3.	#3	AND #5 SUB-HARNESS WIRES SECURED
_		a) #3 injector wire routed under spark plug cable.
		b) Connector is secured to fuel injector.
		c) The #3 and #5 injector wire does not interfere with the water hose clamp.
		d) FOR TOP FEED INJECTORS - Vertical coolant hose clamp does not contact the harness.
4.	#1	WIRE SUB-HARNESS SECURED
-		 Secured to main harness by tie-wrap to the PCV hose, below the splice connection tie-wrap.
		b) Connector is secured to fuel injector.
		e) Routed under spark plug cables.
		d) Subhamess is routed to the outside (fender side) of the PCV hose.
5.	RO	OUTING OF HARNESS
		a) Harness does not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
		b) Verify that the wiree are not pinched at the lower attachment of the air regulator.
6.	0E	HARNESS
		a) Must be secured to two clamps located near the top of the plenum.
		b) #1 and #5 cut-off harness injector leads are sealed with shrink wrap and taped to OE harness.
7.	FU	EL HOSE
		a) New fuel hose between filter and inlet tube is installed.
		b) Return hose and inlet hose before filter are not damaged or cracked.
8.	PU	EL HOSE PROTECTOR (on return line)
		Two protector sleaves are installed on the return hose located near the radiator hose clamp
		and the canister hoses and located at the fuel filter clamp.
9.	FU	EL HOSE CLAMPS
		a) Kit clamps installed (2 clamps), no worm gear type.
	□	b) Tightened. Use a dime coin to measure the clamp opening. Check inlet and return hose.
		 c) Body-to-fuel filter clamps on both the body-side and fuel-filter side set properly.

ARNESS AND FUEL HOSE ROUTING

ENGINE RIGHT SIDE (battery-side) [continued]

9. FU	EL,	HOSE CLAMPS (continued)
		Are the fuel filter-to-fuel rail clamps on both the fuel-filter-side and fuel-rail-side set property?
		is the fuel return clamp set correctly?
		L FILTER
_		
Ų.	a,	is the fuel litter properly seated in the bracket? (filter flange should sit on the bracket)
		Note: If altermarket part, advise customer the part is not original equipment and should be replaced.
11. F	υĔ	L HOSE ROUTING
□.	a)	inlet and return hoses are clamped together with metal clamps at the white stripe of the hose.
	b)	inlet and return fuel hoses are not stressed.
		ENGINE LEFT SIDE (driver-side)
10 E	,,,	• • •
		-HARNESS IDENTIFICATION
		entification tape is on the new sub-harness and located near the fuel pressure regulator (front of engine).
		CING OF SUB-HARNESS
	Th	e splice of the new hamess to the OE hamess is fully wrapped by electrical tape.
14. Q	EN	ERAL SUB-HARNESS ROUTING
	a)	The sub-harness does not come into contact with any sharp objects (such as screws, hose clamps, and brackets).
⊟		Verify that the subhamess is passing below the spark plug cables.
	_	Make sure that the clearance between the accelerator cable drum and the main and sub-harness is at least 20mm.
ă	-	Verify that the OE main harness is secured by three (3) clamps at the plenum.
Т,		UB-HARNESS WIRE ROLITING
_		is under the spark plug cable.
		Is the wrapped to AAC air hose.
_		Connector is secured to the fuel Injector.
□	d)	Sub-harness is routed to the outside (fender side) of the blow-by hose.
16. #	A	nd #6 Sub-Harness wire routing
	a)	Sub-harnesses are under the spark plug cables.
	b)	Connectors are secured to the fuel injectors.
17. O	EH	IARNESS
		is secured to three clamps located near the top of the plenum.
		#2 and #8 cut-off harness injector leads must be sealed with shrink wrap and taped to OE harness.
	-,	
		GENERAL INSPECTION
18. B	EF(DRE STARTING ENGINE
		No fuel smeil.
_	bì	Bettery terminals tight.
_		All vacuum house leading into the plenum are securely attached and are not split or brittle.
_	-1	Note: Vacuum and coclant hoses covered by this campaign are listed in the campaign builetin.
	ď١	Check that the throttle cables (throttle, cruise control, A/T) are correctly installed in the throttle drum.
ō		Verify vacuum hose connections and electrical connections at any visible locations.
_		·
_		INE AUNNING
님	•	No fuel smells.
		No fuel leaks.
	(V)	No coolant leaks.

IVISING. INSPECTION REPORT

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

	NON-TURBO	Model Year: Dealer code: Technican: Inspection Date:
		Dealer code: Technican:
		Technican:
		Inspection Date:
D 8466		
PASS AIL, check the inspection of to the Quality Control	n item(s) wi	FAIL hich required repair. Checklist for details.
MAXIMA		300ZX
	1.	Sub-harness identification
cing of sub-harness		Splicing of sub-harness
		#3 & #5 sub-harness wires secured
Mre sub-harness secured	4,	#1 wire sub-hamess secured
ting of hamess	5.	Routing of harness
hose	6.	OE harness
hose protector (on return line)	7.	Fuel hose
hose clamps	8.	Fuel hose protectors (on return line
filter	9.	Fuel hose clamps
hase routing	10.	Fuel filter
-harness identification		Fuel hose routing
	. 	Sub-hamess identification
eral sub-harness routing		Splicing of sub-hamess
		General sub-hamess routing
		#2 sub-harness wire routing
	16.	#4 & #6 sub-harmess wire routing
		OE harness
ne running		Before starting engine
	MAXIMA -harness identification cing of sub-harness #5 sub-harness wires secured wire sub-harness secured ting of harness hose hose protector (on return line) hose clamps filter hose routing -harness identification cing of sub-harness eral sub-harness routing sub-harness wire routing #6 sub-harness wire routing ness secured ore starting engine ine running	MAXIMA -harness identification 1. ing of sub-harness 2. #5 sub-harness secured 3. wire sub-harness secured 4. ting of harness 5. hose 6. hose protector (on return line) 7. hose clamps 8. filter 9. hose routing 10. -harness identification 11. cing of sub-harness 12. eral sub-harness routing 13. sub-harness wire routing 14. #6 sub-harness wire routing 15. ness secured 16. ore starting engine 17.

IWSING. INSPECTION REQUEST FORM VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

Inspections can be ordered by the Nissan Dealer via FAX Number 310-323-3636

Dealer Name:	Region:	Zlp Cı	ode:		
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Dealer contact phone number:		FAX Number:			
VIN #	·	Vehicle Mileage	Requested Inspection Date		
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IWSING. INSPECTION REQUEST FORM VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

Inspections can be ordered by the Nissan Dealer via FAX Number 310-323-3636

Dealer Name:	Region: Zip Code:
Dealer Code: Dealer Contact	t name:
Dealer contact phone number:	FAX Number:
VIN #	Vehicle Requested Mileage Inspection Date
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IWSinc. INSPECTION REPORT

VOLUNTARY SERVICE CAMPAIGN FUEL INJECTORS AND HOSES

/EHICLE INFORMATION	·
☐ MAXIMA ☐ 300ZX NON	N-TURBO 300ZX TURBO
·IN:	Model Year:
Dealer Name:	Dealer code:
lepair Order ≠:	Technican:
<u></u>	
WS Inspector Na:	Inspection Date:
PASS If FAIL, check the inspection it Refer to the Quality Control Ins	FAIL sem(s) which required repair. spection Checklist for details.
MAXIMA	300ZX
Sub-harness identification	Sub-harness identification
2. Solicing of sub-harness	2. Splicing of sub-harness
3. #3 & #5 sub-harness wires secured	3. #3 & #5 sub-harness wires secured
4. #1 wire sub-harness secured	4, #1 wire sub-harmess secured
5. Routing of harness	5. Routing of harness
6. Fuel hose	6. OE harness
7. Fuel hose protector (an return line)	7. Fuel hose
8. Fuel hose clamps	8. Fuel hose protectors (on return line)
9. Fuel filter	9. Fuel hose clamps
10. Fuel hose routing	10. Fuel filter
11. Sub-harness identification	11. Fuel hose routing
12. Splicing of sub-harness	12. Sub-harness identification
13. General sub-harness routing	13. Splicing of sub-harness
14. #2 sub-harness wire routing	14. General sub-harness routing
15. #4 & #6 sub-harmess wire routing	15. #2 sub-harness wire routing
16. Harness secured	16. #4 & #6 sub-harness wire routing
17. Before starting engine	17. OE harness
18. Engine running	18. Before starting engine 19. Engine running
Provide comments and description for the Repairs suggested to the dealer/technician:	e rollowing:
<u> </u>	
n-Process Inspection Comments (problems found):	
•	