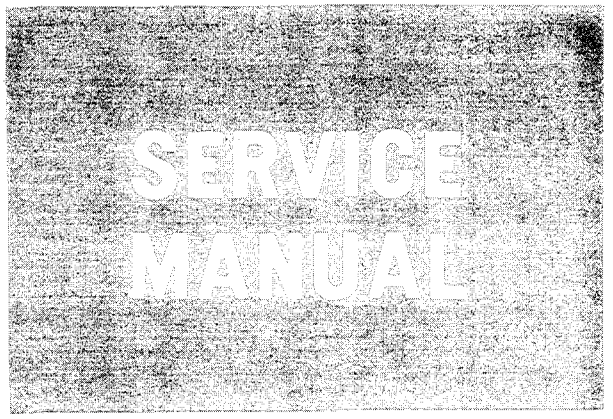


DATSUN 280Z
MODEL S30 SERIES

NISSAN

NISSAN MOTOR CO., LTD.
TOKYO, JAPAN

SECTION FE

ENGINE CONTROL, FUEL & EXHAUST SYSTEMS

FE

ENGINE CONTROL SYSTEM ..... FE- 2
FUEL SYSTEM ..... FE- 4
EXHAUST SYSTEM ..... FE- 6

ENGINE CONTROL SYSTEM

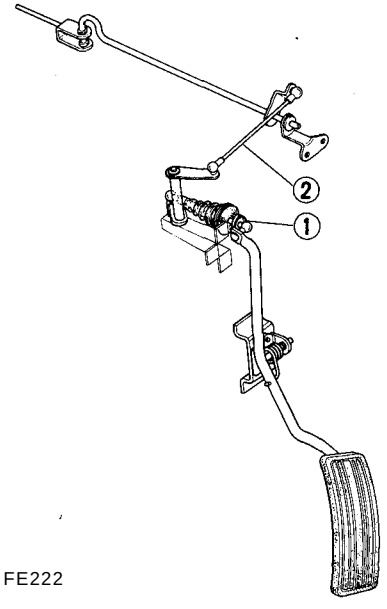
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ACCELERATOR SYSTEM

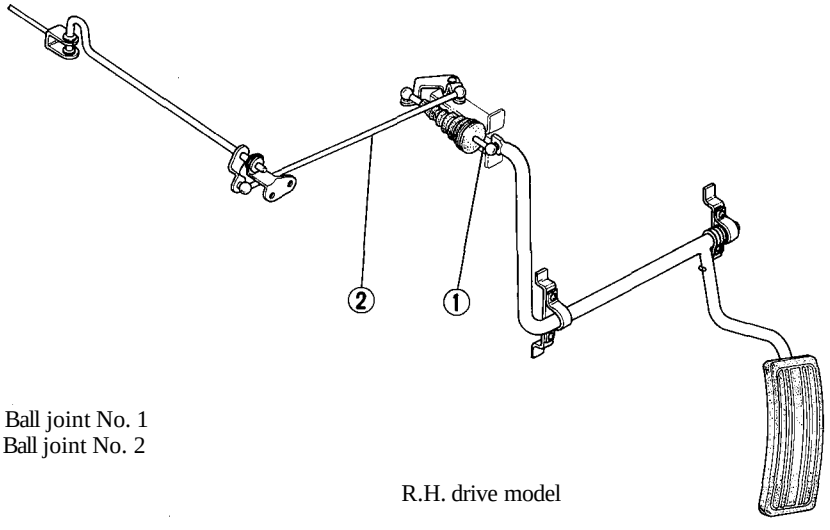
DESCRIPTION

The accelerator linkage has been constructed with minimized weight so that it will not be affected by engine vibration and will operate smoothly at all times.



FE222

L.H. drive model



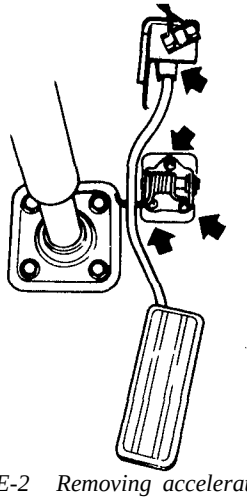
1 Ball joint No. 1
2 Ball joint No. 2

R.H. drive model

Fig. FE-1 Accelerator linkage

REMOVAL AND INSTALLATION

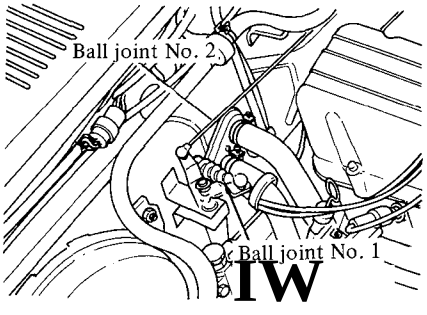
1. Remove three screws from accelerator pedal bracket.
2. Separate accelerator rod from pedal arm at ball joint. See Figure FE-1.



FE164

Fig. FE-2 Removing accelerator pedal arm

3. Disconnect ball joint of each rod at torsion shaft support in the engine compartment. Ball joint rods can then be taken out easily.



FE223

Fig. FE-3 Disconnecting ball joint rods

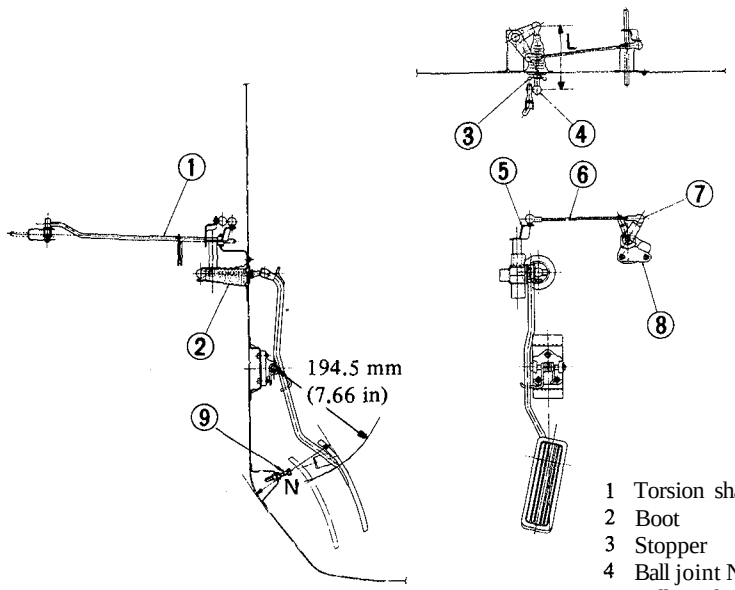
4. Installation is in the reverse sequence of removal.

INSPECTION

1. Check accelerator pedal return spring for rust, fatigue or damage.
   Replace if necessary.
2. Check accelerator linkage for rust, damage or looseness.
   Repair or replace if necessary.

ADJUSTMENT

LINKAGE



FE165

1 Torsion shaft
2 Boot
3 Stopper
4 Ball joint No. 1
5 Bell crank
6 Tension rod
7 Ball joint No. 2
8 Torsion shaft support
9 Pedal stopper and nut

Fig. FE-4 Accelerator linkage setting

1. Adjust the stopper bolt height to 22.5 mm (0.886 in) from toe board.
2. Adjust the tension rod running through dashboard to 117 mm (4.61 in).
   Adjust the other tension rod to 123 mm (4.84 in).
3. Upon completion of the above adjustment, depress accelerator pedal, and adjust stopper bolt properly so that it comes into contact with pedal when throttle shaft is in "Fully Open" position. Now, turn stopper bolt clockwise one full turn and lock stopper bolt with lock nut.

Kickdown switch

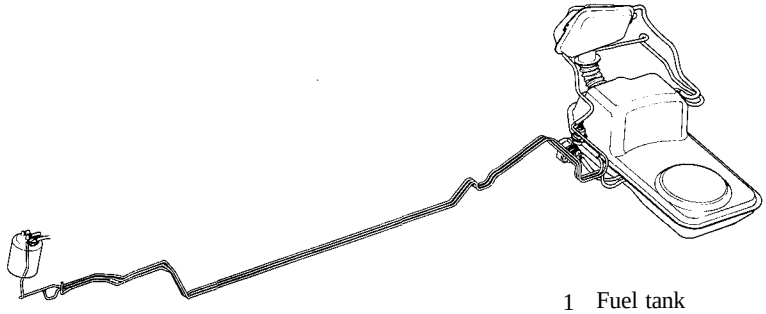
On automatic transmission models, it is necessary to adjust kickdown switch. Kickdown switch adjustment is correct if switch is actuated by kickdown switch striker when accelerator pedal is fully depressed.

Always tighten stopper nut securely after proper adjustment is obtained.

FUEL SYSTEM

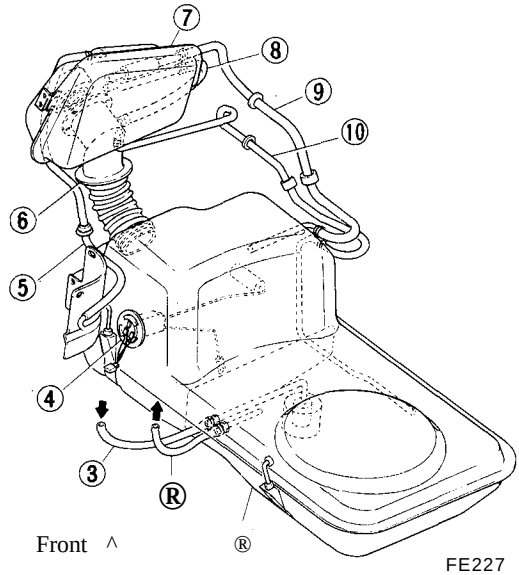
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INSPECTION FE-5
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FUEL UNIT GAUGE FE-5



FE226

1 Fuel tank
2 Fuel hose (outlet)
3 Fuel hose (return)
4 Tank unit gauge
5 Vapor vent line
6 Filler hose
7 Reservoir tank
8 Breather hose
9 Breather hose
10 Breather hose



FE227

Fig. FE-5 Fuel tank and fuel line

DESCRIPTION

The fuel tank is installed beneath the spare tire housing. The fuel pump is installed beside the fuel tank. The electronic fuel injection system requires high fuel pressure in the fuel line.

Thus, pay close attention to the fuel line. The fuel tank is equipped with a thermistor for fuel warning. When the fuel level drops below 10 liters (10 U.S. qt, 8 Imper. qt.) the thermistor is activated and the warning lamp goes on.

A large capacity fuel strainer is also installed midway in the fuel line in the engine compartment.

For evaporative emission control, a reservoir tank and a carbon canister are also equipped. The reservoir tank is located at the rear quarter and the carbon canister in the engine compartment.

For fuel pump, fuel damper and fuel strainer, refer to Section EF.

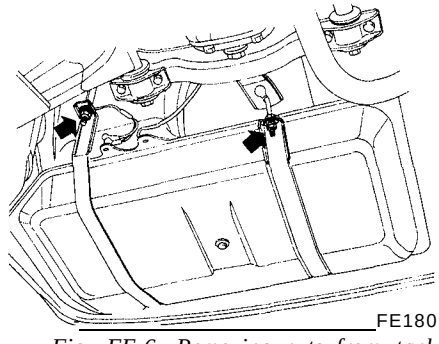
REMOVAL AND INSTALLATION

FUEL TANK

1. Disconnect battery ground cable.
2. Remove drain plug from tank bottom, and drain fuel completely.

Note: Fuel vapors are highly explosive. Keep flames or sparks away from vicinity of empty fuel tank.

3. Disconnect unit gauge cable, outlet hose and return hose from tank.
4. Remove nuts from two tank securing bands, and lower tank slightly.



FE180

Fig. FE-6 Removing nuts from tank securing bands

5. Disconnect three ventilation hoses (used to connect reservoir to tank) and filler hose from tank, and dismount tank.
6. Disconnect breather hose (used to connect filler hose to reservoir), remove reservoir installation bolts, and remove reservoir.

Note: Plug hose and tube openings to prevent entry of dust or dirt during removal.

7. Installation is in the reverse sequence of removal.

Note: Install fuel filler hose after fuel tank has been mounted in place. Failure to do so could result in leakage from around hose connections.

Do not twist or smash breather hoses when they are routed. Be sure to retain them with clips securely.

FUEL TUBE

The fuel line between fuel pump and fuel strainer is a single molded unit construction which completely eliminate fuel leakage. Fuel tubes are serviced as an assembly.

Do not disconnect any fuel line unless absolutely necessary,

1. Drain fuel from fuel tank.
2. Loosen fuel hose clamps and disconnect fuel tube at each end.

Note: Plug hose and tube openings to prevent entry of dust or dirt during removal.

3. Unfasten clips that hold tube on underbody and remove tube from car.
4. Installation is in the reverse sequence of removal.

FUEL UNIT GAUGE

1. Drain fuel from fuel tank.
2. Disconnect battery ground cable.
3. Disconnect wire from fuel tank unit gauge.
4. Turn fuel unit gauge counterclockwise with a screwdriver.

Note: Unit gauge is a bayonet type; To remove, turn it counterclockwise.

5. Installation is in the reverse sequense of removal.

Note: When installing fuel tank unit gauge, align projection of tank unit gauge with notch in fuel tank and tighten it securely. Be sure to install tank unit gauge with O-ring in place.

INSPECTION

FUEL TANK

Check fuel tank for cracks or deformation. If necessary, replace.

FUEL HOSE

Inspect all hoses for cracks, fatigue, sweating or deterioration.

Replace any hose that is damaged.

FUEL TUBE

Replace any fuel tube that is cracked, rusted, collapsed or deformed.

Note: Inspect hoses and tubes according to the periodic maintenance schedule.

FUEL STRAINER

Replace fuel strainer according to the periodic maintenance schedule or when it is clogged or restricted.

Fuel strainer is a cartridge type and cannot be cleaned. Always replace with a new one.

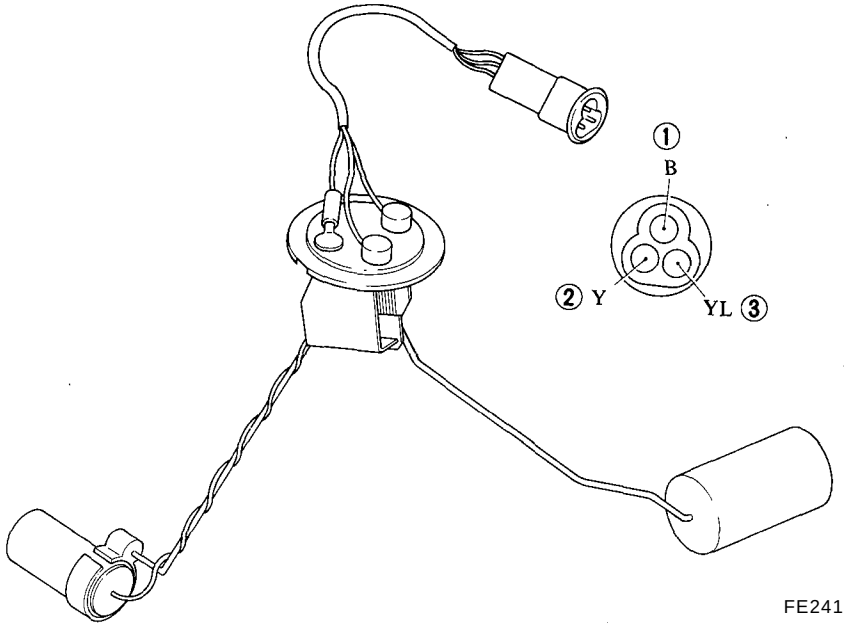


Fig. FE-7 Fuel unit gauge

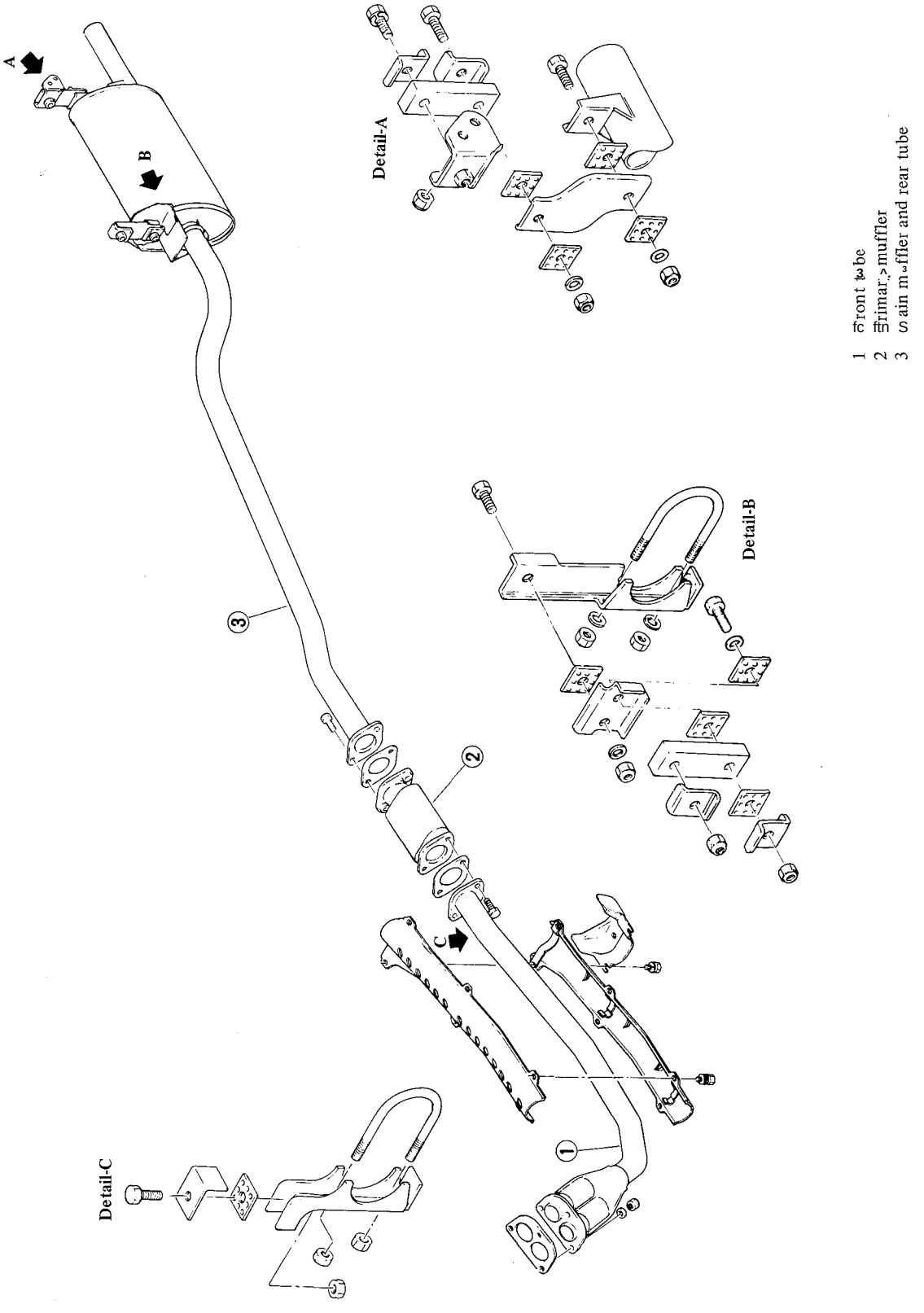
FUEL UNIT GAUGE

1. Test resistance between (T)-(2) terminals with a low reading ohmmeter. Resistance should be between approximately 10 to 80£2.
2. Check resistance between ®-(3) terminals when thermistor is submerged in fuel.
3. Then remove it from fuel, and drain fuel. At this step, resistance between ®-(3) terminals should be different than that in step 2.
4. If anything is distorted, replace fuel unit gauge as an assembly.

EXHAUST SYSTEM

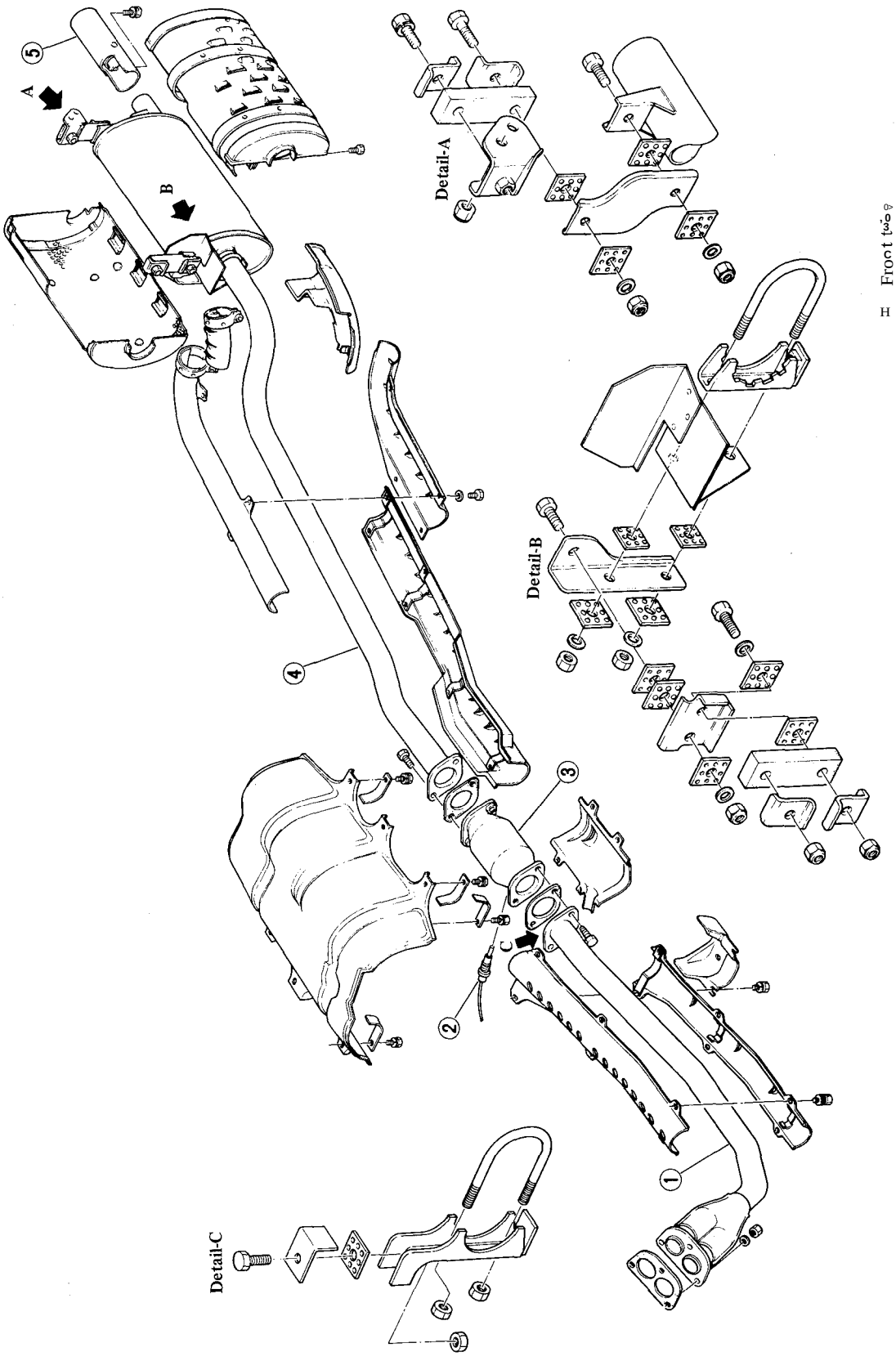
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MAIN MUFFLER WITH TAIL PIPE FE-8
PRE-MUFFLER OR CATALYTIC CONVERTER FE-8
FRONT TUBE FE-8



FE242

Non-California model



FE243

California model

Fig. *FE-8 Exhaust tube*

DESCRIPTION

The exhaust system consists of three units:

Front tube, pre-muffler and main muffler with tail pipe.

In the California model, a catalytic converter is installed in place of pre-muffler. Heat insulator plates for catalytic converter and exhaust system are also installed on the California model.

REMOVAL AND INSTALLATION

MAIN MUFFLER WITH TAIL PIPE

1. Remove tail pipe clamp bolt.

Note: Because a diffuser is installed on the California model, finisher must be removed prior to the above step.

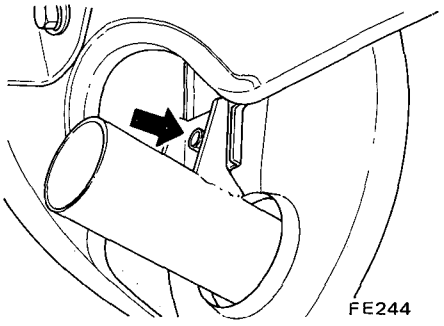
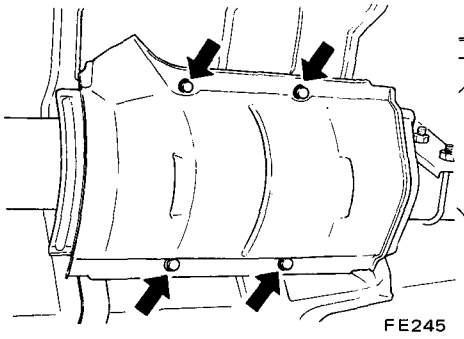


Fig. FE-9 Removing tail pipe clamp bolt

2. Remove two bolts and nuts connecting tail pipe to pre-muffler or catalytic converter.

Note: In California model, heat insulator should be removed prior to the above step.



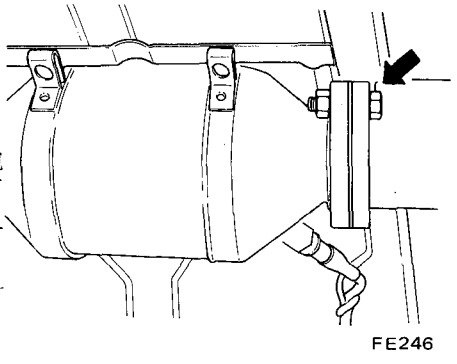


Fig. FE-10 Removing heat insulator

3. Holding main muffler and tail pipe, remove main muffler clamp bolt. Main muffler with tail pipe can then be taken out.

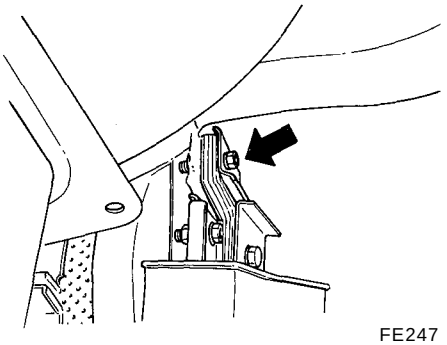


Fig. FE-11 Removing main muffler clamp bolt

4. Installation is in the reverse sequence of removal.

PRE-MUFFLER OR CATALYTIC CONVERTER

1. Remove main muffler with tail pipe, referring to the previous section.
2. Remove two bolts and nuts connecting pre-muffler or catalytic converter to front tube.

Note: In the California model, disconnect catalytic converter sensor prior to this step.

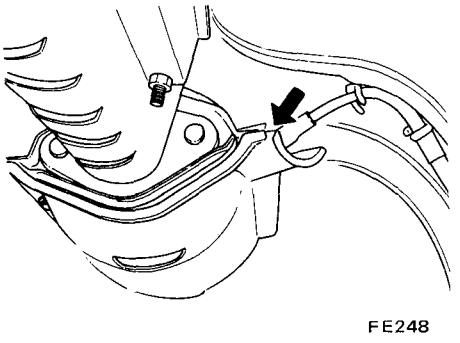


Fig. FE-12 Disconnecting catalytic converter sensor

3. Installation is in the reverse sequence of removal.

FRONT TUBE

1. Remove main muffler with tail tube and pre-muffler, referring to the previous section.
2. Remove three nuts securing front tube to exhaust manifold.

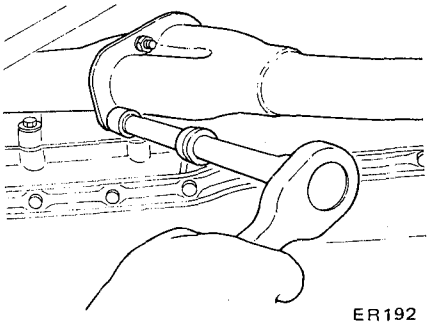


Fig. FE-13 Removing manifold nuts

3. Remove U-bolt securing nuts. Front tube can then be taken out.

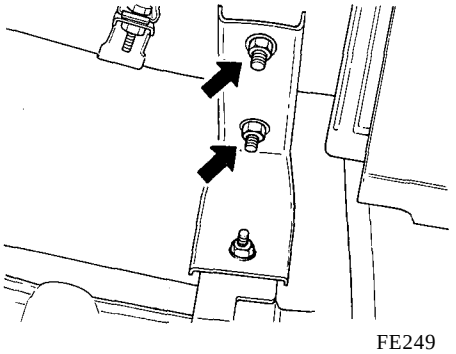


Fig. FE-14 Removing U-bolt

4. Installation is in the reverse sequence of removal.

Tightening torque:
- Exhaust manifold to front tube nuts:
  - 4.4 to 5.9 kg-m
  - (31 to 43 ft-lb)
- U-bolt securing nuts:
  - 1.6 to 1.9 kg-m
  - (12 to 14 ft-lb)
- Pre-muffler securing bolts:
  - 3.1 to 4.1 kg-m
  - (22 to 30 ft-lb)
- Catalytic converter securing bolts:
  - 3.1 to 4.1 kg-m
  - (22 to 30 ft-lb)
- Tail pipe clamp bolt:
  - 0.9 to 1.2 kg-m
  - (6.5 to 8.7 ft-lb)
- Main muffler clamp bolt:
  - 0.9 to 1.2 kg-m
  - (6.5 to 8.7 ft-lb)