

# Fuel Pressure Damper Lower Level Repair

Saturday, October 10, 2015 6:54 AM

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| <b>Reference</b>     | SSM72229   |
| <b>Models</b>        | S-TYPE / X200<br>XF / X250<br>XJ / X350<br>XK / X100<br>XK / X150  |
| <b>Title</b>         | Fuel Pressure Damper Lower Level Repair 4.2L V8 only   |
| <b>Category</b>      | Engine   |
| <b>Last modified</b> | 14-Apr-2015 00:00:00   |
| <b>Symptom</b>       | 404000 Fuel System Concerns  |
| <b>Attachments</b>   | 1attachment A.pdf (1attachment A.pdf)  |
| <b>Content</b>       | <p><b>Subject:</b> The fuel injection supply manifold fuel pressure pulse damper is now available as a lower level service repair part. This affects 4.2 V8 engines only.</p> <p><b>Action:</b> Action: Should the fuel pressure pulse damper require replacement follow the procedure steps below. The damper part number is AJ8 3838. The SRO for this repair is 19.60.13 Fuel rail – renew.</p> <p><b><u>WARNINGS:</u></b> Working on the fuel system results in fuel and fuel vapor being present in the atmosphere. Fuel vapor is extremely flammable, hence great care must be taken whilst working on the fuel system. Adhere strictly to the following precautions:</p> <ul style="list-style-type: none"> <li>• Place the vehicle in a quarantined area and arrange "No Smoking/Petrol Fumes" signs about the vehicle.</li> <li>• Before any work is carried out on the fuel system, ground the vehicle to earth and maintain the ground connection until the work is complete.</li> <li>• Do not smoke or carry lighted tobacco or open flame of any type when working on or near any fuel related components. Highly flammable vapors are always present and may ignite. Failure to follow these instructions may result in personal injury.</li> <li>• Do not carry or operate cellular phones when working on or near any fuel related components. Highly flammable vapors are always present and may ignite. Failure to follow these instructions may result in personal injury.</li> <li>• The fuel system remains pressurized for a long time after the ignition is switched off. The fuel pressure must be relieved before attempting any repairs. Failure to follow these instructions may result in personal injury.</li> <li>• This procedure involves fuel handling. Be prepared for fuel spillage at all times and always observe fuel handling precautions. Failure to follow these instructions may result in personal injury.</li> <li>• After carrying out repairs, the fuel system must be checked visually for leaks. Failure to follow these instructions may result in personal injury.</li> </ul> |

- If taken internally do not induce vomiting, seek immediate medical attention. Failure to follow these instructions may result in personal injury.
- If fuel contacts the eyes, flush the eyes with cold water or eyewash solution and seek medical attention.
- Wash hands thoroughly after handling, as prolonged contact may cause irritation. Should irritation develop, seek medical attention.
- CAUTION: Make sure the engine is cold before this procedure is carried out. Failure to follow this instruction may result in damage to the vehicle.
- When depressurising the fuel system, make sure that there is no throttle input. Failure to follow this instruction may cause damage to the vehicle.
- Make sure that as soon as the vehicle is running roughly/misfiring that the engine is immediately switched off. Failure to follow this instruction may result in damage to the vehicle.

**Procedure:**

1. The removal of the fuel injection supply manifold and the fuel pressure pulse dampers are included in TOPIx Workshop Manual, Section 303-04, Fuel Charging and Controls
2. Using a suitable small flat blade screwdriver blade and carefully bend open each of the fuel pressure damper retaining clips. (See attachment 'A' picture 1 for the location of the clips with the damper fitted to the fuel rail, and picture 2 showing the clips after being opened up.)
3. Remove the damper from the fuel supply manifold stub pipe.
4. Confirm the fuel rail stub pipe bore is clean and free from damage before installing the new damper.
5. Carefully install the damper into the fuel rail stub pipe, making sure the damper is square to the pipe.
6. Using the palm of the hand apply suitable pressure to drive the retaining clips over the stub pipe flange until all the clips are latched, an audible click should be heard.
7. Visually inspect the assembly of the damper to the fuel rail to confirm that all of the retaining clips are fully latched (see picture 1). The damper can be gently pulled away from the manifold to help confirm that all the retaining clips are fully engaged securing the damper to the fuel injection manifold assembly.
8. Install the fuel injection supply manifold to the engine (see TOPIx Workshop Manual, Section 303-04, Fuel Charging and Controls).
9. Check the fuel system for leaks by firstly cycling the ignition to the on position only to run the fuel pump and pressurize the system, ensure no leaks are found. If no leaks are found perform a longer check with the engine running.

**Attachment 'A':**

- Picture 1 – fuel pressure damper fitted to fuel injection supply manifold – retaining clips latched
- Picture 2 – fuel pressure damper after removal from fuel injection supply manifold – retaining clips bent open.

- **Picture 3 – new fuel pressure damper – retaining clips shown in original closed position.**

