



INSTRUCTIONS

Diesel Pumps

Please Read These First

These instructions are intended as a guide only and are not a substitute for a workshop manual. The fitter must have a degree of mechanical competence. If you are in any doubt as to your ability to fit the part, do not undertake the job.

For more Technical Tips and to register your warranty online visit

www.smpe.co.uk

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Diesel Pumps

Please read these first

Renewing high pressure diesel pumps should only be carried out by trained technicians with knowledge of diesel system repair. Specialist tools are normally required, without them serious damage may occur. If you are in any doubt as to your ability to complete the repair, do not undertake the job. The following is a guide to fitting, not vehicle specific instructions.

Caution

Diesel fuel systems utilise huge pressures, please ensure that you use the correct procedures and protection to prevent disfigurement, injury or death due to accidents plus any damage you could do to the engine.

Dirt or debris in the fuel system is a primary cause of diesel pump failure. The high pressure fuel pump is the most crucial component in the injections system. The utmost cleanliness must be observed at all times to avoid potential, irreparable damage occurring to both the injection system and the engines internal components.

We recommend that the entire fuel system be comprehensively cleaned before the fuel pump is renewed, including;

- Flush out ALL fuel lines, supply and return
- Drain fuel tank and flush out, dispose of drained fuel, top up with new
- Clean out common rail
- Renew fuel filter

Damage caused by dirt in the fuel system is not covered by the pump warranty

We also recommend that the fuel injectors be tested at the time of fitting a new pump.

Diesel high pressure pumps are located on the engine in locations that get very hot. Diesel fuel is extremely flammable. Ensure that the vehicle has cooled to a safe level before attempting the renewal.

Disconnect the battery

- Clean the area around the fuel pump
- Disconnect electrical connectors
- Disconnect the fuel lines, observe the location of the fuel banjos, it is possible to mix these up but will result in fuel starvation
- Do not force or bend the fuel lines
- Manufactures recommend that all fuel lines are changed EVERTIME they are disconnected
- Remove the fuel pump

If necessary remove and install the fuel pump drive gear with the right equipment ie puller etc. Re-torque the drive gear retaining bolts

- Fit the new fuel pump; do not remove the fuel connection blanking plug from the pump until you are ready to fit the fuel pipes.
- Check and/or adjust and set the fuel pump in accordance with manufacturer's data.
- Observe correct torque settings when tightening
- Refit fuel lines, tighten/torque correctly

Caution - - Depending upon the pump type the ECU may need initialising, reprogramming or resetting BEFORE the engine is started, please refer to vehicle specific data for information

- Spin the engine over, once it fires do not rev/over rev, let the engine tick over until it runs "clean"
- Check for leaks

Caution do not "crack open" or loosen any of the fuel pipes whilst the engine is running, serious damage, to you and the vehicle may occur.

Do not attempt to fix any leaks whilst the engine is running for example by tightening pipes fractures may occur.

Please see separate poster information for details of suitability and acceptability of surcharge units