IVOR SEARLE

AUTOMOTIVE PRODUCTS OF EXCELLENCE
SINCE 1946

Engine Pre Installation & Warranty Information

www.ivorsearle.co.uk

Engine Pre Installation Information

It is important that before fitting the replacement unit, the cause of the original engine failure is identified, and where appropriate, remedial action is taken. Failure to do so may result in similar problems with the replacement engine, which will not be covered by the engine warranty.

Before installation, always visually check that the replacement engine is compatible with the unit it is replacing. The engine supplied may be fitted with temporary transport items that will need to be exchanged with the items from the original engine prior to fitting (e.g. sump pan, rocker or cam cover, injection pump, locking tools etc).

Always carefully read any information or instruction labels that may be supplied with the fitting gaskets, or fixed to the engine or packaging, as they may be specific to the engine supplied.

It is good practice that all ancillary parts should be thoroughly cleaned prior to refitting to the exchange unit.

BEFORE FITTING THE REPLACEMENT ENGINE, PLEASE CAREFULLY READ THROUGH THE FOLLOWING NOTES. IF YOU SHOULD HAVE ANY QUESTIONS OR NEED FURTHER ADVICE, PLEASE CONTACT IVOR SEARLE LIMITED.

Engine oil

The engine is supplied without engine oil. Before turning the engine, it should be filled with oil that meets the original manufacturer's specifications, and should only be filled to the correct level.

Cooling system

Before fitting the replacement engine, we recommend that the radiator be checked by a specialist and replaced if necessary.

It is essential that the complete cooling system functions efficiently. The hoses and hose clips should be carefully checked for wear and leaks, and we would always recommend that a new water-pump and thermostat are fitted. All switches, sensors and cooling fans should be checked for operation. On initial running, ensure the coolant is circulating correctly and that the system is de-aerated. The cooling system should only be filled with an antifreeze mix or the original manufacturer's recommended coolant.

If the previous failure resulted in contamination of the cooling system with oil, then we strongly recommend that the entire cooling system (including the heater matrix) be cleaned with a proprietary cooling system cleaning product and all hoses are replaced.

Breather system

Where parts require transferring from the old unit to the new one, it is essential that the items incorporating crankcase breathers are thoroughly cleaned or replaced with new parts (including rocker or cam covers). All rubber breather pipes should always be replaced and any electronic or vacuum control valves should be checked for correct operation.

If the breather system is blocked or restricted, the crankcase can become pressurised. As a result, the efficiency of the oil control rings and valve stem oil seals is reduced and problems with high oil consumption may occur.

On turbocharged engines, excessive crankcase pressure can lead to premature turbocharger failure.

Poor crankcase ventilation will also prevent the engine from disposing of impurities such as water vapour and acids which are formed as a by-product of combustion; these will reduce the life expectancy of the lubricating oil, causing sludging and premature engine wear. The gasses that build up in a pressurised crankcase will attempt to ventilate wherever possible, usually the dipstick, rocker or cam cover gaskets and engine oil seals.

It is important never to overfill an engine with oil, as the excess can be sucked through the breathing system causing combustion problems or engine damage.

Air intake manifold

This must be thoroughly cleaned and checked for cracks, corrosion and distortion. The intake manifold gasket must be fitted correctly; the securing nuts/ bolts/ studs must be tightened in the correct order and to the correct torque. Bolt and stud threads should be treated with a sealing compound to prevent oil/ coolant leakage.

Many air intake manifolds are fitted with butterfly or other variable valves, and these should be checked for wear and serviceability before they are re-fitted. If the original engine failure resulted in engine debris entering the induction system, then it is essential that all traces of debris are removed to prevent this being sucked back in to the replacement engine, thus causing further damage.

Petrol / LPG fuel system

It is recommended that the injectors are tested and cleaned by a specialist and all electrical connections are in good order. All pipes should be checked for leaks or damage, and replaced as required.

Where carburettors are fitted, they must be cleaned and correctly adjusted. If a mechanical fuel feed pump is fitted, the diaphragm should be checked for cracks or splits, as any damage may lead to contamination of the engine oil.

If fitted with an LPG fuel system, the evaporator must also be de-aerated on initial running. All pipes should be checked for leaks or damage and replaced as required.

It is recommended that dual-fuel engines are operated on petrol only for the first 1,500 miles.

Diesel fuel system

If the replacement engine is supplied without fuel injection equipment (i.e. fuel pump, injectors, distribution rail, pipes etc), it is strongly recommended that the fuel pump and injectors are tested by a specialist prior to re-fitting. All pressure sensors should be checked for operation.

Care should be taken that all fuel pipes and other components of the diesel injection system are meticulously clean, as any contamination could result in serious engine damage.

Where applicable, the diesel injection timing must be set in accordance with the original manufacturers specifications.

Ignition system

Any fault codes should be cleared as soon as possible and any reoccurring codes should be investigated and the cause rectified. Specialist assistance may be required.

The original spark plugs should always be replaced with new ones.

If a distributor is fitted, it should be checked for wear and replaced if required. Points should be replaced and set correctly. Timing should be adjusted in accordance with the manufacturers' recommended procedures and settings.

Front crankshaft pulley

Replace the front pulley if there are any visible signs of cracking, damage or oil seal wear. The original manufacturer may specify that the front crankshaft bolt/s should be replaced. The bolt/s must always be tightened in accordance with the original manufacturers' specifications.

Filters

The fuel filter and air filter must be replaced at the time of engine installation. A new oil filter must be fitted and then be replaced after 500 miles.

Flywheel Bolts

Where the flywheel bolt holes are drilled all the way through the rear crankshaft flange, the bolts must be treated with a sealing compound in order to avoid leakage. The original manufacturer may specify that the flywheel bolts should be replaced. The flywheel bolts must always be tightened in accordance with the original manufacturers' specifications.

Exhaust System, Catalytic Convertor, Diesel Particulate Filter and Turbocharger

The exhaust system should be checked thoroughly for damage, obstructions and contamination.

The exhaust manifold should be checked for cracks and distortion. Bolt and stud threads should be treated with a sealing compound to prevent oil/coolant leakage.

If the original engine suffered from oil starvation, this may also have damaged the turbocharger, as may any debris that has passed from the engine into the exhaust.

Fuel, oil or coolant contamination may damage the catalytic convertor/diesel particulate filter and may also cause "smoking" on engine start-up.

Starting the engine

ALWAYS check that the oil and coolant levels are correct before starting the engine.

It is advisable to disable the fuel or ignition systems, and to turn the engine via the starter motor until the oil pressure indicator light goes out.

After running the engine, check the oil and temperature gauges. If there is low oil pressure or the engine temperature is too high, stop the engine immediately and check for possible causes.

The engine must not be left idling for prolonged periods. Such early life operation will create cylinder bore glazing and consequently excessive oil consumption. At the end of the test drive, make sure that the oil pressure and coolant temperatures are still at the correct levels. Check for oil, water and fuel leaks.

ALWAYS Stress to your customers the necessity of a service after the first 500 miles, when the oil and filter must be changed and the tappets (where manually adjustable) reset. The engine should also have a general inspection at that time.

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY LEAD TO PREMATURE ENGINE FAILURE AND INVALIDATE THE ENGINE WARRANTY.

Ivor Searle Engine Warranty

Subject to the following conditions, all full engines are guaranteed for 12 months, unlimited mileage, against faulty workmanship and defective materials.

1. Damage occurring as a result of a failure of any ancillary parts (e.g. cooling system, fuel system, turbo charger/exhaust & ignition system components) is not covered by this guarantee, nor are the ancillary parts themselves.
2. This guarantee is applicable to mainland United Kingdom and Northern Ireland only. Additional insurance cover is advisable when travelling abroad with the vehicle.
3. That a 500 mile service is carried out when the oil and oil filter are changed. N.B. - only use the type and grade of oil recommended by the original engine manufacturer. The tappets, where they are manually adjustable, should be checked and reset as necessary. Where applicable check cooling, fuel and ignition system as well as auxiliary drive belts. Ensure there are no oil, water or fuel leaks. Throughout the duration of this Warranty the vehicle should be serviced in accordance with the vehicle manufacturer's recommendations. The service record at the back of this booklet should be completed at each service. Any necessary repairs or maintenance (whether covered by this Warranty or not) should be carried out as soon as is practicable and without further detriment to the condition of the engine. All ancillary parts should always be maintained in good order.
4. Any modifications undertaken without the written consent of Ivor Searle Limited will invalidate this Warranty.
5. This Warranty only covers the vehicle when in use on public paved roads and does not apply in marine situations, competition, race or speed trials. If the vehicle is to be used for towing, then this must only be done within the manufacturer's recommendations.
6. This Warranty will not cover any defect, damage or breakdown resulting from misuse, negligence or collision.

7. This Warranty will not apply if the repair is necessitated simply as a result of fair wear and tear.
8. If a remanufactured engine is replaced under the terms of this Warranty, the replacement engine will be covered for the balance of the original guarantee.
9. This Warranty is transferable provided all terms and conditions stated are adhered to.
10. This Warranty does not cover towing, recovery, re-delivery or any consequential costs incurred (e.g. replacement/short term hire vehicle, overnight accommodation etc).
11. If any material facts are withheld, false or fraudulent reports and/or claims are made, then this Warranty shall become void. In this event, any payments that have been made by Ivor Searle Limited will be repayable forthwith.
12. Agents, distributors or 3rd party suppliers trading in or selling Ivor Searle Limited's goods have no right or authority to bind in any way nor to assume on Ivor Searle Limited's behalf, any obligations.
13. No variation or modification to the terms of this Warranty shall be valid or binding unless it is in writing and signed by an authorised employee of Ivor Searle Limited.
14. The vehicle owner is responsible for the costs of maintenance items replaced during Warranty repairs.
15. This Warranty is valid and effective only if all terms and conditions (including the Repairs Procedure) are fully complied with.
16. Nothing in the above Warranty affects the customer's statutory rights.
17. Ivor Searle Limited reserves the right to amend the terms and conditions of this Warranty from time to time without prior notification.

Service record

Failure to abide by the servicing conditions may invalidate a warranty claim.

500 mile engine service

We confirm that the 500 miles service has been completed on Engine Number

R.....as recommended by the engine remanufacturer.

Date.....Recorded mileage.....

Garage.....

Next service due at.....

Signature.....

Garage stamp:

2nd service

We confirm that the service has been completed on Engine Number

R.....as recommended by the engine remanufacturer.

Date.....Recorded mileage.....

Garage.....

Next service due at.....

Signature.....

Garage stamp:

3rd service

We confirm that the service has been completed on Engine Number

R.....as recommended by the engine remanufacturer.

Date.....Recorded mileage.....

Garage.....

Next service due at.....

Signature.....

Garage stamp:

4th service

We confirm that the service has been completed on Engine Number

R.....as recommended by the engine remanufacturer.

Date.....Recorded mileage.....

Garage.....

Next service due at.....

Signature.....

Garage stamp:

Warranty Repair Procedure

The following steps must be taken in the event of a possible Warranty claim:

1. The end-user must contact the agent who supplied the remanufactured unit and provide the following information:
   - The engine reference number (R.....)
   - The make and model of the vehicle
   - The date the remanufactured unit was purchased
   - The mileage of the vehicle at the time the remanufactured unit was fitted
   - The current mileage of the vehicle
   - Details of the complaint
2. If the end-user is unable to contact the agent who supplied the unit, he/she may contact Ivor Searle Limited directly, detailing the information required above.
3. Ivor Searle Limited may require that the warranty registration card is faxed and/or posted to them.
4. The vehicle must then be delivered, **at the owner's expense**, to a mutually agreed repairer. No repairs may be undertaken until the costs and the method of repair have been agreed with Ivor Searle Limited.
5. Ivor Searle Limited will then issue a Warranty repair number that will authorise the necessary repairs, or replacement, at the agreed cost. **No invoices will be accepted for payment without a Warranty repair number.**
6. Ivor Searle Limited reserves the right to provide any necessary repair parts. All faulty or damaged parts removed under the terms of this Warranty shall become the property of Ivor Searle Limited and must be returned.
7. Failure to comply with any of the above may invalidate the warranty.

Engine Warranty Registration

The engine fitter must ensure that he fills in his part of the warranty card and passes the warranty document to the customer immediately the installation is complete.

Engine Reference Number R.....

To be completed by Engine Fitter and given to vehicle owner:

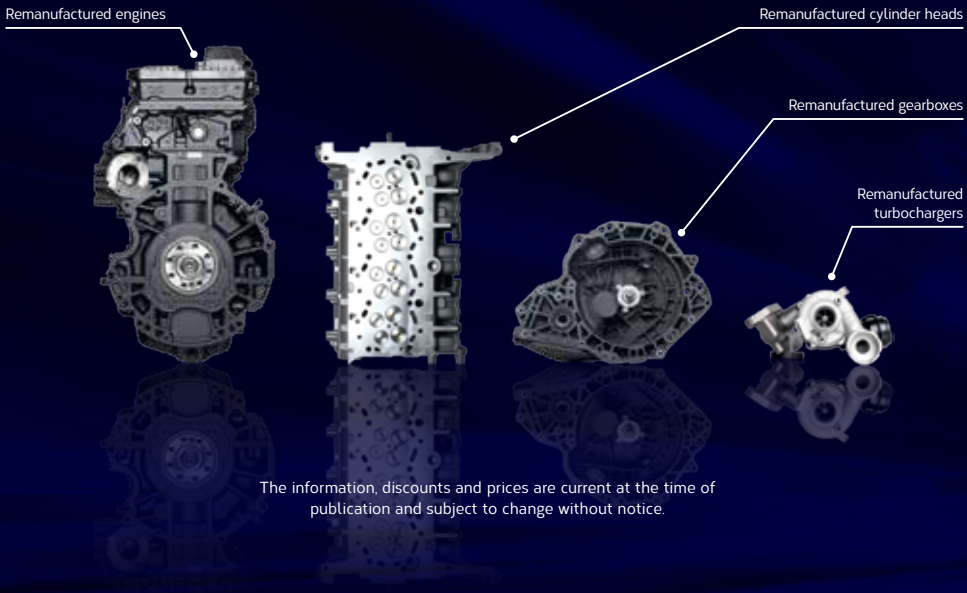
I confirm that I have fitted this engine in accordance with the accompanying fitting instructions. Having inspected the vehicle, I can confirm that there are no faults with any of the ancillary components that would affect the life and performance of the engine. I understand that the Warranty is not valid if the engine is damaged through malfunction of ancillaries or faulty fitting.

Fitters Signature:.....

Date:.....

Fitting Agent's Stamp:

Notes/comments



The information, discounts and prices are current at the time of publication and subject to change without notice.

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