

Engine Specialists Pty Ltd

Applicable to All New And Re-Manufactured Engines

To ensure the validity of your warranty, it is essential that the following questionnaire is completed and returned to Engine Specialists Pty Ltd.

This questionnaire is designed to help identify any potential installation issues and to inform us on the procedures you followed during the engine installation.

Please answer the following questions.

Name and contact details of the company/workshop that performed engine fitment?

Name

.....

....

Address

.....

....

Contact number

.....ABN.....

1. Are you a certified motor mechanic?

• Yes ☐ No ☐

Do you specialise in:

• Diesel engines ☐

• Petrol engines ☐

2. Are you:

• The purchaser ☐

• The fitter ☐

• Both ☐

3. Have you reviewed the 'Installation Procedures' and 'Warranty Terms & Conditions'?

• Yes ☐ No ☐

4. Did you complete the engine assembly using a workshop manual specific to this engine type?

• Yes ☐ No ☐

5. Regarding the injection pump, please select the option that applies:

• Injection pump was reconditioned by a Fuel Injection Specialist ☐

• Injection pump was tested and re-calibrated by a Fuel Injection Specialist ☐

• A new injection pump was installed ☐

• The injection pump was already fitted on the supplied engine ☐

- None of the above ☐

Please specify other.....

6. Fuel Injector Information

Please provide the total kilometers (or hours) that the fuel injectors were in operation before they were sent to the Fuel Injection Specialist:

- kms
- hours

Did the Fuel Injection Specialist:

a) Fit new injector nozzles to the old injectors?

- Yes ☐ No ☐

b) Clean and reset the old injectors?

- Yes ☐ No ☐

c) Neither of the above?

- Yes ☐ No ☐

d) Were the injectors already installed on the supplied engine?

- Yes ☐ No ☐

e) Did some injectors have new nozzles fitted, while others were cleaned and reset?

- Yes ☐ No ☐

If so, how many and what cylinders were they installed?

• New:

• Old:

f) Or did you install entirely new injectors?

- Yes ☐ No ☐

7. Injection Pump Installation:

Did you install the injection pump by: (Please select all that apply)

a) Removing the timing case and aligning the timing marks?

- Yes ☐ No ☐

b) Aligning the timing marks through an inspection plate?

- Yes ☐ No ☐

c) Removing the idler gear (to avoid multiple crankshaft rotations) for easier and quicker alignment of the timing marks?

- Yes ☐ No ☐

d) Not applicable, as the injection pump was already installed?

- Yes ☐ No ☐

8. Injection Pump Timing

Did you initially time (or check the setting of) the injection pump using:

a) Spill timing?

- Yes ☐ No ☐

b) Dial indicator?

- Yes ☐ No ☐

c) Neither of the above?

- Yes ☐ No ☐

Note: It is recommended to re-check fuel pump timing.

9. Fuel Filter Replacement

Did you replace the fuel filter(s)?

- Yes ☐ No ☐

10. Turbocharger or Supercharger (If applicable)

a) Did you recondition the turbocharger or supercharger?

- Yes ☐ No ☐

b) Did you only inspect the turbocharger or supercharger?

- Yes ☐ No ☐

c) Did you install a new turbocharger or supercharger?

- Yes ☐ No ☐

d) Was the turbocharger already installed on the engine?

- Yes ☐ No ☐

Warning: The installation of any aftermarket turbocharger or supercharger will automatically void the engine warranty.

11. Intake Manifold Inspection

Did you thoroughly inspect and clean the intake manifold(s)?

- Yes ☐ No ☐

12. Air Induction System

Did you thoroughly inspect and clean the air induction system?

- Yes ☐ No ☐

13. Air Filter Replacement

Did you replace the air filter(s)?

- Yes ☐ No ☐

14. Exhaust Brake (Applicable only to engines equipped with an exhaust brake)

a) Did you have the exhaust brake fully serviced or replaced?

- Yes ☐ No ☐

b) Did you use the old exhaust brake because it appeared to be in good condition?

- Yes ☐ No ☐

15. Exhaust System Inspection

a) Did you thoroughly check the exhaust system/muffler for blockage?

- Yes ☐ No ☐

b) Did you replace the muffler/silencer assembly?

- Yes ☐ No ☐

c) DPF "Cleaned/flushed" or "Regenerated"?

- Cleaned/flushed ☐

- Regenerated ☐

d) Did you replace the DPF assembly?

- Yes ☐ No ☐

16. Engine Sump

Did the sump on this engine require changing or swapping?

- Yes ☐ No ☐

If yes, did you: (Please select all that apply)

a) Use the pick-up pipe from the old engine?

- Yes ☐ No ☐

b) Leave the pick-up pipe supplied, as it was identical to the old one?

- Yes ☐ No ☐

c) Change the pick-up pipe connection position on the block?

- Yes ☐ No ☐

18. Rocker Cover

Did the rocker cover(s) require changing or swapping?

- Yes ☐ No ☐

19. Timing Case

Did the timing case require changing or swapping?

- Yes ☐ No ☐

If so, was it the:

- a) Inner ☐ b) Outer ☐ c) Both ☐

20. OHC and Balance Shaft Belts (Applicable only to OHC and balance shaft equipped engines)

a) Did you replace the OHC drive belt?

- Yes ☐ No ☐

b) Did you use the existing OHC drive belt?

- Yes ☐ No ☐

c) Did you replace the balance shaft belt?

- Yes ☐ No ☐

d) Did you use the existing balance shaft belt?

- Yes ☐ No ☐

21. Crankshaft Items

Did you replace the following crankshaft items? a) Harmonic balancer damper?

- Yes ☐ No ☐

b) Retaining collar?

- Yes ☐ No ☐

c) Retaining bolt or nut?

- Yes ☐ No ☐

d) Retaining washer?

- Yes ☐ No ☐

e) Key(s)?

- Yes ☐ No ☐

f) Crank drive belt gear (as applicable to OHC engines)?

- Yes ☐ No ☐

22. Harmonic Balancer Retaining Torque

Did you torque the harmonic balancer retaining bolt or nut?

- Yes ☐ No ☐

If yes, what was the torque setting used?

..... ft/lb Nm

23. Oil Cooler Flushing

Did you flush out the oil cooler?

a) By using compressed air and a degreasing agent?

- Yes ☐ No ☐

b) Any other method?

- Yes ☐ No ☐

Please state:

24. Water Pump

a) Did you replace the water pump?

• Yes ☐ No ☐

b) Did you leave the water pump as supplied with the engine?

• Yes ☐ No ☐

c) Did you use the existing/old water pump because it appeared to be in good condition?

• Yes ☐ No ☐

25. Viscous Fan Hub

Was the rotating movement of the viscous fan hub correct?

• Yes ☐ No ☐

26. Thermostat

a) Did you replace the thermostat(s)?

• Yes ☐ No ☐

b) Did you check the thermostat(s) for proper operation by placing them in boiling water?

• Yes ☐ No ☐

c) Neither of the above?

• Yes ☐ No ☐

27. Radiator

Did you have the radiator:

• a) Re-cored ☐ b) Chemically cleaned by a Specialist ☐ c) Flushed out with a hose ☐ d) Replaced ☐ e) None of the above ☐

28. Radiator/Coolant Hoses

a) Did you replace the radiator/coolant hoses?

• Yes ☐ No ☐

b) Did you use the old hoses because they appeared to be in good condition?

• Yes ☐ No ☐

29. Radiator Pressure Cap

a) Did you replace the radiator pressure cap?

• Yes ☐ No ☐

b) Did you use the old cap because it appeared to be in good condition?

• Yes ☐ No ☐

30. Fan Belt

a) Did you replace the fan belt(s)?

• Yes ☐ No ☐

b) Did you use the old belt(s) because they appeared to be in good condition?

• Yes ☐ No ☐

31. Radiator Coolant/Inhibitor

Did you add the correct radiator coolant/inhibitor?

• Yes ☐ No ☐

If yes, what quantity was added? Litres/ml:

32. Oil Pressure Verification

Did you verify the engine oil pressure using:

a) The oil pressure gauge in the vehicle?

• Yes ☐ No ☐

b) A master oil pressure gauge?

• Yes ☐ No ☐

What was the oil pressure on start up?.....

33. Oil Pressure Gauge/Warning Light

Is the oil pressure gauge or warning light functioning correctly?

• Yes ☐ No ☐

34. Initial Engine Start-Up At the stage of initial engine start-up, what method did you use to attain oil pressure?

a) Pressure priming first, then cranking the engine (without firing) until the correct oil pressure was obtained

• Yes ☐ No ☐

b) Cranking the engine with injectors fitted until the correct oil pressure was obtained (without firing the engine)

• Yes ☐ No ☐

c) Cranking the engine with injectors removed until the correct oil pressure was obtained

• Yes ☐ No ☐

d) Starting the engine and waiting for the oil pressure to register on the gauge

• Yes ☐ No ☐

35. Cylinder Head Bolt Re-torque (Applicable only to engines requiring re-tension of cylinder head bolts)

Did you torque the cylinder head bolts after the initial warm-up?

• Yes ☐ No ☐

What torque settings were used? ft/lb Nm

36. Cylinder Head Bolt Re-torque Awareness

Are you aware that the cylinder head bolts may need to be re-torqued and the valve clearances reset after 800km to 1,000km?

• Yes ☐ No ☐

37. Valve Clearance Reset

Did you reset the valve clearances after the initial warm-up?

• Yes ☐ No ☐

What were the valve clearances used?

• Intake:

• Exhaust:

38. Coolant Temperature Gauge/Sensors

Is the coolant temperature gauge/sensors functioning correctly?

• Yes ☐ No ☐

39. Gasket Shrinkage Correction

After the initial warm-up, did you correct any gasket shrinkage by tightening all engine cover bolts and screws?

• Yes ☐ No ☐

40. Running-In Procedure Form

Did you read the supplied 'Running-In Procedure' form?

- Yes ☐ No ☐

41. Road Testing

After the installation procedure was completed, was the vehicle road tested?

- Yes ☐ No ☐

42. Exhaust Smoke After Road Testing.

Were there any issues with exhaust smoke?

- Yes ☐ No ☐

If yes, what colour was the smoke?

- Black ☐ Grey ☐ White ☐ Blue ☐

43. Engine Operation

Were there any other issues with the engine operation?

- Yes ☐ No ☐

If yes, please describe:

.....
.....
.....

44. Vehicle Information

Is the engine installed in a:

- Car ☐ Truck ☐ Van ☐ 4WD ☐ Boat ☐ Machine ☐ Other ☐

If other, please specify:

.....

45. Odometer/Hour Meter Operation

Was the odometer (or hour meter) in the vehicle operating correctly at the time of delivery?

- Yes ☐ No ☐

46. Odometer/Hour Meter Reading

What was the odometer (or hour meter) reading at the time of installation?

- kms
- miles
- hours

Please provide run-in procedure in detail

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47. Are all engine sensors working correctly?

• Yes ☐ No ☐ Other ☐ (Please specify)

48. What was the engines AFR?.....

Signatures

Name:

Date:

(Person who completed this form) (Date of installation)

Company Name:

.....

Address:

Phone:

Mobile:

Date of Sale:

Engine Make/Model:

.....