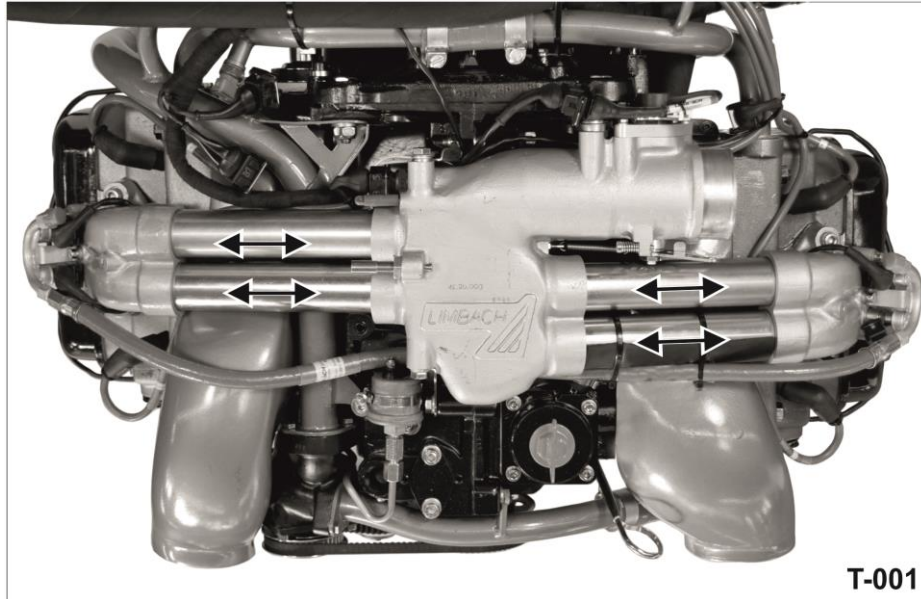


Subject: Intake Manifold Pipes

Affected engines: L 2400 DT, ET, DX

Reason: Impermissible axial play in the intake manifold pipes has been found in some engines. To correct this state, all 4 manifold intake pipes must be replaced!



Priority: Immediately.

Compliance: Replace intake manifold pipes.

Required Parts:

| Part-No. | Name | pcs |
|-------------|-------------------------------|-----|
| 250.103.160 | O-Ring | 8 |
| 250.103.131 | Manifold intake pipe (194 mm) | 4 |
| 250.103.140 | Insulate flange | 2 |
| 250.103.150 | Gasket | 4 |
| 708.413.070 | Gasket compound, reinzosil | 1 |

Attention: The assembly work is to be carried out according to the safety specifications of our manuals! There is a risk of fire and explosion when working on the fuel system! Observe safety regulations and country-specific regulations!

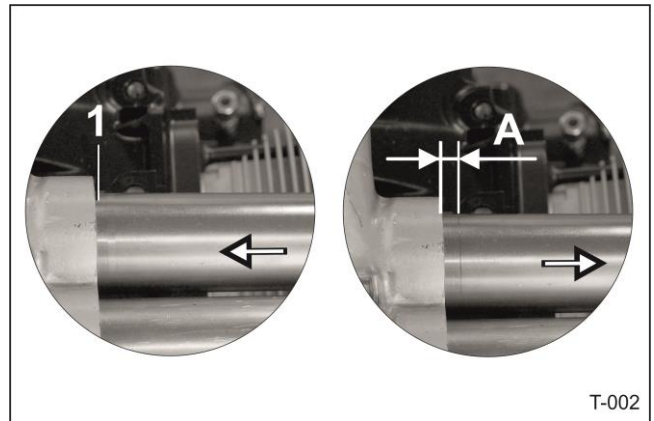
Pull the spark plug connectors off the spark plugs.

Check the axial play of the manifold intake pipes:

To do this, push the intake manifold pipe up to the stop and mark at the position shown (1). Push the manifold intake pipe in the opposite direction and measure distance "A".

Acceptable axial displacement at engine operating temperature: max. 2 mm

Repeat the steps for the other 3 intake manifold pipes.



Caution!

If unacceptable axial displacement is determined, all 4 intake manifold pipes must be replaced.

Replace intake manifold pipes

The following description refers to one engine side. The work steps are to be carried out the same way for the opposite side.

Detach and attach fuel lines to and from the engine.

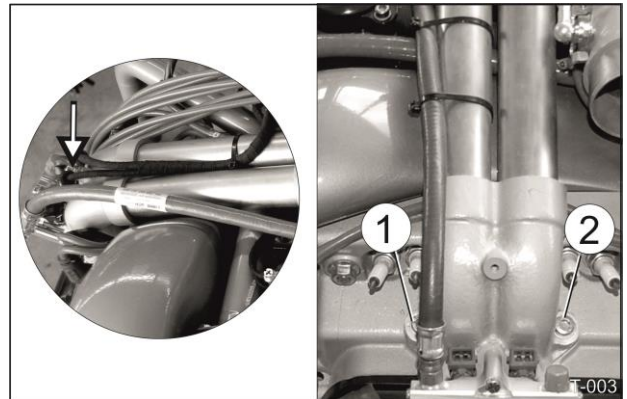
See Repair Manual, Chapter 6
"FUEL INJECTION SYSTEM"

Detach wiring harness connector for fuel injectors. Remove clamps (arrow). Detach the cable from the intake manifold pipe (1 cable tie) and put it aside.

Disassemble the fuel line from the injector nozzle holder and detach from the manifold intake pipe (2 cable ties).

Unscrew the fastening screws (1) and (2).

Pull off the assembly of inlet elbow with intake manifold pipes from the intake manifold collector. Pull the intake manifold pipe off the inlet elbow and remove O-rings (4 pieces). Clean all sealing surfaces!



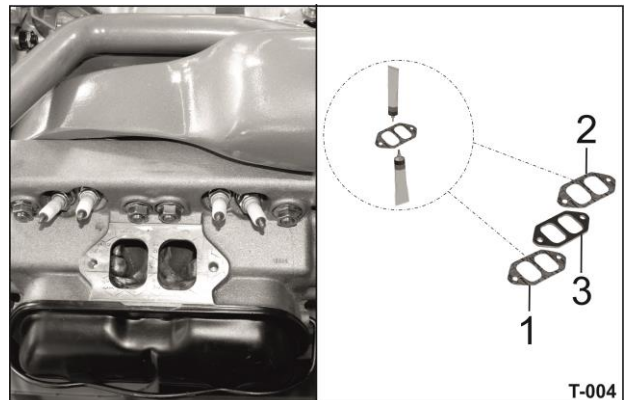
Apply gasket compound 708.413.070 to gasket (1) and (2) on both sides.

Mount gasket (1), insulating flange (3) and gasket (2).



Note

Gasket surfaces must be dry and grease-free.
Make sure the gasket surfaces are kept clean!



Moisten new O-Ring with engine oil and insert in the inlet elbow. Pay attention to make it fit exactly.

Insert new intake manifold pipes into the inlet elbow up to the stop.



Note

When inserting the intake manifold pipes, make sure that the O-rings are not damaged.



Moisten new O-Ring with engine oil and insert in the intake manifold collector. Pay attention to make it fit exactly.

Insert the assembly of inlet elbow with intake manifold pipes into the intake manifold collector up to the stop.



Note

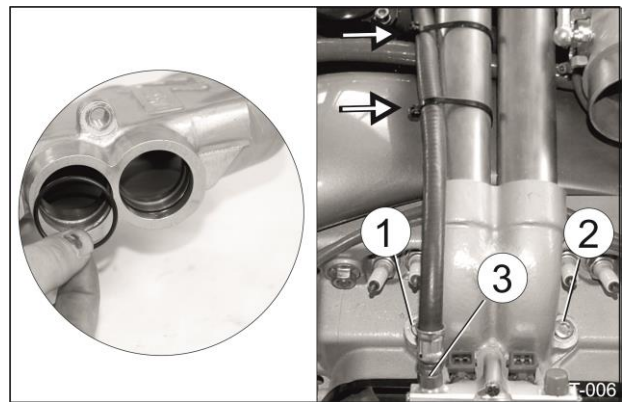
When inserting the intake manifold pipes, make sure that the O-rings are not damaged.

Assemble the fastening screws (1) and (2), insert new snor rings.

Tightening torque: (M8/8.8): 20 Nm

Assemble the fuel line (3) and secure it with a cable tie at the location shown (arrows).

Tighten the union nut until tight.



Attach wiring harness connector (1) for injectors. Pay attention to make it fit exactly.

Pay attention to the labeling of the wiring harness connectors:

Y1 = injector, cylinder 1

Y2 = injector, cylinder 2

Y3 = injector, cylinder 3

Y4 = injector, cylinder 4



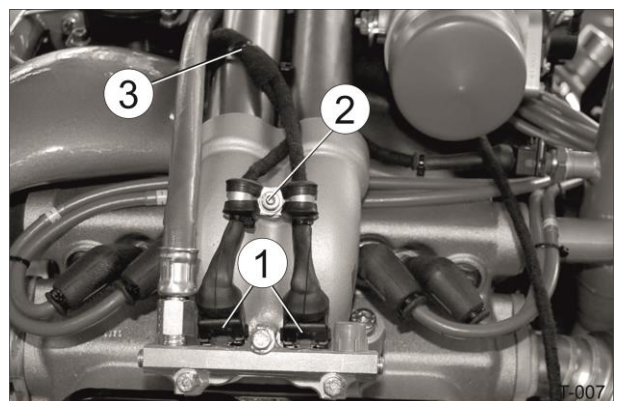
Caution!

Wiring harness connectors must not be interchanged!
Incorrect connection of the harness connectors can cause engine damage!

Assemble clamps with fastening screw (2), insert new spring washer. Secure the cable (3) at the location shown with a cable tie.

Tightening torque: (M5/8.8): 5.5 Nm

Attach spark plug connector, note the marking for the cylinder on the ignition cable!



Source: Limbach Flugmotoren GmbH, Kotthausener Str.5, 53639 Königswinter, Germany
Tel: 02244-92010, Fax: 02244-920130, www.limflug.de

Approval: The technical content of this document is approved under the Authority of EASA ref. approval number 10079468 and have been produced in accordance with alternative procedure to DOA nr. EASA.AP509.