07.3-310 Checking inlet valves for deposits (coking), cleaning as necessary

Special tool



Designation Supplier Alfred Kärcher Spray for walnut shell granulate Order No. 1.486.601 Leutenbacher Str. 30-40 D-7057 Winnenden Walnut shell granulate (25 kg) Eisenwerk Würth GmbH & Co. Grain size 1-1.5 mm Friedrichshaller Straße Order No. 10407 D-7107 Bad Friedrichshall

Importer and exporter countries should send their orders to Plant 50, PEW Sindelfingen.

Transition faults during the warming-up phase on vehicles fitted with CIS injection system may be the result of coked inlet valves.

A pressure jet is available for cleaning the inlet valves. This provides a simple and cost-effective means of cleaning. It is not necessary to remove the inlet manifold and to clean the valves by hand.



- High pressure cleaner 1
- 2 Electric cable (220 V)
- 3 4 Compressed air connection Blow-off valve
- 5 Compressed air supply line
- 6 7 Granulate supply line
- Compressed air gun with jet
- 8 Adaptor
- 9 Suction line with plug connection 10 Suction pipe

Cleaning procedure

Walnut shell granulate is sprayed in at high pressure through the mounting hose of the injection valves onto the plates of the **closed inlet valves**. The coking residues are evacuated simultaneously with the granulate through the throttle valve housing into the high pressure cleaning equipment.

The valve plate is partially covered by the valve stem. The valve must therefore be turned once through 180° for cleaning the concealed part.

Instructions for maintaining and filling the high pressure cleaner

1 After approx. 20-30 cleaning operations, the coking residues on the outside of the filter bag should be shaken off (arrow).

2 Pay attention to marking (M) when fitting on the top section.



3 Fill bottom section of cleaning equipment with approx. 4 kg walnut shell granulate, size 1-1.5 mm, up to the bottom edge (arrow).

4 The granulate should be renewed if lumps form or if there is a high proportion of rust due to the poor cleaning effect.



Scope of work

1 Remove mixture control unit with the air guide housing, install (07.3–225).

2 Remove, install injection valves (07.3-215).

3 Remove, install rocker arm and thrust pieces of inlet valves (05–230).

Attention!

Rocker arms and thrust pieces must be re-installed at the same points.

4 Cover over valve section and camshaft with cleaning cloth.

5 Fit on adapter (8) with throttle valve open.



7 Position compressed air gun (7) with jet into the hole of the injection valve. Spray inlet valve for approx. 30–60 seconds.







8 Blow out inlet passage with the blow-out valve (4) through the hole of the injection valve with the suction device switched on.



9 Use the lever presser 123 589 03 61 00 to press inlet value down and at the same time turn the value through 180° .

10 Spray inlet valve for approx. 15-30 seconds.

11 Blow out inlet passage with blow-out valve (4) through the hole of the injection valve with the suction device switched on.

12 Insert suction tube (10) through throttle valve housing and suck remaining granulate out of the bottom section of inlet manifold and out of the EGR line.

13 Illuminate the bottom section of the inlet manifold to check for any remaining granulate, suck out if necessary.



14 Clean inside of throttle valve housing and throttle valve with cleaning petroleum.

15 Install removed parts.

16 Adjust idle speed (07.3-100).

Flat rate

 Basic
 02-0507/03

 Related job
 02-0507/06