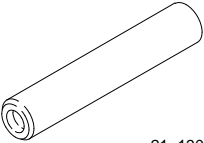
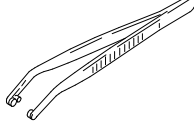
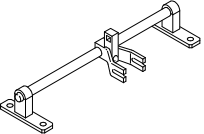
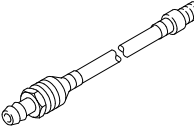
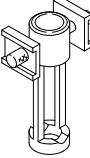
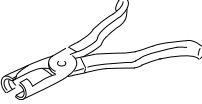


Seals – Valve Stem – Renew (all) (21 238 0)**Special Tools**

 <p>21-130A</p>	<p>21-130A Valve stem seal installer</p>	 <p>21156</p>	<p>21-156 Installer, valve collets</p>
 <p>21155</p>	<p>21-155 Valve spring compressor</p>	 <p>21157</p>	<p>21-157 Adapter, air supply cylinder</p>
 <p>2115503</p>	<p>21-155-03 Adaptor for 21-155</p>	 <p>PZ21211</p>	<p>21-211 Valve stem seal pliers</p>

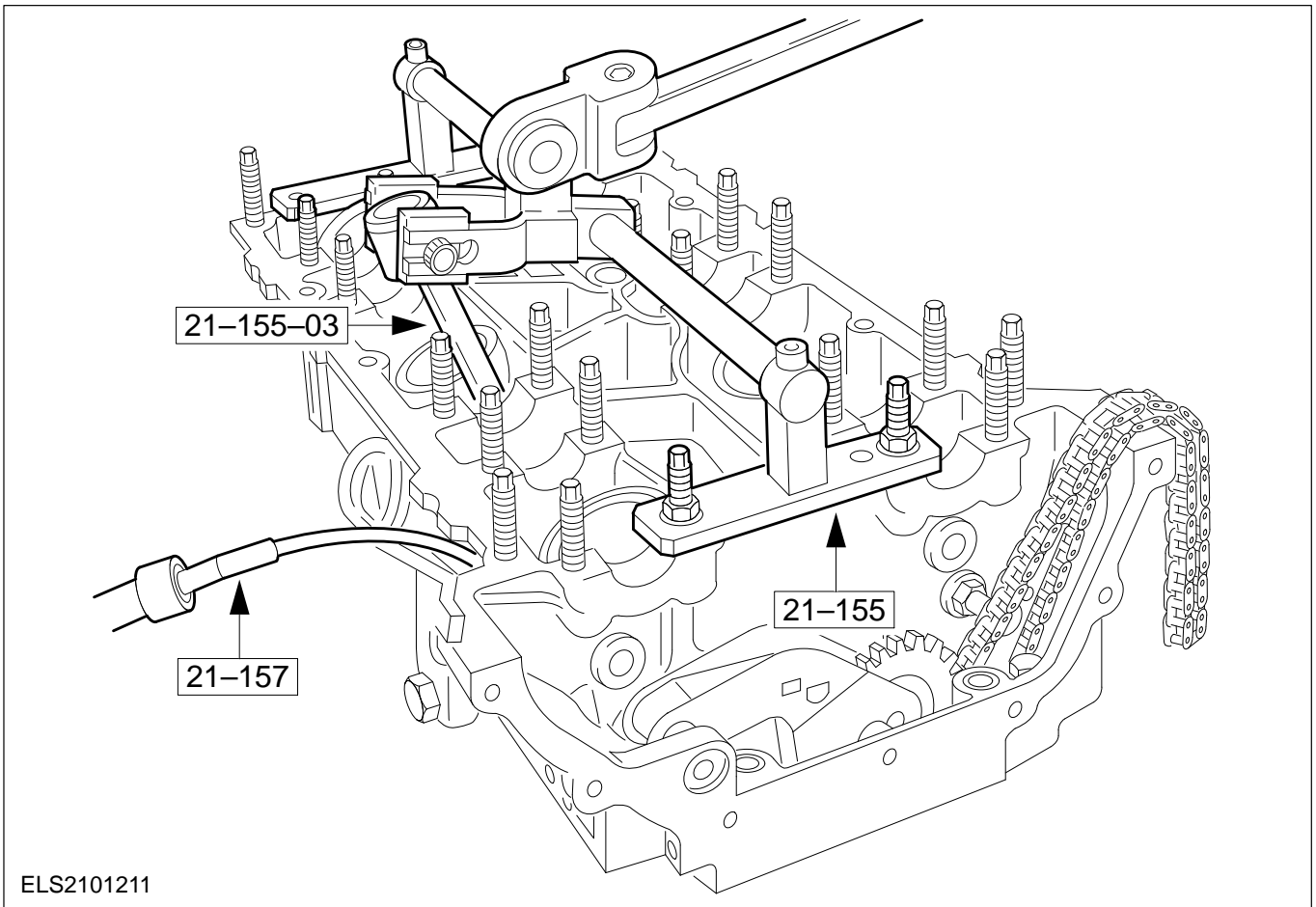
Remove**1. Standard preparatory operations**

- Make a note of the radio keycode.
- Make a note of the preset radio stations.
- Detach the battery cover.



CAUTION: Disconnect the battery earth lead.

2. Remove the camshafts as described in Op.no. 21 284 0.**3. Remove hydraulic tappets and place to one side in order.**

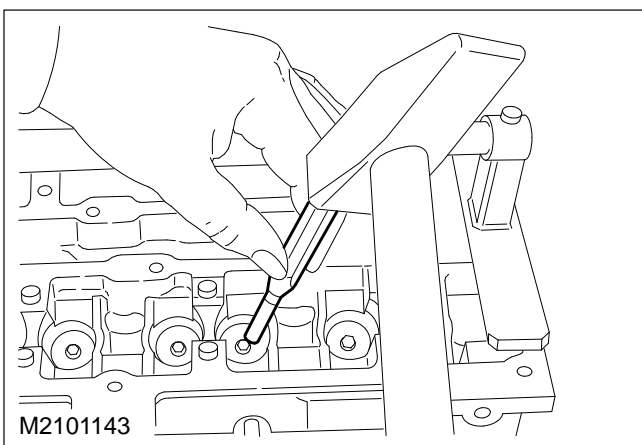


ELS2101211

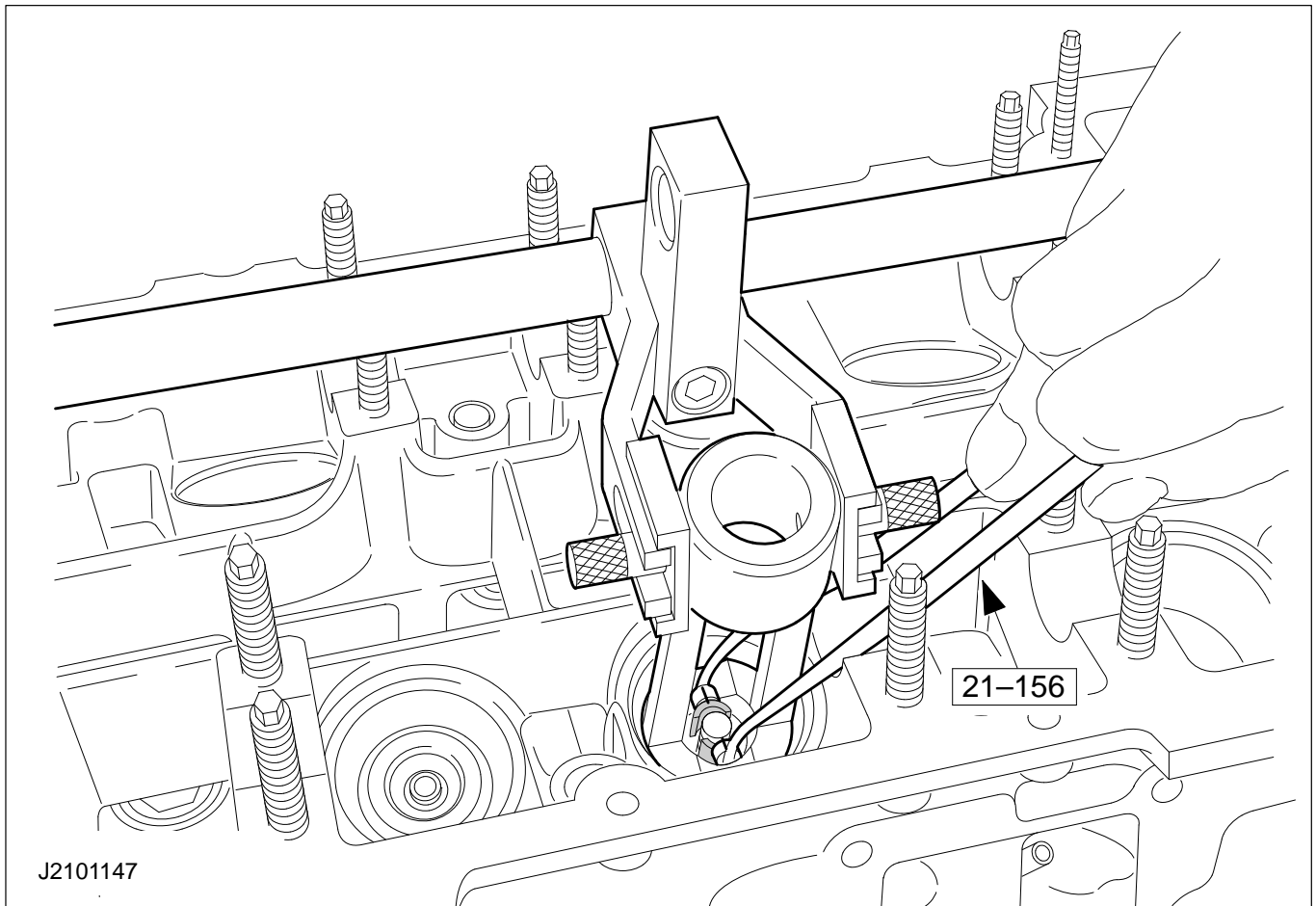
4. Fit the special tools.
5. Apply compressed air (7-10 bar) to the cylinders.

⚠ CAUTION: Use a brass drift to release the valve spring retainers.

6. Lightly tap the valve spring retainer to release it.



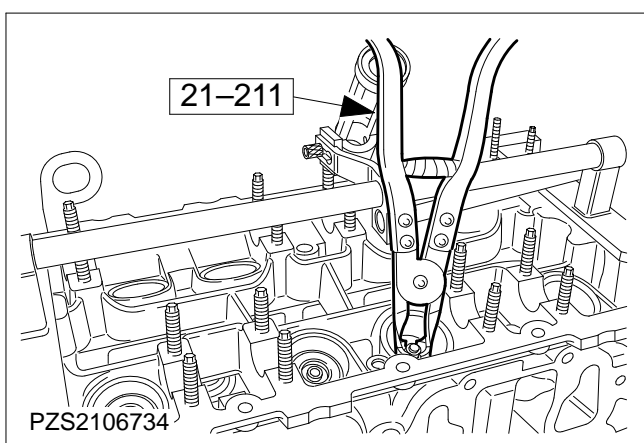
M2101143



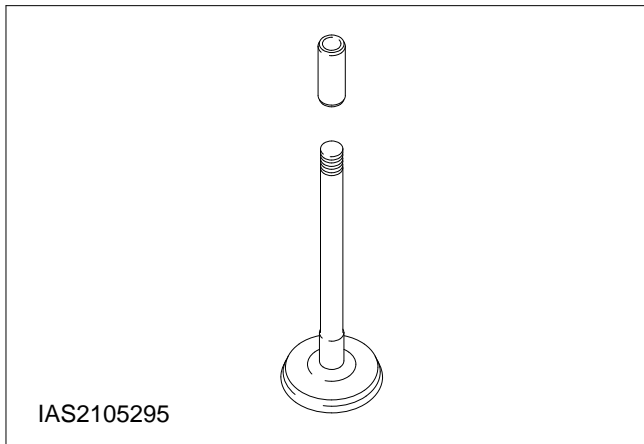
7. Remove the valve springs together with the valve spring retainers and the valve collets.

⚠ CAUTION: Do not damage the valve stem when pushing down the valve spring retainer.

- Compress the valve spring.
- Remove the valve collets with the special tool.
- Release the valve spring and remove it together with the valve spring retainer.



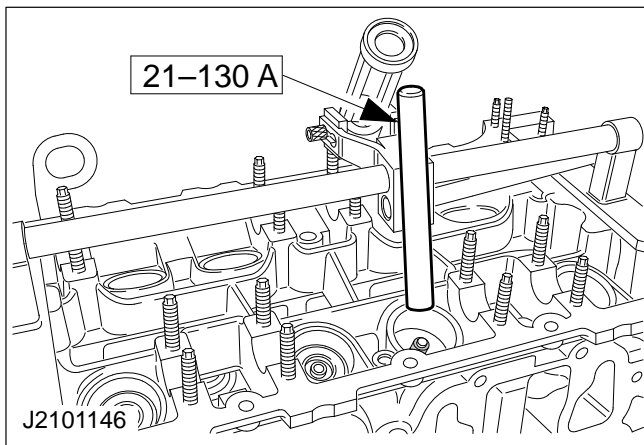
8. Remove the valve stem oil seals.



Install

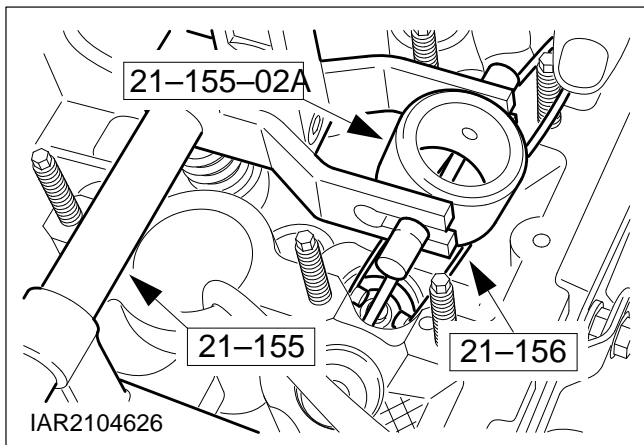
9. Push protective sleeves onto the valve stems.

Lubricate the valve stems with Hypoid oil.



10. Install new valve stem oil seals.

- Lubricate the valve stem oil seals with Hypoid oil and install them.
- Remove the protective sleeves from the valve stems.



11. Fit the valve spring and the valve collets.

- Insert the valve spring and the valve collets.
- Compress the valve spring.

NOTE: Correct seating of the valve collets.

- Insert the valve collets.
- Release the valve spring.

12. Repeat the steps for all valve stem oil seals.

13. Remove the valve spring compressor and the adapter.

14. Disconnect the compressed air supply.

15. Fit the hydraulic tappets.

16. Fit the camshafts as described in Op.no. 21 283 0.