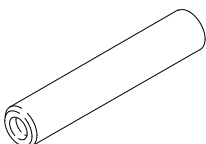
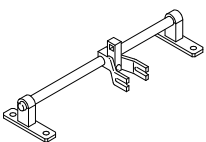
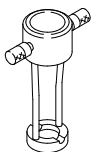
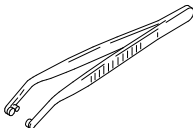
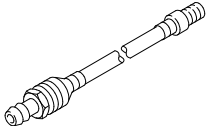
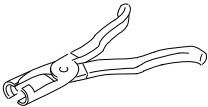


Seals – Valve Stem – Renew (21 238 0)**Special Tools**

| | |
|--|---|
|  21-130A | 21-130A Valve stem seal installer |
|  21155 | 21-155 Valve spring compressor |
|  2115502 | 21-155-02A Adaptor for 21-155 |
|  21156 | 21-156 Installer, valve collets |

| | |
|---|---|
|  21157 | 21-157 Adaptor, air supply cylinder |
|  PZ21211 | 21-211 Valve stem seal pliers |

Materials

| | |
|-----------------------------|---------------------------------|
| Valve stem installer sleeve | |
| Hypoid oil | SQM-2C9002-AA |
| Engine oil | Refer to General Specifications |

Proprietary Tools

| |
|-------------|
| Brass drift |
|-------------|

Remove**1. Standard preparatory measures:**

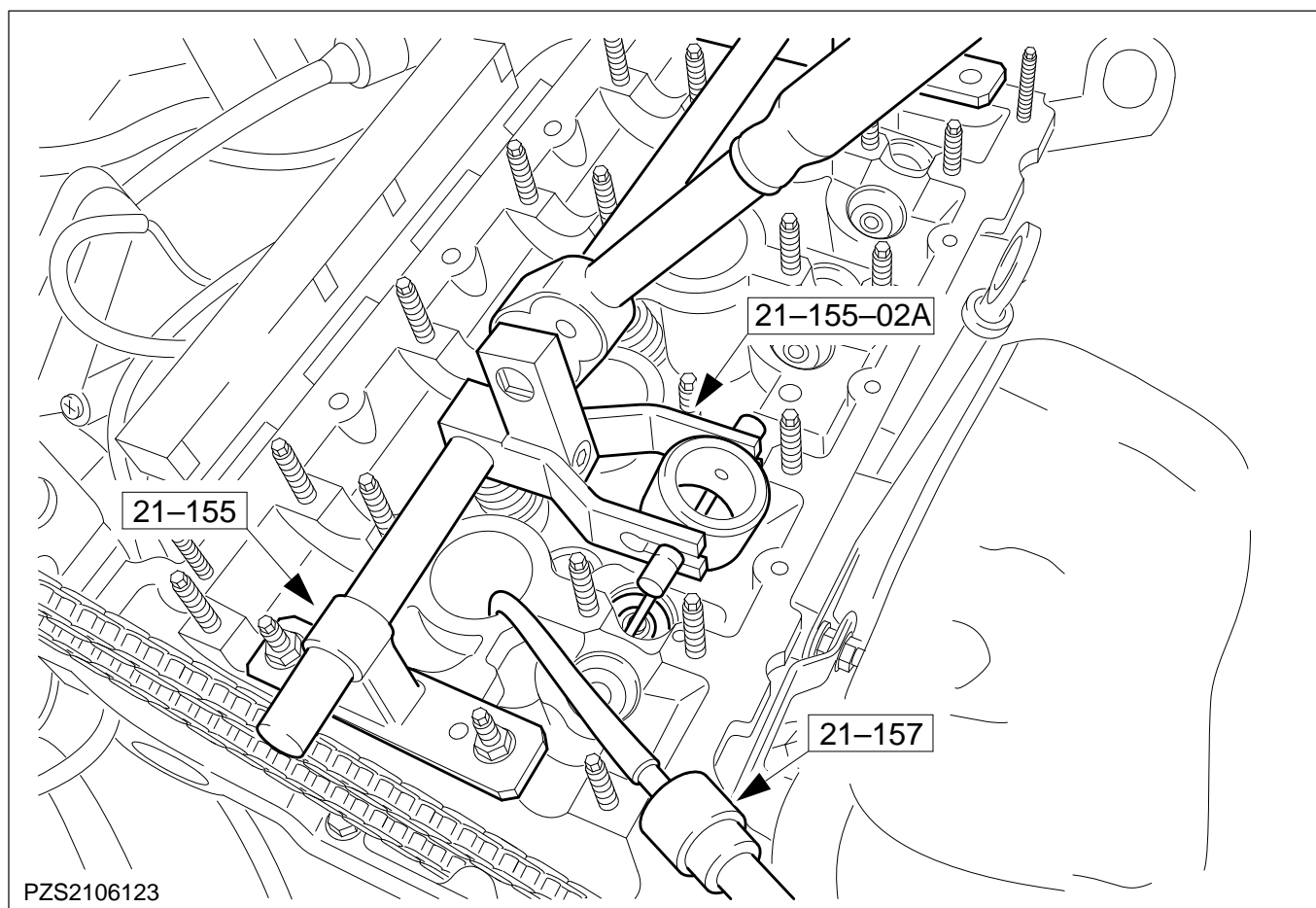
- Make a note of the radio keycode.
- Remove the battery cover.



CAUTION: After making a note, disconnect the battery earth lead.

Make a note of the preset radio stations.

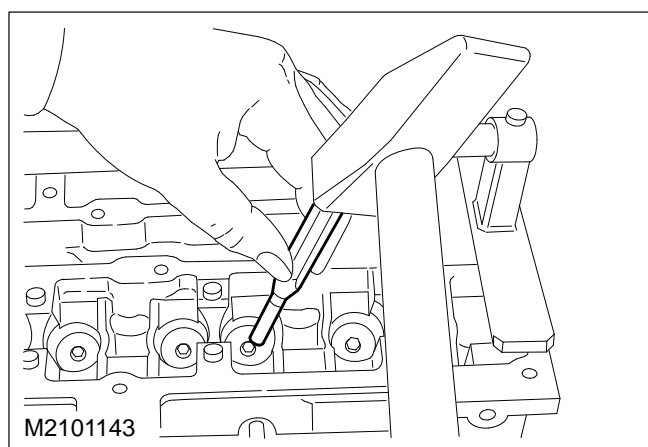
2. Remove the camshafts as described in operation 21 284 0.

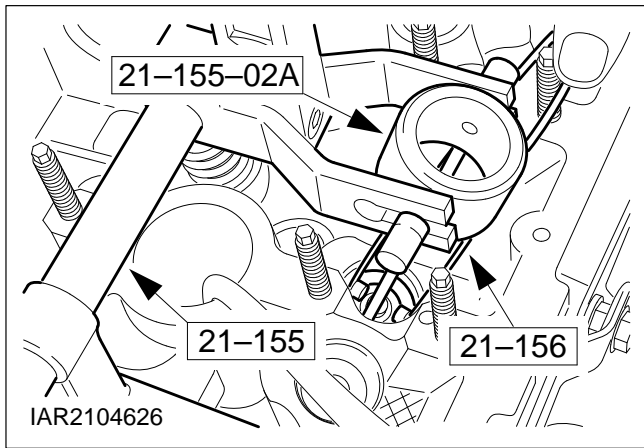


3. Fit the valve spring tensioner and the adaptor.
4. Pressurise the cylinder with compressed air (7-10 bar).

⚠ CAUTION: Use a brass drift.

5. Loosen the valve collets with a light tap on the valve spring retainers.

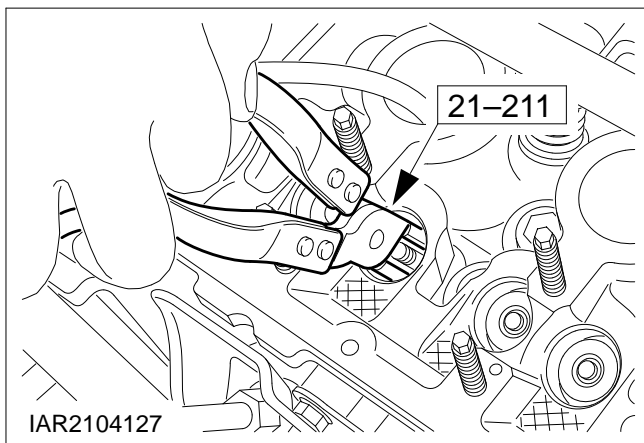




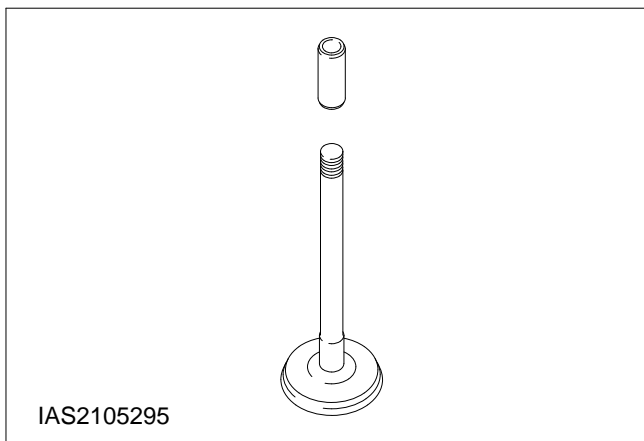
CAUTION: Do not damage the valve stem when the valve spring retainer is pushed down.

6. Remove the valve springs.

- Compress the valve springs.
- Remove the valve collets using the remover/installer.
- Release the valve springs and remove them with the valve spring retainers.



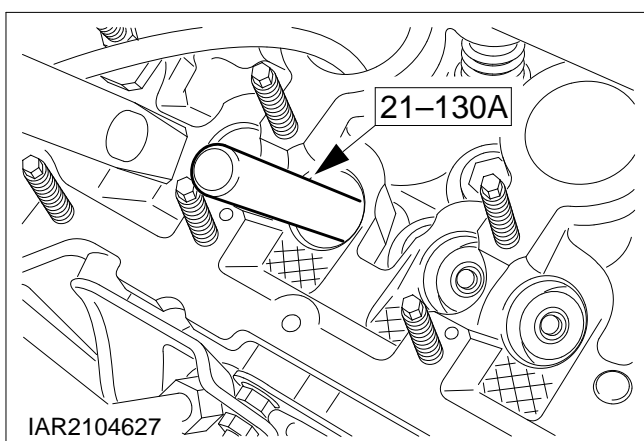
7. Remove the oil seal.



Install

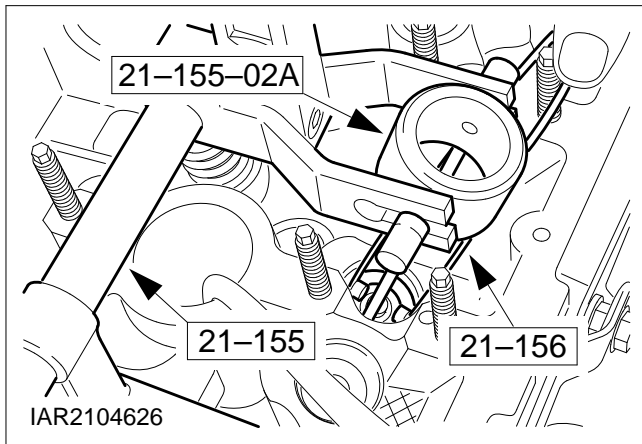
8. Cover the collet groove with the valve stem installer sleeve.

Lubricate the valve stem with hypoid oil.



9. Fit a new valve stem seal.

- Lubricate the valve stem sleeve with hypoid oil.
- Remove the valve stem installer sleeve.

**10. Install the valve spring.**

- Install the valve spring and valve spring retainer.
- Compress the valve spring.

NOTE: Ensure the valve collets are seated correctly.

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

11. Seat the valve collets with a suitable drift.**12. Repeat sub-operations 4. to 11. for all the other oil seals.****13. Detach the valve spring compressor and the adaptor.****14. Remove the compressed air connector.****15. Install the camshafts as described in operation 21 283 0.**