



## SIB 11 04 14

2021-09-03

SERVICE ACTION: Inlet Valves S 1000 R - Bulletin 11 004 14 (035)R

This Service Information Bulletin replaces SI 11 004 14 (035)R **dated October 2014**.

The contents of this bulletin have not changed; bulletin numbering was updated.

### **MODEL**

This document applies to the following Motorrad AG models: 0D12

This document applies to the following Motorrad model descriptions: S1000R US

This document applies to the following Motorrad series: K47

### **SITUATION**

This document is applies to the following categories: Engine

Supporting Materials

[picture\\_as\\_pdf 11\\_004\\_14\\_035R\\_S\\_1000\\_R\\_Inlet\\_Valves.pdf](#)

|                                    |                                    |                                |                           |         |                        |                |
|------------------------------------|------------------------------------|--------------------------------|---------------------------|---------|------------------------|----------------|
|                                    |                                    |                                |                           |         |                        |                |
| Retail Operator<br>General Manager | Sales<br>New Motorcycles           | Sales<br>Pre-Owned Motorcycles | Business Manager<br>(F&I) | Service | Parts &<br>Accessories | Administration |
| Date: October 2014                 | Source: SI 27/2014                 |                                | Revised November 2014     |         |                        |                |
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|                                    | Title: Service & Technical Manager |                                |                           |         |                        |                |
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# BMW Motorrad USA

## Service Information Bulletin

### **\*\*Technical Campaign\*\***

**Subject:** Inlet valves

**Model:** S 1000 R (K47 0D02/0D12)

**Details:** BMW Motorrad has ascertained that on account of a manufacturing defect, some inlet valves could break at the valve head resulting in engine damage.

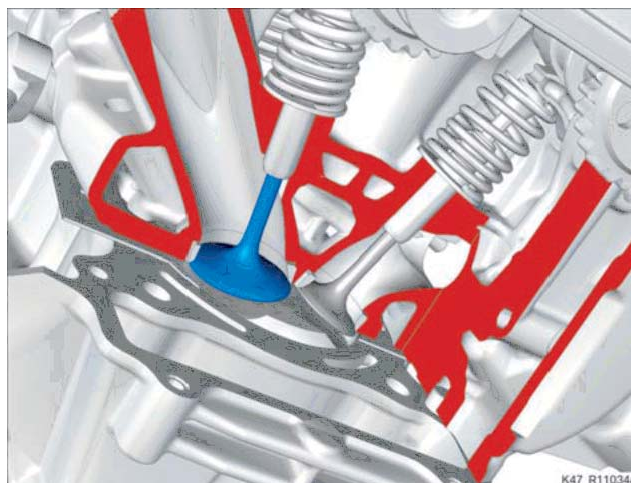


Illustration: Inlet valve

**Vehicles affected:** In order to determine if a specific vehicle is affected by this Technical Campaign, it will be necessary to verify all vehicle VINs through a DCS Vehicle History Check. Based on the response of the system, either proceed with the repair or take no further action. Please note, affected VINs may not appear until 24-72 hours after the release of this bulletin.

**Production Solution:** Vehicles produced as of May 21, 2014 have defect free valves.

**Aftersales Solution:** Before handing over a new motorcycle to its owner or when motorcycles possibly affected by this problem are next brought to the workshop, replace all inlet valves (see attached work item 00 60 297 for details).

**Warranty Information:** Reimbursement for this Technical Campaign is through normal claim entry utilizing the following information:

|               |                 |  |
|---------------|-----------------|--|
| Defect code:  | 00 11 34 00 00  | Replacing all inlet valves                     |
| Labor code:   | 00 60 297*      | Replacing all inlet valves, 77 FRUs            |
| Part numbers: | 07 11 9 963 044 | Sealing ring                                   |
|               | 11 12 7 713 747 | Cylinder-head screw (x10)                      |
|               | 11 12 7 713 809 | Valve cover gasket, outside                    |
|               | 11 12 7 713 810 | Valve-cover gasket, inside (x2)                |
|               | 11 34 8 544 632 | Inlet valve (x8)                               |
|               | 11 34 1 340 849 | Valve stem seal (x8)                           |
|               | 18 21 7 676 551 | Locknut, exhaust manifold (x8)                 |
|               | 18 51 8 542 088 | Gasket, exhaust manifold (x4)                  |
|               | 07 11 9 963 073 | Sealing ring                                   |
|               | 07 11 9 906 941 | O-ring (x2)                                    |
|               | 07 11 9 906 605 | Sealing ring, chain tensioner                  |
|               | 11 42 7 721 779 | Oil filter                                     |
|               | 07 11 9 963 252 | Sealing ring                                   |
|               | 11 14 7 722 366 | O-ring   |
|               | 11 12 7 726 964 | Seals set, camshaft bearing cap                |
|               | 17 22 7 680 667 | O-ring   |
|               | 17 22 7 680 668 | O-ring   |
|               | 11 13 7 676 132 | ISA screw (x7)                                 |
|               | 11 12 7 713 823 | Washer (x8)                                    |
|               | 11 31 7 705 460 | Set of O-rings                                 |
|               | 11 12 7 700 455 | Cylinder head gasket 1.025                     |
|               |                 | <b>or</b> (depending on original installation) |
|               | 11 12 7 700 457 | Cylinder head gasket 1.125                     |

**Sublet Code 4 For oil replacement and coolant top off, Not to exceed \$50**

\*Main Work 00 60 297 - this main labor operation crediting 77 FRUs includes all repair procedures to complete the task with allowance for necessary ancillary tasks (e.g. visual inspection, lubrication, cleaning parts etc.) and administrative tasks.

Only one main labor operation can be claimed per repair visit. All other labor operations for any other line(s) must be claimed using plus code labor operations.

Please refer to the Warranty Policy and Procedures Manual regarding add-ons, proper support, documentation, claims submission and archiving requirements as applicable.

**Contact:** Service and Technical Manager

## 00 60 297 Replacing all inlet valves

### Attention

Risk of hard or sharp-edged objects damaging components. Take care not to scratch components; cover or mask as necessary.

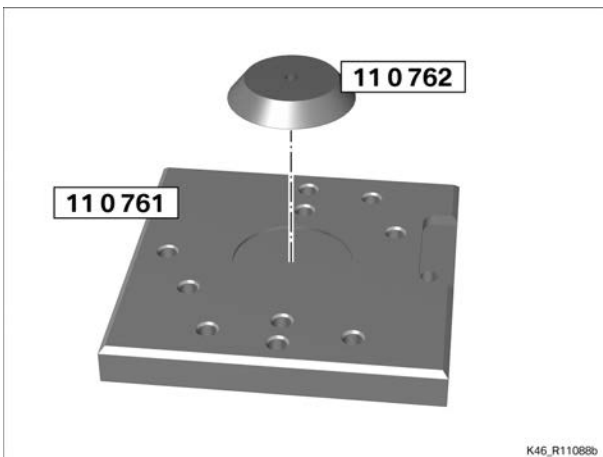
# 1

### ► Preparatory work

- Installing rear-wheel stand
- Removing rear seat
- Removing front seat
- Disconnecting battery
  - with engine spoiler<sup>OE</sup> (0580)
- Removing complete engine spoiler<
- Removing left side panel
- Removing right side panel
- Draining cooling system
- Draining engine oil from engine and removing oil filter
- Removing complete cover of fuel tank
- Removing fuel tank
- Disengaging BMS-K control unit with wiring harness
- Removing carrier frame for air filter
- Remove the intake air silencer
- Removing throttle-valve stub assembly
- Removing secondary air system line
- Remove the direct ignition coils
- Removing spark plugs
- Release the cable for front wheel-speed sensor
- Disengaging lines of oil cooler
- Removing bracket for radiator
- Removing radiator with oil cooler

- Releasing engine wiring harness
- Removing cooling-air duct
- Removing complete exhaust system
- Removing horn
- Disengaging brake line, front, from pressure modulator in frame
- Remove the cylinder head cover
- Remove the screw from bore for locating pin
- Removing crankshaft cover
- Checking valve clearance
- Locking crankshaft in TDC position.
- Removing timing-chain tensioner
- Removing top slide rail
- Removing camshaft bearing cap
- Removing camshafts
- Removing timing-gear cover
- Removing chain slide rail
- Removing chain tensioner rail
- Removing valve shims
- Removing cylinder head
- Removing cylinder-head gasket

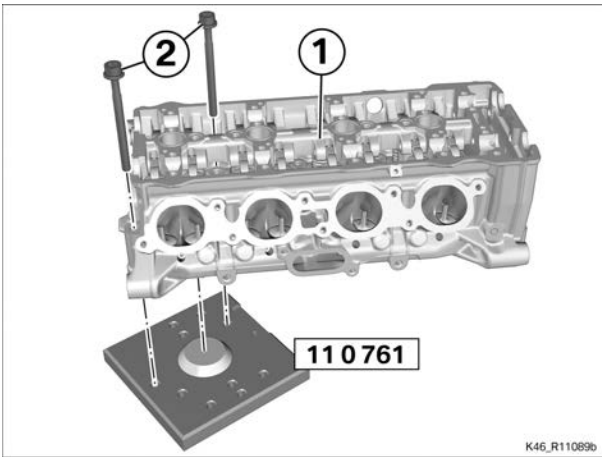
## 2



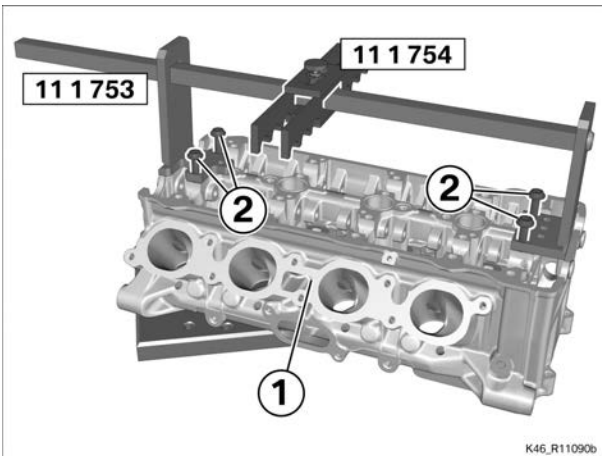
### ► Removing inlet valves

- Install flat adapter (11 0 762) in support plate (11 0 761).

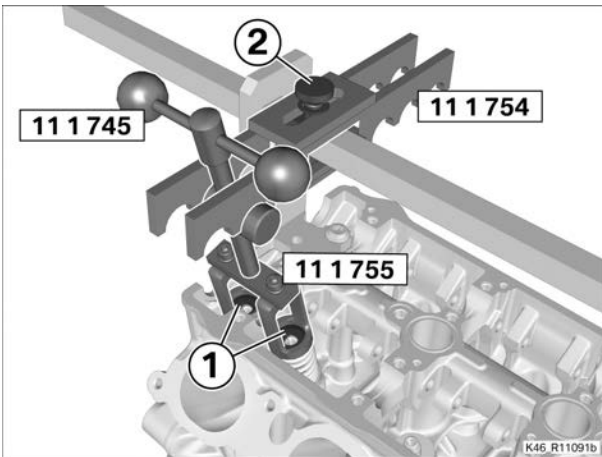
K46\_R11088b



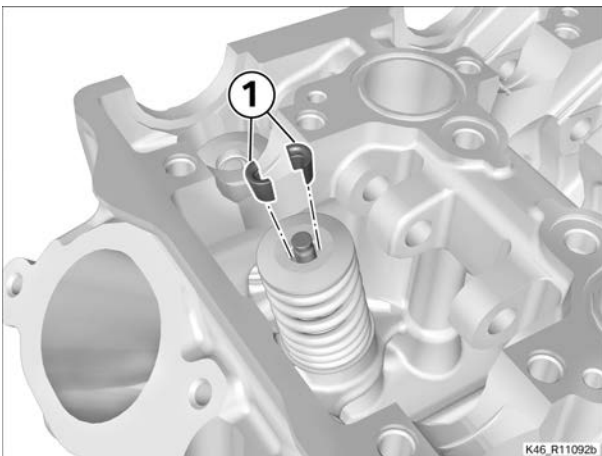
- Using suitable screws **(2)**, secure cylinder head **(1)** to support plate (11 0 761).



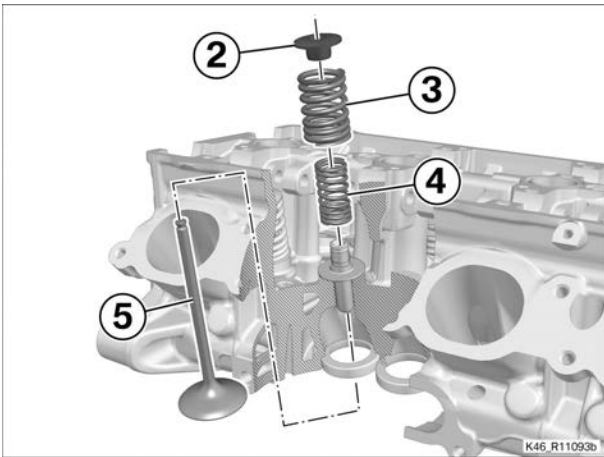
- Push support (11 1 754) onto thruster (11 1 753).
- Position thruster (11 1 753) on cylinder head **(1)** and secure with suitable screws **(2)**.



- Seat thrust cage (11 1 755) with spindle (11 1 745) in support (11 1 754) and position the assembly on valve heads **(1)**.
- Adjust support (11 1 754) and tighten clamping screw **(2)**.
- Press down valve heads **(1)** with thrust cage (11 1 755) and spindle (11 1 745).



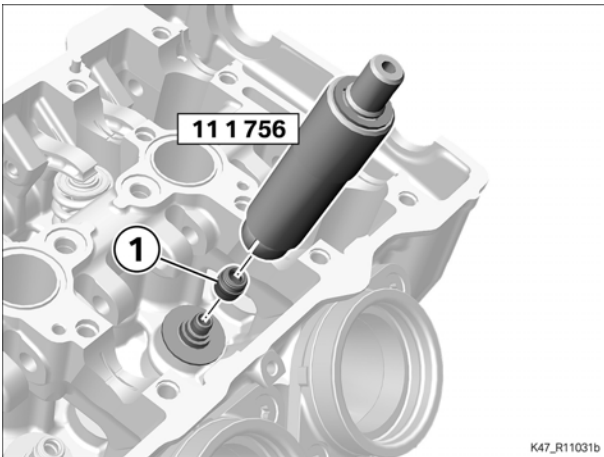
- Use a suitable tool to remove valve collets **(1)**.



- Back off the special tool.
- Remove the following components:
  - Spring retainers **(2)**
  - Outer valve spring **(3)**
  - Inner valve spring **(4)**
  - Inlet valve **(5)**

- Repeat this procedure with the other valves.

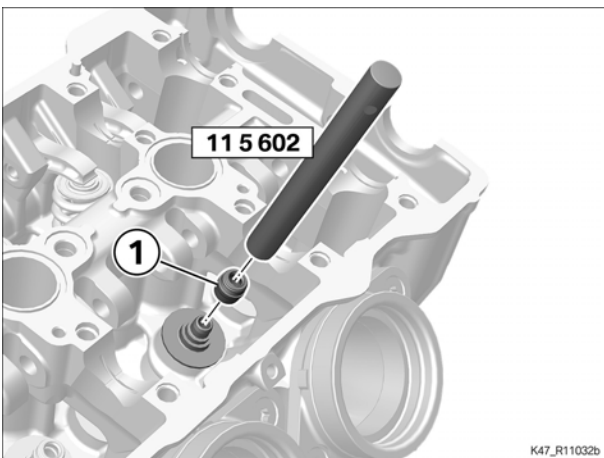
### 3



#### ► Removing valve stem seals for inlet

- Remove valve stem seal **(1)** with puller (11 1 756).
- Repeat this procedure for all valve stem seals for inlet valves.

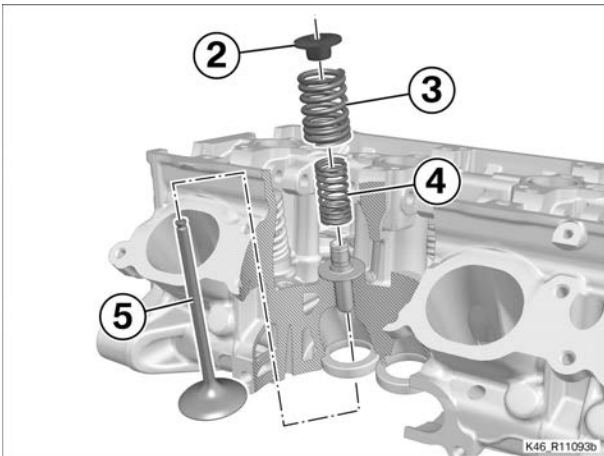
### 4



#### ► Installing valve stem seals for inlet

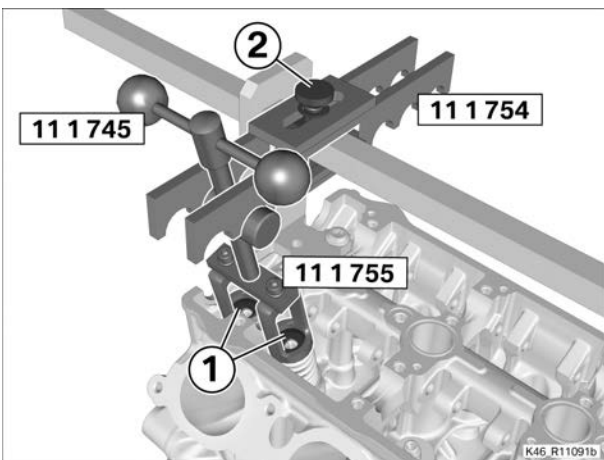
- Carefully seat new valve stem seal **(1)** with drift (11 5 602).
- Repeat this procedure for all valve stem seals for inlet valves.



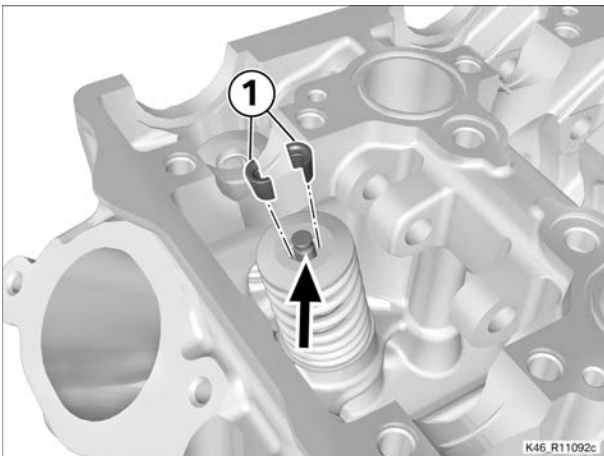


## ► Installing inlet valves

- Install inlet valve **(5)**.
- Install inner valve spring **(4)** and outer valve spring **(3)**.
  - » Coloured marks face up.
  - » Close-spaced spring coils face down.
- Install spring retainer **(2)**.



- Seat thrust cage (11 1 755) with spindle (11 1 745) in support (11 1 754) and position the assembly on valve heads **(1)**.
- Adjust support (11 1 754) and tighten clamping screw **(2)**.
- Press down valve heads **(1)** with thrust cage (11 1 755) and spindle (11 1 745).



- Lightly lubricate valve shims **(1)** to keep them from slipping out.



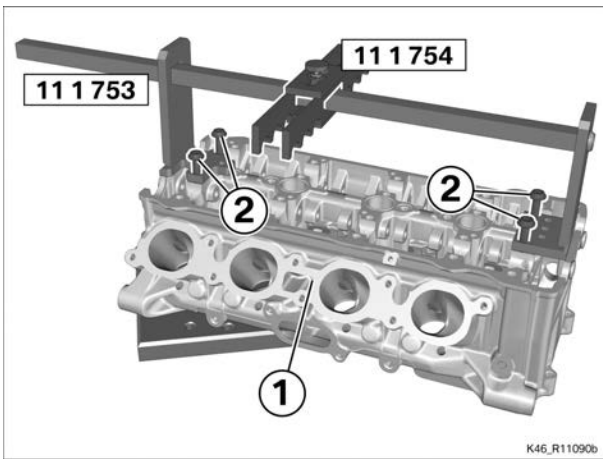
### Lubricant

|                  |  |
|------------------|--|
| Molykote D paste |  |
|------------------|--|

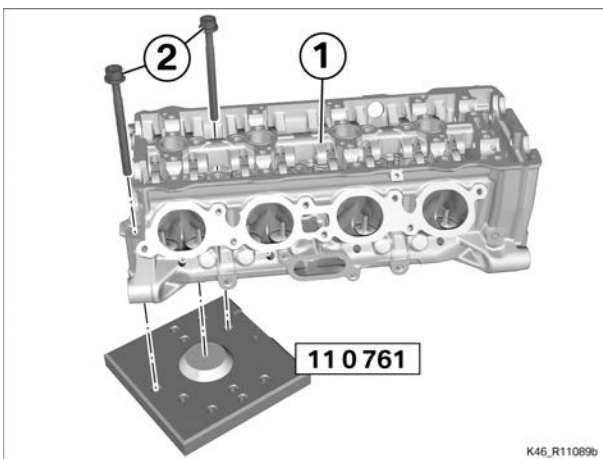
- Use a suitable tool to install valve shims **(1)**. Make sure that they engage the groove in the valve **(arrow)**.

- Repeat this procedure with the other valves.

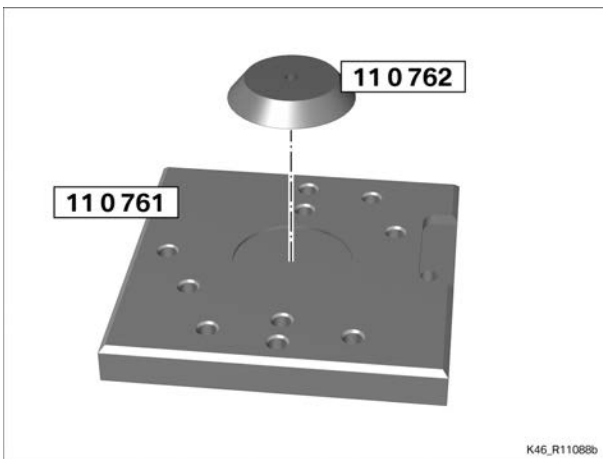




- Remove screws **(2)**.
- Remove support (11 1 754) and thruster (11 1 753).



- Remove screws **(2)** and remove cylinder head **(1)** from support plate (11 0 761).



- Remove flat insert (11 0 762) from support plate (11 0 761).

## 6

### ► Finishing work

- Installing cylinder-head gasket
- Installing cylinder head
- Installing valve shim
- Installing chain tensioner rail
- Install the chain slide rail

- Installing timing-gear cover
- Install the camshafts
- Installing camshaft bearing cap
- Installing timing chain tensioner
- Turning engine through several revolutions and checking freedom of movement of all components
- Checking valve clearance
- Locking crankshaft in TDC position.
- Removing timing-chain tensioner
- Removing TDC locating screw
- Adjusting valve clearance
- Installing timing chain tensioner
- Turning engine through several revolutions and checking freedom of movement of all components
- Adjusting ignition timing
- Installing timing chain tensioner
- Installing top slide rail
- Rechecking valve clearance
- Installing crankshaft cover
- Installing cylinder head cover
- Securing brake line, front, from pressure modulator in frame
- Secure the horn
- Install the complete exhaust system
- Installing cooling-air duct
- Securing engine wiring harness
- Installing radiator with oil cooler
- Installing bracket for radiator
- Securing lines of oil cooler
- Securing cable for front wheel-speed sensor
- Installing oil filter and drain plug, pouring in engine oil
- Completely filling cooling system
- Checking cooling system for leaks
- Installing spark plugs

- Installing direct ignition coils
- Installing secondary air system line
- Installing throttle-valve stub assembly
- Install the intake air silencer
- Installing carrier frame for air filter
- Securing BMS-K control unit with wiring harness
- Installing fuel tank
- Installing complete cover of fuel tank
- Connecting battery
- Adjusting Bowden cable for exhaust-flow control valve
- Installing cover of exhaust-flow control valve
- Check the engine oil level
- Installing right side panel
- Installing left side panel
- with engine spoiler<sup>OE</sup> (0580)
- Installing complete engine spoiler◇
- Checking date; if necessary correcting with BMW Motorrad diagnostic system
- Connecting BMW Motorrad diagnostic system to vehicle
- Setting service countdown distance
- Disconnecting BMW Motorrad diagnostic system from vehicle
- Installing front seat
- Installing rear seat
- Removing rear-wheel stand
- Final check of work performed

