SERVICE BULLETIN

MITSUBISHI MOTORS

AFTERSALES SERVICE OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : INFORMATION	ISSUE NO. : MSB-08E11-002A	DATE : 2008-07-05
SUBJECT : VALVE SPRINGS FOR 4B1 NON-TURBO ENGINES		<MODEL> (EUR/RUSSIA) LANCER (GS41)(CY0A) OUTLANDER (GS45X)(CW0W) <M/Y> 08
GROUP : ENGINE		

1. Description:

The type of the valve springs for the 4B1 non-turbo engines is changed in order to improve productivity and to use them commonly among the 4B1 series engines. This Service Bulletin contains the modified descriptions related to the valve springs.

2. Applicable Manuals:

See Attachment 1.

3. Effective Date:

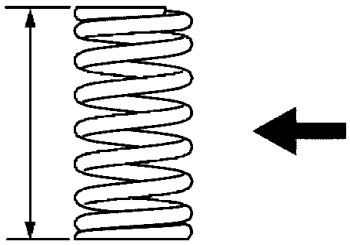
From early December 2006

4. Details:

The valve springs are changed from the unequal pitch type to the equal pitch type.
Accordingly, the paint mark for identification of the installation direction is abolished.

<New>

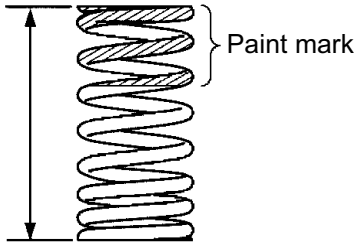
Equal pitch type



Free height: 47.44 mm

<Current>

Unequal pitch type



Free height: 47.44 mm (4B10, 11)
48.12 mm (4B12)

Attachment 1

<EUR>

Manual	Pub. No.	Title (Info-ID)	Attachment
2008 OUTLANDER Workshop Manual	CGXE08E2-CD (English) CGXS08E2-CD (Spanish) CGXF08E2-CD (French) CGXG08E2-CD (German)	Camshaft and Valve Stem Seal Removal and Installation (M113-00-691-65001-01)	Attachment 2
2008 OUTLANDER Technical Information Manual		Base Engine (M112-00-101-41400-01)	Attachment 3
2008 LANCER Technical Information Manual	CG1E08E2-CD (English) CG1S08E2-CD (Spanish) CG1F08E2-CD (French) CG1G08E2-CD (German)	Base Engine <4B10> (M112-00-101-38400-01), Base Engine <4B11> (M112-00-101-39500-01)	Attachment 4

<RUSSIA>

Underneath Manual	Underneath Pub. No.	Title (Info-ID)	Attachment
2008 OUTLANDER Workshop Manual	N/A	Camshaft and Valve Stem Seal Removal and Installation (M113-00-691-65001-01)	Attachment 2
2008 OUTLANDER Technical Information Manual		Base Engine (M112-00-101-41400-01)	Attachment 3
2008 LANCER Technical Information Manual		Base Engine <4B10> (M112-00-101-38400-01), Base Engine <4B11> (M112-00-101-39500-01)	Attachment 4
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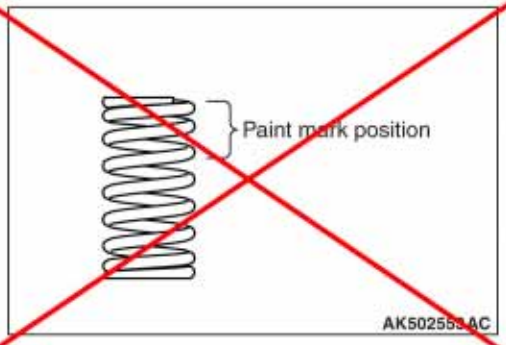
Attachment 2

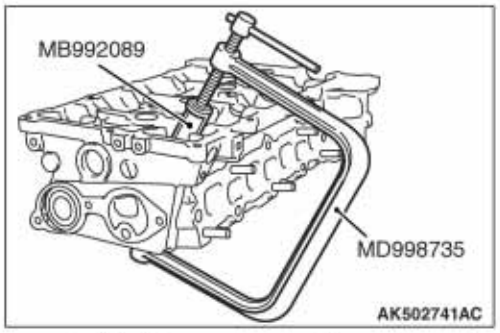
<Delete>

>>B<< VALVE SPRING INSTALLATION



Install the valve spring so that the painted side faces toward the camshaft.

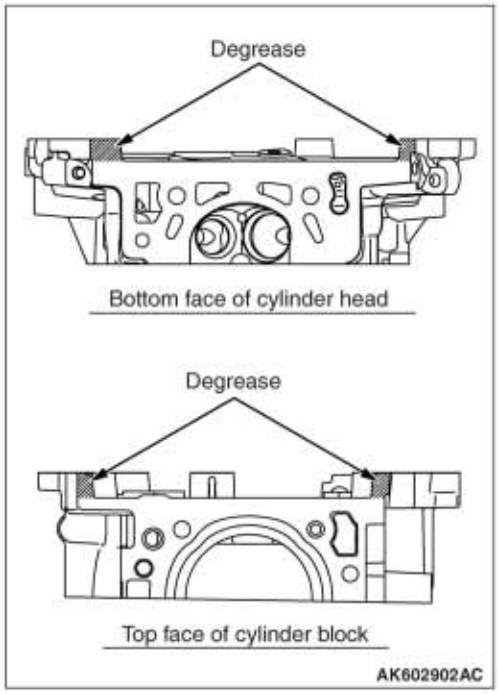
>>C<< RETAINER LOCK INSTALLATION



Use a special tool to compress the valve spring and to install the retainer lock.

- Valve spring compressor (MD998735)
- Retainer holder C (MB992089)

>>D<< CYLINDER HEAD GASKET / CYLINDER HEAD ASSEMBLY INSTALLATION



1. Completely remove the liquid gasket on the upper plane of the cylinder block and the lower plane of the cylinder head.

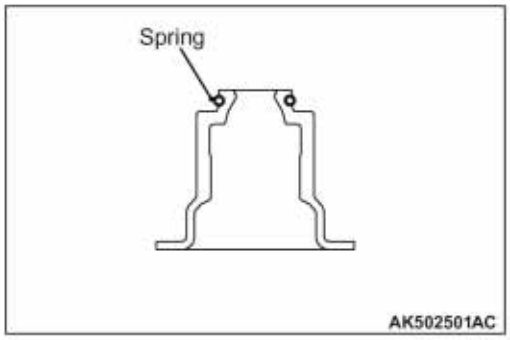
⚠ CAUTION

Sufficiently check that there is no residual oil on the place where degreasing is performed. If fingerprints are left, do not touch it with bare hands after the degreasing, since the oils from your fingers will harm the seal ability.

2. Using white gasoline and so on, degrease the place specified in the illustration.

Attachment 3

VALVE STEM SEALS

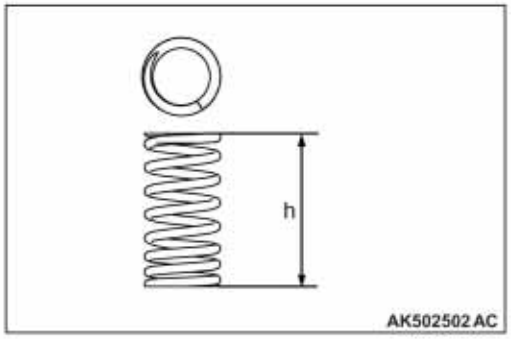


The valve stem seals are integrated with the valve spring seats.
The valve stem seal portion excels in sealing performance and is equipped with a spring to prevent oil from descending.

<New>
The spring steel having the oval section, good heat resistance and excellent settling resistance is used.

<Old>
~~To prevent the engine from surging at high speeds, unequal pitch springs are used.~~

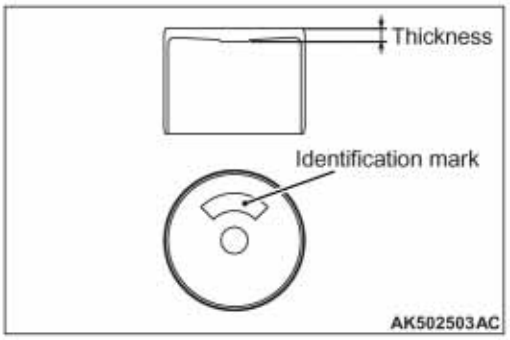
VALVE SPRINGS



Item	Specifications
Free height (h) mm	~~48.42~~ <Old>
Total number of windings	8.67

47.44
<New>

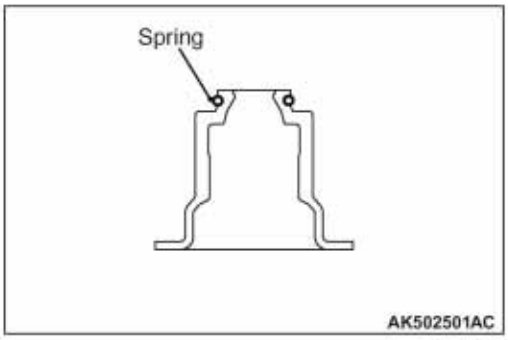
VALVE TAPPETS



To adjust the valve lift, 47 sizes of valve tappets are available in 0.015 mm increments, from 3.000 to 3.690 mm.

Attachment 4

VALVE STEM SEALS



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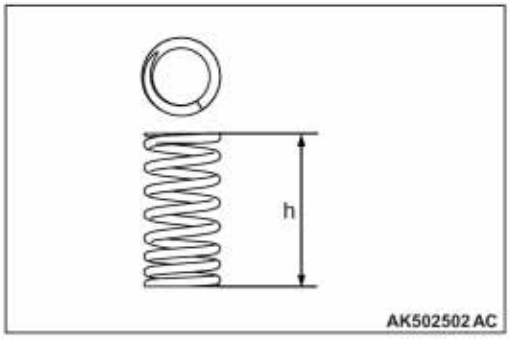
VALVE SPRINGS



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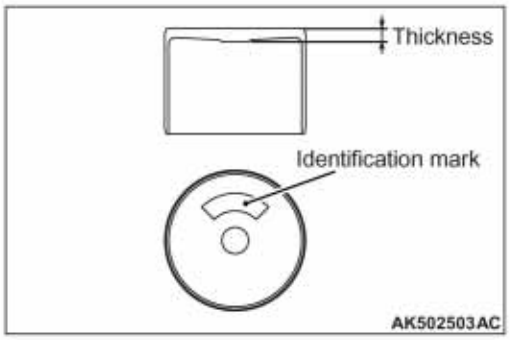
VALVE TAPPETS



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