MITSUBISHI MOTORS

SERVICE BULLETIN

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-13EXML11-501A	DATE : 2013-05-15
SUBJECT : THE TIMING BELT EXCHANGE OF 6B3 ENGINE		<Destination/Model> (AS SHOWN BELOW) <M/Y> ALL
GROUP : ENGINE OVERHAUL(Gr.11)		ALL VEHICLES WITH 6B3 ENGINE

1. Description :

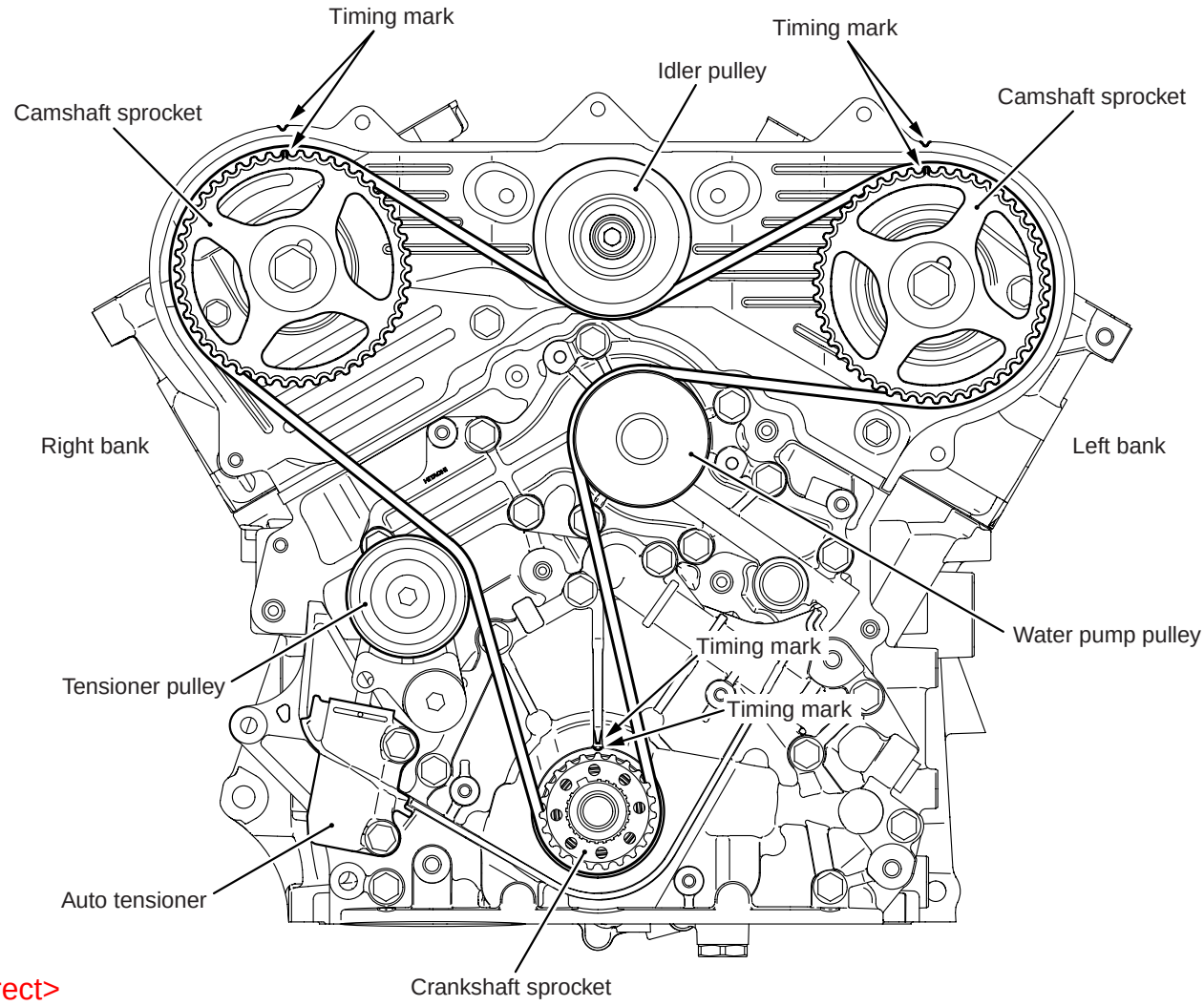
See the attached document for the correction of the error existing in the applicable service manual. **(The error in writing about the timing belt installation of 6B3 engine in case of OH)**

2. Details :

Attached 2 : for the destinations except MMNA
Attached 3 : for MMNA
Attached 4 : for MMNA ⇒**"Attached 4" is added in this revision A**

Target destinations : MMNA/USTP/EUR/RUSSIA/G.EXP/GCC/MMAL/NZ/CHINA/THAILAND/MEXICO
Target models : OUTLANDER(CW0W/GF0W) / NATIVA/PAJERO SPORT/MONTERO SPORT(KH8W)

Enforcement : From the first produced vehicle of the target models

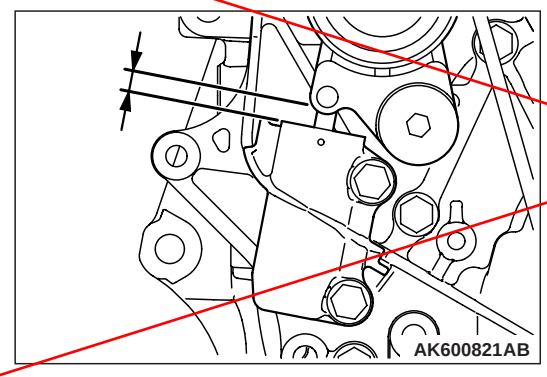


<Incorrect>

AK600820AB

6. Rotate the crankshaft two turns clockwise and leave it alone for approximately five minutes.
7. Check that the projection of the rod of the auto-tensioner is within the standard value.

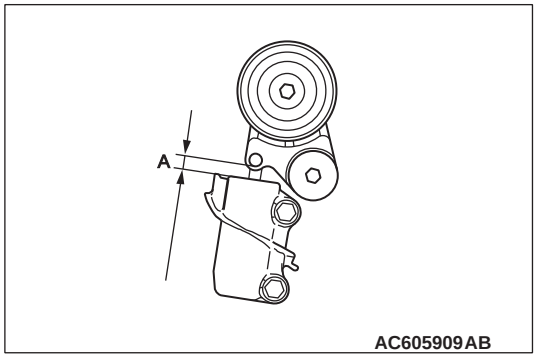
   Standard value: 9.1 – 13.4 mm



Insert attached sheet 2 (2/2)

<Correct>

⚠ <Deleted> ~~6. Remove the setting pin that has been inserted into the auto-tensioner.~~



7. Turn the crankshaft clockwise twice to align the timing marks.
8. Wait for at least five minutes, then check that the auto-tensioner pushrod extends within the standard value range.

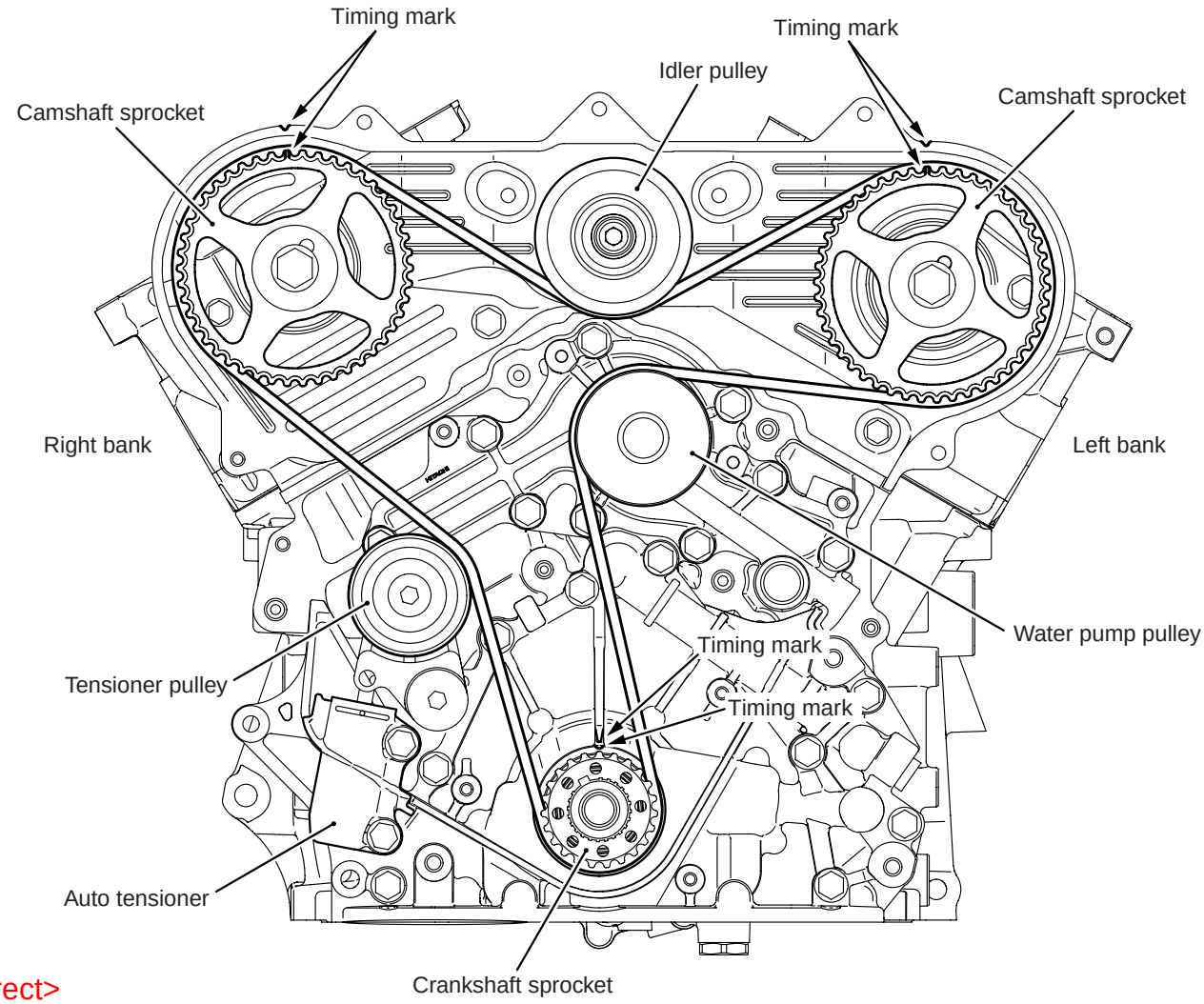
   Standard value (A): 9.1 – 13.4 mm

9. If not, repeat the operation in steps 1 to 7 above.
10. Check again that the timing marks of the sprockets are aligned.

Insert attached sheet 4

Attached sheet 3 (1/2)

A

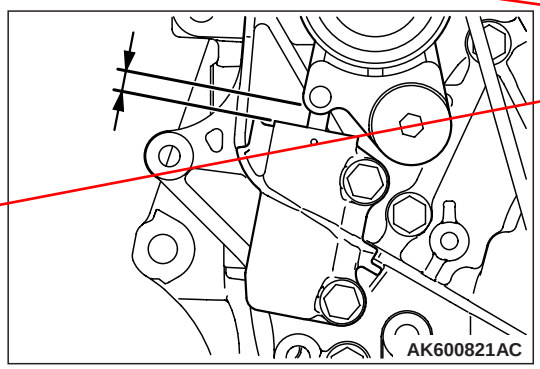


<Incorrect>

AK600820AC

6. Rotate the crankshaft two turns clockwise and leave it alone for approximately five minutes.
7. Check that the projection of the rod of the auto-tensioner is within the standard value.

Standard value: 9.1 – 13.4 mm (0.36 – 0.52 inch)



<Correct>

A

D

<Incorrect> **>>~~E~~<< AUTO-TENSIONER INSTALLATION**

CAUTION

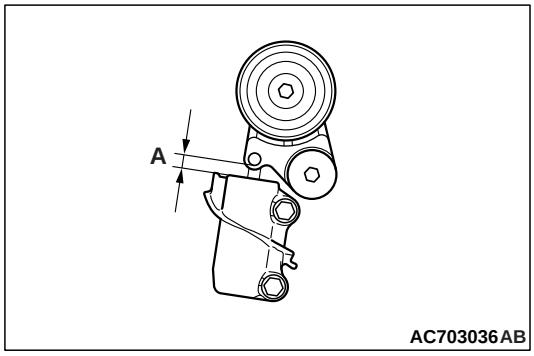
Always bleed the auto-tensioner of air before installing the auto-tensioner. (Refer to Air bleeding method)

Insert attached sheet 3 (2/2)

TSB Revision

<Correct>

⚠ <Deleted>



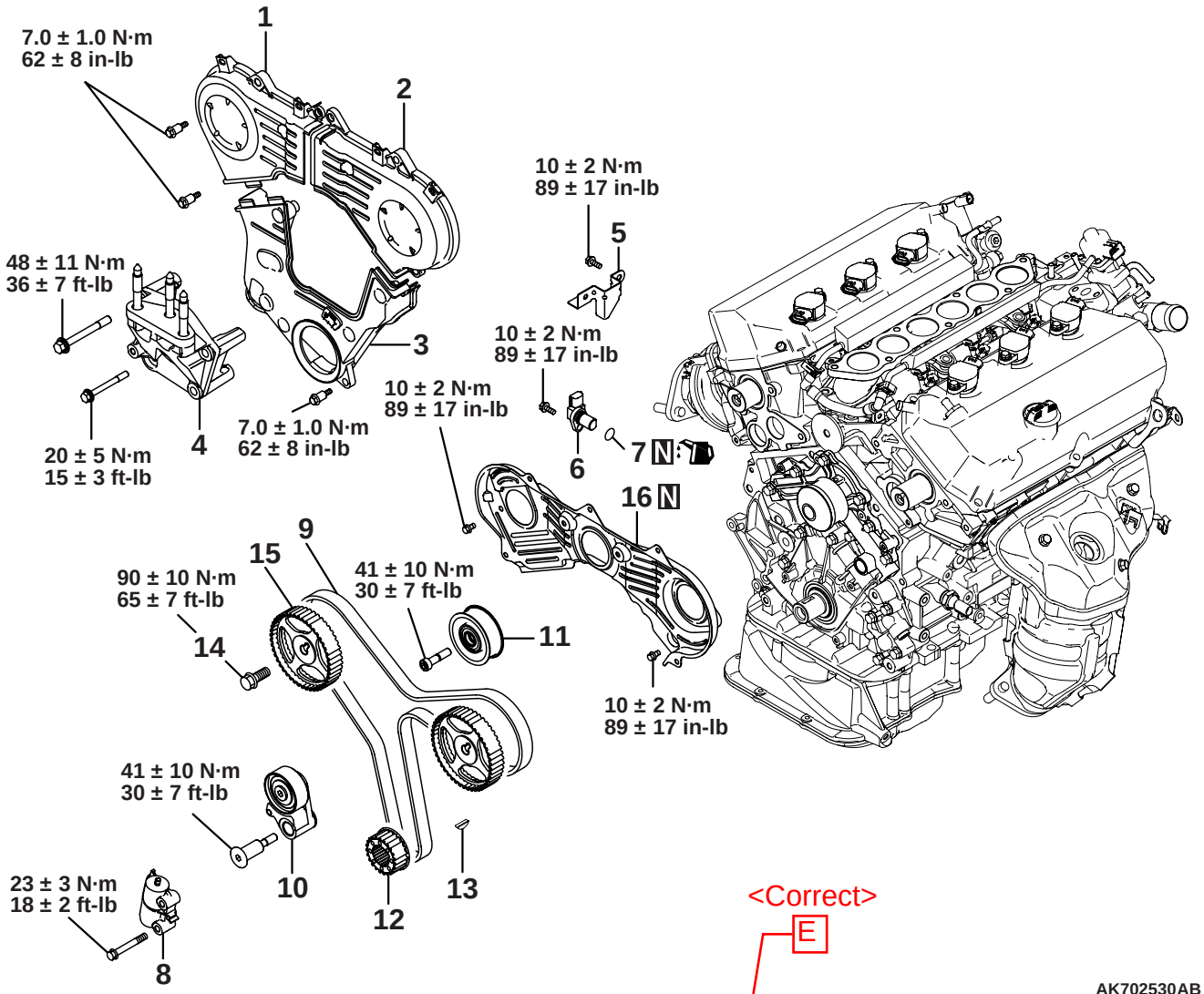
~~6. Remove the setting pin that has been inserted into the auto-tensioner.~~

7. Turn the crankshaft clockwise twice to align the timing marks.
8. Wait for at least five minutes, then check that the auto-tensioner pushrod extends within the standard value range.

   Standard value (A): 9.1 – 13.4 mm (0.36 – 0.52 inch)

9. If not, repeat the operation in steps 1 to 7 above.
10. Check again that the timing marks of the sprockets are aligned.

REMOVAL AND INSTALLATION



<Correct>
D
<<A>> >>A<<
<Incorrect>

Removal steps

1. Timing belt front upper cover, right
2. Timing belt front upper cover, left
3. Timing belt front lower cover
4. Engine support bracket, right
5. Crankshaft position sensor cover
6. Crankshaft position sensor
7. O-ring
8. Auto-tensioner

<Correct>
E
<Incorrect>

Removal steps

<<B>> >>B<< 9. Timing belt
10. Tensioner arm
<<C>> >>C<< 11. Idler pulley
>>B<< 12. Crankshaft sprocket
13. Key
<<D>> >>A<< 14. Camshaft sprocket bolt
15. Camshaft sprocket
16. Timing belt rear cover

Required Special Tools:

- MB990767: End Yoke Holder
- MD998716: Crankshaft Wrench
- MD998719: Pins

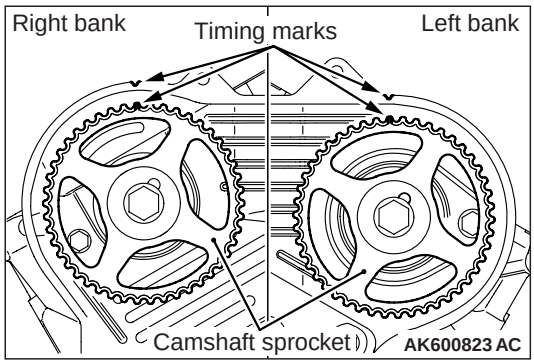
TSB Revision

<Correct> E <Incorrect>

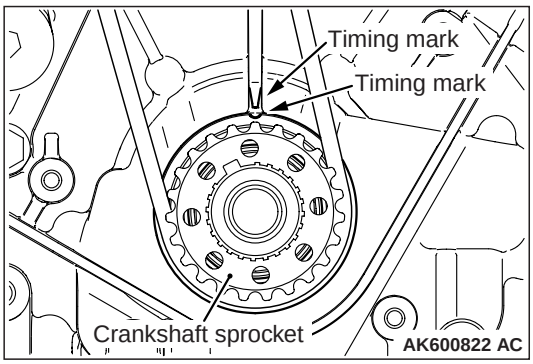
>>E<< TIMING BELT INSTALLATION

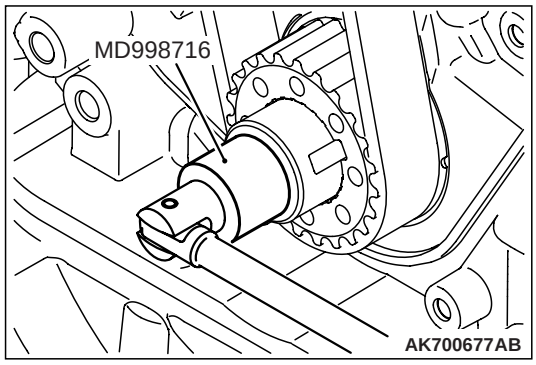
CAUTION

Remove and install the timing belt, aligning the timing marks of the crankshaft sprocket and the camshaft sprocket with the Number1 at the Top Dead Center of the compression stroke.



1. Check the timing marks of the crankshaft sprocket and the camshaft sprocket are aligned with the Number1 at the Top Dead Center of the compression stroke. If they are not, align the timing marks again, paying attention to the interference between the valve and the piston.
2. Install the timing belt on each sprocket in the following sequence.
   (1) Install the timing belt on the crankshaft sprocket and then on the water pump pulley, while tightening it to prevent slackness.
   (2) Line up the timing marks of the left bank camshaft sprockets.
   (3) Install the timing belt on the idler pulley, while taking up the slack.
   (4) Install the timing belt on the right bank camshaft sprocket.
   (5) Install the timing belt on the tensioner pulley.
3. Check to see that the timing marks of all the sprockets are in a alignment.





4. Using special tool MD998716, rotate the crankshaft a quarter of a turn counterclockwise. Then rotate it back clockwise to verify that all the timing marks are in alignment.
5. Pull out the pin of the auto-tensioner.

TSB Revision