

ISTA system version	4.14.14.17050	Data version	R4.14.14	Programming	- data
VIN	TT07533	Vehicle	MINI/R56/HAT/Cooper/N12/MANUAL/ECE/RL/2007/03		
Int.lev.works	-	Int.lev.(cur.)	-	Int.lev.(tar.)	-
Mileage	-				

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11 31 540

Checking timing chain for elongation (N12N16N18)

Special tools required:

- 2 353 281



**Attention!**

Measurement of timing chain is only possible during manual cranking (dynamic).

An engine start is **not** permissible.

Cranking the engine is only permissible with special tool (chain tensioner).

Attention!

Do not turn engine against the direction of rotation.



Necessary preliminary tasks:

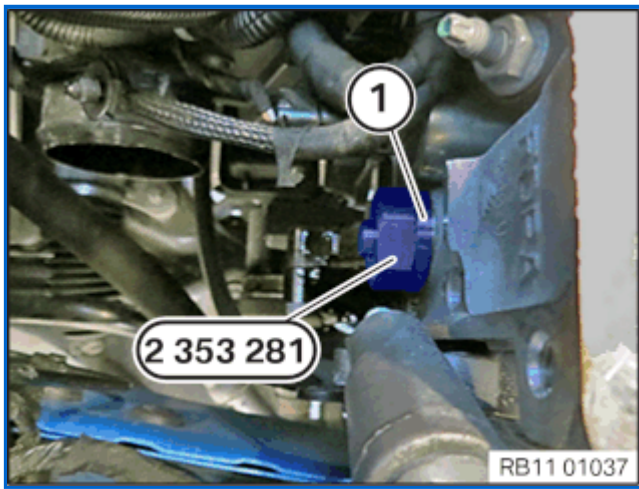
- [Remove chain tensioner](#), remove sealing ring.
- Remove front [wheel arch panel](#).

**Attention!**

Cranking the engine only with an installed special tool (chain tensioner) is permissible.

Screw in special tool 2 353 281 **without** shim (1).

Tightening torque. [11 31 4AZ](#).



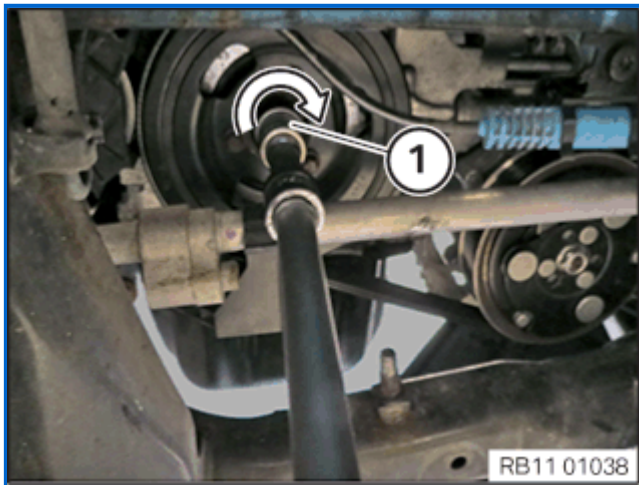
**Attention!**

Do not turn the engine against the direction of travel.

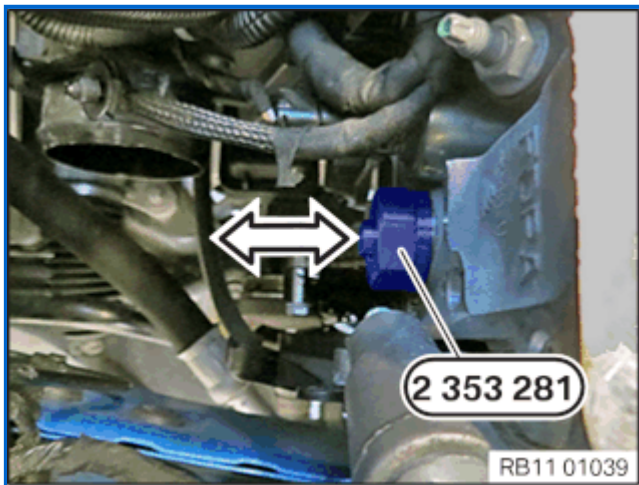
Measurement of timing chain.

Crank engine at constant speed in direction of rotation **4 times**.

Determine minimum dimension on special tool 2 353 281 with the aid of a second person.

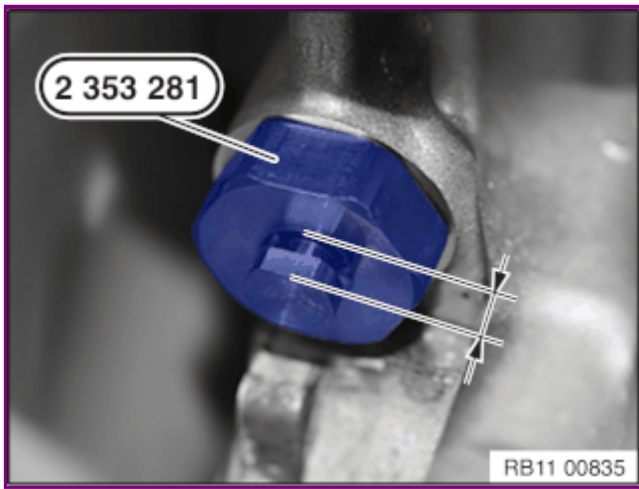


Depending on the tension and compression of the timing chain, the measuring pin is uniformly extended and retracted in direction of arrow on special tool 2 353 281.

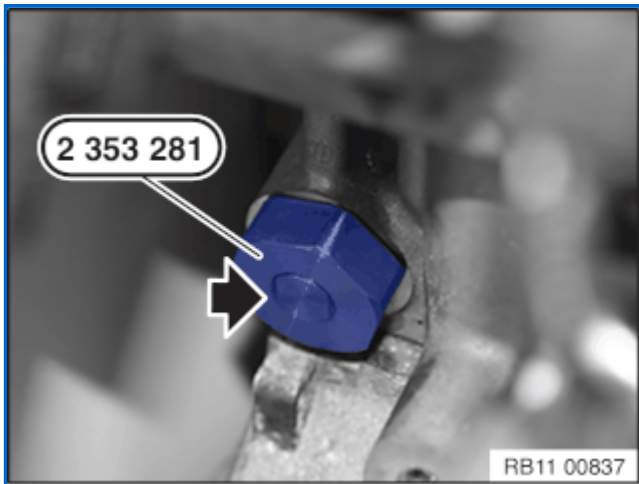


Determine protrusion or short length of the measuring pin on special tool 2 353 281 (see graphic).

Timing chain is OK if protrusion is detected on special tool 2 353 281 (measuring pin).



Assemble engine.



If a short length or flush distance is detected on special tool 2 353 281 (measuring pin), the timing chain and chain tensioner must be renewed.



*Installation note:*  
Replace [timing chain](#).