



SB-10057338-8937

This Service Information bulletin and attachment supersedes SI B11 16 14 **dated January 2015.**

NEW designates changes to this revision

SUBJECT

N63 Engine: Check the Timing Chain

MODEL

F01 and F02 (7 Series Sedan) produced from 9/2008 to 6/2012

F04 (ActiveHybrid 7) produced from 4/2010 to 6/2012

F07 (Gran Turismo) produced from 9/2009 to 6/2012

F10 (5 Series Sedan) produced from 3/2010 to 7/2013

F12 (6 Series Convertible) produced from 3/2011 to 7/2012

F13 (6 Series Coupe) produced from 7/2011 to 7/2012

E70 (X5) produced from 3/2010 to 6/2013

E71 (X6) produced from 7/2008 to 6/2014

E72 (ActiveHybrid X6) produced from 9/2009 to 9/2011

INFORMATION

This bulletin outlines the procedure for checking the engine timing chains for wear, and **should be completed in conjunction with [SI B11 06 14](#)**, "N63 Customer Care Package."

The N63CCP and N63 Engine Check the Timing Chain are NOT mandatory Technical Campaigns or Recalls.

They should be completed only based on **parts availability, workshop capacity, and the customer's schedule.**

Performing the test plans identified in the procedure below will detect wear at an early stage and, if necessary, provide a repair solution. To avoid future valvetrain wear, the vehicle must be reprogrammed and a shorter oil service interval must be retrofitted via ISTA/P.

Finally, drain and replace the engine's oil and filter.

After completing all necessary repairs included in the N63 Customer Care Package and the Timing Chain Check, the vehicle must be test driven for up to 30 minutes to ensure that the repairs were performed to the highest standard.

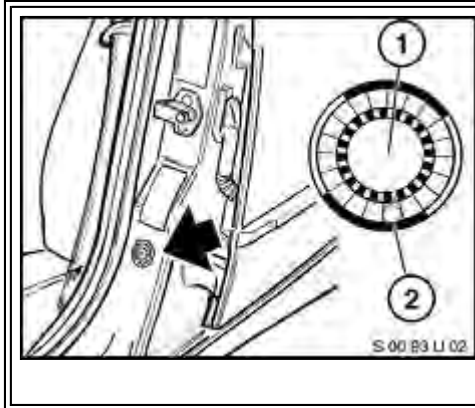
AFFECTED VEHICLES

This Service Action applies to E70, E71, E72, F01, F02, F04, F07, F10, F12, and F13 vehicles with the N63 engines corresponding to the production dates listed above.

First check if a Service Action label with a code number **728** is already attached to the B-pillar. If a code number **728** has already been punched out, the Campaign has already been performed and no further action is necessary.

Eligible vehicles will show the following Service Action-related Campaign Code:

00 13 48 02 00



This Service Action has been assigned code number **728**. After the vehicle has been checked and/or corrected, obtain a label (SD 92-464) and:

- A. Emboss your BMW center warranty number in the middle of the label (1);
- B. Punch out code number **728** (2), printed on the label; and
- C. Affix the label to the B-pillar as shown.

If the vehicle already has a label from a previous Service Action/Recall Campaign, affix the new label next to the old one. Do not affix one label on top of another one, because a number from an underlying label could appear in the punched-out hole of the new label.

PROCEDURE

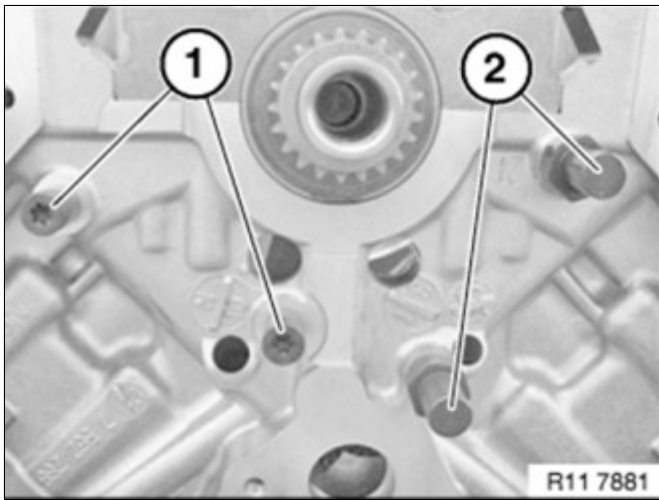
1. Perform a vehicle test.
2. Perform the applicable test plan to measure the timing chain's elongation, using ISTA/D 3.47 or higher.

F01, F02, F04, F07, F10, F12, and F13 Timing Chains Test Plan path:

1. Select "Troubleshooting"
2. Select "Function structure"
3. Select "Drive"
4. Select "Engine electronics, quality control valve (MSV)"
5. Select "Valve gear"
6. Select "Start Search"
7. From the list of available test plans, select "VANOS solenoid valve, exhaust"
8. Select "Continue"
9. Select "Timing chain test" and follow the steps to complete the test plans.
10. Test plan will conclude with the statement "Timing chain is OK" or "Timing chain is not OK".
11. **NEW** If the test plan results indicate the timing chains are stretched ("not OK"), replace both timing chains per Repair Instruction 11 31 052 "Replacing both timing chains \ PREMIUM" after completing the remaining portion of the vehicle evaluation procedure from [SI B11 06 14](#).

Do not discard the replaced parts. These parts will be requested by the Warranty Parts Return Center (WPRC). When the defective timing chains are removed from the engine label them with cylinder head bank (1 or 2) they were removed from.

Important Note:



NEW The current ISTA repair manual RA11 31 052 “Replacing both timing chains \ PREMIUM” instructs to release tension on four bearing bolts (indicated as #1 for cylinders 5 to 8; and #2 for cylinders 1 to 4) on the engine block.

NEW IT IS NOT NECESSARY TO DO THIS.

NEW DO NOT release these bolts, because the bearing bolts are micro-encapsulated and they would have to be replaced if loosened up. The repair instructions will be updated soon.

12. Terminate the diagnostic session so that FASTA data will be transmitted.
13. Program the vehicle using ISTA/P 3.53.5 or a more recent version and retrofit the new engine oil service interval. The engine oil service interval of the vehicle must be retrofitted to a shorter service interval of 12 months or 10,000 miles. ISTA/P will automatically reprogram and code all programmable control modules that do not have the latest software. Perform the programming, coding and engine oil service retrofit during the same ISTA/P session.

For information on programming and coding with ISTA/P, refer to Centernet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

Engine Oil Service Interval Retrofit Procedure (F01, F02, F04, F07, F10, F12, and F13):

1. From the ISTA/P start screen select “Start a new session”
2. Select “ISTA/P Server Automatically”
3. Select “Connect”
4. Select “Vehicle”
5. Select “Conversion, oil service 12months/15,000km/10,000 miles” from the retrofit list.
6. Select “Determine Measure Plan”
7. Select “Accept Measure Plan”
8. Select “Continue”
9. Select “OK”
10. Select “End Session”

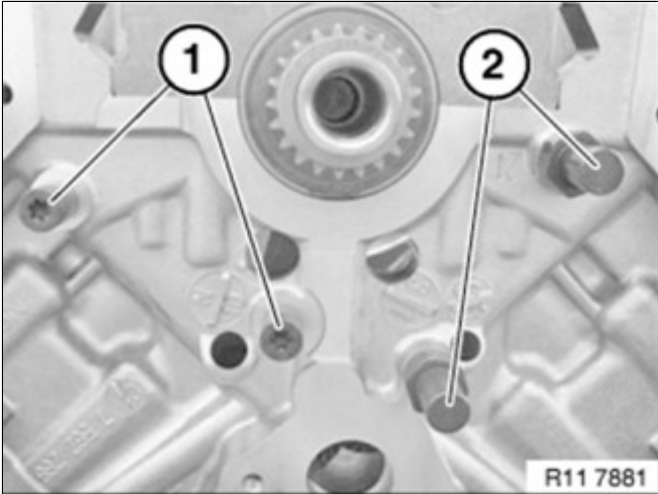
The retrofit of the engine oil service is complete.

E70, E71 and E72 Timing Chain Test Plan Path:

1. Select “Troubleshooting”
2. Select “Function structure”

3. Select “Drive”
4. Select “Engine electronics, quality control valve (MSV)”
5. Select “Valve gear”
6. Select “Start Search”
7. From the list of available test plans select “Exhaust camshaft”, and then follow with the “Display” and then “Continue” buttons
8. Select “Bank 1” and Continue
9. Select “Timing chain test” and follow the steps to complete the test plans
10. **NEW** If the test plan results indicate the timing chains are stretched (“Timing chain is not OK”), replace both timing chains per Repair Instruction 11 31 052 “Replacing both timing chains \ PREMIUM” after completing the remaining portion of the vehicle evaluation procedure outlined in [SI B11 06 14](#).

Do not discard the replaced parts. These parts will be requested by the Warranty Parts Return Center (WPRC). When the defective timing chains are removed from the engine label them with cylinder head bank (1 or 2) they were removed from.

	<p>Important Note:</p> <p>NEW The current ISTA repair manual RA11 31 052 “Replacing both timing chains \ PREMIUM” instructs to release tension on four bearing bolts (indicated as #1 for cylinders 5 to 8; and #2 for cylinders 1 to 4) on the engine block.</p> <p>NEW IT IS NOT NECESSARY TO DO THIS.</p> <p>NEW DO NOT release these bolts, because the bearing bolts are micro-encapsulated and they would have to be replaced if loosened up. The repair instructions will be updated soon.</p>
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11. Terminate the diagnostic session so that FASTA data will be transmitted.

NOTE: Until the release of ISTA/P 3.55.1 (March 2015), the reduction of the CBS oil service intervals on E70/E71/E72 vehicles can be performed only via the Vehicle Order (VO) modification (procedure can be found in the attachment).

Programming and Vehicle Order Modification for Engine Oil Service Interval (E70, E71 and E72):

12. Request a vehicle order (VO) modification via the “N63 CCP - VO” TC case.
13. The TC specialist will respond with a modified vehicle order that includes engine oil service interval option SA8KL (10,000 miles and 12 months). Refer to the attached document for instructions on how to import a vehicle order. While completing the vehicle order update, the vehicle must be programmed with ISTA/P 3.53.5 or higher at the same time.

For information on programming and coding with ISTA/P, refer to Centernet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

Finally, after completing all needed repairs, drain and replace the engine oil and filter. Refer to Repair Instructions 11 00...”Service – Engine oil”.

PARTS INFORMATION

Please supply your correct location code and shipping address in the TC case, so the parts are shipped to the correct location (main store or satellite).

The parts are blocked form ordering. Please remove the parts from your automatic reordering system and please do not place manual orders as they will be cancelled.

If applicable, use the following part numbers when replacing the timing chains. Refer to ETK and the repair instructions for onetime use fastener and component information regarding additional screws, gaskets and seals.

Part Number	Description	Quantity
11 31 7 567 500	Timing chain with tensioner rail	2
11 36 7 598 001	VANOS adjustment unit, inlet camshaft	2
11 36 7 598 002	VANOS adjustment unit, NEW outlet camshaft	2
11 31 7 574 397	Guide rail	2
11 31 7 565 242	Slide rail	2
11 21 7 571 037	Sprocket gear	1
11 31 7 557 741	Timing chain tensioner	2
11 35 7 564 346	VANOS collar screw	4
11 31 7 550 461	Seal	2
11 42 7 583 220	Oil filter	1
NEW Refer to EPC	Cylinder Head Gasket (Set)	1

Sublet Submission

83 21 2 365 946	5W30 BMW Engine Oil 1qt.	Up to 10
		(E72, F04 9 qt.)

Note: Only order the necessary parts, in the quantities needed, for customers’ vehicles that have confirmed failures. Such parts can only be ordered through TeileClearing, as the part numbers are blocked. Parts identified as needed in the TeileClearing case will be forwarded to the Parts Department and will constitute the Center’s Parts order for this vehicle.

IMPORTANT:

NEW If the test plan failed, submit a PuMA Teileclearing Engine case with “N63CCP – Timing Chain” in the subject line. The timing chain parts listed above will be manually released to your dealer.

Please supply your correct location code and shipping address in the TC case, so the parts are shipped to the correct location (main store or satellite).

The parts are blocked from ordering. Please remove the parts from your automatic reordering system and please do not place manual orders as they will be cancelled.

The following parts are blocked and will need manual release via the Parts Consultant Group. Copy and paste the parts table below into the N63 CCP Timing Chain case.

Part Number	Description	Quantity
11 31 7 567 500	Timing chain with tensioner rail	2
11 36 7 598 001	VANOS adjustment unit, inlet camshaft	2
11 36 7 598 002	VANOS adjustment unit, outlet camshaft	2
11 31 7 565 242	Slide rail	2
11 21 7 571 037	Sprocket gear	1
11 31 7 557 741	Timing chain tensioner	2
11 35 7 564 346	VANOS collar screw	4
11 31 7 550 461	Seal	2

When the PuMA case is received, you will receive an acknowledgment that the case will be processed. If the case details are not sufficient, you will receive a response describing the discrepancy.

All parts from these repairs are subject to 100% return and inspection at the WPRC, in order to ensure appropriate usage of parts. Returned parts that do not meet the correct replacement criteria (part number/part index), as described in the procedure attachment, will be debited.

WARRANTY INFORMATION

Reimbursement for this repair will be via normal claim entry utilizing the following information:

Defect Code:	00 13 48 02 00	
Labor Operation:	Labor Allowance:	Description:
00 62 913	8 FRU	Timing chains test plan; oil change; CBS reduction/programming and coding claimed under different service action/repair
00 62 914	12 FRU (E7x)	Timing chains test plan; oil change; CBS reduction/programming and coding
	13 FRU (F01, F02, F04, F07, F10, F12, F13)	

00 62 915	13 FRU (E7x)	Timing chains test plan; oil change; CBS reduction/programming and coding with CAS
00 62 916	297 FRU (F10 manual trans)	NEW Timing chains test plan and timing chains replacement (includes removing and installing engine and the cylinder heads); oil change; CBS reduction/programming and coding claimed under different service action/repair
	300 FRU (F13 manual trans)	
	303 FRU (F12 manual trans)	
	309 FRU (F10 auto)	
	314 FRU (F13 auto)	
	315 FRU (F01, F02)	
	318 FRU (F12 auto)	
	319 FRU (F07)	
	339 FRU (F04)	
	367 FRU (E70, F13 Xdrive)	
	375 FRU (E71)	
	377 FRU (F01 Xdrive, F02 Xdrive, F10 Xdrive)	
	379 FRU (F12 Xdrive)	
	381 FRU (F07 Xdrive)	
	409 FRU (E72)	
00 62 917	302 FRU (F10 manual trans)	NEW Timing chains test plan and timing chains replacement (includes removing and installing engine and the cylinder heads); oil change; CBS reduction/programming and coding
	304 FRU (F13 manual trans)	
	308 FRU (F12 manual trans)	

	313 FRU (F10 auto)	
	319 FRU (F13 auto)	
	320 FRU (F01, F02)	
	322 FRU (F12 auto)	
	323 FRU (F07)	
	343 FRU (F04)	
	371 FRU (E70)	
	372 FRU (F13 Xdrive)	
	379 FRU (E71)	
	381 FRU (F10 Xdrive)	
	382 FRU (F01 Xdrive, F02 Xdrive)	
	383 FRU (F12 Xdrive)	
	386 FRU (F07 Xdrive)	
	413 FRU (E72)	
00 62 918	372 FRU (E70)	NEW Timing chains test plan and timing chains replacement (includes removing and installing engine and the cylinder heads); oil change; CBS reduction/programming and coding with CAS
	380 FRU (E71)	
	414 FRU (E72)	

NEW Vehicle Programming/Encoding

NEW If a vehicle control module or component was working properly and/or had no related faults stored prior to vehicle programming and it fails to program correctly and/or requires initialization, this additional work must be claimed with separate labor operations under the defect code listed above; refer to KSD2.

Repairs to address control modules and/or components with pre-existing conditions are not eligible to be claimed under the defect code listed in this bulletin.

And:

When other additional work and/or parts are required as a direct result of this issue, including the applicable labor operations listed in KSD2, claim these items under the defect code listed above.

And:

Sublet – Materials

Sublet Code 4	See sublet reimbursement calculation below	Reimbursement for used quantities of required operating fluids, including engine oil (applicable BMW part numbers. Do not use these part numbers for claim submission)
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Sublet calculation:

Reimbursement for used quantities of required operating fluids, including engine oil (applicable BMW part numbers) at dealer net plus handling.

Enter the material cost in sublet and itemize the amount in the claim comment section.

After the Engine Oil Service Retrofit is Completed, a CBS Data Reset and if applicable a CBS Correction Must Be Performed

The engine oil service interval calculation will now be based on 12 months or approximately 10,000 miles, one of the following steps should be performed:

- If the engine oil service task **shows** Recommended, Due or **qualifies** to be performed within the next 2 calendar months or less, **reset the engine oil service CBS data to 100%**.

Or

- If the engine oil service task **does not show** Recommended, Due or **does not qualify** to be performed within the next 2 calendar months or less, **reset the engine oil service CBS data to 100% and perform a CBS correction in order to reduce the engine oil service counter by 1.**

Combined and Other Required Maintenance Service Tasks

Please be sure to perform the service tasks that are “combined” with the engine oil service, as well as the “stand alone” maintenance tasks if they qualify.

If eligible, claim these other items under the BMW Maintenance Program or, after reviewing with the customer with his or her approval, invoice these items separately as customer-pay.

NEW Overlapping Labor with Other Repairs

NEW If invoicing additional KSD2 flat rate labor operation codes for the other repair work results in overlapping labor being claimed, invoice work time labor operation 00 50 000 instead for the additional time (FRU) minus the overlap.

NEW On the repair order and in the claim comment section, please identify the labor operations that labor operation code 00 50 000 replaces and itemize the claimed FRU amount.

NEW Even though work time labor operation code 00 50 000 ends in “000,” it is not considered a Main labor operation. When work time labor operation 00 50 000 is being used for work that will be claimed under different defect codes, separate punch time(s) are required.

Previous Customer-pay Repairs

BMW of North America, LLC will provide reimbursement for “qualifying customer-pay” timing chain repairs” that were performed on an eligible vehicle prior to the release of the N63 Engine Timing Chain Inspection

Measure.

Customer-pay repairs, when they were performed, are subject to the applicable New Vehicle/SAV Limited Warranty's exclusions and limitations, in addition to the vehicle and coverage eligibility requirements.

Repairs performed on ineligible vehicles or the diagnosis and repair of other unrelated issues do not qualify for reimbursement.

To request reimbursement for a "qualifying customer-pay repair," performed either by an authorized BMW center or independent repair shop, please have your customer submit a reimbursement request online at www.BMW-RP.com.

Reimbursement Procedure

To initiate the online process, the customer will be asked to attach PDF files of the required documentation; this is outlined in the attachment below.

Alternatively, he or she may mail or fax his or her request and documentation directly to the BMW Customer Reimbursement Center.

For more information, please refer to the PDF attachment: "B110614_Customer_CP_Reimbursement Procedure" that is included in [SI B11 06 14](#). A copy of this attachment can be provided to the customer.

ATTACHMENTS

View PDF attachment [B111614_VO_Modification](#).

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