



PERFORM THE PROCEDURE OUTLINED IN THIS SERVICE INFORMATION ON ALL AFFECTED VEHICLES BEFORE CUSTOMER DELIVERY OR THE NEXT TIME THEY ARE IN THE SHOP FOR MAINTENANCE OR REPAIRS.

SUBJECT

N63 Engine: Check the Timing Chain

MODEL

F01 and F02 (7 Series Sedan) produced from 3/2009 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 to check the engine timing chains for wear and should be **completed in conjunction with [SI B11 06 14](#) “N63 Customer Care Package”**.

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 assure the highest standard of performed repairs.

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

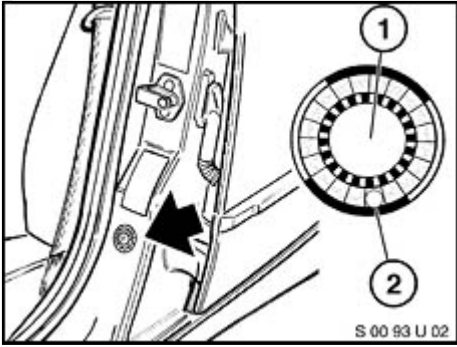
ELIGIBLE VEHICLES

To assist you in identifying the eligible vehicles, the DCSnet Warranty Vehicle Inquiry has been updated with the “Vehicle Comment” shown below:

N63 Engine: Customer Care Package. B11 16 14. Defect code: 00 13 48 02 00. Please review the Repair History (Claims)” sections first, before performing any repairs. If this has been performed and claimed already, no further action is necessary.

This message will also display in the Key Reader/ISPA Light application’s “Information on” tab.

Note: Always check the DCSnet Warranty Vehicle Inquiry “Vehicle Comments” and the “Repair History (Claims)” sections first, before performing any repairs.

	<p>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:</p> <ol style="list-style-type: none"> 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.
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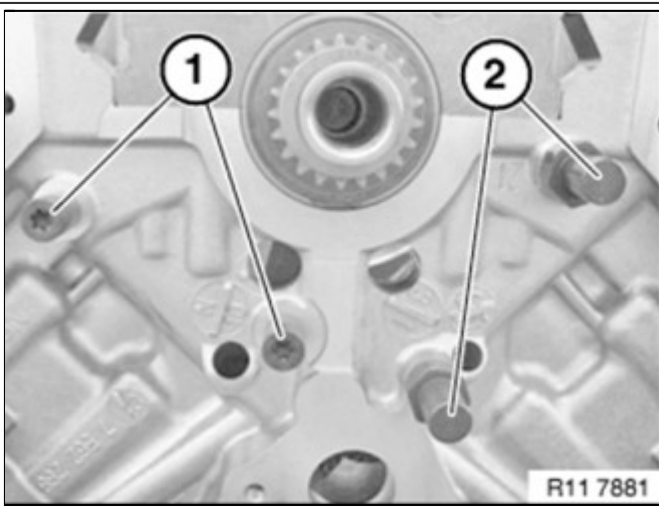
If the vehicle already has a label from a previous Service Action/Recall Campaign, affix the new label next to the old one. Do not affix one label on top of another one, because a number from an underlying label could appear in the punched-out hole of the new label.

PROCEDURE

1. Perform a vehicle test.
2. Perform the applicable test plan to measure the timing chains elongation.

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. If the result of the test plan indicates that the timing chains are stretched (“not OK”) then replace both of the timing chains as per Repair Instruction 11 31 052 “Replacing both timing chains (N63)” after completing the remaining portion of the vehicle evaluation procedure from [SI B11 06 14](#).

**Important Note:**

The current ISTA repair manual RA11 31 052 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.

IT IS NOT NECESSARY TO PERFORM THIS.

DO NOT release these bolts because the bearing bolts are micro-encapsulated and they would have to be replaced in case of loosening 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):

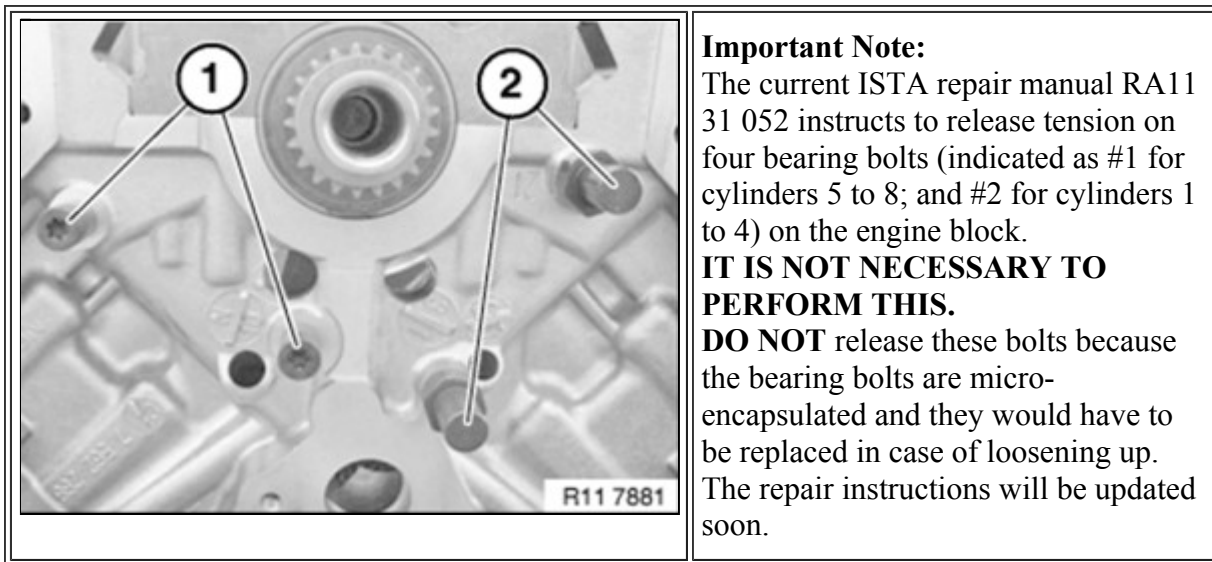
1. From the ISTA/P start screen select “Start a new session”
2. Select “ISTA/P Server Automatically”
3. Select “Connect”
4. Select “Vehicle”
5. Select “Conversion, oil service 12months/15,000km/10,000 miles” from the retrofit list.
6. Select “Determine Measure Plan”
7. Select “Accept Measure Plan”
8. 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. If the result of the test plan indicates that the timing chains are stretched (“Timing chain is not OK”) then replace both of the timing chains as per Repair Instruction 11 31 052 “Replacing both timing chains (N63)” after completing the remaining portion of the vehicle evaluation procedure outlined in [SI B11 06 14](#).



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” TC case.
13. The TC specialist will respond with a modified Vehicle Order that includes engine oil service interval option SA8KK (10,000 miles and 15 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

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

Do not replace the VANOS Gear Adjustment unit unless visible damage can be seen to the gear teeth.

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:

When submitting a PuMA Engine Case "N63CCP" (as per instructions to [SI B11 06 14](#)), indicate the results of the ISTA timing chain test plan. In case the test plan failed, the timing chain parts listed above will be manually released to your dealer every evening before close of a business day.

WARRANTY INFORMATION

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

Defect Code:	00 13 48 02 00
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F0x, F1x, and E7x:

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)	Timing chains test plan and timing chains replacement; 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)	Timing chains test plan and timing chains replacement; 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)	Timing chains test plan and timing chains replacement; oil change; CBS reduction/programming and coding with CAS
	380 FRU (E71)	
	414 FRU (E72)	

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 (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 (applicable BMW part numbers) at dealer net plus handling.

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

CBS Data Reset

If the engine oil service task **shows** Recommended, Due or **qualifies** to be performed within the next 60 days or less, after changing the engine oil filter as part of the repair procedure outlined in this bulletin, **reset the CBS data**.

As a result of Programming together with the Vehicle Order Modification, the engine oil service interval calculation will now be based on 12 months or 10,000 miles.

If the engine oil service task **does not show** Recommended, Due or **does not qualify** to be performed within the next 60 days or less, after changing the engine oil and filter, **do not reset the CBS data**.

When the engine oil service qualifies to be performed, perform the engine oil service and reset the CBS data. Then new 12 months or 10,000 miles engine oil service interval will now display.

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 “standalone” maintenance tasks if they qualify to be performed. If eligible, claim these other items under the BMW Maintenance program.

Attachment: B111614_VO_Modification

ATTACHMENTS

View PDF attachment [B111614_VO_Modification](#).

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