May 2014 Technical Service

This Service Information bulletin supersedes SI B17 01 14 dated May 2014.

NEW designates changes to this revision

#### **SUBJECT**

# Low Coolant Level with No Sign of External Leaks

#### MODEL

F30 (3 Series Sedan)

F31 (3 Series Sports Wagon)

F32 (4 Series Coupe)

F33 (4 Series Convertible)

F34 (3 Series Gran Turismo)

Produced from 7/2013 to 9/2013

#### **SITUATION**

The Low Coolant Warning light is on and there are no signs of a visual leak. Pressure testing the cooling system may or may not show an internal leak (loss of pressure). There may also be a complaint of transmission fluid leaking from the vent on top of the transmission; poor shift quality; or a shuddering from the transmission.

## **CAUSE**

There is an internal failure of the automatic transmission oil cooler, allowing coolant to mix with transmission fluid. Possible faulty coolers were built between 6/6/2013 and 8/4/2013.

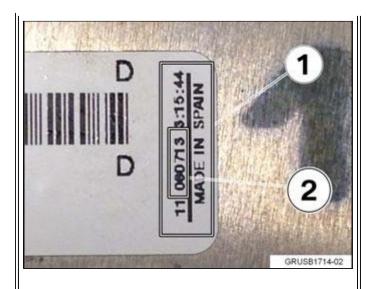
#### **CORRECTION**

Once the transmission oil cooler has been determined to be faulty, the cooler and automatic transmission must be replaced. The cooler lines must be properly flushed to remove any remaining contaminants (coolant/oil mix).

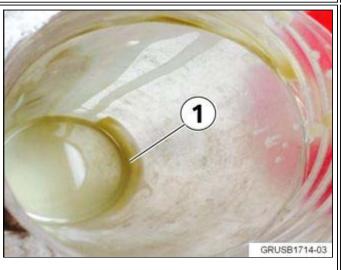
### **Identifying the transmission oil cooler**



• Access the cooler and visually check the parts label on the coolant side of the cooler (1).



• Defective coolers are labeled "Made in Spain" (1) and the production range is 06.06.2013 to 04.08.2013 (DD/MM/YY) (2).



• Drain a small amount of transmission fluid (at the transmission heat exchanger) to inspect for coolant contamination. Contaminated fluid will have a milky color (1). Submit a PuMA Info Only case titled "F30 Transmission Oil Cooler" if there is any concern about the color or condition of the fluid.

TC PuMA Case approval is still needed for replacement of the transmission (refer to <u>SI B24 05 12</u>). Provide pictures of the fluid with the Case if there is any concern about the color or condition of the fluid.

# NEW PARTS INFORMATION

Part Number	Description	Quantity	
17 21 7 600 553	Heat exchanger	1	
Refer to EPC	Automatic transmission	1	

There are several different part numbers for automatic transmissions during this production period. Use the most current version of EPC and order the transmission that applies, based on VIN.

Part Number	Description	Quantity	
83 22 2 220 439	Automatic transmission fluid (20 liters)	As needed	
or			
83 22 2 220 443	Automatic transmission fluid (1 liter)	As needed	

# **WARRANTY INFORMATION**

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty

<b>Defect Code:</b>	17 21 01 48 00		
Labor Operation:	Labor Allowance:	<b>Description:</b>	
24 00 054	Refer to KSD	Installing exchange transmission	
and			
17 22 510	Refer to KSD	Replacing heat exchanger for transmission	
and			
17 99 000	Work time (WT)	Work time to flush transmission cooler lines	
00 00 556	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)	
and			
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery")	
and			
61 00 730	Refer to KSD2	Programming/encoding control unit(s)	

Labor operation code 24 00 054 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation 24 00 554 instead.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the "Search" button, and then enter the applicable flat rate labor operation in the FR code field.

Even though work time labor operation code 17 99 000 ends in "000," it is not considered a Main labor operation.

Work time (WT) labor operation 17 99 000 requires an individual punch time.

If control module(s) fail to reprogram or initializations are required, the additional work must be claimed using separate labor operations found in KSD2 under the defect code listed above.

### **Sublet - Materials**

Sublet Code 4	III	Reimbursement for the used quantity of transmission fluid (Bulk container reference P/N 83 22 2 220 439 for 20 liters or P/N 83 22 2 220 443 for one liter. Do not use this part number for claim submission)
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Sublet calculation: Reimbursement for used quantity of transmission fluid (Bulk container reference P/N 83 22 2 220 439 for 20 liters or P/N 83 22 2 220 443 for one liter) at dealer net plus handling. Enter this material cost in

	sublet and itemi	ze the amo	ount in the	claim c	omment	section.
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