



SIB 17 01 24

2025-03-31

COOLANT LEAK AT CHANGEOVER VALVE

This Service Information Bulletin (Revision 3) replaces SI B17 01 24 **dated April 2024**.

What's New:

- Procedure and Claim Information sections updated
- G70 Aux Heater for HV added to procedure
- Clean date for changeover valve updated

<input type="checkbox"/>	THIS REPAIR IS MOBILE FRIENDLY
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MODEL

E-Series	Model Description
G26	i4 Gran Coupe Battery Electric Vehicle (BEV)
G60	i5 Sedan (BEV)
G70	i7 Sedan (BEV)
i20	iX Sports Activity Vehicle (SAV BEV)

SITUATION

- There is coolant leaking from under the car
- Low heater output
- Possible Check Control message “Drive, you can continue driving” (ID49)
- Possible fault codes stored in these BEV vehicles:
 - 224163 – Electric auxiliary heater for the high-voltage battery unit: Undervoltage or internal communication fault
 - 8049AA - Coolant level sensor, expansion tank: Coolant level low or short circuit to ground or line disconnection
 - 80124F – Electric auxiliary heater: Communication in electric auxiliary heater faulty
 - 224F60 - Coolant level sensor, expansion tank: Coolant level low or short circuit to ground or line disconnection
 - 224111 - Cooling system for power electronics: Coolant loss detected
 - 224107 - Cooling system for high-voltage battery unit, component protection: Detection of coolant loss

CAUSE

Leakage coming from the coolant changeover valve(s); two or more when applicable.

CORRECTION

Check all the changeover valves (if vehicle has more than one*) for a coolant leak (active) or previous coolant leak (valve has residual coolant dried around it).



Check the production date of the remaining changeover valves (1). Improved valves were produced 18.1.2024 (January 18, 2024) and later.

Replace any* changeover valves PN 64 11 9 462 114) with a production date older than 5.1.2024 (January 5, 2024).

(*) Possible number of changeover valves per model:

G26	1
G60	3
G70	1
i20	2

If no changeover valves are leaking, perform further diagnosis with ISTA and cooling system test equipment.

PROCEDURE

Important Warning for Working on the High-Voltage (HV) systems on BMW Group vehicles:

Only properly trained personnel, who passed all applicable HV Technical Training Courses, should perform repairs which require disconnecting, or removal of High Voltage battery components on any Hybrid or Electric Vehicle. Work performed on High Voltage systems by unqualified persons may result in severe injury or damage to the vehicle. Additional safety information is found in Repair Instruction 61 00... “Observe safety instructions when handling electric vehicles”.

Prior to disconnecting, or the removal of any HV component, the HV system needs to be disabled and secured (by means of the HV Disconnect Switch) by a properly trained technician, Once the vehicle’s HV system is disabled (the “Blitz” – lightning bolt icon displayed in instrument cluster, see below).



High Voltage Battery removal and rework can be performed ONLY by a certified HV Specialist Technician for the vehicle being repaired.

Replace the changeover valve(s), reference and use the appropriate repair instruction based on model being repaired:

G26 and G70:	Refer to Repair Instruction 64 12 790
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I20:	Refer to Repair Instruction 64 12 792 and 17 61 625
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And for replacing the electric auxiliary heater(s):

All	Refer to Repair Instruction 64 12 821
G70:	Refer to Repair Instruction 64 12 831 (for the HV Battery)

Note: The special flat rate labor operation codes provided in the Claim information section addresses the overlapping labor that is contained in these repair operations' FRU allowances.

Perform a coolant system bleeding after repairs following ISTA path:

Vehicle management/Service functions/Electric drive/Cooling/Fill and bleed the cooling system.

Perform a functional check of the electric auxiliary heater following ISTA path:

Body/Heating and air conditioning functions/Electric auxiliary heater/Heating and air conditioning functions: electric auxiliary heater

G70 only: Perform a functional check of the electric auxiliary heater for the high voltage battery following ISTA path:

Electric drive/High-voltage battery unit/Electric auxiliary heater for high-voltage battery unit

Only replace the electric auxiliary heater if the test module instructs you to replace it.

Warning! Risk of scalding: Carry out the repair work on the cooling system only when the engine has cooled down.

Important: Life-time coolant filling - Never reuse used coolant!

Installation note: Only use prescribed coolant that applies to the vehicle! Observe the mixture ratio!

For cooling system disassembly/replacement work related to plastic and/or rubber components only where a partial quantity of coolant is drained, new coolant must be used to replenish the amount that was drained, up to the top up/full level.

DO NOT OVERFILL THE COOLANT SYSTEM.

PARTS INFORMATION

To determine the part number(s) that applies to the specific vehicle being repaired, enter the VIN/chassis number into either ETK or AIR, this will consider the specific equipment and/or options that are fitted to the vehicle.

Part Number	Description	Quantity
64 11 9 462 114	Changeover valve	Up to 3* as applicable
And, if necessary:		
Refer to AIR/ETK (MG 64)	Elektrischer Durchlauferhitzer/Electric auxiliary heater	1

G70 (When necessary)

Part Number	Description	Quantity
Refer to AIR/ETK (MG 17)	Electric auxiliary heater for HV battery (G70 only)	1

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Bulk Supply Materials - Sublet

Part Number	Description	Quantity
83 19 2 468 442	HT-12 Coolant (DN = 1 gallon concentrate)	Sublet
Or:		
83 19 5 A32 851	HT-12 Antifreeze RTU (Bulk DN = 1/10 Liter) (Pre-mix)	Sublet

Additionally, other materials and small parts that are not specified above, such as fluids, lubricants, one-time use screws, nuts, and seals, which must be replaced or installed (according to the ISTA repair instructions/ETK/AIR), are to be selected from the Electronic Parts Catalogue, and/or other approved BMW Group's resources according to the respective vehicle type. Invoiced these items separately under the Repair Code listed in this bulletin.

CLAIM INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks, or the BMW Certified Pre-Owned Program as applicable below.

Repair Code:	6411900400	G26 G60 G70 I20 BEV Coolant loss at changeover valve
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Below are the special flat rate labor operation code choices for this repair.

The vehicle is already in the workshop.

Work Pkg	Labor Operation	Description (Plusposition work)	Labor Allowance
# 1	00 75 857	Checking the coolant level, reading out the fault memory (includes carrying out vehicle test, 00 00 556/61 21 528), replacing all changeover valves as applicable, checking the electric auxiliary heater.	As applicable
And:			
If applicable	00 78 544	Additional work: Replacing the electric auxiliary heater.	As applicable
And:			
If applicable	00 78 545	Additional work: Replacing the electric auxiliary heater for the high voltage battery (G70 only).	As applicable

Or:

The vehicle arrives at your center for this repair (No other Main work will be performed or claimed during this workshop visit).

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 2	00 75 272	Checking the coolant level, reading out the fault memory (includes carrying out vehicle test, 00 00 006/61 21 528), replacing all changeover valves as applicable, checking the electric auxiliary heater.	As applicable
And:			
If applicable	00 78 544	Additional work: Replacing the electric auxiliary heater.	As applicable
And:			

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If applicable	00 78 545	Additional work: Replacing the electric auxiliary heater for the high voltage battery (G70 only) .	As applicable

Only one Main work flat rate labor operation code can be claimed per workshop visit.

Claim Repair Comments

Only reference the SIB number and the work package (Pkg) number performed in the technician's RO notes and the claim comments (For example: B17 01 24 WP 1), unless otherwise required by State law.

Additionally, when applicable, add comments to support the replacement of the electric auxiliary heater(s).

Sublet – Bulk Supply Materials (RO and Claim Comments Required)

Sublet Code 4	Reimbursement for the repair-related bulk supply material (Do not use the BMW part number for claim submission)	Up to \$100.00
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Sublet reimbursement calculation for claiming the applicable repair-related bulk supply material (BMW part number) is at the dealer net price amount for the quantity used plus your center's handling.

BMW Antifreeze/Coolant: Claim the corresponding sublet dollar amount for the quantity needed to replace what was drained. The one-gallon concentrate part number quantity for a 50/50 coolant/water solution.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

BMW Group's AIR Application Resource for Flat Rate Labor Operation Codes

To obtain the corresponding flat rate unit (FRU) allowance information from the BMW Group AIR application resource, start by entering the Chassis Number (last seven (7) characters of the VIN), and click on the "Search" icon. If the "Vehicle Selection" window displays two or more model possible vehicle choices, select the applicable Model, or enter the full VIN (17 characters) instead to proceed. Click on the "Flat Rate Units" button and enter a flat rate labor operation code number "without spaces" in the field to the right, click on the "Search" icon to display the corresponding listing of "Flat rate unit group details" that are available and their corresponding FRU allowances.

FEEDBACK REGARDING THIS BULLETIN

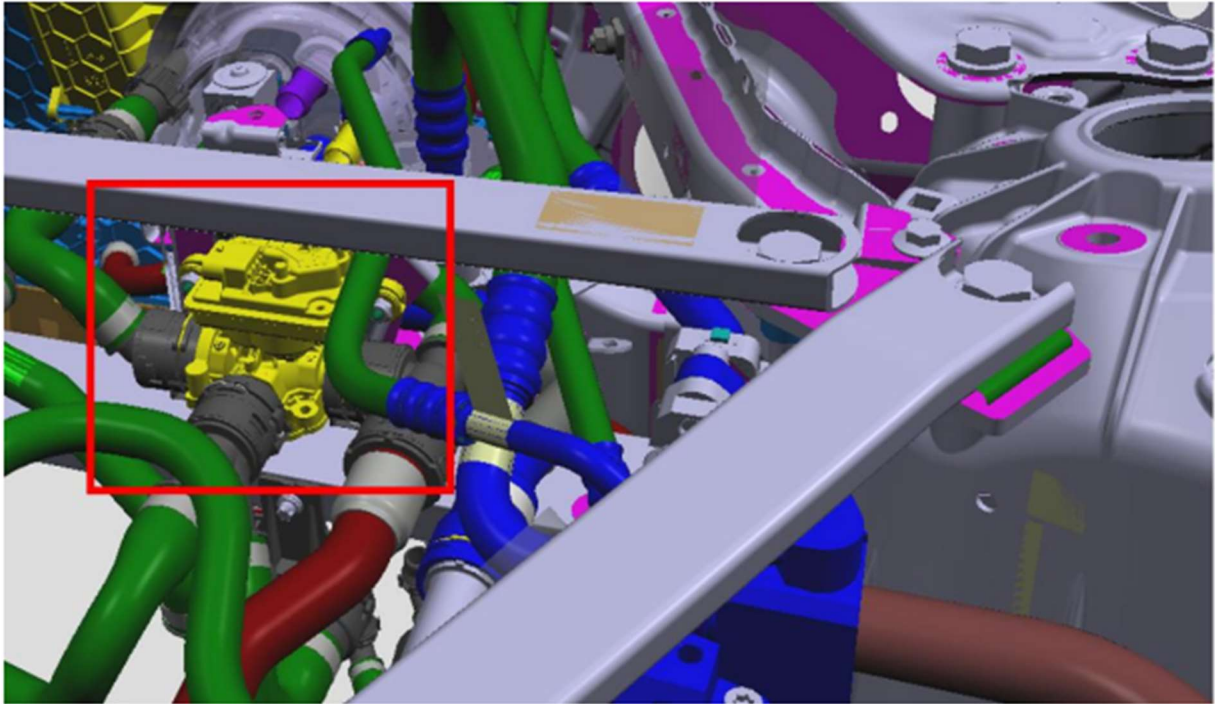
Technical Feedback	To submit feedback for the technical topic of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department

Supporting Materials

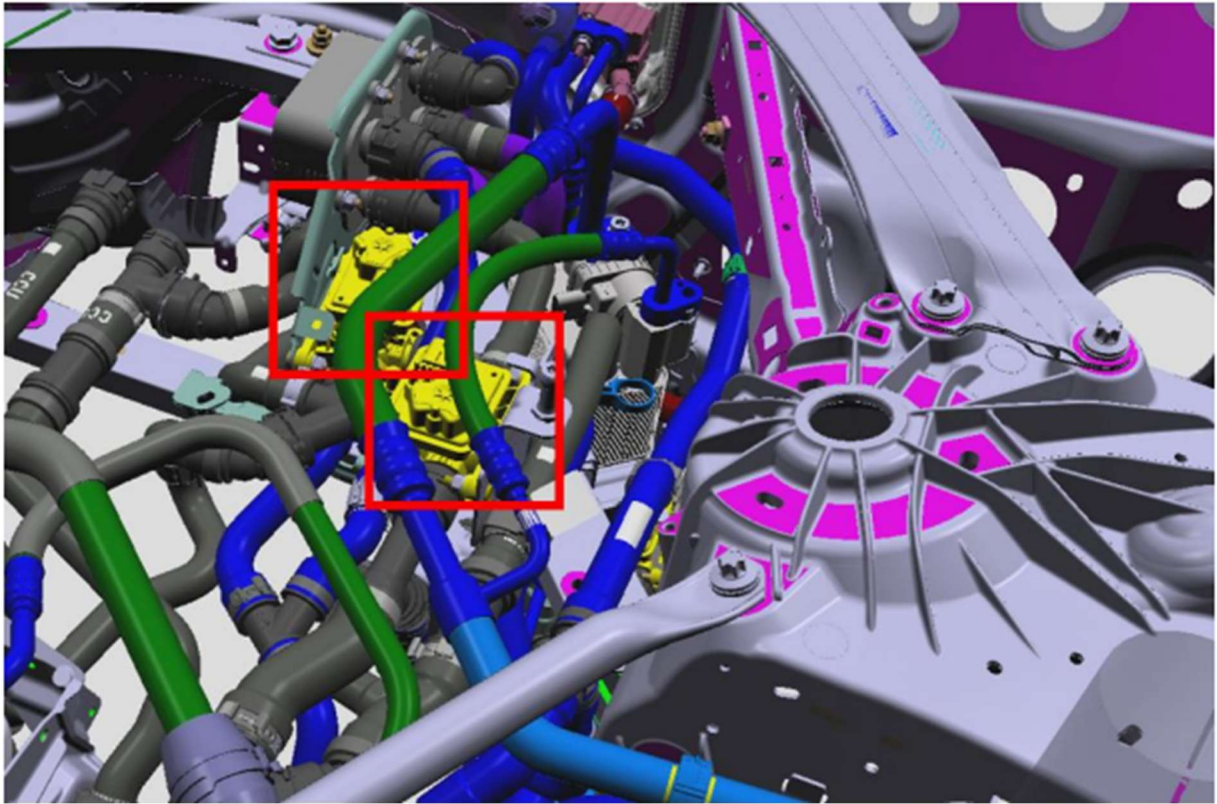
[picture_as_pdf Attachment B17 01 24 Valve Locations.pdf](#)

COOLANT LEAK AT CHANGEOVER VALVE

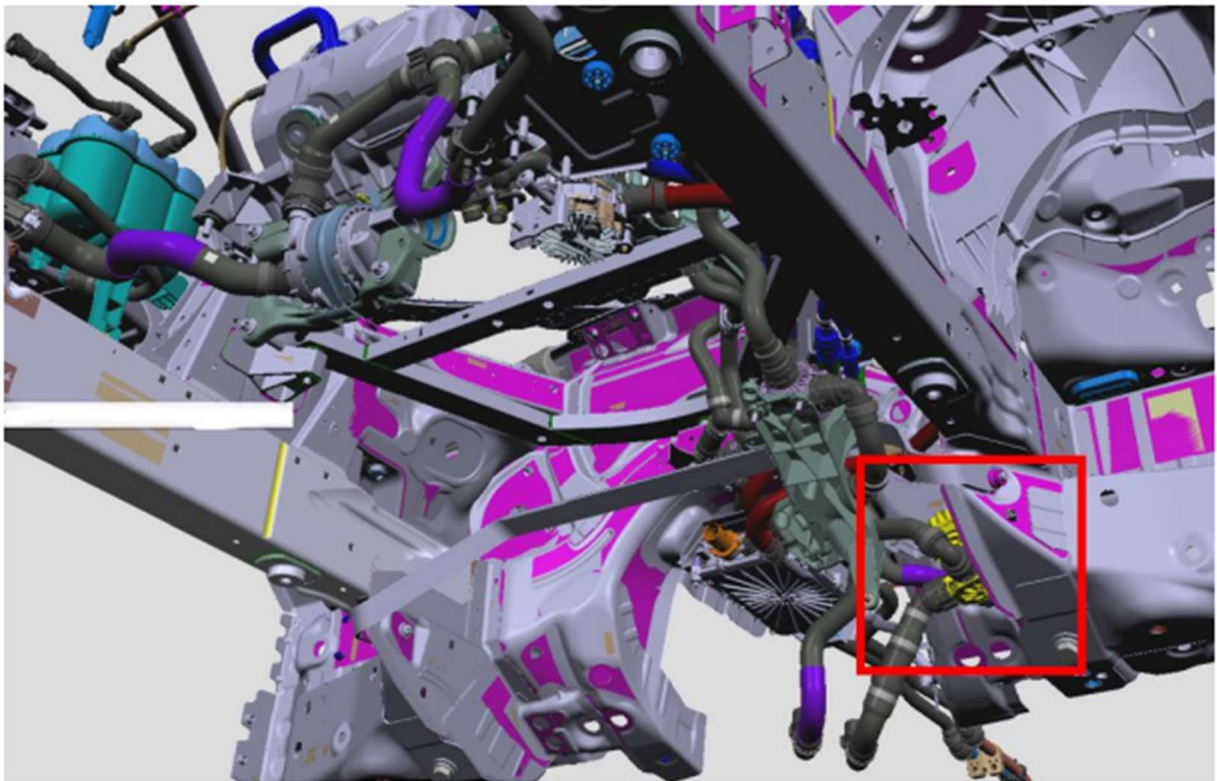
CHANGEOVER VALVE LOCATIONS



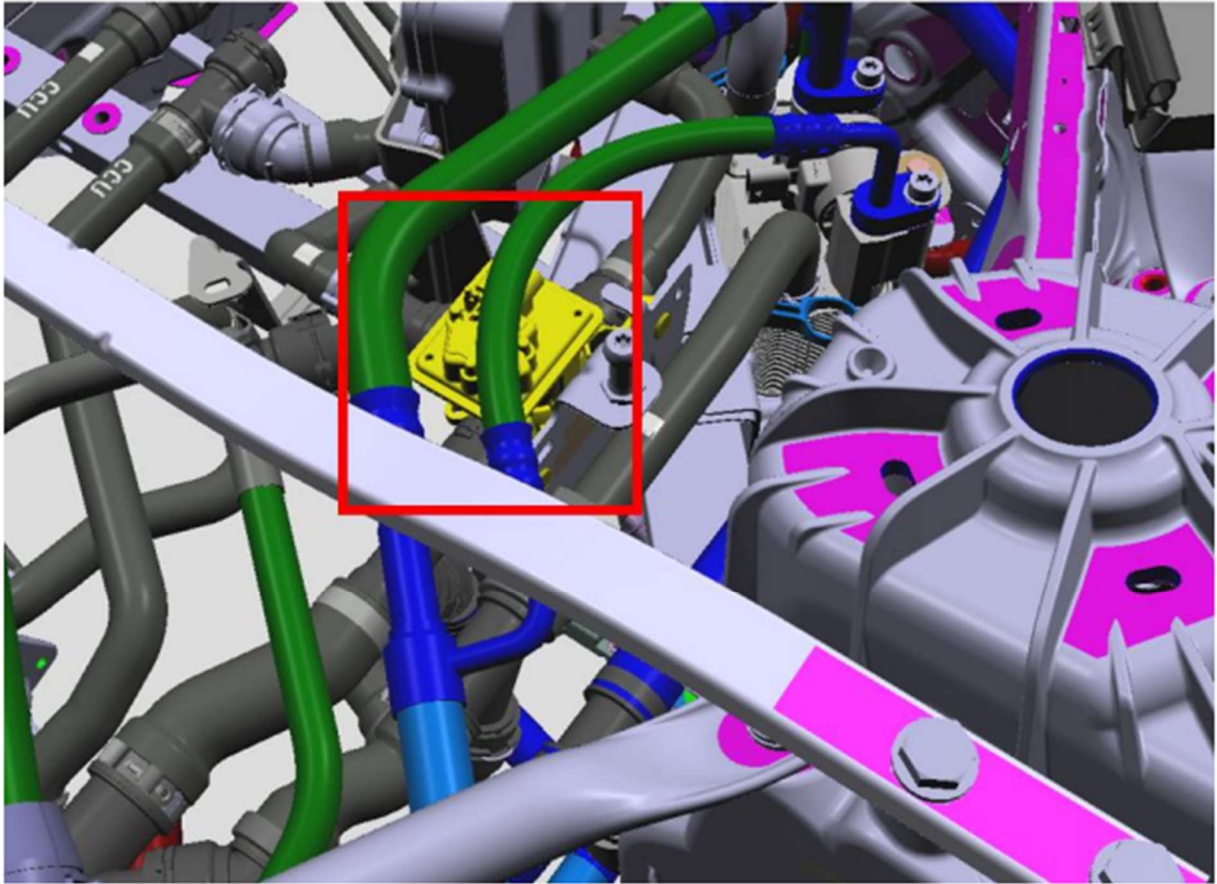
G26



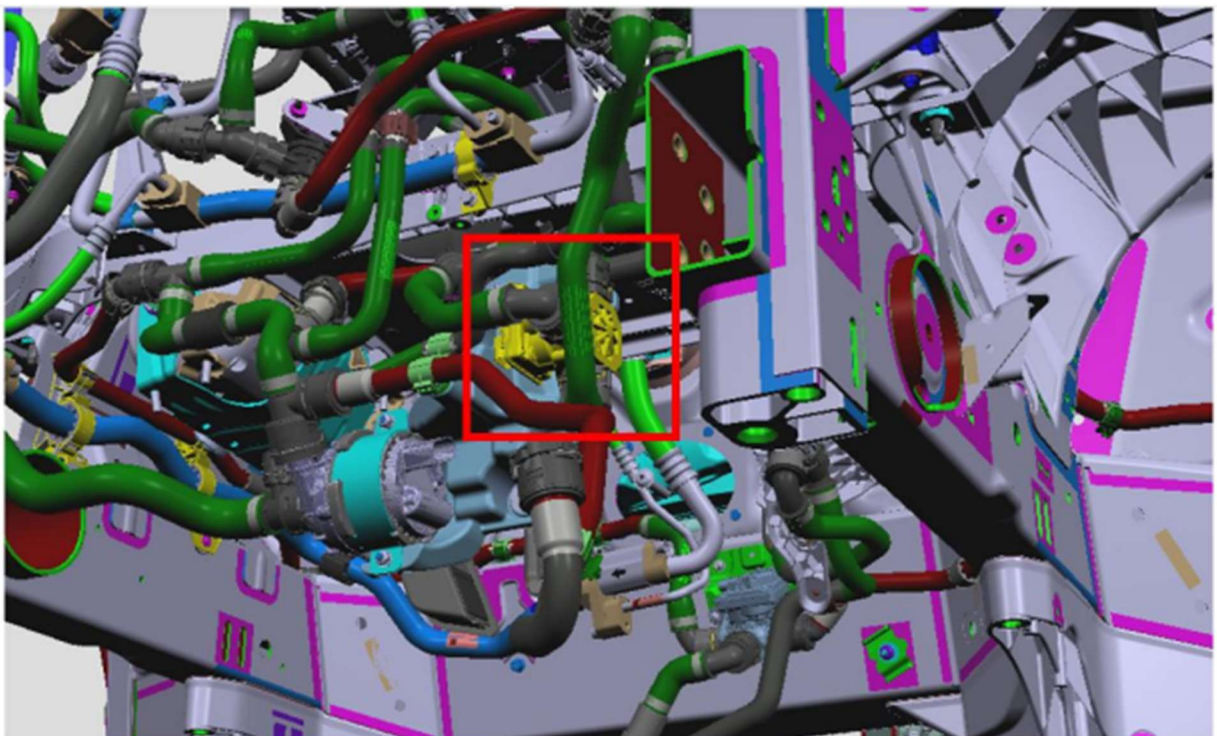
G60 Valves 1 & 2



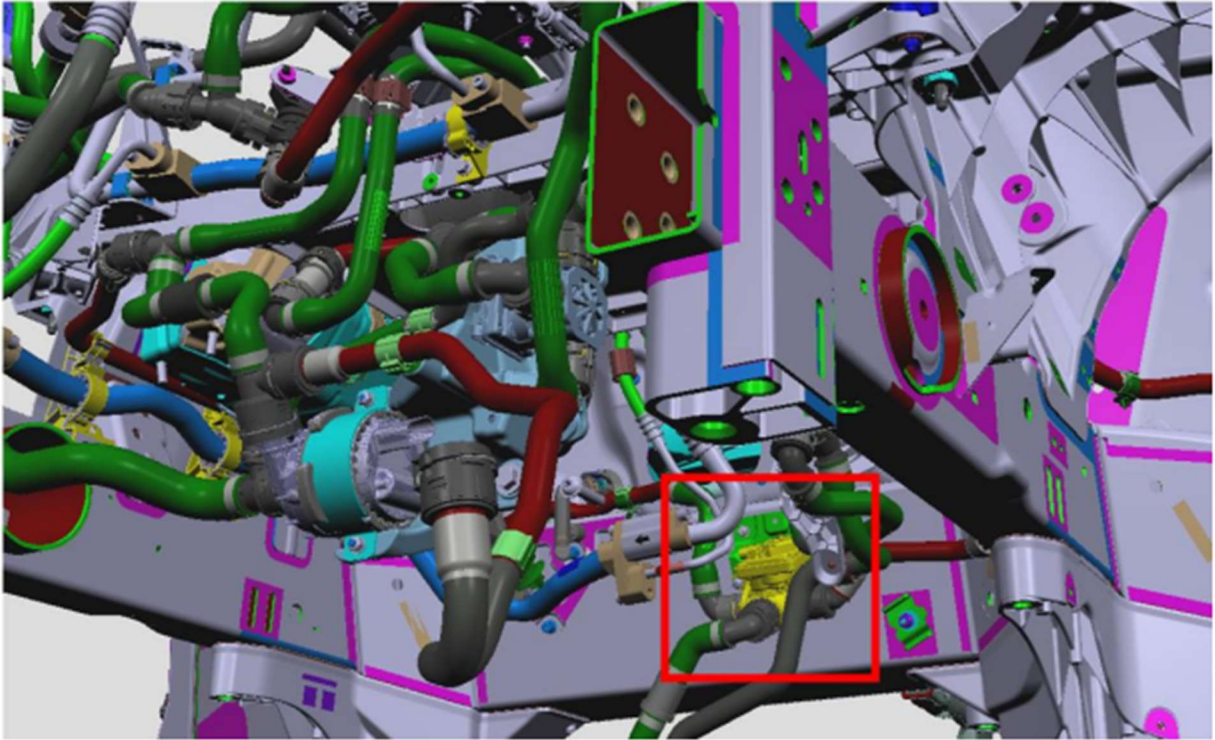
G60 Valve 3



G70



I20 Valve 1



I20 Valve 2