Low Coolant Level – Warning Lamp Illuminated

**Issue:**
When a new vehicle is factory-filled with antifreeze solution, small pockets of air may remain trapped in the cooling system. On a new vehicle, these pockets of air may take some considerable time to be purged, resulting in a gradual drop in the coolant level. This process may eventually lead to illumination of the coolant warning lamp by the low level sensor located in the coolant reservoir.

Once the coolant level has dropped, it is also possible that the captive float which actuates the low level sensor may stick in the down position, leaving a warning on even after the cooling system has been refilled.

**Action:**
When investigating a customer complaint of low coolant level warning light remaining on proceed as follows:

**A. TOPPING-UP THE COOLING SYSTEM.**
The following procedure assumes that only a minor top-up of the coolant is required - a maximum of 1 quart of coolant. Any causes of major leakage must be repaired before continuing.

1. With the engine cold, remove the pressure cap from the coolant reservoir. Check the pressure cap seal - replace if necessary. Visually check the coolant level. If low, continue with the procedure below.

2. If the coolant level is below the bottom of the filler neck, top up with Jaguar Antifreeze D542 (diluted 50:50 with clean water) until the coolant rises to the bottom of the filler neck.

3. Start the engine and allow it to run at idling speed. The coolant level may fall in the coolant reservoir. With the engine still running, immediately top up the coolant to the bottom of the filler neck.

4. Before the coolant temperature has a chance to increase, fully tighten the pressure cap on the coolant reservoir.

5. Before stopping the engine, check that the coolant warning lamp is off.
B. COOLANT LEVEL SENSOR - FLOAT STICKING

1. If the coolant warning lamp remains on after the above procedure, stop the engine but return the ignition switch to the ‘run’ position.

2. Check if the captive float, located at the right hand rear corner of the coolant reservoir, is stuck in its lowest position. The float is captive on a tube, which houses the level sensor, attached to the bottom of the coolant reservoir.

3. Use a light to illuminate the interior of the reservoir, and use a long probe to carefully check that the float is free to move.

4. If the float is stuck, or does not move freely, fit a replacement reservoir.

Always perform procedures A and B above before replacing the level sensor or complete reservoir.

If the warning lamp remains on with the reservoir full of coolant, check that the float is free to move, then proceed with normal diagnosis for an electrical fault in the warning lamp circuitry.
### Parts Information:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaguar Antifreeze D 542</td>
<td>JLM 20404/3</td>
<td>a/r</td>
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</tbody>
</table>

### Warranty Information:

<table>
<thead>
<tr>
<th>FAULT CODE</th>
<th>R.O. NUMBER</th>
<th>DESCRIPTION</th>
<th>TIME ALLOWANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB ****</td>
<td>26.91.06</td>
<td>Check level sensor float and top off cooling system</td>
<td>0.15 hrs.</td>
</tr>
<tr>
<td></td>
<td>10.10.10</td>
<td>Drive in/drive out</td>
<td>0.15 hrs.</td>
</tr>
</tbody>
</table>

*** ** BB ZZ = Coolant level - incomplete factory fill  
BD NS = Coolant level sensor float sticking

* This Warranty Fault Code and SRO are no longer valid after the vehicle has received its First Routine Service at nominal 10,000 miles (16,000 km).