Reference: This service bulletin replaces the previous service bulletin SB 43-0029 from May 2000, which should be discarded.
Vehicles involved: Cars with AWD and AW 50-42
Purpose: Part No. for transmission fluid and time allowance has been updated.

**Automatic transmission AW 50-42, hard lockup engagement and disengagement.**

**Background**
Customer complaints regarding transmission lockup engagement / disengagement while driving at cruising speeds (90-100 km/h / 55-60 mph) may be due to coolant contaminated, degraded or overheated transmission fluid.

As service solution, the transmission should be flushed/refilled using new, clean transmission fluid, meeting JWS 3309 specifications.

**Affected vehicles**

<table>
<thead>
<tr>
<th>Model</th>
<th>Factory</th>
<th>Chassis No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>S70 AWD</td>
<td>2</td>
<td>560000-</td>
</tr>
<tr>
<td>V70 AWD -2000</td>
<td>2</td>
<td>395000-</td>
</tr>
</tbody>
</table>

**Materials**

<table>
<thead>
<tr>
<th>Model</th>
<th>Quantity</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWS 3309 automatic gearbox fluid</td>
<td>16 litres</td>
<td>1161640 4 liter bottle</td>
</tr>
<tr>
<td>Plastic hose (oil resistant)</td>
<td>4.0 ft</td>
<td>1161540 1 liter bottle</td>
</tr>
<tr>
<td>inner diameter 1/2&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic/rubber plug</td>
<td></td>
<td></td>
</tr>
<tr>
<td>outer diameter 1/2&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note!** The total volume ATF needs to be 16 litres.
Fault-tracing

Faults which occur in the transmission but do not store any diagnostic trouble codes (DTC) can be mechanically fault traced by carrying out certain checks and adjustments.

Fault-trace in the following order.

Check the transmission fluid

Check the transmission fluid. Transmission fluid should be red or reddish brown in color. If it is pink and cloudy it has been contaminated with engine coolant.

Check the expansion tank

Check that there is no transmission fluid in the radiator expansion tank (do not confuse it with black engine oil).

Corrective action

The following corrective action must be taken if coolant has entered the transmission:

Replace transmission assembly and cooling hoses according to VADIS.

Replace the auxiliary transmission cooler and hoses if installed.

Clean and inspect the expansion tank. Inspect all other coolant hoses. Replace if necessary.

Flushing transmission

If coolant has not entered the transmission, flush and fill with new JWS 3309 fluid according to the following method.
Preparations

Warning! The oil may be very hot if the car has just been driven. Avoid skin contact.

Remove
- the battery and battery shelf
- the return hose on the control system (valve body) cover.

Install
- a plastic plug in the connection on the cover
- a transparent plastic hose on the oil return hose connection

Position a container for the oil with markings for the volume under the hose.
Temporarily reinstall the battery shelf and the battery.

Flushing the gearbox

Apply the parking brake. Move the gear selector lever to position P.
Start the engine. Allow the engine to idle.
Switch the engine off when 2 quarts of oil have been pumped out or when air bubbles become visible in the hose.
Top up with 2 quarts of oil.
Repeat this 7 times.

Note! 16 litres ATF in total.

Start the engine again. Allow the engine to idle.
Check the color of the oil. When the color of the oil is clear red (as new oil), switch off the motor.
Connect the return hose to the control system (valve body) cover.

Checking and adjusting the oil level

Check and adjust the oil level according to VADIS.

Supplementary work

Reset DTC's
Set radio code
Set clock
WARRANTY STATEMENT: Claims may be submitted under the New Car Warranty when there is a documented customer complaint, using claim type 01.

<table>
<thead>
<tr>
<th>Operation No.</th>
<th>Labor description</th>
<th>Time allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>43928-2</td>
<td>Automatic gearbox flushing</td>
<td>1.1 hr</td>
</tr>
</tbody>
</table>