

Technical Service Bulletin

19 Identifying and mixing factory fill engine coolants

19 19 98 2025303/10 March 13, 2019. Supersedes Technical Service Bulletin Group 19 number 18-97 dated December 12, 2018 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
All	1994 - 2021	All	Not Applicable

Condition

REVISION HISTORY		
Revision	Date	Purpose
10	-	Revised <i>Technical Background</i> (Updated information) Revised <i>Service</i> (Updated Figure 2)
9	12/12/2018	Revised <i>Technical Background</i> (Updated information) Revised <i>Service</i> (Added information on Audi e-tron)
8	10/23/2018	Revised header data (Added model years) Revised <i>Technical Background</i> (Added G12evo information) Revised <i>Service</i> (Updated Figure 2 and added information)

Discontinuation and mixing of Audi-approved engine coolants.

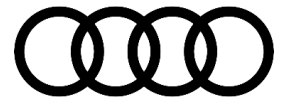
Technical Background

- G11, G12, and G12+ coolants have been replaced by an improved version.
- G12++ coolant (for service available) has been introduced in MY 2005 for all engines.
- G13 has been introduced in MY 2008 as initial fill and service coolant.
- G12evo was introduced in MY19 as initial fill and service coolant.
- Modern combustion engines make higher demands on the coolant. Audi is one of the few manufacturers whose coolant does not require changing. Therefore, the coolant has to be adjusted to the requirements and constantly developed further.



Tip:

The model year 2019 and newer vehicles use - G12evo part number: 1.5L concentrate G -12E-100-M2 (to be mixed with distilled water). **Only G12evo can be used in the Audi e-tron.**



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The model year 2018 and older vehicles use - G13 part number: 1-gallon concentrate G -013-A8-1G (to be mixed with distilled water).

Production Solution

No production change required.

Service

Identifying and mixing factory fill engine coolants:

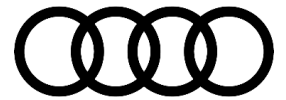
1. Based on its color, identify which coolant the vehicle was filled with from the factory (Figure 1).



Tip: Figure 1 is shown for color identification only; coolant packaging may vary.



Figure 1. The color of each type of engine coolant. G11 (green-blue), G12 (red), G12+, G12++, G12evo, and G13 (purple).



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2. Using the chart below, determine if the vehicle has the correct coolant (Figure 2). If a vehicle is found to have the incorrect coolant, drain and fill the coolant system using the procedures in ElsaPro.

Can be mixed with:	Green-blue G11 ≥ 1994	Red G12 ≥ 1996	Purple G12+ ≥ 2000	Purple G12++ ≥ 2005	Purple G13 ≥ 2012
G11	Green	Red	Yellow	Yellow	Yellow
G12	Red	Green	Yellow	Yellow	Yellow
G12+	Green	Green	Green	Yellow	Yellow
G12++	Green	Green	Green	Green	Green
G13	Green	Green	Green	Green	Green

Figure 2. The table identifies which Service coolants (left) can be added to the Factory Filled coolant (top).

Color	Ratio description
Green =	Can be mixed in any ratio.
Yellow =	Mixing is possible but it will cause a reduction in corrosion protection.
Red =	Cannot be mixed.

How to use this table:

1. Check which coolant additive is in the cooling system.
2. Look for the coolant additive in the upper horizontal row.
3. Go down the green column. All coolant types of the green and yellow fields (described in the left vertical column) can be used. **But preferably the coolant marked in a green field should be used.**

Coolants can be mixed, as described in the chart, but it is always best practice to change the coolant due to reduced corrosion protection when coolants are mixed (exception: G12++ and G13 are fully compatible).

Only mix **distilled water** with coolant additives per ElsaPro.

Deionized water must not be used.

Drained coolant must not be reused.



Note:

When the coolant is changed due to a cooling system issue, the cooling system should be drained using the Repair Manual procedures in ElsaPro and refilled with water.

Then, run the engine for 15 minutes with the heater on to remove any residual coolant.



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The final step is to drain and fill the system to the freeze protection ratio listed in ElsaPro.



Tip: If G11 is mixed with G12+, G12++, G13 or G12evo the coolant becomes brown (this is normal). The G12++ scale should be used when using the refractor T10007A to read the freeze protection for the G12evo coolant.

If it is unclear whether a cooling system is filled with G12, G13 or a mixture of the two, use the G13 scale of the refractors T10007A/B to read the freeze protection.

Cooling system drain and fill due to coolant mixing or incorrect coolant, is not covered by Warranty.

Warranty

This TSB is informational only and not applicable to any Audi Warranty.

Additional Information

All part and service references provided in this Technical Bulletin (2025303) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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