

General

Applies to gearboxes GA866 and GA867/R

Tools

Examples of suitable tools from Scania:

Part number	Designation
82 320	Lifting platform
98 405	Fixture beam and bracket
98 655-9	Beam
99 318	Engine support kit
99 309	Rotating tool
587 500	Component hoist
587 313	Gearbox jack

Work description

Perform the work in the following order:

1. Lower the air suspension to its lowest point.
2. Tilt the cab.

IMPORTANT!

Always use the cab strut when working under a tilted cab.

3. Disconnect the battery or turn off the battery master switch.¹

Removing the gearbox

4. Detach the electrical connectors on the gearbox and the connectors on the road speed sensor.



WARNING!

The connector must be removed to prevent oil squirting out if power is applied to the solenoid valve.

5. Undo the connector for the accumulator solenoid valve if the gearbox has a retarder.¹
6. Remove the exhaust pipe if the vehicle has an exhaust outlet on the left.
7. Drain the gearbox oil into a suitable container.



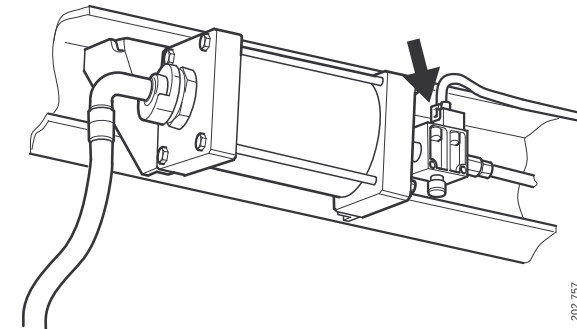
WARNING!

Hot oil can cause scalding. Always wear protective gloves and goggles when the oil is drained.

8. Refit the oil plug.
9. Detach the oil hoses for the oil cooler. If the gearbox is fitted with a retarder¹ the hose to the accumulator must also be detached.

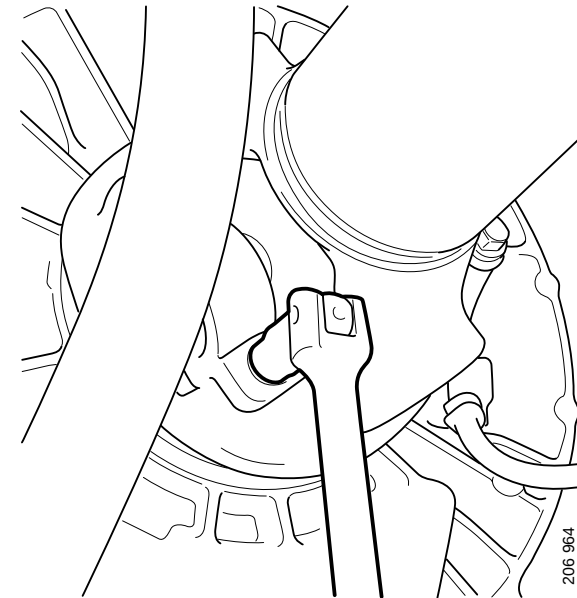
1. Option

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Removing the gearbox

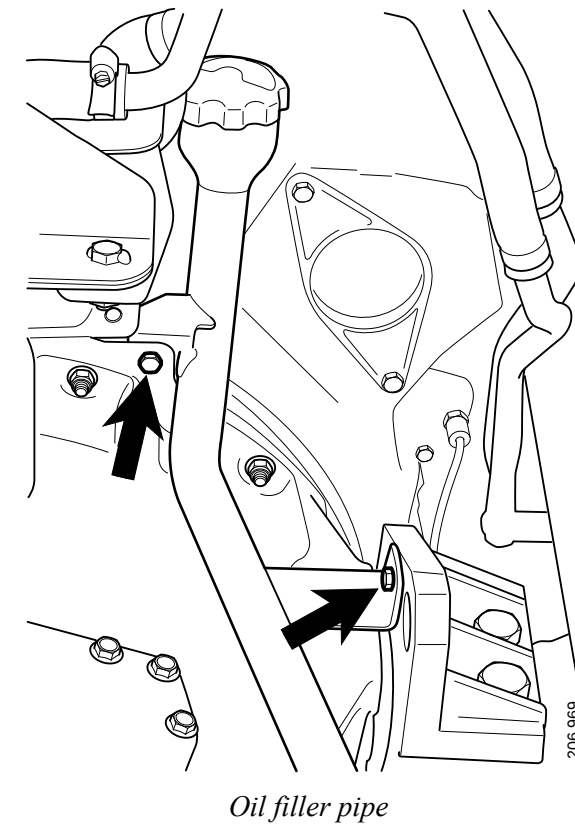
10. Remove the propeller shaft from the gearbox.
11. Detach the support bearing bracket from the chassis frame crossmember and pull out the propeller shaft.



Removing the propeller shaft from the gearbox

Removing the gearbox

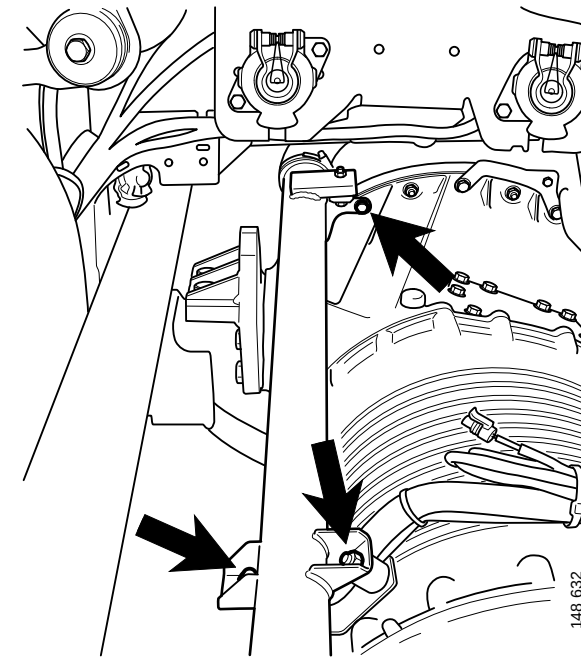
12. Detach the oil filler pipe.



Removing the gearbox

Work description

13. Detach the two coolant pipe brackets from the gearbox.
14. Undo the connector for the power take-off.¹
15. Remove the noise shields.¹
16. Remove the starter motor and its cable duct.
17. Remove the rubber plugs on the flywheel housing access hole and from the turning hole.

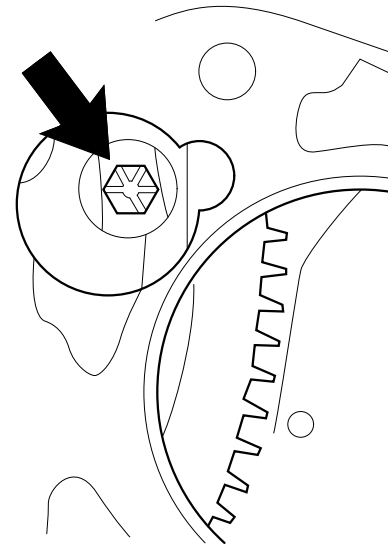


Coolant pipe brackets

1. Option

Removing the gearbox

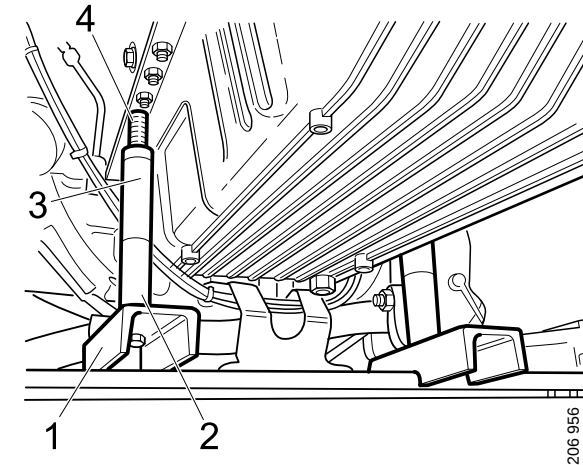
18. Remove the 12 scrws securing the flex plate to the torque converter through the access hole. Turn the flywheel round to the different screws positions using rotating tool 99 309.



Removing the gearbox

19. If the vehicle has leaf spring suspension, the engine should be supported using the following method:

- Hook 2 engine supports 99 318 onto the front axle beam.
- Screw the lowest spacing sleeve (2) onto the relevant engine support. Do not tighten the nuts.
- Adjust using intermediate sleeves (3) and the threaded adjusting device (4) so the engine support is at the correct height.
- Unscrew the 2 oil sump screws, so that the pins of the adjusting device can be fitted in the screw holes. Select the sump screws so that the intermediate sleeve (3) ends up behind the centre of the front axle.
- Adjust the position of the sleeves so that they are as straight as possible and tighten the nuts on the lowest sleeve.
- Screw up the adjusting device (4) so that the support bottoms against the oil sump.



1. Engine support 99 318
2. Spacing sleeve
3. Intermediate sleeve
4. Adjusting device

Removing the gearbox

20. Position beam 98 655-9, bracket and fixture beam 98 405 and hoist plate 82 320 on component hoist 587 500 or by using gearbox jack 587 313 (as illustrated).

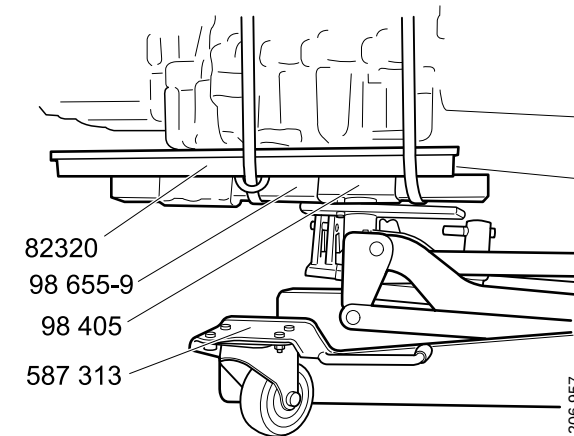
Clamp the gearbox with straps at both the front and rear edges.

21. The following applies to leaf spring suspension:

- Detach the gearbox brackets from the vibration insulators.
- Lift up the gearbox.
- Screw up the adjusting devices on the engine supports.
- Remove the vibration insulators.

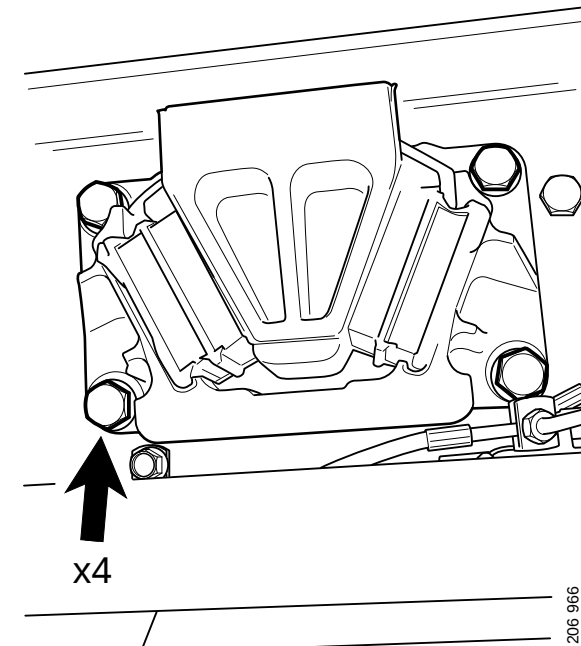
22. The following applies to air suspension:

- Detach the gearbox brackets from the vibration insulators.
- Lift up the engine and gearbox.



Removing the gearbox

23. Remove the vibration insulators. Four screws on the inside and two screws on the outside of the frame.



Removing the gearbox

24. Remove the gearbox brackets.
25. Lower the engine and gearbox onto the engine beam.
26. Remove the spacing ring and gearbox from the flywheel housing. The nuts which are fitted on the studs are through nuts and are screwed into the flywheel housing.
27. Lower the gearbox and pull it out. Make sure that the gearbox goes clear of any obstructions.

28. Remove the spacing ring from the gearbox.

