



General

General

Applies to gearboxes GR/S/O 875/895/9105/R.

Tools

Examples of suitable tools from Scania:

Part number	Designation
99 309	Turning tool
99 318	Engine support
99 502	Release bearing tool
99 544	Lifting tool for gearboxes
99 546	Lifting tool for gearboxes
587 313	Gearbox jack
587 500	Component hoist



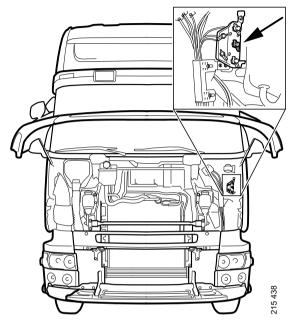


Work description

Work description

From above, vehicles with Opticruise

- 1. Drain the coolant.
- 2. Drain the parking brake circuit.¹
- 3. Tilt the cab.
- 4. Detach the oil pipes at the gearshift housing.²



Draining the parking brake circuit.

^{1.} Vehicles with batteries at the far rear of the frame.

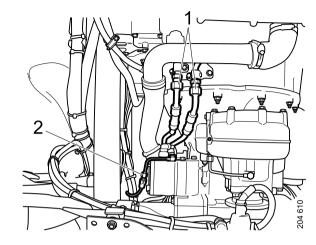
^{2.} Vehicles with oil cooler.





Work description

- 5. Detach the compressed air pipe at the gearshift housing.
- 6. Disconnect the cable interface in the left-hand side of the frame.
- 7. Undo the hose clamp on the upper retarder coolant hose.¹
- 8. Undo the 2 upper clutch servo screws.
- 9. Unscrew the 6 upper nuts for the clutch housing.



- 1. Oil pipe
- 2. Compressed air pipes

1. Vehicle with retarder.

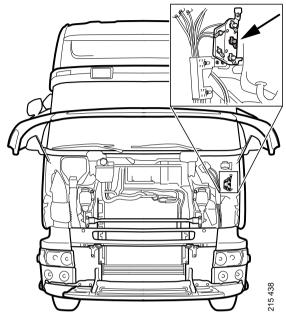




Work description

From above, vehicles without Opticruise

- 1. Drain the coolant.
- 2. Drain the parking brake circuit.¹
- 3. Tilt the cab.



Draining the parking brake circuit

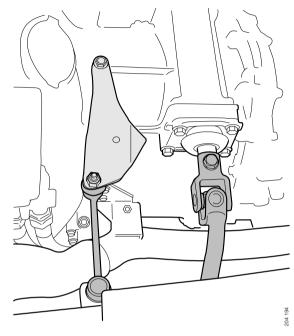
^{1.} Vehicles with batteries at the far rear of the frame.





Work description

- 4. Detach the torque rod and gear linkage.
- 5. Undo the hose clamp on the upper retarder coolant hose. 1



Torque rod and gear linkage

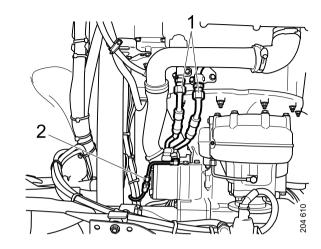
1. Vehicle with retarder.





Work description

- 6. Detach the oil cooler hoses and plug the oil pipes. 1
- 7. Undo the 2 upper clutch servo screws.
- 8. Unscrew the 6 upper nuts for the clutch housing.



- 1. Oil pipe
- 2. Compressed air pipes

1. Vehicles with oil cooler.



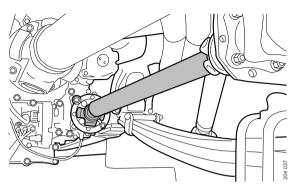


Work description

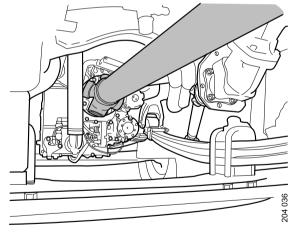
From above, vehicles with Opticruise

- 1. Undo the exhaust system.
- 2. Remove the noise shields.
- 3. Detach the propeller shaft for the EG pump. 1
- 4. Undo the propeller shaft mounting at the centre joint.²

- 5. Undo the 4 screws at the front of the propeller shaft and then use an M12 or M16 screw as a puller, depending on the size of the screw hole.
- 6. Detach the propeller shaft at the rear and lower the propeller shaft.



Propeller shaft for EG pump.



Propeller shaft screws

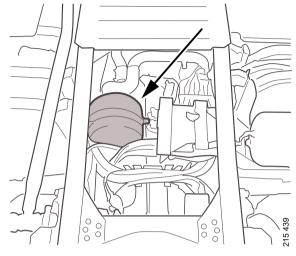
- 1. Vehicles with EG power take-off.
- 2. Vehicles with long chassis.





Work description

- 7. Remove the compressed air connection for the parking brake tank which is located behind the retarder. Remove the parking brake tank.¹.
- 8. Undo the hydraulic pump.¹



Parking brake tank

1. Vehicles with dual-circuit steering.





Work description

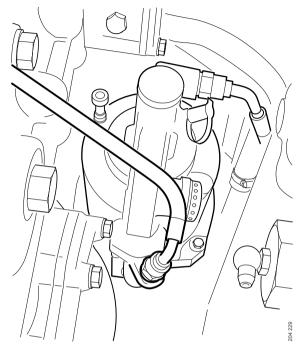
9. Detach the compressed air lines for the clutch servo. Then detach the clutch servo and tie it onto the frame.

IMPORTANT!

Hold the union when the compressed air line is unscrewed. Otherwise there is a risk of damaging the clutch servo.

Do not disconnect the clutch fluid pipes.

10. Detach the electrical cables and the compressed air lines at the upper rear edge of the gearbox.



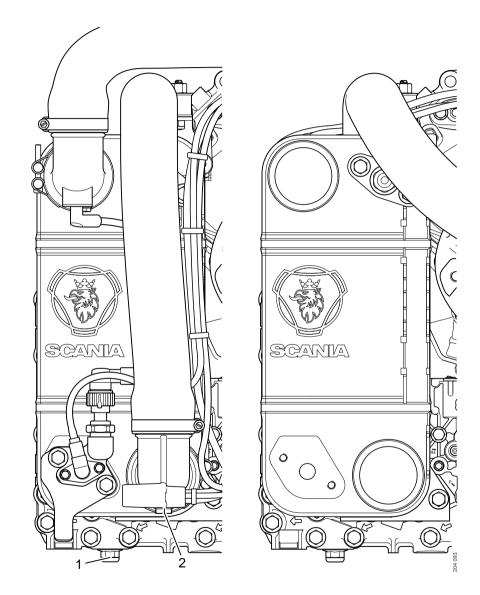
Compressed air line to clutch servo





Work description

11. Drain the coolant from the retarder.¹



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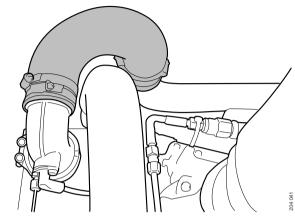
^{1.} Vehicle with retarder.





Work description

12. Disconnect the upper retarder coolant hose. 1



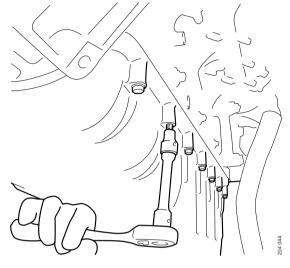
Upper coolant hose to retarder



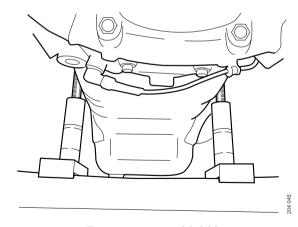


Work description

13. Fit engine supports 99 318 to support the engine. Two screws must be removed from the oil sump before the engine supports can be fitted.



Remove two screws



Engine support 99 318

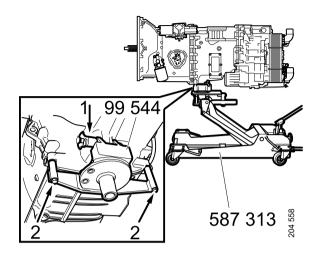


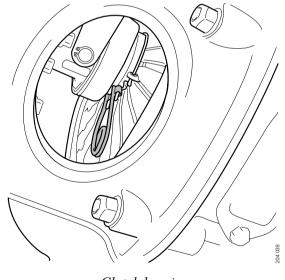
Work description

14. Fit lifting tool 99 544 on the gearbox. Fit the lock pin (1) on the rear and then screw on the two screws (2) on the front.

Then use component hoist 587 500 or gearbox jack 587 313 by fastening it to the lifting tool.

- 15. Release the clutch bearing through the inspection hole using special tool 99 502 and press the clutch bearing forwards to make it release. A clicking sound should be heard when the clutch bearing releases.
- 1. Lock pin
- 2. Screw





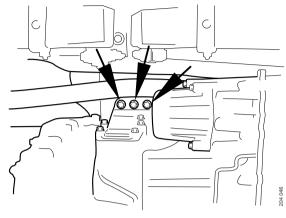
Clutch bearing





Work description

- 16. Lift the gearbox a little and remove the gearbox beam screws.
- 17. Lower the engine and gearbox so that the engine rests on the engine supports.
- 18. Undo the lower clutch housing nuts and remove the gearbox.



Gearbox beam screws

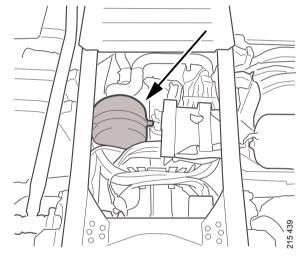




Work description

From below, vehicles without Opticruise

- 1. Undo the exhaust system.
- 2. Detach the noise shields.
- 3. Detach the propeller shaft for the EG pump. 1
- 4. Undo the propeller shaft mounting at the centre joint.²
- 5. Undo the 4 screws at the front of the propeller shaft and then use an M12 or M16 screw as a puller, depending on the size of the screw hole.
- 6. Detach the propeller shaft at the rear and lower the propeller shaft.
- 7. Remove the compressed air connection for the parking brake tank which is located behind the retarder. Remove the parking brake tank. ¹.
- 8. Undo the hydraulic pump.³
- 9. Detach the compressed air lines for the clutch servo. Then detach the clutch servo and tie it onto the frame.
- 10. Drain the coolant from the retarder.⁴
- 11. Disconnect the upper retarder coolant hose.⁴
- 12. Fit engine supports 99 318 to support the engine. Two screws must be removed from the oil sump before the engine supports can be fitted.
- 13. Fit lifting tool 99 544 on the gearbox. Fit the lock pin 1 on the rear and then screw on the two screws 2 on the front.
 - Then use component hoist 587 500 or gearbox jack 587 313 by fastening it to the lifting tool.
- 14. Release the clutch bearing through the inspection hole using special tool 99 502 and press the clutch bearing forwards to make it release. A clicking sound should be heard when the clutch bearing releases. Use special tool 99 309 if the engine needs to be turned.
- 15. Lift the gearbox a little and remove the gearbox beam screws.
- 1. Vehicles with EG power take-off.
- 2. Vehicles with long chassis.
- 3. Vehicles with dual-circuit steering.
- 4. Vehicle with retarder.



Parking brake tank



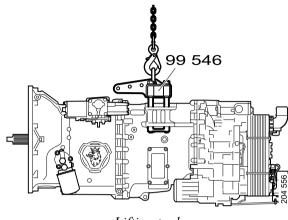


Work description

- 16. Lower the engine and gearbox so that the engine rests on the engine supports.
- 17. Undo the lower clutch housing nuts and remove the gearbox.

Note:

If the gearbox is to be transported with the aid of an overhead hoist, lifting tool 99 546 must be used. Lifting the gearbox in the input shaft will damage the input shaft bearing.



Lifting tool