

Construction Equipment

Document Title: Complete engine, removal	Function Group: 210	Information Type: Service Information	Date: 2014/4/27	
Profile:				

# Complete engine, removal

# Op nbr 210-01

Lifting chains, min. 1000 kg



Before starting any work, allow the diesel engine to cool down in order to avoid burn injuries.

#### NOTE!

In general, all clamps that secure hoses and electrical cables must be removed.

- 1. Turn off the electric power with the battery disconnector.
- 2. Remove the counterweight according to Counterweight, removalinSection 7.
- 3. Remove the plate 1.

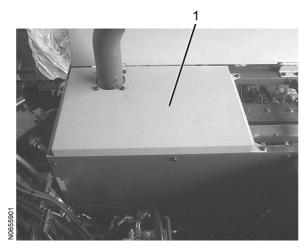


Figure 1
Engine compartment

- 1. Plate
- 4. Release the gas strut (hidden) from the engine hood 2.
- 5. Remove the attaching bolts **1** and lift away the engine hood **2**.



Figure 2 **Engine compartment** 

- Attaching bolts Plate
- 2.
- 6. Remove the plate **1**.



Figure 3 Hydraulic compartment

- 1. Plate
- 7. Remove the protective plate **1**.
- 8. Remove the silencer **2** with brackets and the pipe to the turbo.

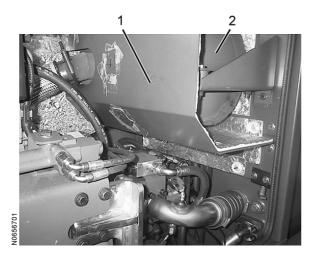


Figure 4
Engine compartment

- 1. Protective plate
- 2. Silencer
- 9. Remove the plate **1** underneath the engine.



Figure 5 Superstructure

- 1. Plate
- 10. Remove the rubber moulding 2 around the frame parts.
- 11. Remove the plate **4** and the frame parts**1** and **3**.

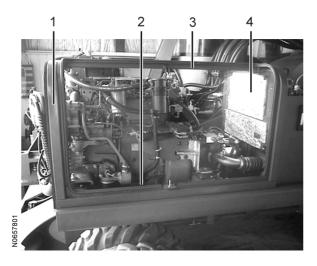


Figure 6
Engine compartment

- 1. Frame
- 2. Rubber moulding
- 3. Frame
- 4. Plate

# 12. Remove the frame part **1**.

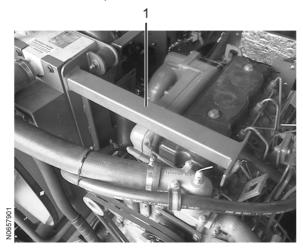


Figure 7
Engine compartment

- 1. Frame
- 13. Remove the connector **3** from the throttle control.
- 14. Remove the angle ball joint **1** from the retainer.
- 15. Remove the bolts2 from the retainer and place the throttle control to the right of the hydraulic oil tank.

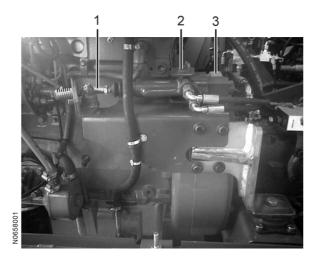


Figure 8
Engine compartment

- 1. Angle ball joint
- 2. Attaching bolts
- 3. Connector
- 16. Remove (if one is mounted) the compressor **1** from the engine, and remove the Vee belts **2**.

### NOTE!

Do not disconnect any hoses from the compressor.

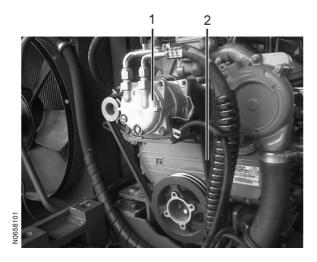


Figure 9
Engine compartment

- 1. Compressor
- 2. Vee belts
- 17. Disconnect the hose **1** from the engine and pinch the hose with the pliers **2**.
- 18. Connect a drain hose **3** on the hose connection **1** and drain the engine coolant into a container.

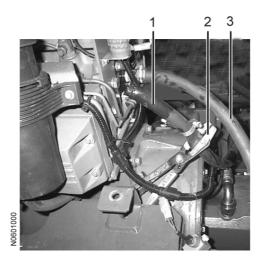


Figure 10 Engine compartment

- 1. Hose
- 2. Pliers
- 3. Hose
- 19. Remove the clamp **1** from the engine mounting.
- 20. Disconnect the hose **2** from the coolant pump.

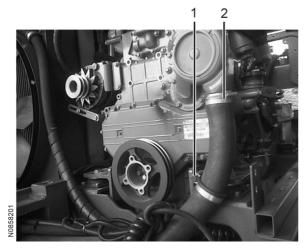


Figure 11
Engine compartment

- 1. Clamp
- 2. Hose
- 21. Fold the hose  ${\bf 1}$  and clamp it according to fig. 12, using a clamp.



Figure 12 Engine compartment

- 1. Hose
- 22. Remove the hose  ${\bf 1}$  from the engine and the hose  ${\bf 2}$  from the crankcase ventilation.

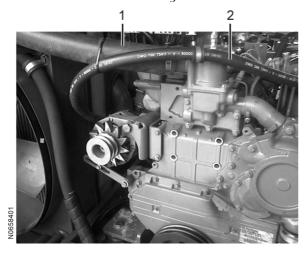


Figure 13
Engine compartment

- 1. Hose
- 2. Hose
- 23. Disconnect the hose **1** from the turbo.



## Figure 14 Hydraulic compartment

- 1. Hose
- 24. Disconnect the fuel lines **1** and plug the lines and connections.
- 25. Disconnect the cabling 2 to the starter motor.

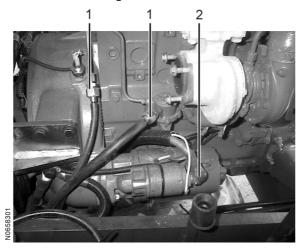


Figure 15
Engine compartment

- 1. Fuel lines
- 2. Cabling
- 26. Remove the electrical cables from the alternator  ${\bf 1}$  .

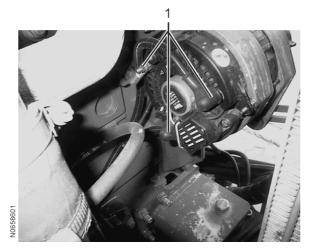


Figure 16
Engine compartment

- 1. Electrical cables
- 27. Mark up and disconnect the electrical cabling from the sensors **1** and the engine.



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