

## 2.2 ENGINE REMOVAL – INSTALLATION

### 2.2.1 REMOVAL



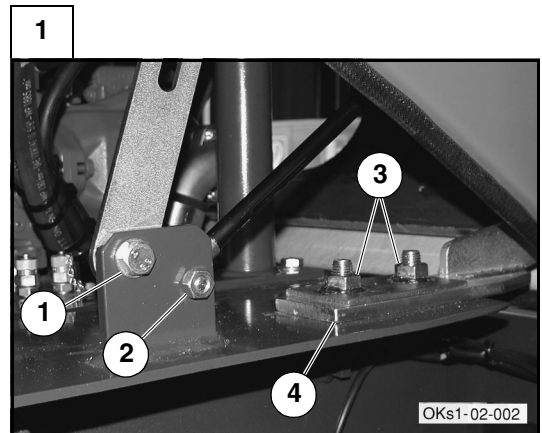
#### DANGER

Lift and handle all heavy parts with a lifting device of appropriate capacity.  
Make sure that groups or parts are held by appropriate slings and hooks.  
Make sure that no bystanders are in the vicinity of loads to be lifted.

#### LEFT SIDE

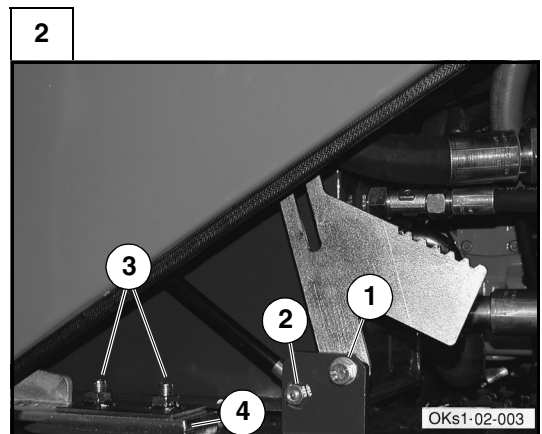
Remove the engine hood, proceeding as follows:

- Sustain the hood in an appropriate manner;
- Remove screw (1) securing the hood sliding bracket and screw (2) securing the hood shock absorber.
- Remove the two screws (3) securing the hood to the rear frame and recover plate (4).



#### RIGHT SIDE

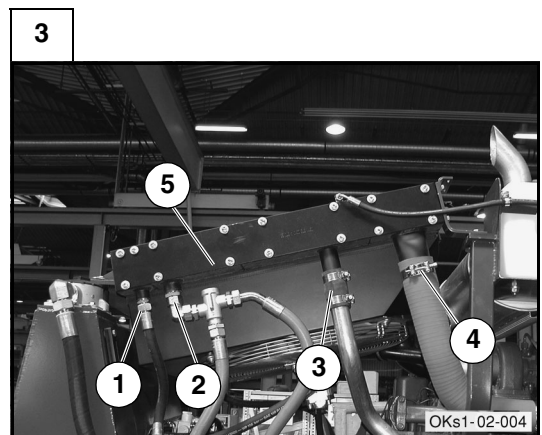
- Remove screw (1) securing the hood sliding bracket and screw (2) securing the hood shock absorber.
- Remove the two screws (3) securing the hood to the rear frame and recover plate (4).



#### RIGHT SIDE

Disconnect pipes (1) (2) (3) and (4) of heat exchanger (5).

1. Hydraulic oil outlet pipe
2. Transmission oil inlet pipe
3. Coolant outlet pipe
4. Compressed air inlet pipe.

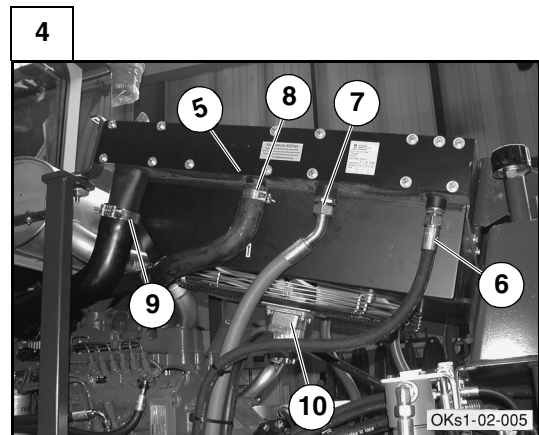


*LEFT SIDE*

Disconnect pipes (6) (7) (8) and (9) of heat exchanger (5).

- 6. Hydraulic oil inlet pipe
- 7. Transmission oil outlet pipe
- 8. Coolant inlet pipe
- 9. Cooled compressed air outlet pipe.

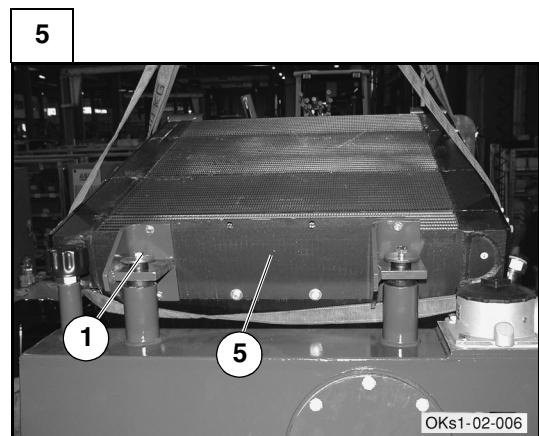
Disconnect the oil pipes from hydraulic motor (10) of the hydraulic fan.



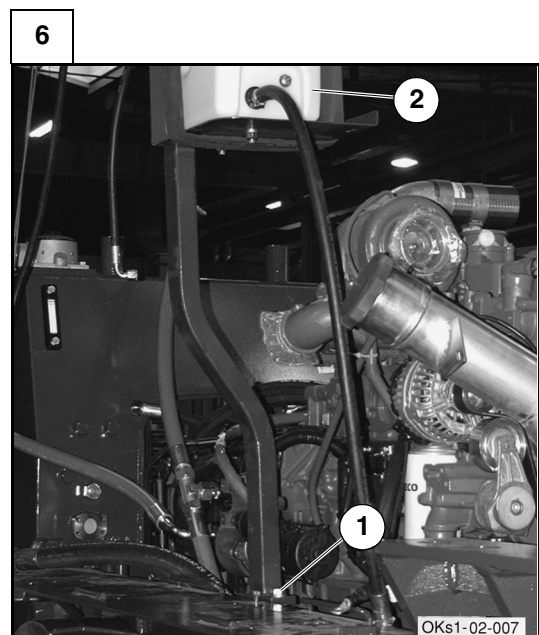
Sling and sustain heat exchanger (5) appropriately.

Remove the four screws (1) securing the heat exchanger to its supports.

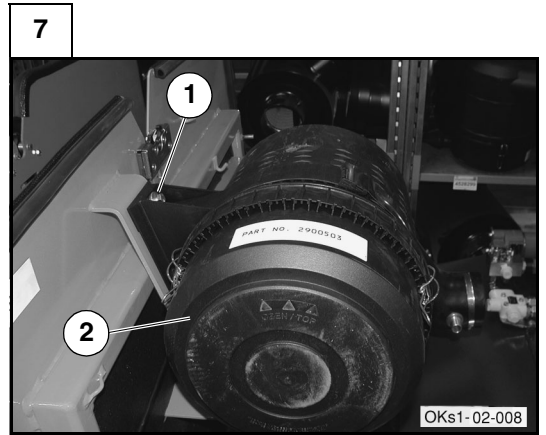
Lift the heat exchanger to remove it.



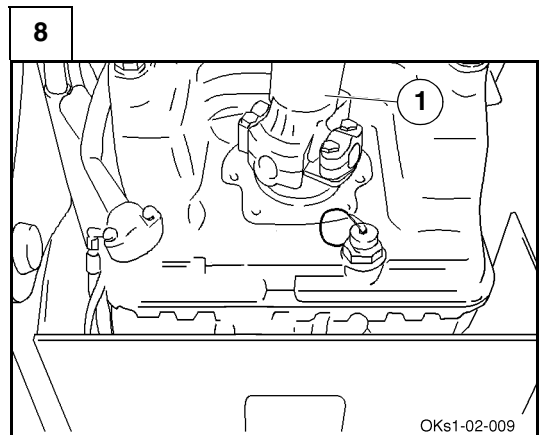
Remove securing screws (1) and remove coolant tank support (2) together with the tank.



Disconnect air cleaner (2) pipes and the engine muffler.  
 Remove screws (1) securing air cleaner (2) and remove it.  
 Remove the muffler.



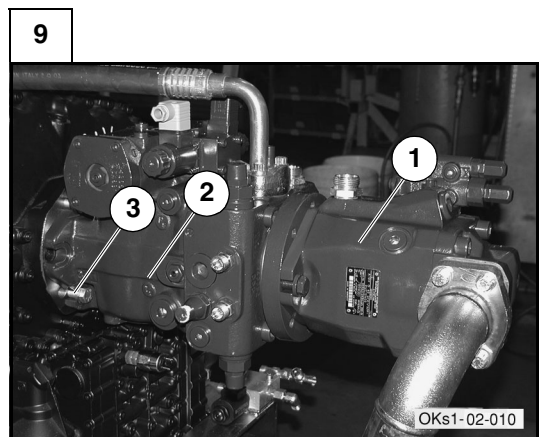
Disconnect propeller shaft (1) connecting the tandem axle-transmission from the transmission side.



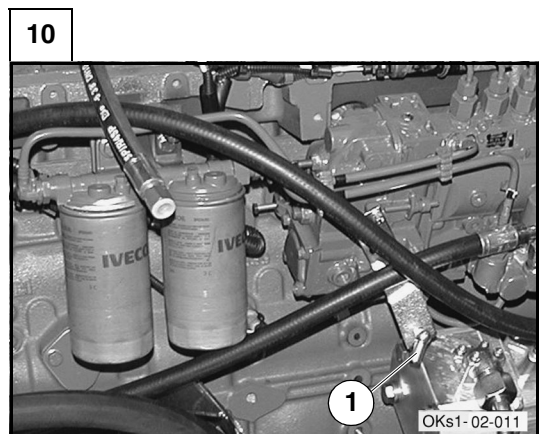
Sling and sustain in an adequate manner attachment pump (1) and front axle pump (2) (included on F106.6A).

**NOTE** – On version F106.6A, the front axle pump is installed between the transmission and the attachment pump.

Remove screws (3) and rest the pumps on the frame so that they do not interfere with the removal of the engine-transmission assembly.



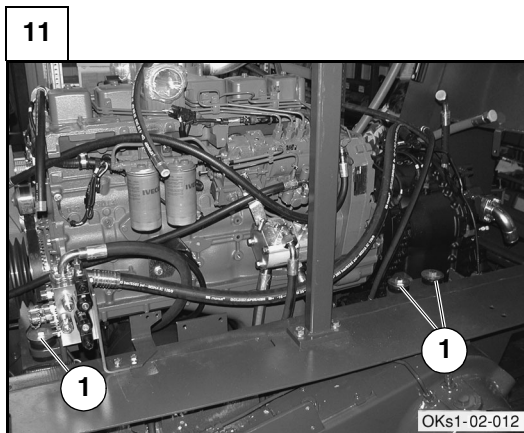
Disconnect all electric connections on the engine.  
 Disconnect throttle cable (1) the fuel supply piping.



Disconnect from the transmission the hydraulic pipes and electrical connections.

Remove screws (1) securing the engine to the frame and lift the engine-transmission assembly using a hoist of appropriate capacity.

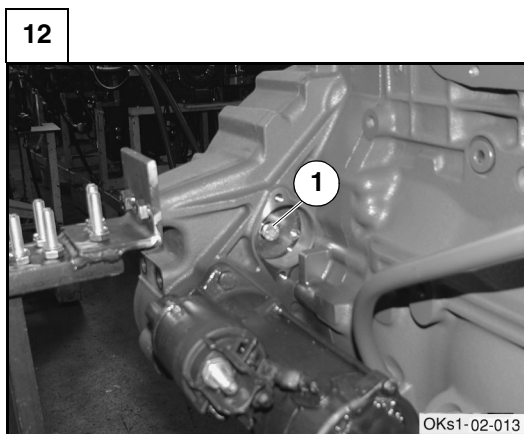
Rest the engine-transmission assembly on an appropriate stand.



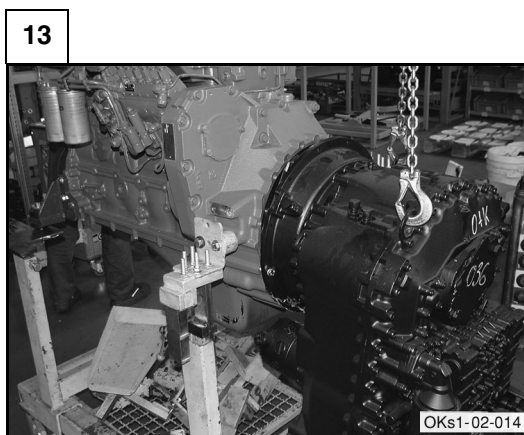
### 2.2.2 ENGINE – TRANSMISSION SEPARATION

Remove the cover on the flywheel cover to reach the four screws (1) securing the engine flywheel to the transmission torque converter.

After removing the first screws (1) turn the engine manually until the second screw reaches the hole, then remove it. Repeat the same operation for the remaining two screws.



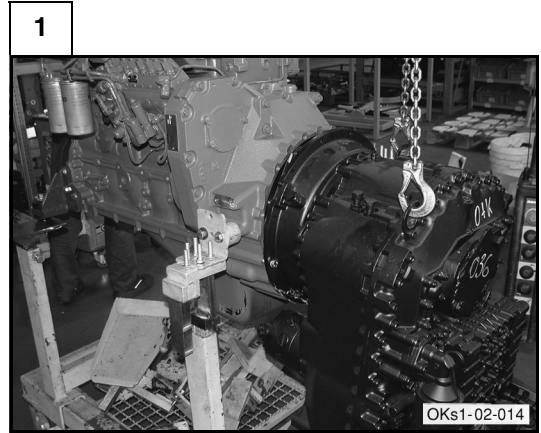
Remove the screws securing the transmission group to the engine and using a hoist of appropriate capacity, separate the transmission from the engine.



### 2.2.3 ENGINE – TRANSMISSION JUNCTION

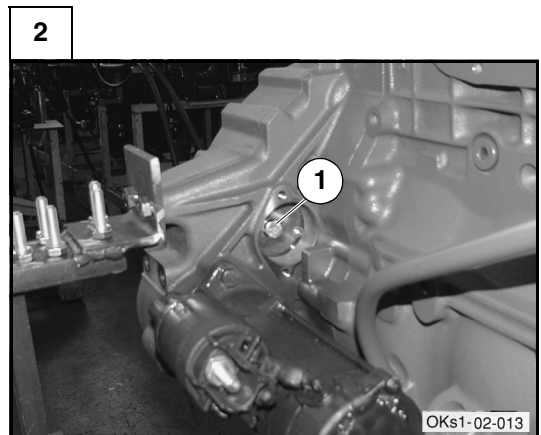
With the engine resting on an appropriate support, connect the transmission to the engine using a hoist.

Tighten temporarily two outer securing screws.



Insert through the hole on the flywheel housing, the first of the four screws (1) and tighten it temporarily.

Turn the engine manually and tighten the other three screws in a temporary manner as well.



Tighten the outer screws securing the transmission group to the engine in a final manner to a torque of 44 Nm.

Tighten the four inner screws securing the flywheel to the torque converter to a torque of 44 Nm.

