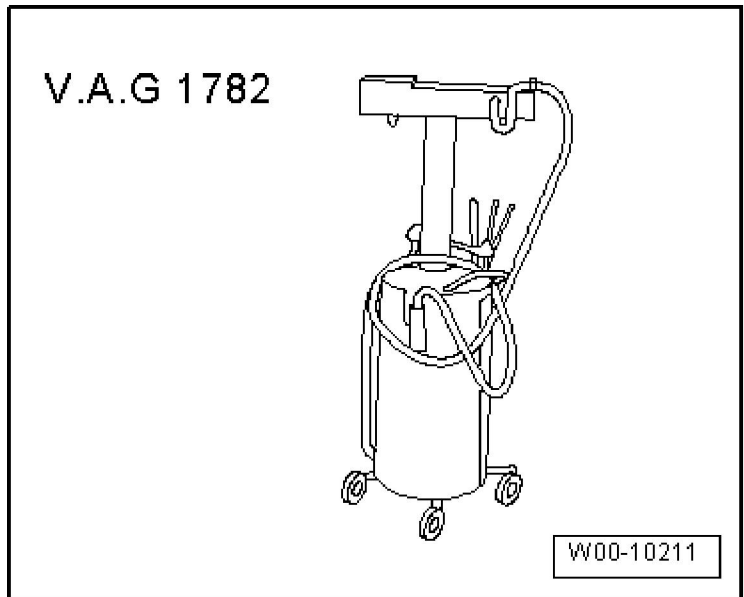


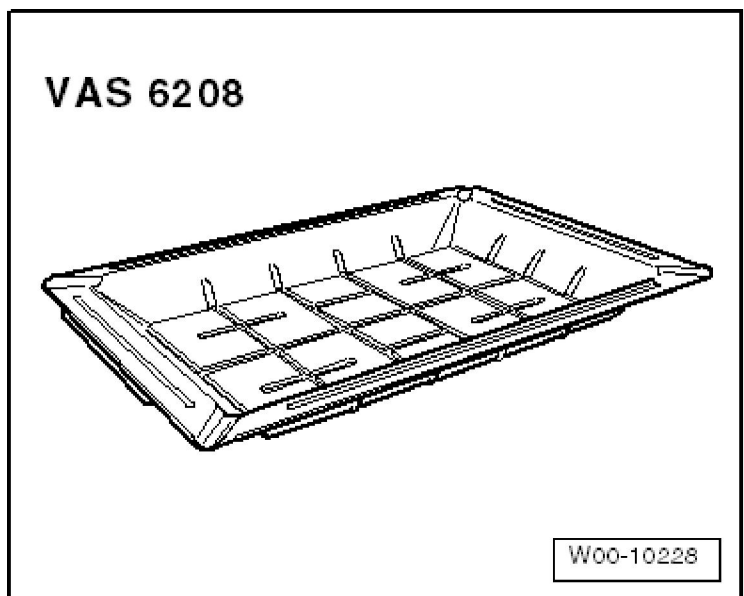
## Generator, 4.2L FSI, Audi RS4, Removing and Installing

### Special tools and workshop equipment required

- t oil drain appliance -VAG 1782- or UL approved equivalent



- t Workshop crane drip tray -VAS 6208- or drip tray -VAG 1306-



- t VAG 1331 Torque wrench (or 5 - 50 Nm equivalent)

**V.A.G 1331**

W00-0427

- t VAG 1332 Torque wrench (or 40 - 200 Nm equivalent)

**Removing**

- Disconnect battery **Chapter**.
- Use oil drain appliance -VAG 1782- (or UL approved equivalent) to draw power steering hydraulic fluid from power steering from reservoir.

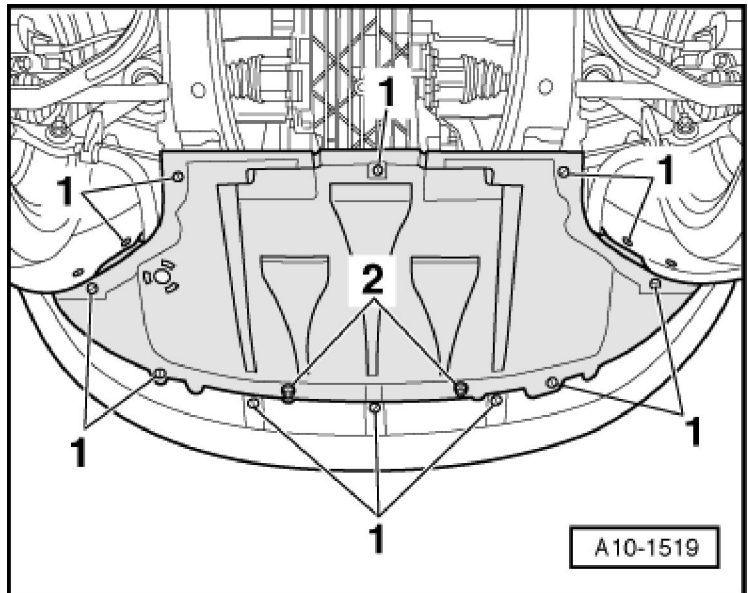

**WARNING**

***The cooling system is pressurized when the engine is warm. Wear gloves and other protection and carefully release system pressure if necessary, before performing repairs.***

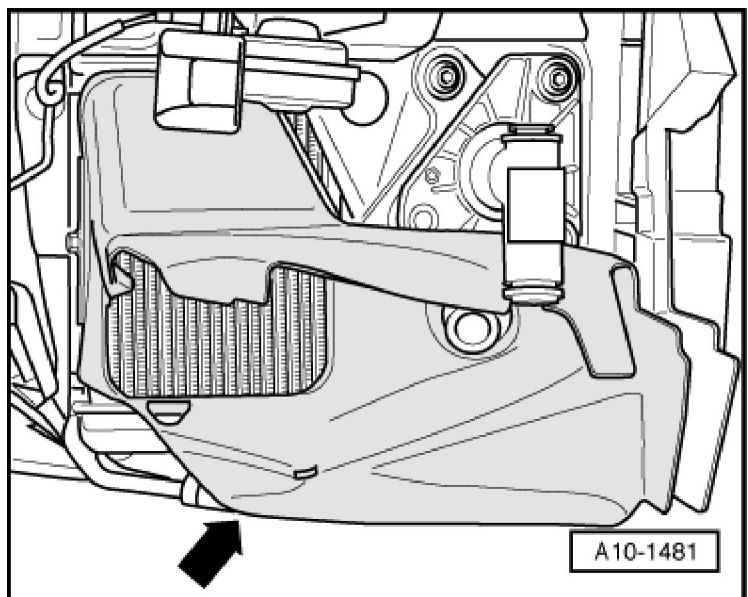
**V.A.G 1332**

W00-0428

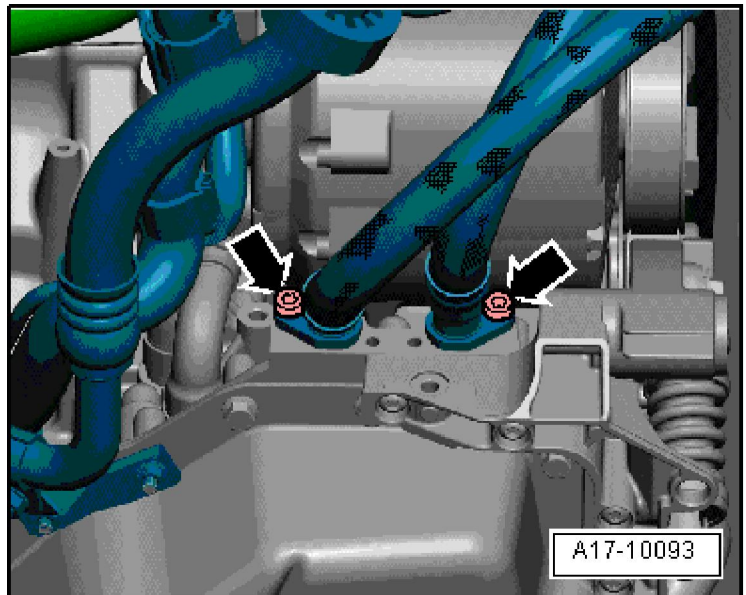
- Open filler cap for coolant expansion tank.
- Lift vehicle
- Remove right front wheel.
- Release fasteners -1- and -2- and remove front noise insulation.
- Remove right front wheelhouse liner **Body Exterior; Rep. Gr.66**.
- Remove front bumper cover **Body Exterior; Rep. Gr.63** Front bumper cover, removing and installing.



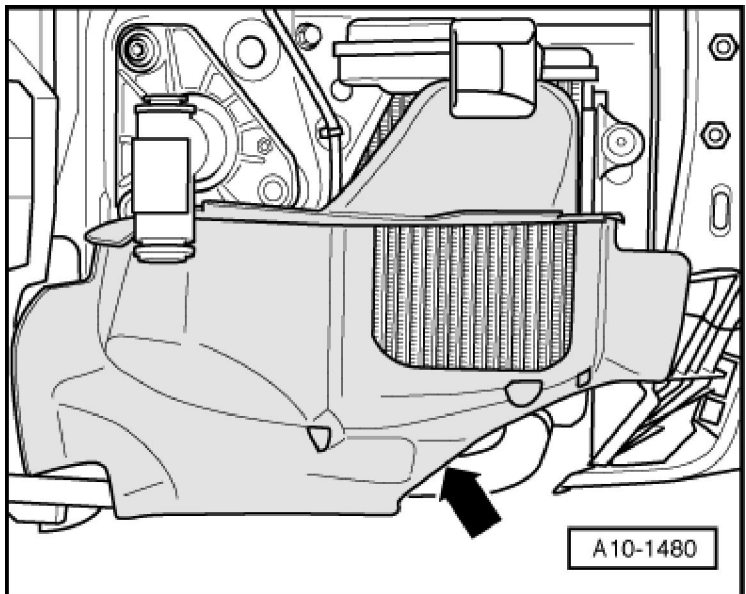
- Remove right air duct -arrow- in front of auxiliary radiator.
- Place oil drain appliance -VAG 1782- (or UL approved equivalent) under engine.
- Drain engine oil.



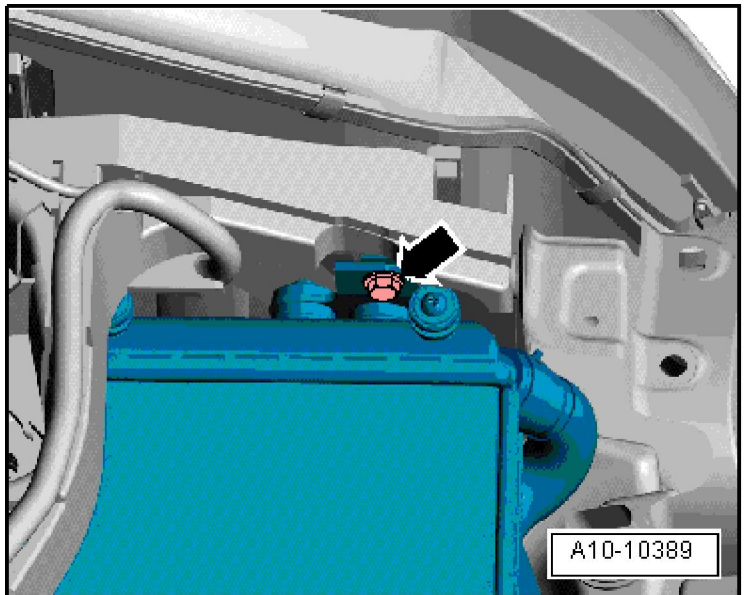
- Remove screws -arrows- at oil cooler lines on upper part of oil pan.
- Remove oil lines from upper part of oil pan.



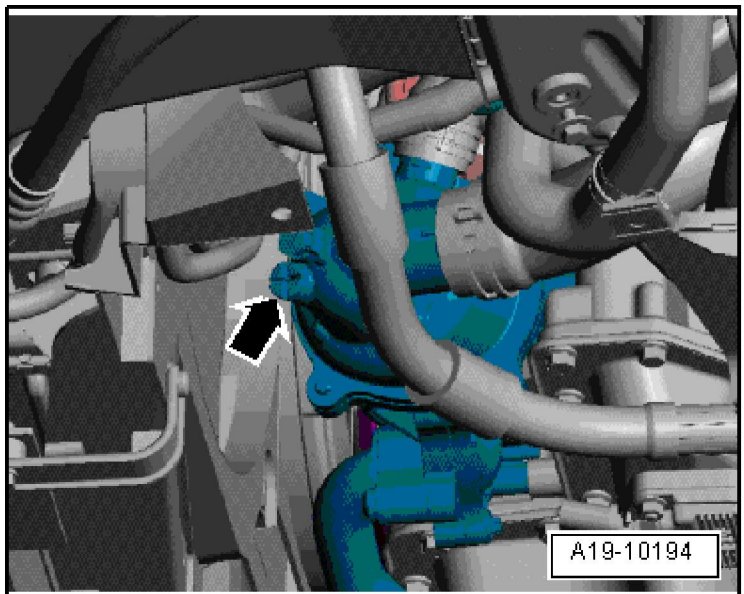
- Remove left air duct -arrow- in front of auxiliary radiator.



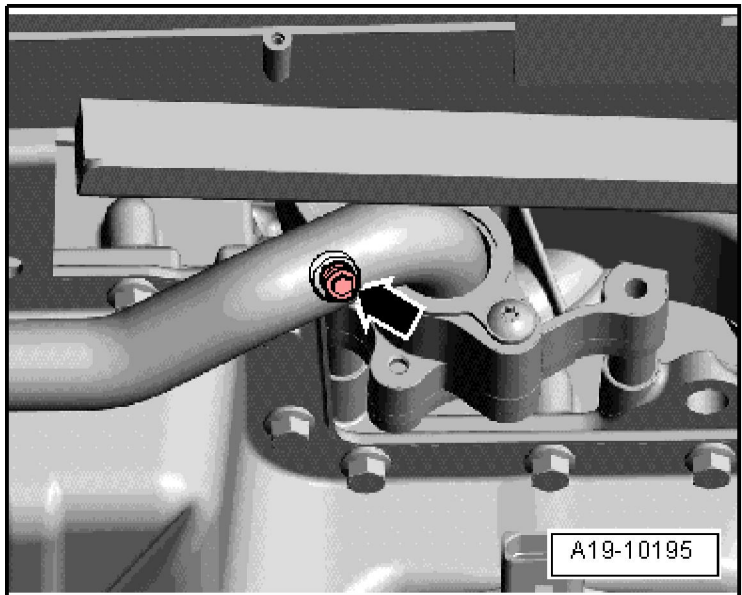
- Remove screws -arrow- at upper left auxiliary radiator bracket at lock carrier.
- Place workshop crane drip tray -VAS 6208- or -VAG 1306- under engine.



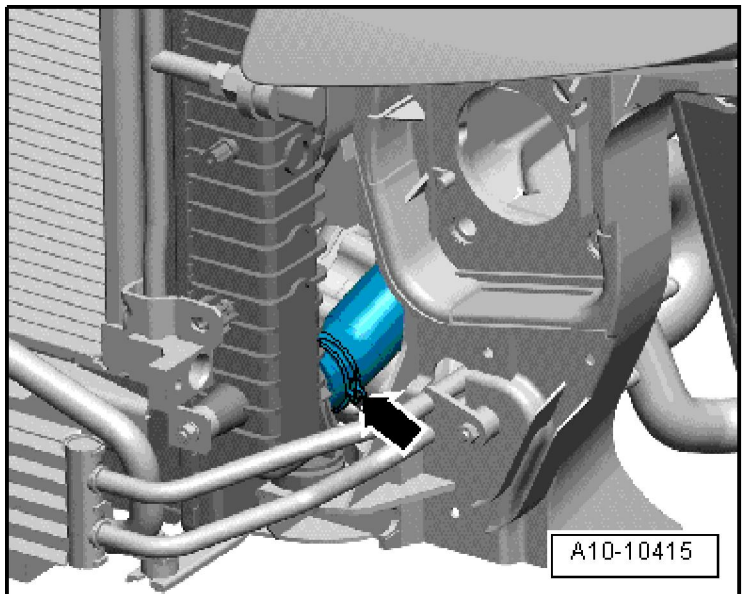
- Remove drain plug -arrow- at coolant regulator housing and drain coolant at engine.



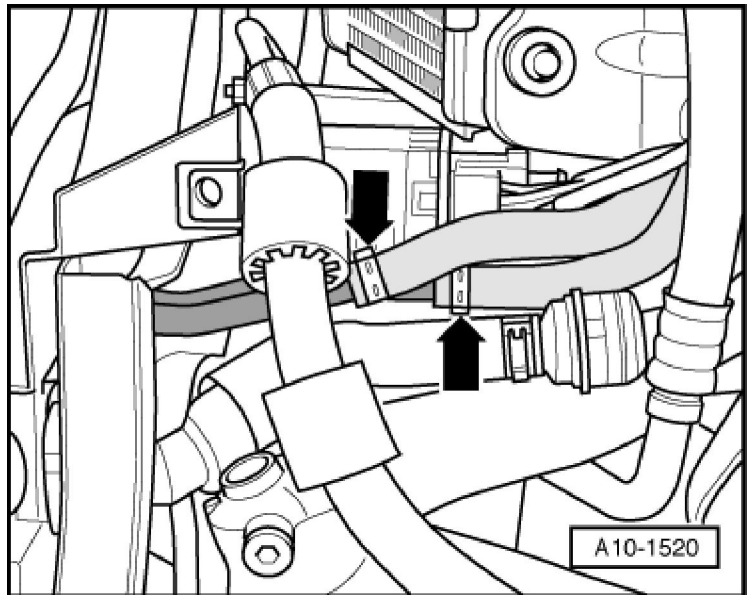
- Also remove drain plug -arrow- at front coolant pipe and drain remaining coolant.



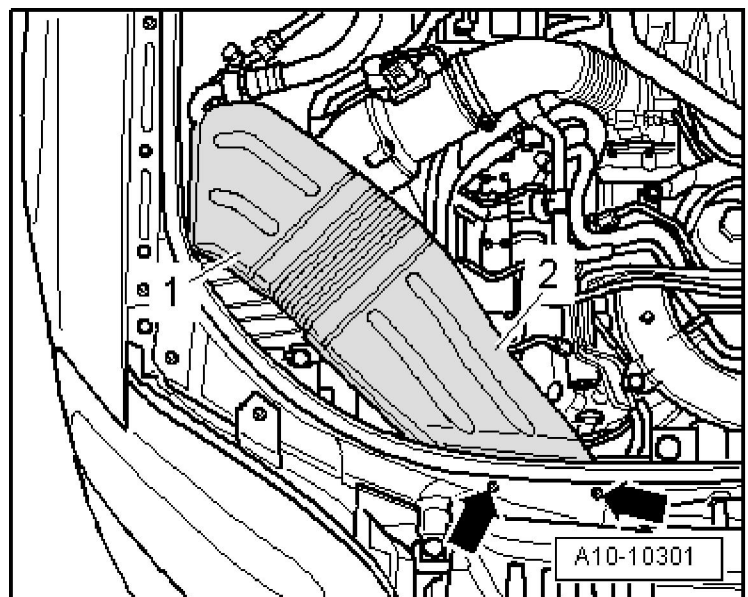
- Loosen hose clamp -arrow- and remove lower coolant hose from radiator.
- Place oil extractor -VAG 1782- under engine.



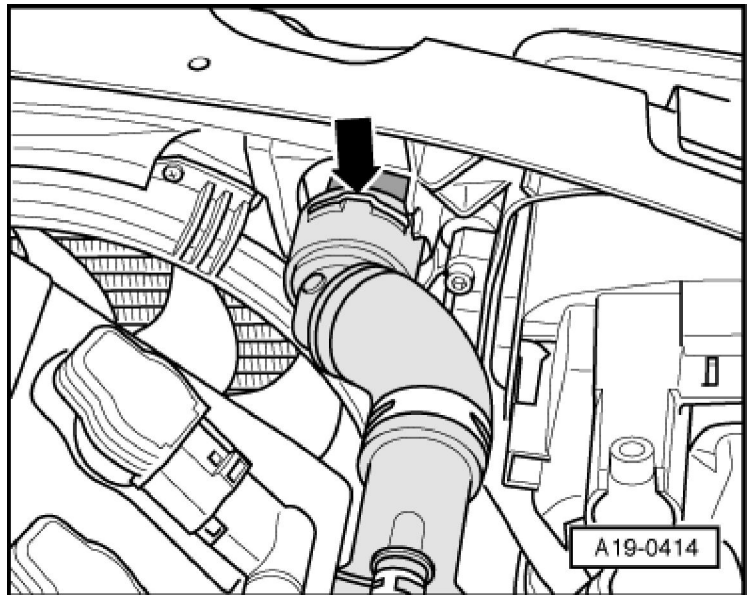
- Disconnect hydraulic lines to rear left radiator coil on lock carrier -arrows-.



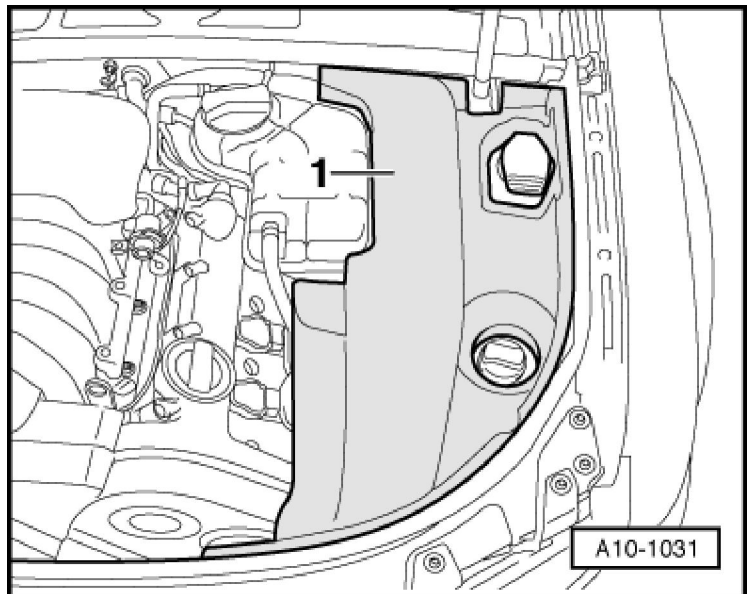
- Remove screws -arrows-.
- Remove air duct -1- and -2-.



- Detach upper coolant hose -arrow- from radiator.

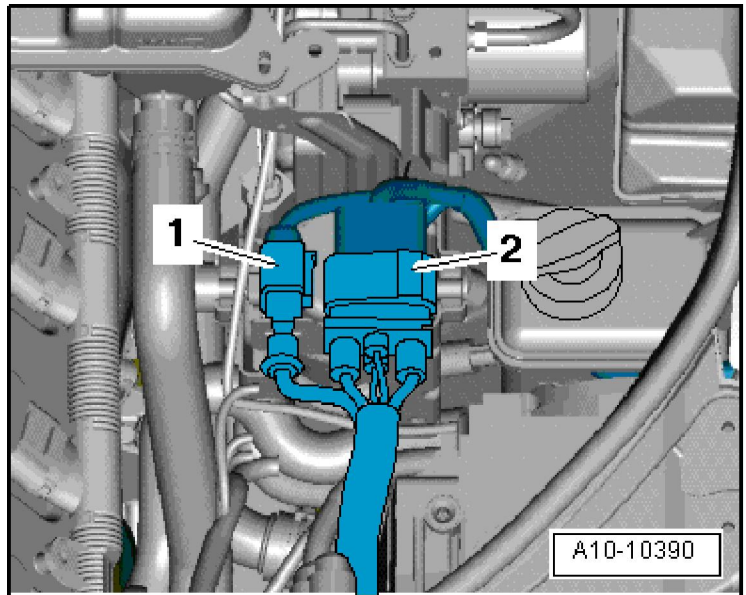


- Remove cover -1- at left of engine compartment.

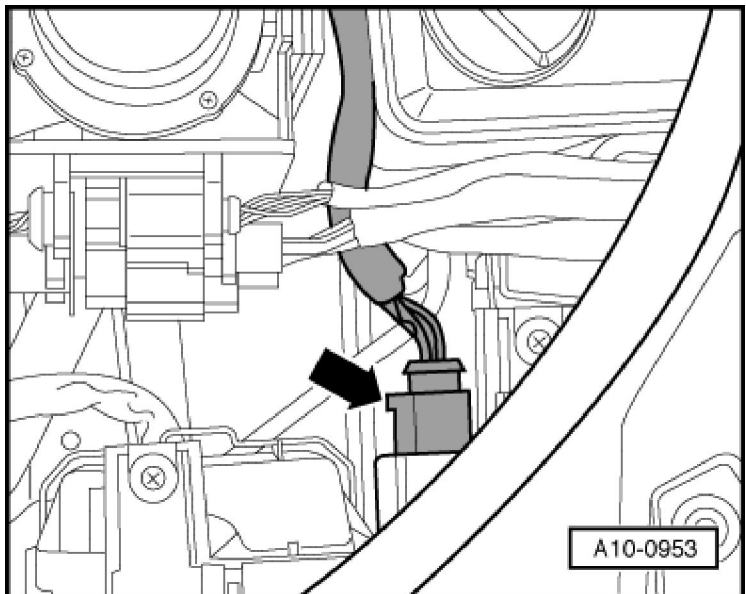


- Remove electrical connections -1- and -2- from retainer and disconnect.
- Set aside harness toward lock carrier.

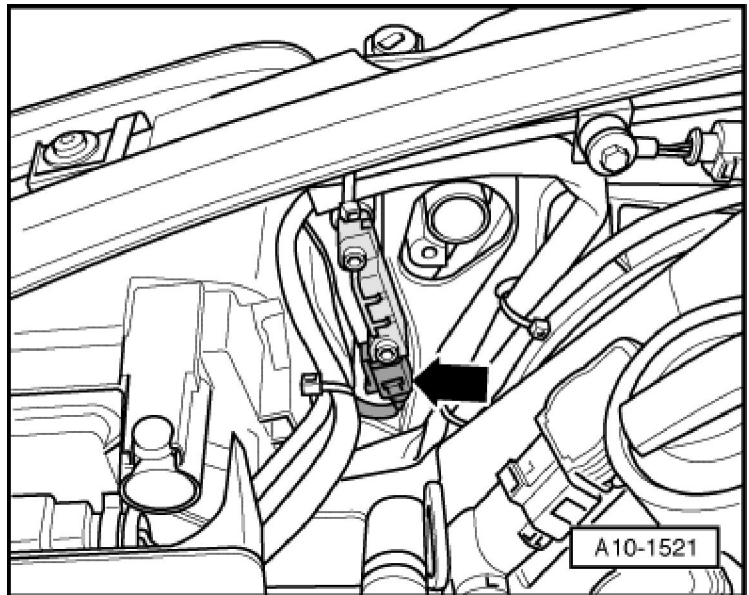




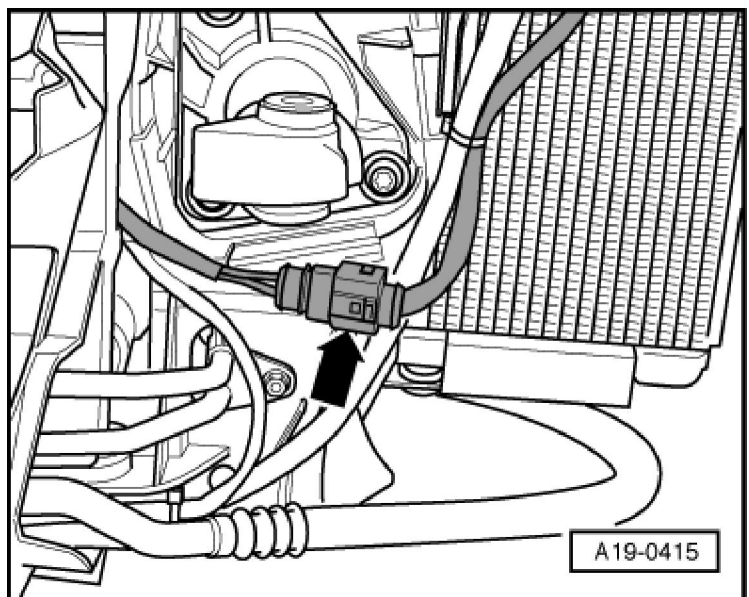
- Disconnect electrical connections for left and right headlamps -arrow-.



- Disconnect electrical connections for left and right airbag sensors -arrow- at lock carrier.
- Set aside harness toward lock carrier.
- Remove hood cable at lock carrier **Body Exterior; Rep. Gr.55.**



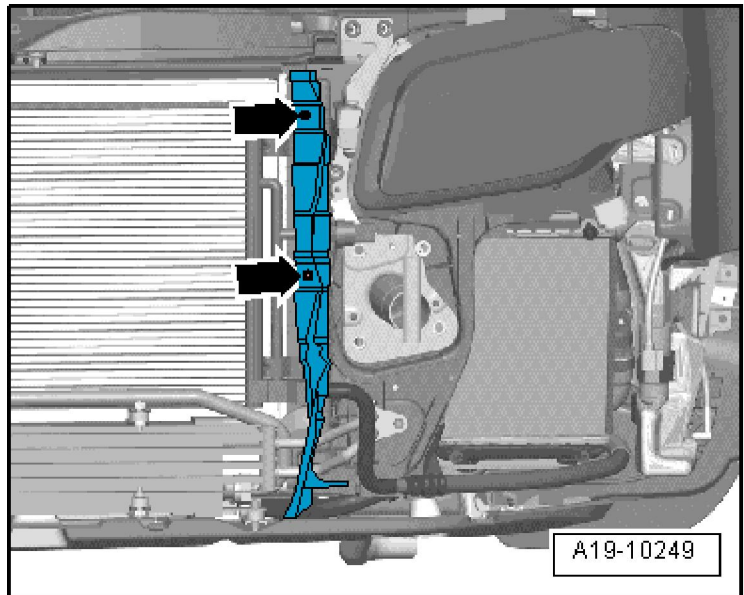
- Disconnect electrical connection for right radiator fan -arrow-.



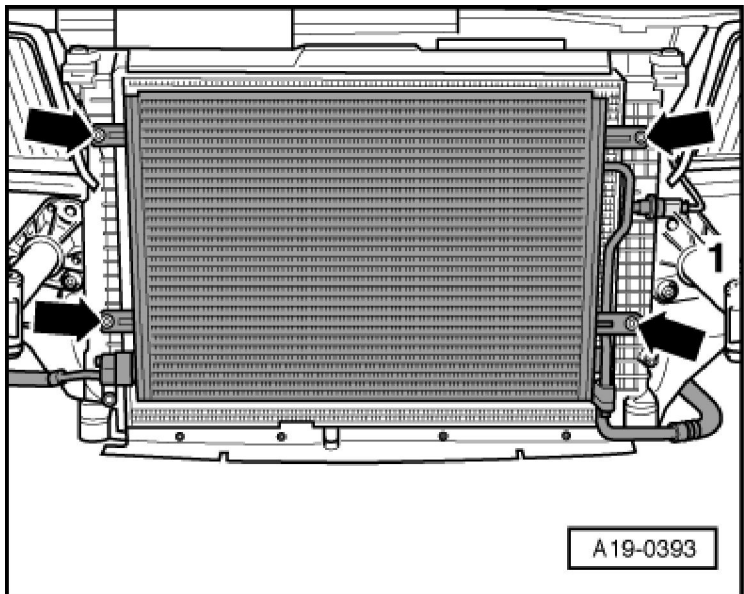
- Remove screws -arrows- at left and right air ducts on radiator.

 **Caution**

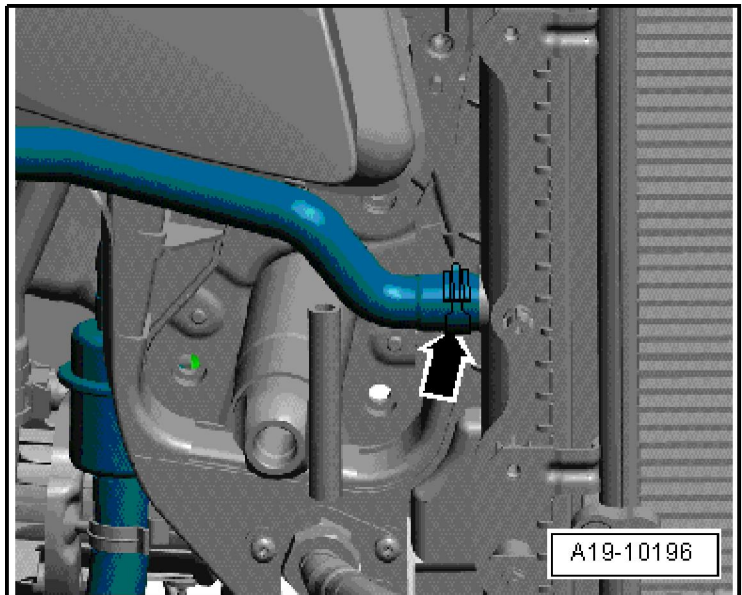
- t ***In order not to damage the condensor and refrigerant lines/hoses, ensure refrigerant lines are not excessively bent or tensioned in the following procedures.***
- t ***Do not open refrigerant circuit!***



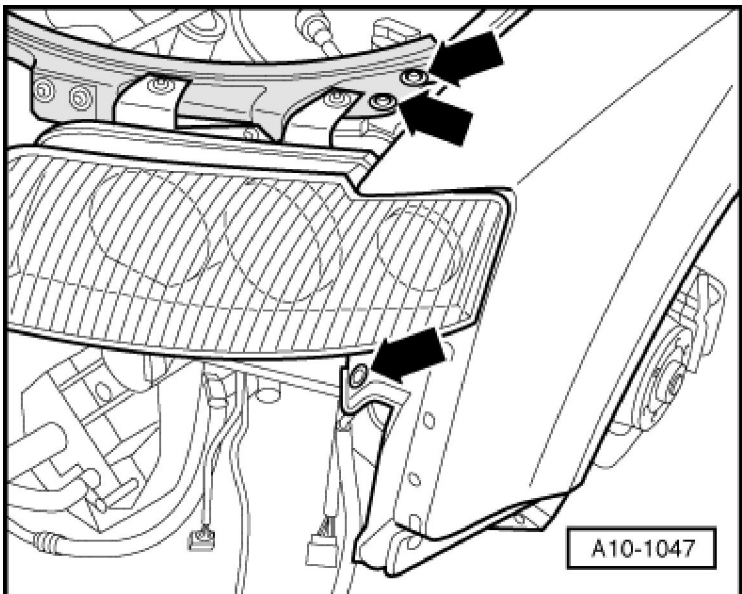
- Disconnect electrical connection -1- for High Pressure Sensor -G65-.
- Remove screws -arrows-.
- Remove condenser and swing downward with refrigerant lines connected.



- Remove right coolant hose -arrow- at radiator.



- Remove screws -arrows- at left and right lock carriers.
- Remove engine compartment seat at lock carrier and fender edges.



- Remove screws on left and right shock absorbers -arrows-.

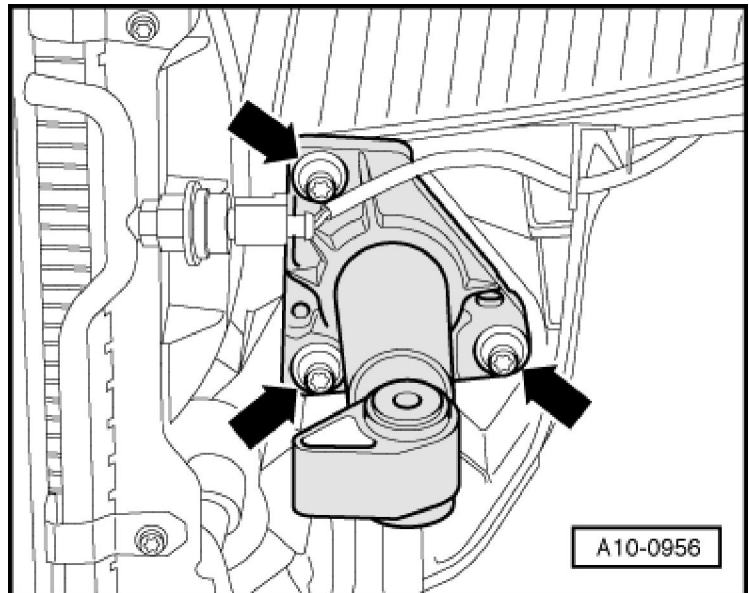
**i Note**

Use an assistant to remove lock carrier in the following step.

- Remove lock carrier and tilt aside (secure against falling).

**⚠ Caution**

**Before removing ribbed belt, mark direction of rotation. Belt damage will result if not reinstalled in proper direction.**

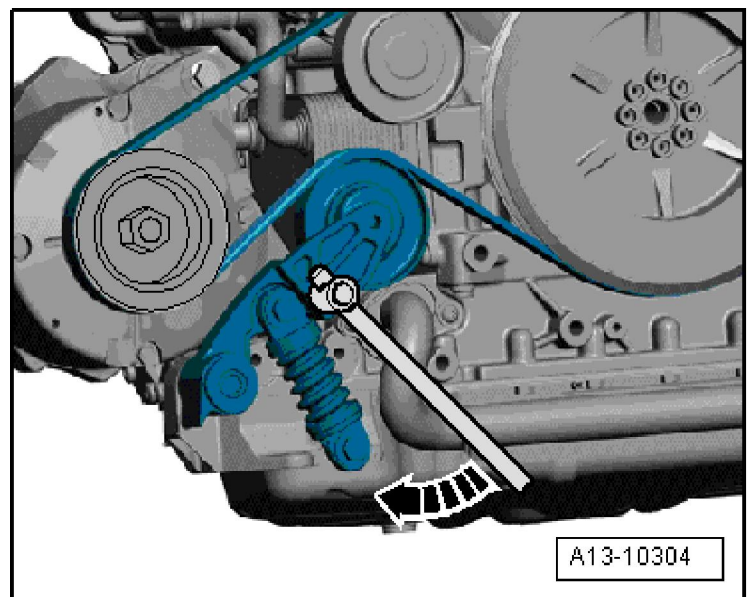


- Relieve ribbed belt tension by pivoting tensioner in direction of -arrow-.

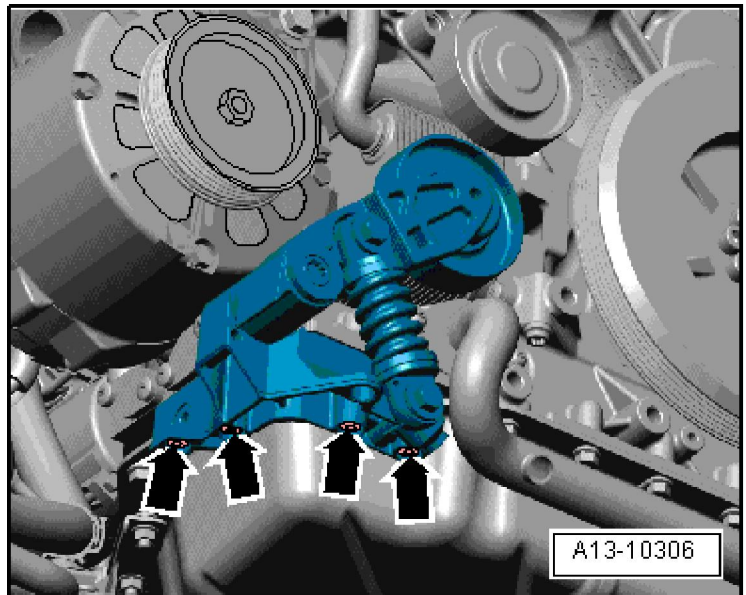
**Note**

Ensure lever axle is long enough so that it can be completely inserted in tensioner.

- Remove ribbed belt from generator pulley.
- Release tensioner.



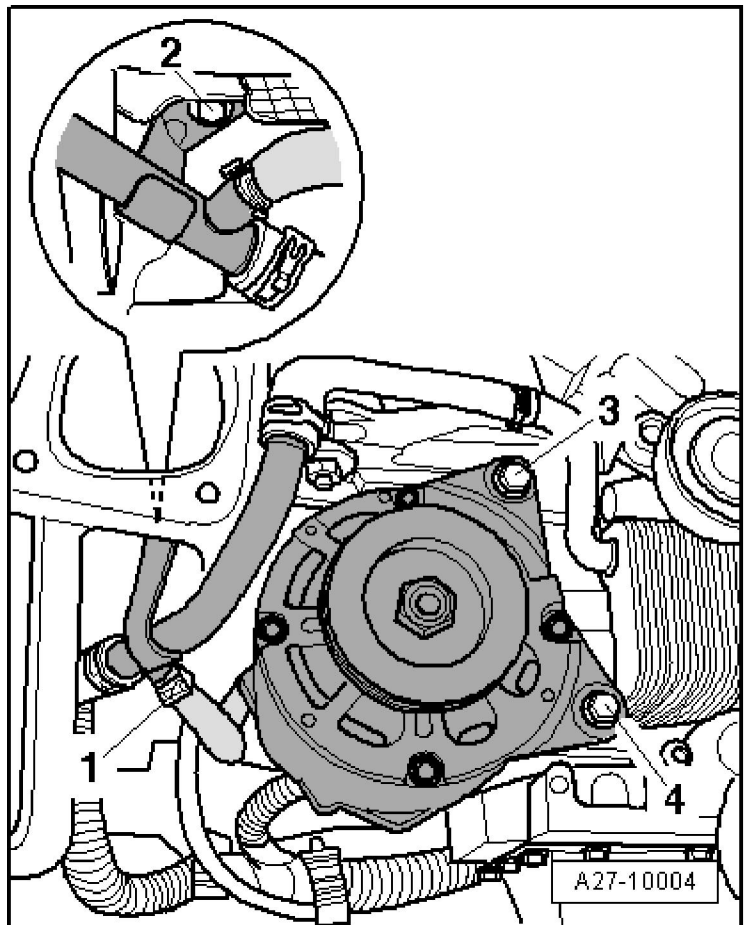
- Remove bolts -arrows-.
- Remove tensioner -1- at upper part of oil pan.



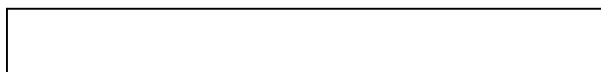
- Remove bolt -2- on coolant pipe bracket.
- Loosen hose clamp and remove coolant hose -1- to generator.
- Remove bolts -3- and -4-.
- Remove generator from bracket and pull forward.

**Note**

*If generator is difficult to remove from mounting, reinstall mounting bolts loosely and carefully strike bolt heads with hammer in order to loosen mounting threaded bushings.*



- Remove coolant hose -1- from generator.
- Disconnect electrical connection -5-.
- Remove screw -4- and remove heat shield.



**⚠ Caution**

**Ensure coolant pipes do not slip out, otherwise O-rings on removed coolant pipes must be replaced. Re-tighten bracket -3- after removing heat shield if necessary.**

- Remove nut -2- and terminal 30 ( B+ ) eyelet from generator.
- Remove generator.

**Installing**

Install in reverse order of removal, noting the following:

**⚠ Caution**

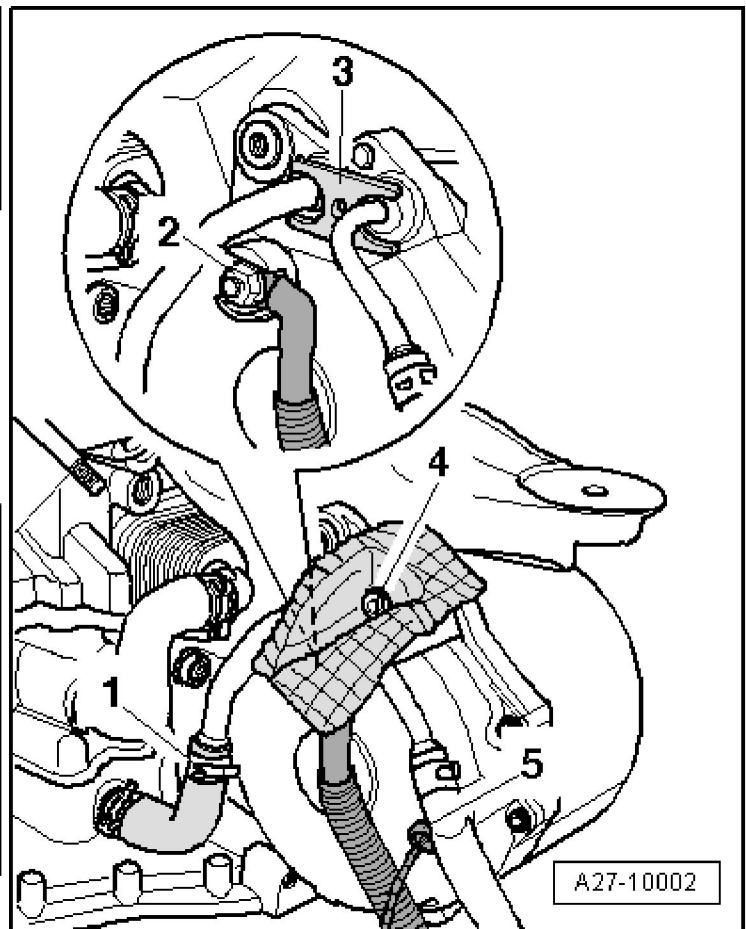
- t **Before installing the ribbed belt, ensure that all subassemblies (generator, a/c compressor etc.) are securely mounted and turn freely.**
- t **When installing belt, ensure correct seating in the belt pulleys!**
- t **Reinstall all hose clamps, harness retainers and replace all removed cable ties as originally installed in production.**

- To aid in installation, drive generator mounting bushings back into mounting flanges approx. 4mm.

**⚠ Caution**

**Tight generator mounting bushings must be made to move freely in order to ensure sufficient clamping force at the specified bolt torque.**

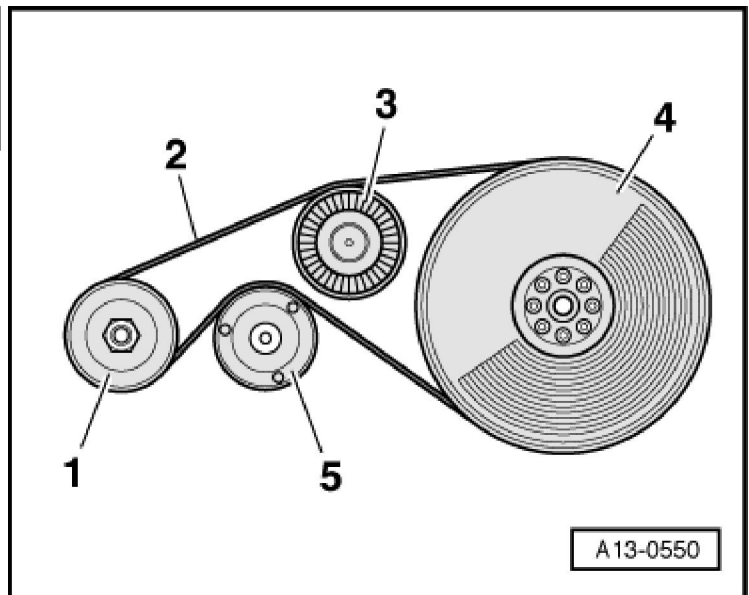
- Note running direction of ribbed belt as previously marked and route as illustrated.
  - 1 - Generator
  - 2 - Ribbed belt
  - 3 - Idler pulley
  - 4 - Vibration damper
  - 5 - Tensioning roller
- Install lock carrier with attachments **Body Exterior; Rep. Gr.50.**
- Install front bumper cover **Body Exterior; Rep. Gr.63** Front bumper cover, removing and installing.
- Before starting engine for first time, fill hydraulic oil in power steering reservoir.



**Caution**

**Power steering pump must NOT be allowed to run dry. Damage will result.**

- Fill engine oil and check oil level.
- Fill coolant **Engine Mechanical; Rep. Gr.19.**
- Reconnect battery. Required steps **Anchor**
- Start engine and check belt routing.
- Check and adjust headlamps.

**Tightening Torques**

Component - fastener	Nm
Coolant pipe bracket to generator - bolt	9
Terminal 30/B+ to generator - nut	16
Generator to engine - bolts	22
Tensioner to upper part of oil pan - bolts	9