

## Removing transmission

Special tools: [999 5006](#) , [999 5033](#) , [999 5045](#) , [999 5460](#) , [999 5461](#) , [999 5462](#) , [999 5463](#) , [999 5488](#) , [999 5534](#) , [999 5540](#) , [999 5562](#) , [999 5656](#) , [998 5972](#) , [999 5972](#)

**Note!** This method for removing and installing the transmission applies to all 850 variants. Before starting work on the 850 AWD transmission, the bevel gear must be removed. For further information see [Bevel gear, replacing](#) . To install bevel gear see [Bevel gear, replacing](#) and [Bevel gear, replacing](#) .

**Note!** Removal and installation of the 850 AWD special rear engine mounting is contained in this method. To work on the right drive shaft see [Bevel gear, replacing](#) . When for example replacing clutch, working on drive shafts and transmission cables, see Service Manual Section 4 (41.43.46) Manual transmission M56 including clutch and drive shafts 850 1992–.

**Note!** The illustrations in this section show LHD version. RHD and turbocharged versions are described only where they differ.

### Adjusting steering wheel position

#### Adjust steering wheel position

Slacken steering wheel adjustment lever.

Press steering wheel forward into bottom position and angle upward as far as possible. Lock wheel in position with lever.

Shift gear selector lever into neutral.



### Removing battery and engine intake components

#### Remove:

- Battery
- air cleaner (ACL) housing and intake
- turbocharger (TC) control valve from air cleaner (ACL) housing. (Only cars with turbocharged engines)
- Battery shelf
- air cleaner (ACL) housing bracket mounting screws.

#### Only cars with turbocharged engines:

Remove charge air pipe clamp and hose from pipe.

Remove intake manifold between air cleaner (ACL) and turbocharger (TC).

### Removing transmission components

#### Remove:

- selector cables from bracket and levers
- outer transmission lever by knocking out split pin
- back-up (reversing) light switch connector



### Only cars with turbocharged engines:

Remove throttle pulley cover

#### Remove:

- intake pipe to throttle body (TB). Pull pipe to one side with a tie strap so that it is free of the throttle body (TB)
- upper oil cooler hose to the engine oil cooler.



### Removing clutch slave cylinder

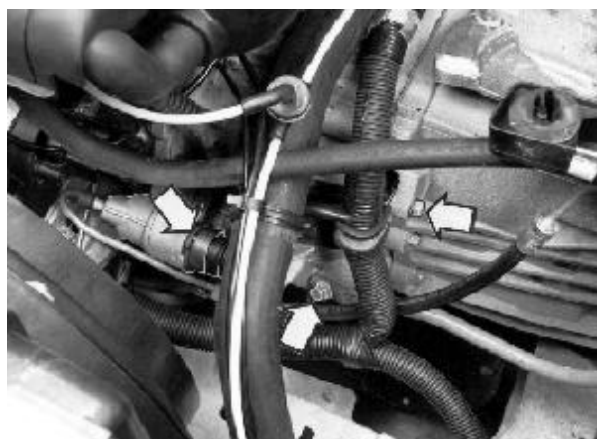
#### Remove clutch slave cylinder from transmission

Remove circlip.

**Caution!** Ensure that boot stays in place on cylinder.

#### Remove:

- ground lead from transmission.
- engine cable harness clamp(s).



### Removing engine – transmission screw

Undo rear engine pad/splash guard nut a few turns

Remove screws (5) holding starter motor/transmission

Lift engine coolant expansion tank from its mounting and put to one side

**Only cars with EGR:**

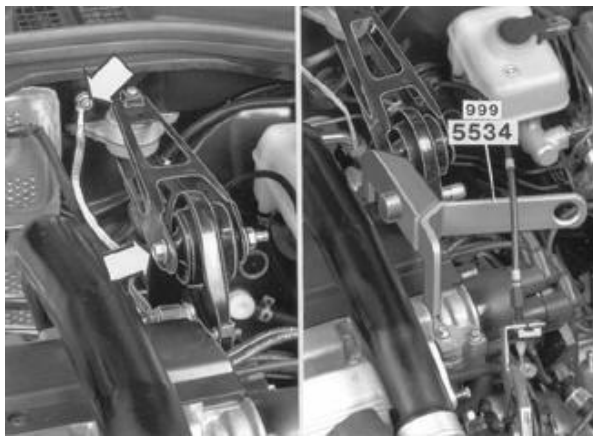
Disconnect hoses from control valve (A).



### Removing torque rod/torque control arm screw

Remove screw on upper torque rod/torque arm at engine

Disconnect ground strip from firewall

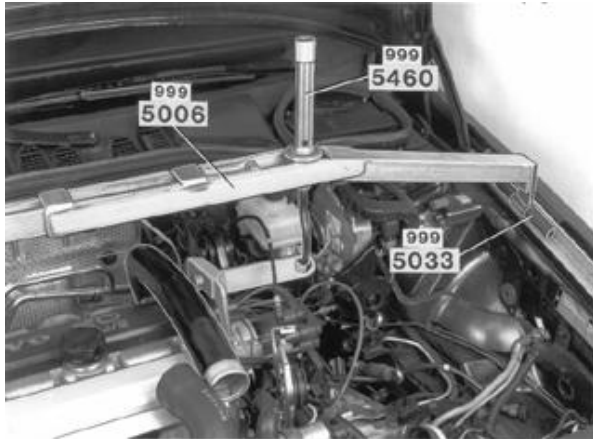


Install lifting fork **999 5534** on torque rod - engine

### Installing support and lifting beam

#### Install:

- supports **999 5033** on fender edges
- Lifting beam **999 5006** on supports. Locate the beam directly above the eye on the lifting fork
- lifting hook **999 5460** . Tighten the hook **approximately 5mm** to relieve some of the load on engine pads
- note the measurement between lifting beam and spark plug cover.



### Removing front wheel and ABS sensor

#### Remove:

- Front wheels
- ABS sensor from stub axle (left-hand side).

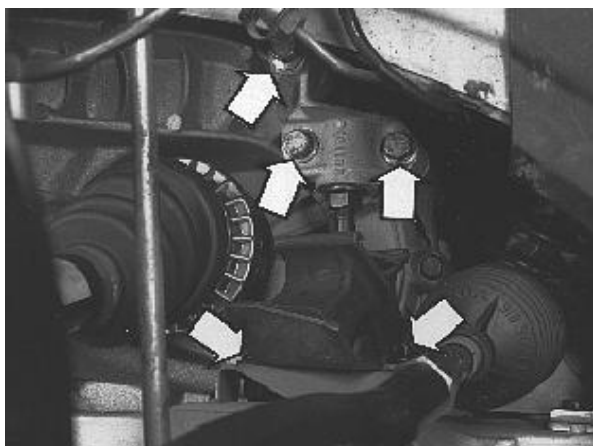
**Caution! Do not separate the connector halves!**

**Remove brake pipes and ABS wiring brackets (both sides). Unhook the brackets and let them hang loose**



### Removing engine mounting

**Remove rear engine mounting from transmission and sub-frame**



### Removing plastic nuts and drive shaft nut

#### Remove:

- the front fender liner plastic nuts on both sides and





the two Torx screws on the left-hand side (early version)  
 - left drive shaft nut. Knock out split pin (applies only to early version). Install counterhold [999 5461](#) (4 wheel studs) or [999 5540](#) . Remove nut.

#### Detach drive shaft end in the hub

Knock end of drive shaft **approximately 10-15 mm** into the hub. Use a rubber or copper mallet.

#### Removing covers

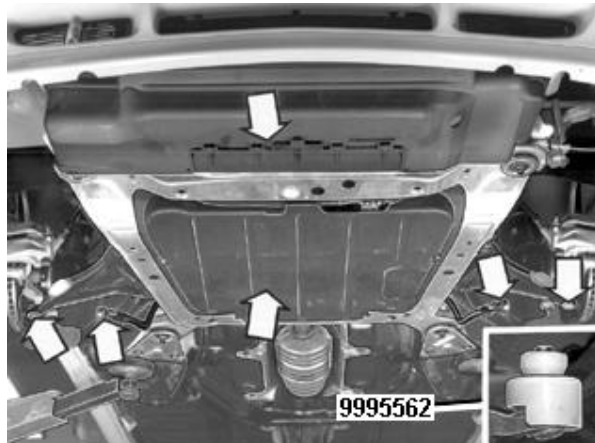
##### Remove:

- front splash guard
- splash guard under engine.

#### Disconnect control arm/ball joint from stub axle (both sides)

Install protective sockets [999 5562](#) on ball joints (both sides).

#### Disconnect and unhook links from anti-roll bar (both sides)



#### Removing cable conduit from sub-frame

#### Remove cable conduit mounting screw and unhook from the sub-frame

#### Remove the carbon filter container with its hoses from the sub-frame

Cut off tie straps for hoses and hang the container in car body.

Loosen exhaust pipe clamp behind the three-way catalytic converter (TWC).



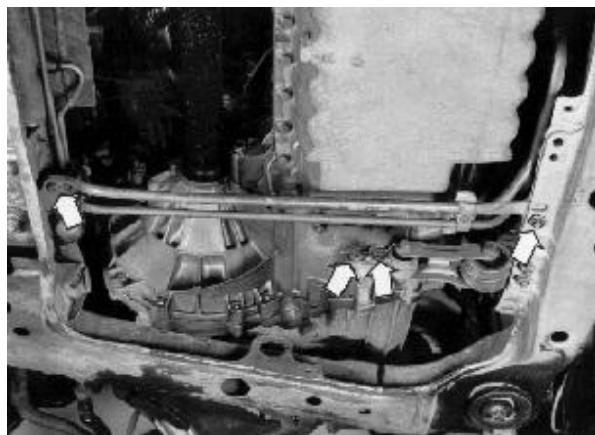
#### Removing screws for brackets and torque arm mounting

##### Remove:

- oil pipe bracket screws
- the two bolts securing the torque rod mounting support on transmission.

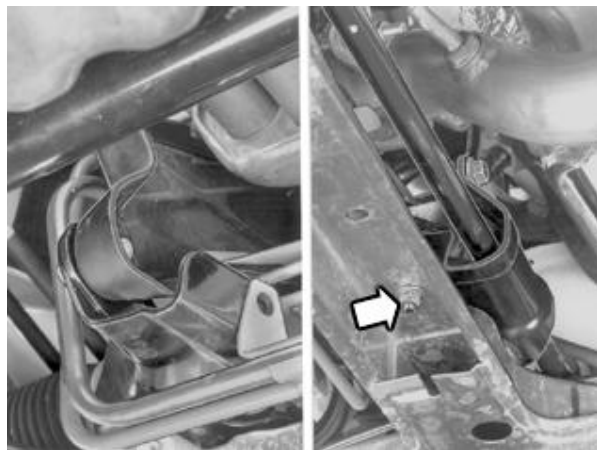
#### Drain transmission oil.

**Caution!** Only if the transmission or oil is to be replaced. Tighten plug to 35 Nm.



#### Right-hand drive cars only:

Remove crash guard above the steering gear. (2 screws.)



### Disconnecting drive shaft

#### Disconnect right drive shaft

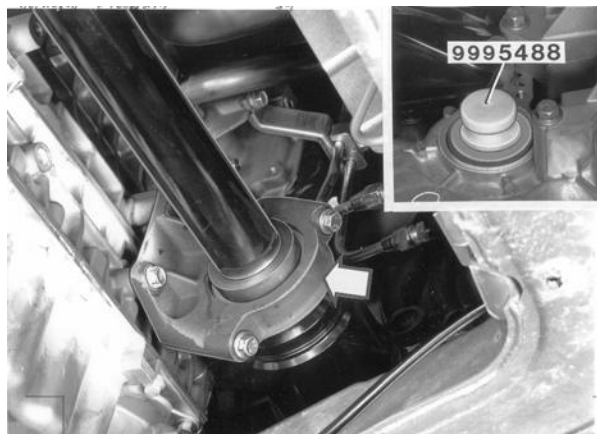
Remove bearing cap.

Pull out inner section of drive shaft and fold out spring strut at the same time.

**Caution! Take care not to damage the seal in the transmission.**

Install plug [999 5656](#).

Let the drive shaft rest on the sub-frame and oil pipes.



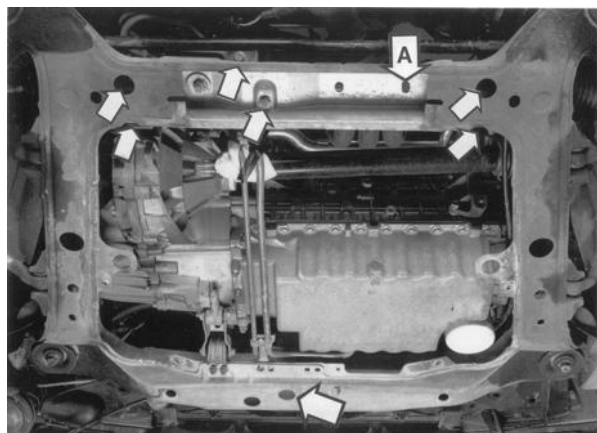
### Removing engine pad screws

#### Remove front engine pad/sub-frame screw

Undo the screw on the engine mount/steering gear approximately one turn.

Remove the five steering gear mounting nuts in the sub-frame.

**Right-hand drive cars only: Remove crash guard/sub-frame nut (A)**

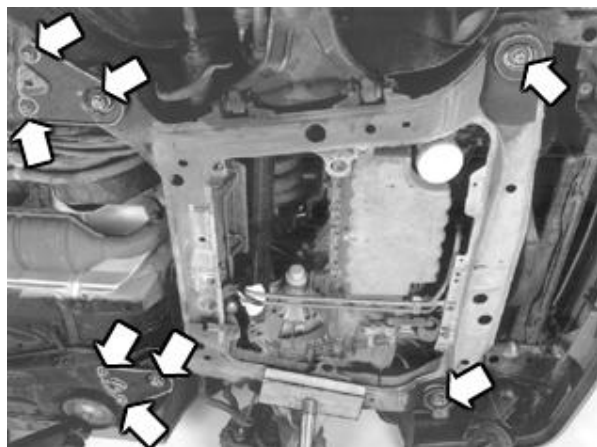


### Removing sub-frame

#### Remove sub-frame from car

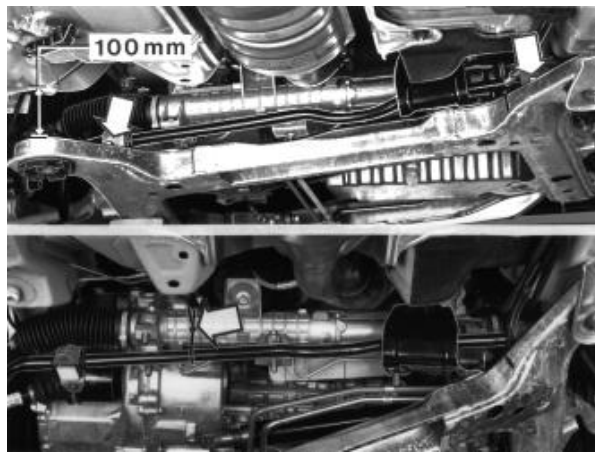
Position mobile jack [998 5972](#) to support the left-hand side of the sub-frame, slight pressure.

Remove left and right sub-frame support bracket screws. Unscrew the two sub-frame mounting screws in bodywork on right-hand side a **maximum of 5 turns**. Remove screws on left-hand side.



**Right-hand drive cars only:**

**Lower sub-frame approximately 100 mm**



Ensure that the five steering gear screws and crash guard screw are clear of frame.  
 Remove left-hand side anti-roll bar bearing cap screws.  
 Undo screws on right-hand side until they are held by a short section of thread.  
 Secure the anti-roll bar to the steering gear as illustrated.

### Lowering sub-frame

#### Lower sub-frame. Remove mobile jack

**Caution!** Check that the steering gear screws are free of the sub-frame. Ensure that the control arm is free of the right drive shaft boot.

#### Remove mobile jack

Let the sub-frame hang in the right-hand side screws.

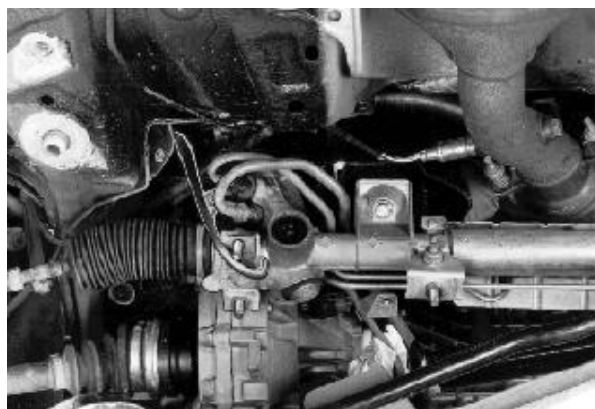


### Hanging up steering gear

Hang up steering gear on left-hand side with hook 999 5045 in hole in frame member flange

Remove the engine pad/steering gear screw and the nut on top of the engine pad. Remove engine pad

**Caution!** Ensure that the steering gear hangs securely on the hook so that the lower steering shaft does not slide out of the steering column.



Disconnect/remove cable ties, connectors, splash guard and mounting on transmission

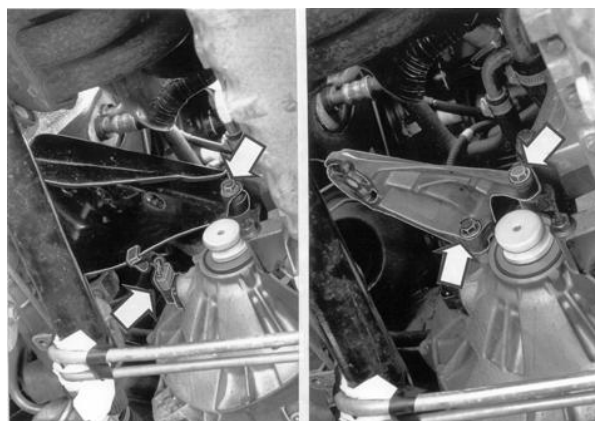
#### Tape end of drive shaft to oil pipes

#### Remove:

- cable clamps for the heated oxygen sensor (HO2S) cable from engine cover
- vehicle speed sensor (VSS) connector and cable.

#### Remove:

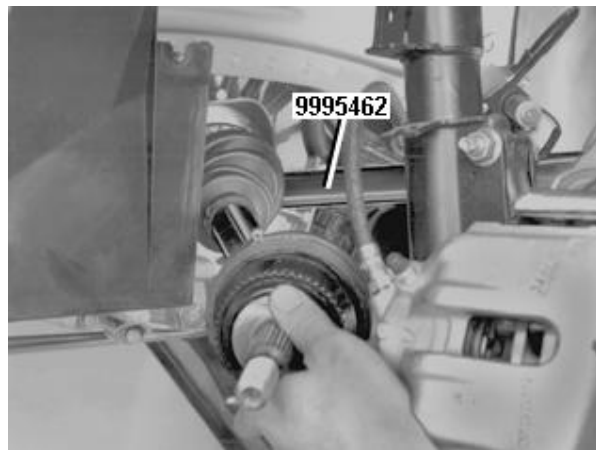
- cover at rear engine mounting
- rear mounting from transmission.



### Removing left drive shaft

#### Remove left drive shaft





Turn and fold out spring strut. Knock out the end of the drive shaft with a rubber or copper mallet and pull the end of the drive shaft out of the hub.

Remove drive shaft from transmission. Use gimmy bar [999 5462](#) between transmission and inside of drive shaft. Modified according to Workshop Guide.

**Caution!** Take care not to damage drive shaft seal and boots.

Install sealing plug [999 5488](#) in transmission.

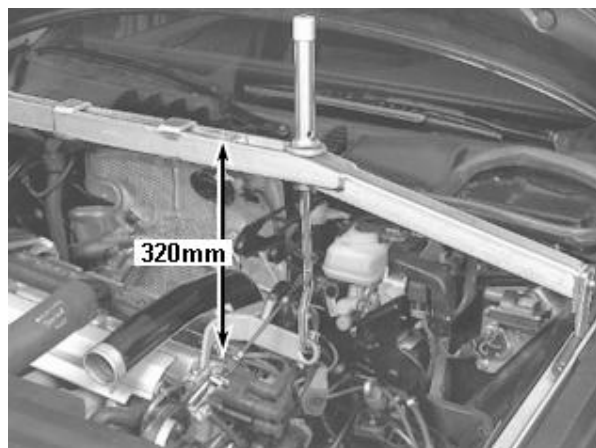
Clean off traces of metal adhesive from the spline joint (hub-drive shaft).

### Lowering engine and transmission

Lower engine and transmission. Use lifting hook [999 5460](#). Lower until distance between lifting beam and sparkplug cover is approximately 320 mm

**Caution!** If the engine is lowered too much, the exhaust pipe can press the steering gear down.

**Caution!** Ensure that cables and hoses are not pinched or stretched and that the engine dipstick is free from the fan.

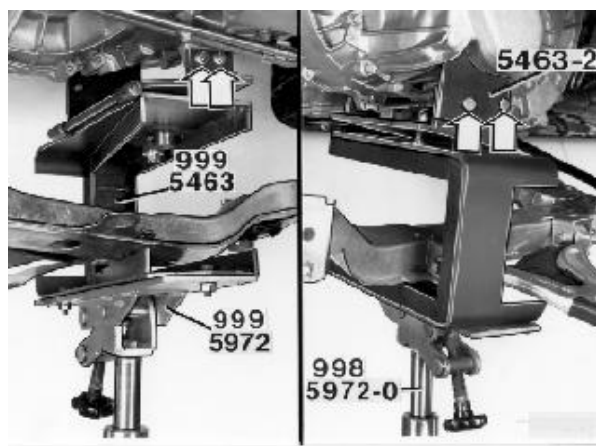


### Installing universal tool and transmission fixture

Install universal tool [999 5972](#) and transmission fixture [999 5463](#) on mobile jack

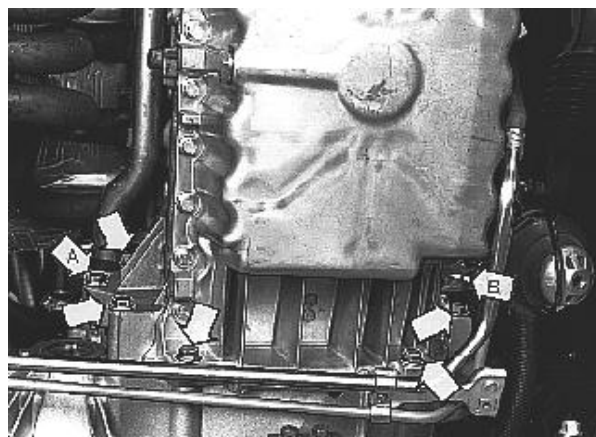
Install transmission fixture in transmission with torque rod mounting screws.

At the same time install support plate (marked [999 5463](#)) on the fixture, modified according to Workshop Guide. Raise mobile jack into contact.



### Removing screws

Remove the rest of the screws between transmission and engine (7 screws)



### Removing transmission

Remove transmission



Pull transmission straight out from engine.

**Caution! Ensure that transmission comes straight out from engine without stressing the clutch driven plate center.**

Lower mobile jack and pull off transmission.