

**43: Transmission, automatic, B5254T2, AW50/51 AWD**  
**V70 XC (01-) / XC70 (-07), 2004, B5254T2, AW50/51**  
**AWD, L.H.D, YV1SZ59H241147306, 147306**  
**15/10/2011**



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## **43: Transmission, automatic, B5254T2, AW50/51 AWD**

### **Transmission, installation**

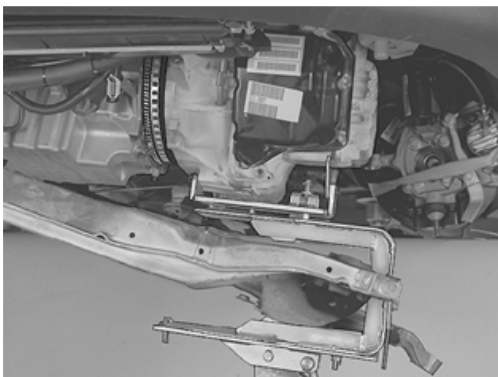
**Special tools:**  
951 2050

**Note! The illustrations in this service information are used for different model years and/or models. Some variation may occur. However, the essential information in the illustrations is always correct.**

#### **Installation**

**Note! For tightening torques, see:  
Tightening torque .**

#### **Installing the gearbox**



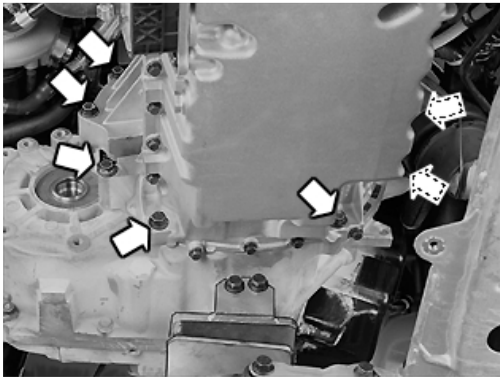
Before installing the transmission it is very important that the checks and cleaning have been carried out. See: Gearbox, preparations before installing .

Adjust for height and angle using the mobile jack and the gearbox fixture.

Align the gearbox against the engine.

**Note! Make sure that the gearbox goes straight in relation to the engine and that the guide sleeves and locating pin for the starter motor fit into the guide holes on the gearbox.**

#### **Installing and tightening the screws to the gearbox**



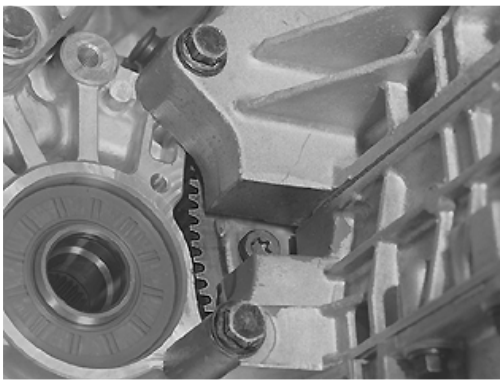
Fit the screws, 7 x M10, to the gearbox/engine.

First tighten alternately and crosswise with light contact, while checking that the gearbox and engine are in contact all the way around.

Following which, tighten the screws with light contact crosswise to the gearbox/engine. Tighten.

Remove the fixture from the gearbox.

#### **Fitting the torque converter screws.**



**Note! Use new screws, Torx TX50.**

Align the torque converter to the carrier plate, by means of pulling round the engine with the nut to the crankshaft pulley and turning the torque converter.

Fit all screws, 6, loosely. Insert the screws as far as the screw heads sit against the carrier plate. Tighten in accordance with: Tightening torque: Summary of tightening torques for specific components .

**Note! Remove the socket wrench from the crankshaft.**

#### **Lifting the engine/gearbox**



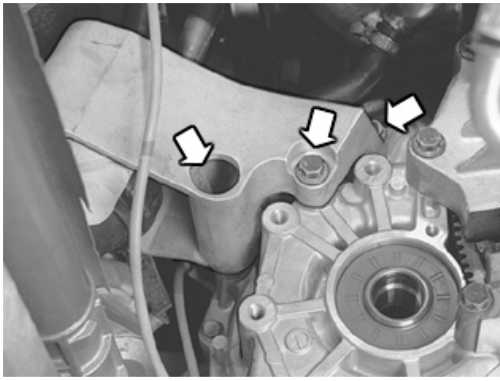
Lift up the engine/gearbox. Check that the engine/gearbox is in horizontal position.

Raise the vehicle.

#### **Installing the rear engine mounting**

Install:

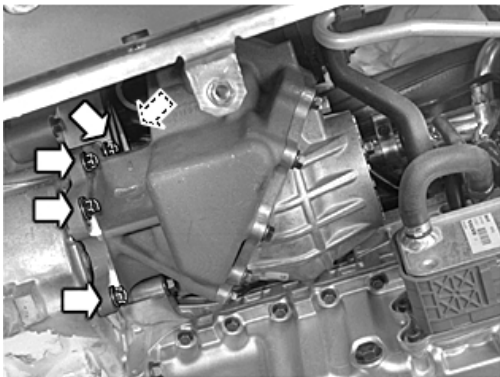
- the rear engine mounting, 3 x



- M10, to the gear box. Tighten the screw to the engine pad/steering gear loosely.

### Installing the angle gear

**Note! Only applies to vehicles with four-wheel drive AWD**



**Note! Before installing the bevel gear, lubricate the spline joint between the transmission and the bevel gear using grease. See:**

Check that the contact surfaces on the gearbox and the angle gear are clean.

Install the bevel gear. Use **new** screws. Tighten the screws alternately to light contact.

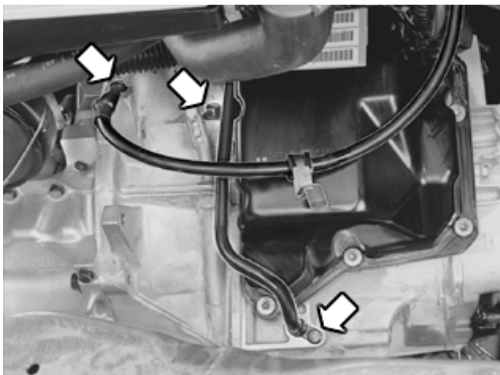
Refer to: Tightening torque

### Installing the lower oil pipe to the gearbox

Use a **new** O-ring.

Install:

- the oil pipe. Tighten the lower screw, 1 x M6.
- the upper screw (oil pipe/dipstick pipe). Tighten in accordance with: Tightening torque: Summary of tightening torques for specific components .
- a tie strap to the cable harness/oil pipe
- the ground cable to the engine.



### Installing the left-hand drive shaft to the gearbox and the wheel spindle



**Note! Check that the seal is fitted on the drive shaft.**

Fit the drive shaft joint sealing ring in accordance with: Seal CV joint housing, replacing .

Press the drive shaft joint in so that the lock ring engages its groove in the gearbox. Check by pulling in the joint housing.

Locate the drive shaft in the wheel hub. Install a **new** screw loosely in the drive shaft.

### Fitting the sub-frame to the body



**Note! Use new screws. Lubricate the screw threads.**

Applies to certain models.

Raise the sub-frame so that it remains approx. 150 mm before reaching the side member. Secure the servo line with the rubber clamp in the front on the top of the frame. Fit the screw loosely.

**Note! When the sub-frame is raised, make sure that the spring strut ball joint pin aligns in the link arm.**

Install:

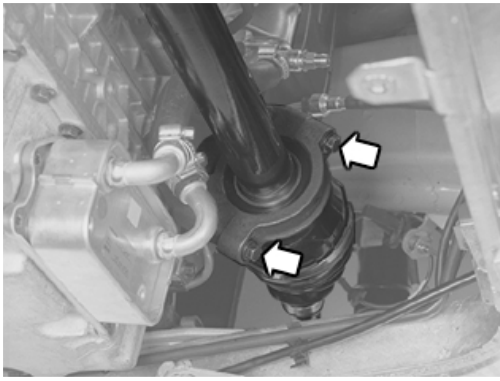
- the **new** screws and the support bracket at the back
- the bracket screws loosely.

Tighten the sub-frame screws to light contact.

Remove the mobile jack.

### Installing the right-hand drive shaft to the gearbox, wheel spindle and link arm

Fit the bearing cap to the drive shaft



support bearing, 2 x M8.  
Tighten.

**Note! Make sure that the seal is fitted on the drive shaft.**

Fit the drive shaft joint sealing ring in accordance with: Seal CV joint housing, replacing .

Locate the drive shaft in the wheel hub. Install a **new** screw loosely in the drive shaft.

Press the link arm down and align the spring strut ball joint pin in the link arm.

Position the mobile jack under the right-hand side of the sub-frame with light contact. Remove both sub-frame screws.

Install:

- **new** screws in the sub-frame

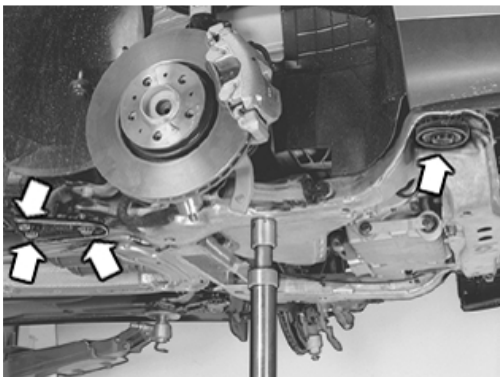
**Note! Lubricate the screws' threads.**

- the screws loosely in the support plate at the rear.

Tighten the sub-frame screws to light contact.

Remove the mobile jack.

**Tightening the sub-frame screws (both sides)**



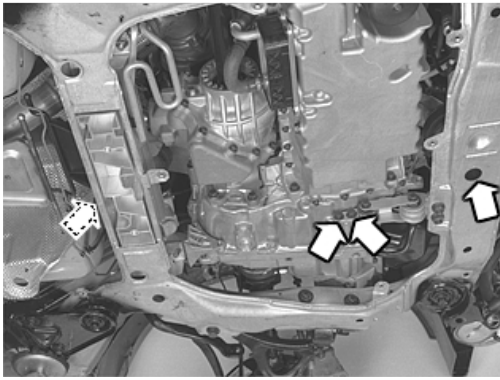
Tighten the screws on the left-hand side of the subframe first, followed by the right-hand side, as per Tightening torque: Summary of specific components and tightening torques .

Use: 951 2050 .

Tighten the screws, 4 x M10, to the sub-frame brackets.

**Fitting the screws for engine pads and the torque rod bracket in the gearbox**





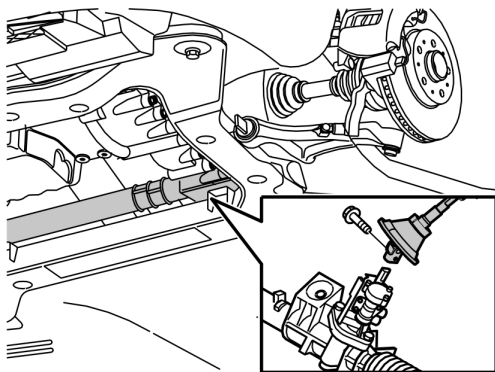
Install:

- the screws, M10, to the front and rear engine pads. Tighten

**Note! Use new screws.**

- the torque rod bracket to the transmission. Tighten. See Tightening torque:Summary of tightening torques for specific components .

**Installing the steering wheel shaft joint**



Align the steering wheel shaft joint on the steering gear.

Fit a **new** steering wheel shaft screw. Tighten in accordance with: Tightening torque:Summary of tightening torques for specific components .

Connect the cable to the stepper motor/solenoid.

Check the position of the tie rod in the steering gear in accordance with Gearbox, removing:Measuring the position of the tie rod in the steering gear .

**Installing the collision protection system over the steering gear**

**Note! Applies only to right-hand drive vehicles.**

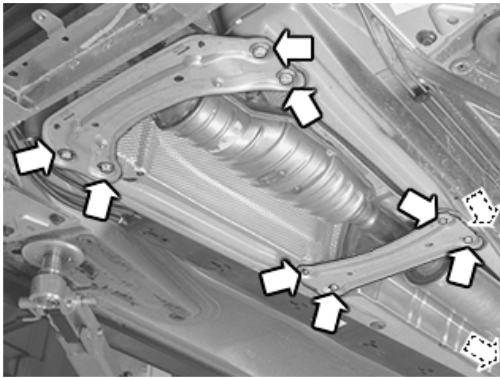
Fit the screws, 2 x M12. Tighten.



**Installing the crossmembers**

Install:

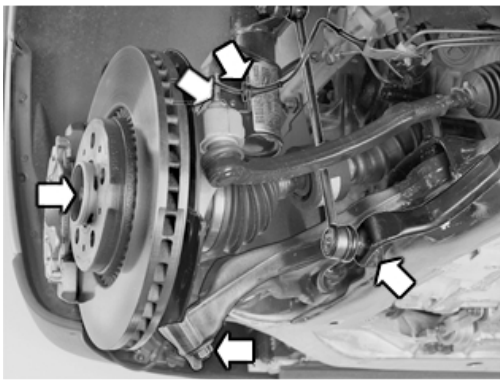
- the front crossmember and the



- brake pipe in their holders
- the other 2 crossmembers.

Tighten all M8 screws.

### Installing and tightening the front suspension components



Fit the nut to the ball joint pin. Counterhold the ball joint pin while tightening so that the gaiter does not turn. Use a **new** nut, M12. Tighten, see: Tightening torque:Summary of tightening torques for specific components .

For steel control arm, see: Ball joint, replacing

Tighten the drive shaft screw. Use a **new** screw. Counterhold with a screwdriver in the brake disc. Tighten as described in Tightening torque:Summary of tightening torques for specific components . Use: 951 2050 .

Fit on the left-hand side:

- the link to the anti-roll bar. Counterhold the ball joint pin while tightening so that the gaiter does not turn. Use a **new** lock nut. Tighten in accordance with: Tightening torque:Summary of tightening torques for specific components .
- the tie rod. Tighten in accordance with: Tightening torque:Summary of tightening torques for specific components .

Install:

- the ABS line to the bracket in the spring strut

- the wing liner with support plate and nuts.

### **Installing the cable conduit**

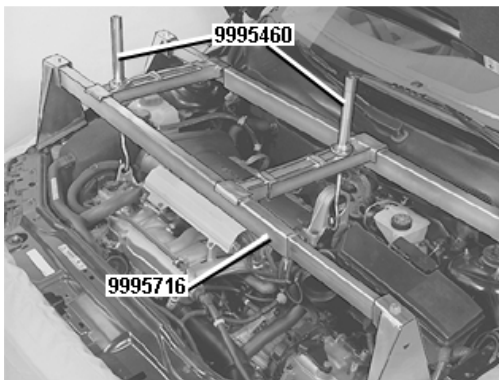
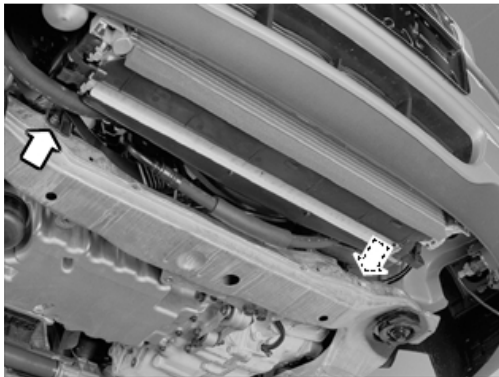
Install:

- the cable duct to the sub-frame
- the ground cable to the sub-frame
- auxiliary heater/parking heater to the bracket in the sub-frame and the fuel line to the brackets (if fitted to the vehicle)
- the front splash guard
- the splash guard under the engine
- the wheels. See Installing wheels .

### **Removing the lifting beam**

Lower the vehicle.

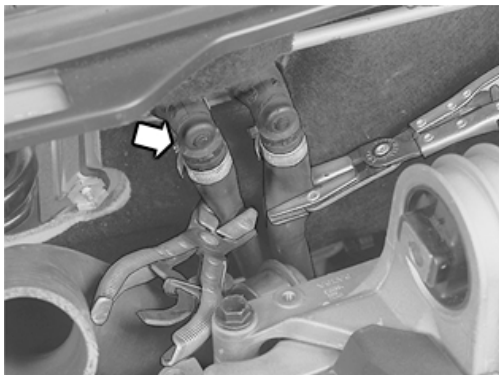
Remove the lifting beams and lifting hooks from the engine.



### **Installing the water hose**

Fit the water hose quick attachment to the heater.

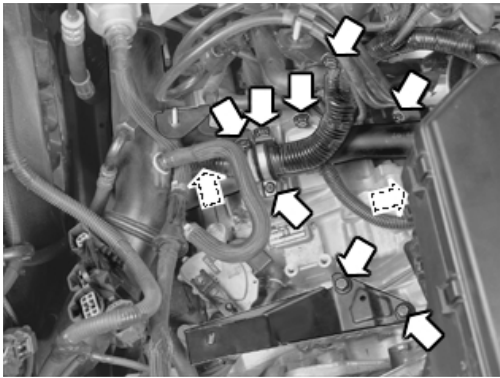
Remove the hose clips.



### **Fitting the remaining screws to the gearbox/starter motor**

Install:





- the screws, 3 x M10, to the gearbox/engine. Tighten
- the screws for the starter motor. Tighten. See: Tightening torque: Summary of tightening torques for specific components
- the bracket to the coolant hose-cable harness
- the bracket to the cable harness clamp and the bracket for the heated oxygen sensor (HO2S) connectors in the rear edge of the gearbox
- the clamp to the cable harness at the rear edge of the engine
- the bracket for the air cleaner (ACL), 2 x M10. Tighten (Applies only to B5254T4).

### Installing the gear selector cables and oil line

#### Install:

- the ground cable with bracket to the sub-frame
- the oil pipe to the gearbox
- the gear selector cables with the bracket, 2 x M8. Tighten.

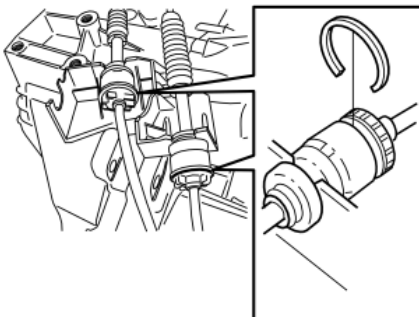


Connect the cable to the lever.  
Connect the gearbox connector and the bracket to the air cleaner (ACL) housing bracket.

Press the cable harness bracket onto the control system cover.

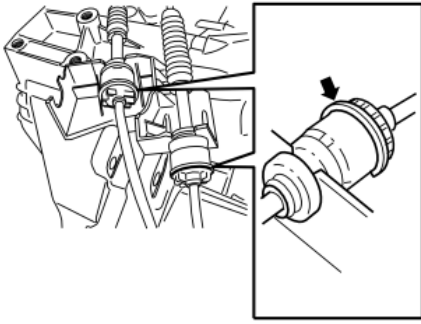
**Caution!** Check that the gearbox air bleed hose/valve is not trapped. Risk of overpressure in the gearbox.

### Installing the service clips



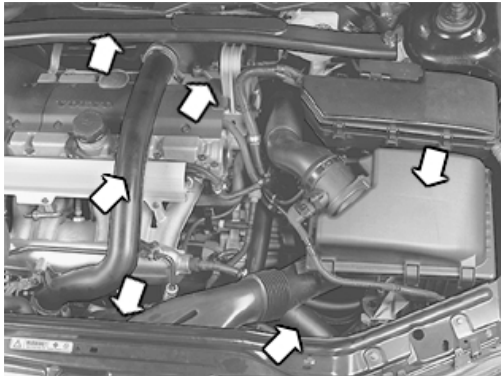
**Note!** The automatic transmission has one gear selector cable while the manual transmission has two cables.

Ensure that the gear selector cable is locked in position before installing the blue clip. Press the clip into place as illustrated.



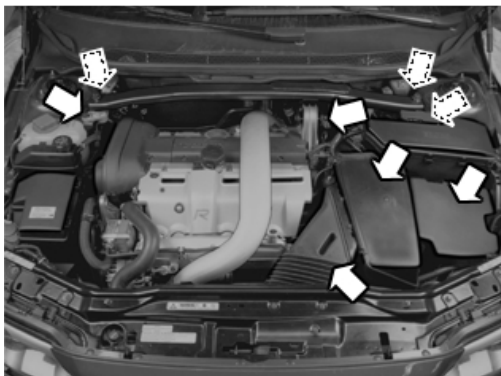
Check that the clip is positioned in the groove as illustrated.

### Installing engine compartment components



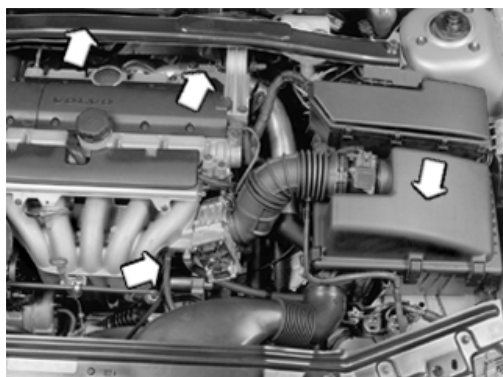
Applies only to turbocharged engines, fit:

- the control valve to the fan cover
- the charge air pipe over the engine
- the air cleaner (ACL) housing assembly with the intake manifold and connections
- the cover at the side of the air cleaner (ACL) housing (Applies only to B5254T4)
- the ground cable to the bracket on the engine (certain variants)
- the upper torque rod between the wheel housings. Tighten the screws, M10
- the screw, M12, to position rod/engine mounting. Tighten.



Applies only to naturally aspirated engines, fit:

- the air cleaner (ACL) housing with the intake manifold and preheating hose
- the vacuum hoses, 2, from the intake manifold to the control



- valves
- the ground cable to the bracket on the engine (certain variants)
- the upper torque rod between the wheel housings. Tighten the screws, M10
- the screw, 1 x M12, to the torque rod/engine mounting. Tighten.

### **Finishing**

#### **Installing the battery cable**

Install the battery cable. See Battery, disconnecting .

### **Check**

After work in the gearbox checking must be performed in accordance with: Gearbox replacement, post-checking .

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