

87: Air conditioning, B5254T2

V70 (00-08), 2004, B5254T2, AW55-50/51SN, L.H.D

9/5/2013

87: Air conditioning, B5254T2



PRINT

Magnet clutch AC compressor, replacing

Special tools:

999 5596
999 5597
999 5598
999 5599
999 5600
999 5602
999 7193

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.

Preparatory work

Warning! Follow the safety instructions for work on air conditioning systems. See: Refrigerant, safety regulations .

Note! First read the instructions covering slow and fast leaks. See Oil air conditioning (A/C) system, filling .

Note! When replacing a compressor, always replace the O-rings in pipes and quick-release connectors.

Note! Always plug the pipes and connections when working on the climate control system.

Disconnect the battery negative lead. See: Battery, disconnecting .

Drain the refrigerant from the system. See Refrigerant, draining .

Removal

Removing the auxiliaries belt

MY 1999-2000:

Remove the auxiliaries belt from the AC compressor acc.
to: Auxiliaries belt / belt tensioner, replacing .

MY 2001-2004:

Remove the auxiliaries belt from the AC compressor acc.
to: Auxiliaries belt / belt tensioner, replacing .

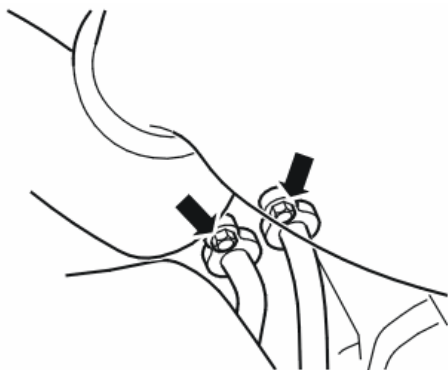
Model year 2005-

Remove the auxiliaries belt from the AC compressor acc.
to: Auxiliaries belt / belt tensioner, replacing Auxiliaries belt / belt tensioner, replacing .

Removing AC compressor

Note! The AC compressor is removed from below.

Loosen the screws, 2 pcs., for the AC compressor's low and high pressure hoses.



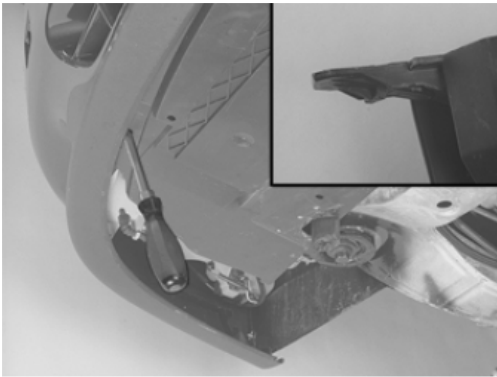
Removing the splash guard

Note! Install the front lift arms so that they do not block the sub-frame's support plates.

Raise the vehicle.

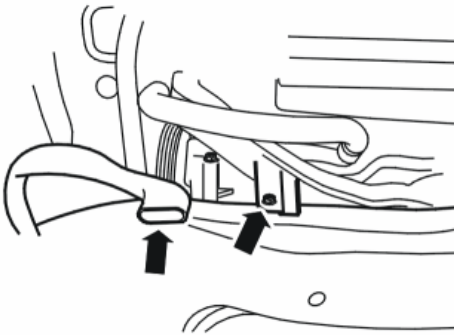
Loosen the protective cover

under the engine by removing the screws, 7 pcs.



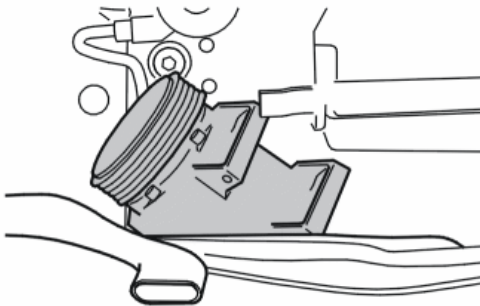
Remove the screws, 2 pcs., for the front protective cover.

Press in the catches in the cover's front edge and then pull backwards.



Remove the screw, 1 pc., for the cable channel and loosen the cable channel from the sub-frame.

On certain variants: remove or loosen the control module box's air channel from the sub-frame.



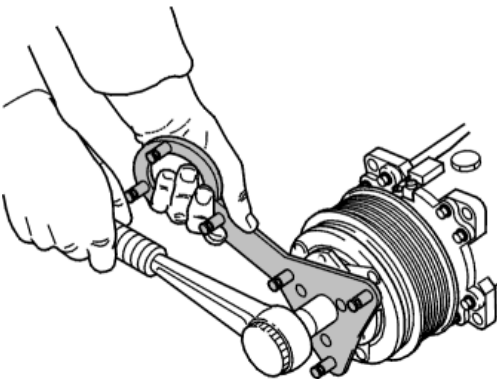
Remove:

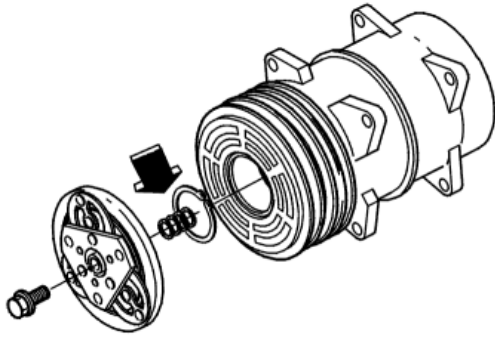
- low and high pressure hoses from the AC compressor and move them aside
- the connector for the AC compressor's magnet (solenoid) clutch
- the screws, 4 pcs., from the AC compressor.

Hold the cable channel to the side and remove the AC compressor by removing it between the sub-frame and the car body.

Removing the drive plate

Loosen the screw, 1 pc., for the drive plate using a counterhold: 999 5596 .



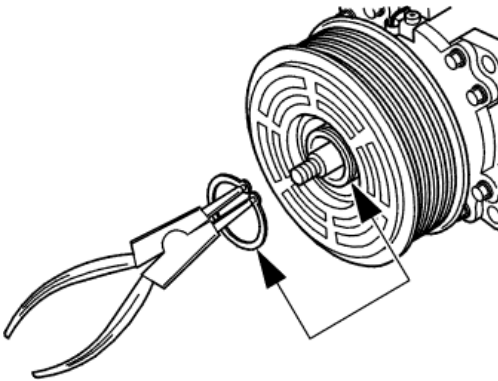


Loosen the drive plate with a puller:
999 5597 .

Note! Keep the shims.

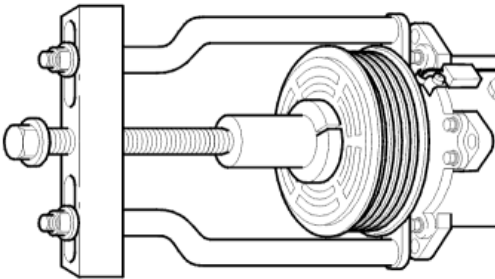
Removing belt pulley's lock ring

Remove the lock ring.



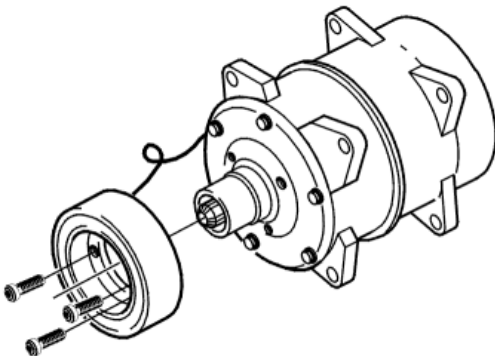
Removing the pulley

Pull loose the belt pulley with a puller:
999 5598 and sleeve: 999 5599 .



Removing the solenoid coil

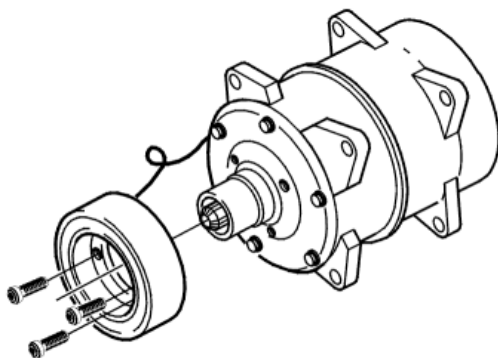
Remove the magnet coil.



Installation

Installing the solenoid coil

Install the screws, 3 pcs., for the new magnet coil (solenoid). Tighten with 5

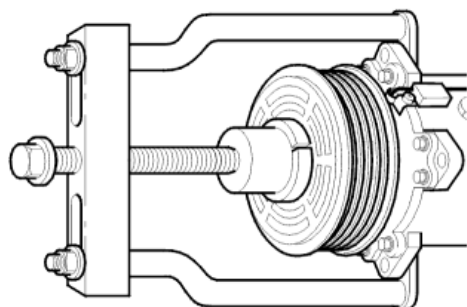


Nm.

Installing the pulley

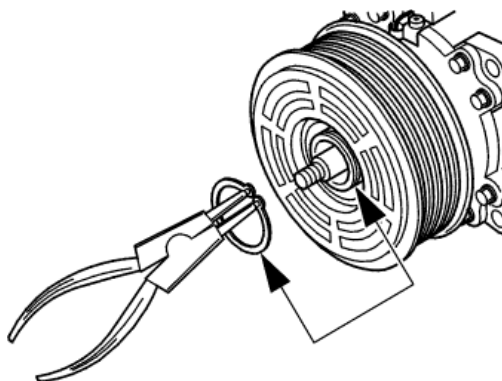
Install the new belt pulley with a puller: 999 5598 and sleeve: 999 5600 .

Note! Install the tools behind the AC compressor mounts.



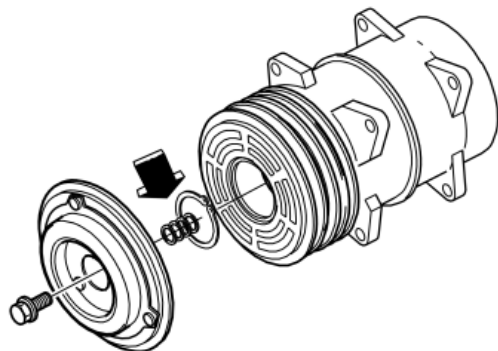
Installing the lock ring

Install the lock ring.



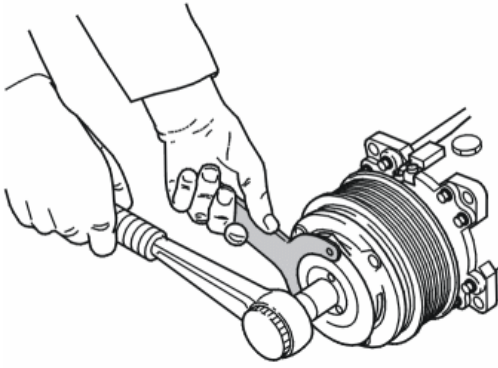
Installing the drive plate

Install the shims.



Install:

- the drive plate
- the screw, 1 pc., using a counterhold: 999 7193 and tighten with 13 Nm.



Checking the clearance

Check the clearance between the turning plate and the belt pulley with a feeler gauge.

The clearance should be 0.3-0.5 mm.
0.3 mm clearance all the way round
It must not be possible to insert 0.6 mm at any point.

If clearance is not within given values, replace the shims.

The following dimensions are available:

0.2 mm
0.3 mm
1.0 mm.

Installing the air conditioning (A/C) compressor

If necessary, fill oil in the AC compressor acc. to: Oil air conditioning (A/C) system, filling .

Hold the cable channel to the side and install the AC compressor by inserting it between the sub-frame and the car body.

Install the screws, 4 pcs. M8, for the AC compressor and tighten.

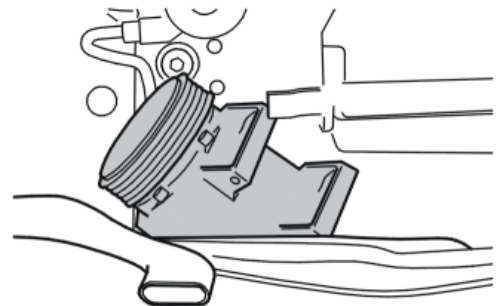
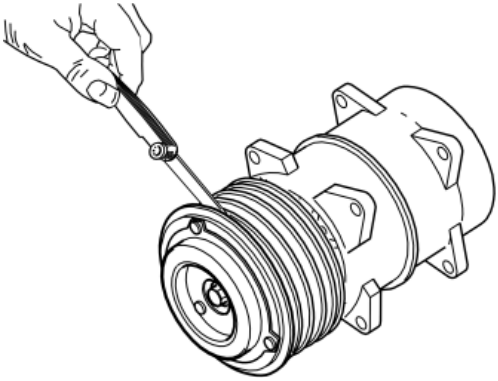
Note! Always use new O-rings lubricated with compressor oil.

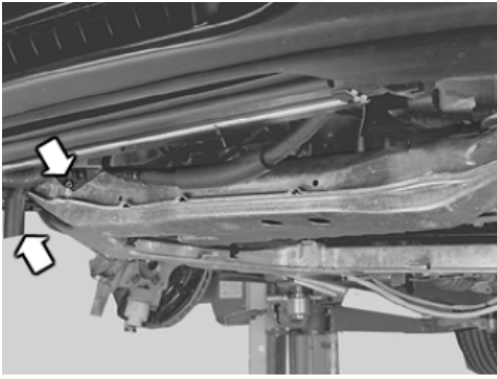
Install:

- AC compressor's low and high pressure hoses. On certain vehicle models, it may be easier to install and tighten the screws from above
- the magnetic clutch connector.

Install the cable channel on the sub-frame and bolt it down.

On certain variants, the cable channel is mounted on the control module box and





then on the sub-frame.

Installing the auxiliaries belt

MY 1999-2000:

Install the auxiliaries belt on the AC compressor acc. to: Auxiliaries belt / belt tensioner, replacing .

MY 2001-2004

Install the auxiliaries belt on the AC compressor acc. to: Auxiliaries belt / belt tensioner, replacing .

MY 2005

Install the auxiliaries belt on the AC compressor acc. to: Auxiliaries belt / belt tensioner, replacing Auxiliaries belt / belt tensioner, replacing .

Installing the battery negative cable

Fit the battery's negative cable in accordance with: Battery, disconnecting .

Refrigerant and leak detection

Vacuum pump side. See: Vacuum pumping .

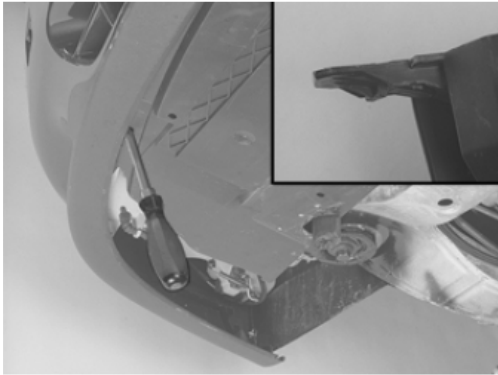
Fill the system with refrigerant. See: Refrigerant, filling .

Check for system leaks acc.
to: Leak tracing, fluorescent
tracing agent / UV lamp or
acc. to: Leak tracing,
fluorescent tracing agent / UV
lamp .

Installing the splash guard

Install:

- the catches in the protective casing's front edge and press forward
- the screws, 2 pcs., for the front protective cover.



Finishing

Installing the splash guard

Install:

- the protective cover under the engine
- the screws, 7 pcs., and tighten.

Lower the vehicle.

9/5/2013

PRINT