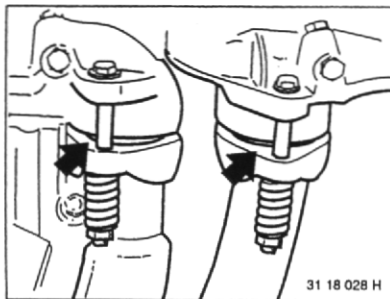


18 Exhaust System

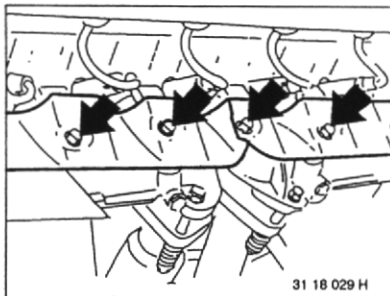
18 00 020	Exhaust assembly – remove and install	18-00/1
	• Exhaust pipes on engine – align	18-00/1
	• Exhaust assembly – remove	18-00/1
18 12 ...	Exhaust assembly – disassemble	18-12/1
	• Catalyst on muffler assembly, rear – unbolt	18-12/1
	• Final muffler, left – remove	18-12/1
	• Catalysts, left and right – unbolt	18-12/2
	• Oxygen sensors – remove and install	18-12/2
027	Final muffler, right – replace	18-12/3
18 21 511	Exhaust suspension parts – replace (exhaust assembly removed)	18-21/1
	• Exhaust suspension, center – replace	18-21/1
	• Exhaust suspension, rear – replace	18-21/1



18 00 020 REMOVING AND INSTALLING EXHAUST ASSEMBLY

Note:

If work has to be carried out on the exhaust assembly or car which influences the position of exhaust pipes to exhaust manifolds, these connections must be loosened and tightened again to the specified torque after finishing the work.

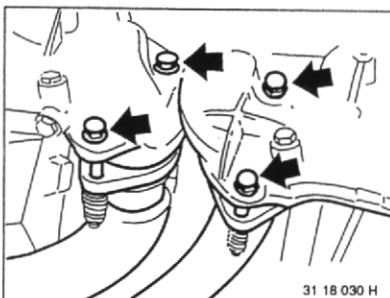


Aligning Exhaust Pipes on Engine

Unscrew engine splash guard. Remove windshield washing fluid tank partially. Unscrew heat shield on exhaust manifold.

Important!

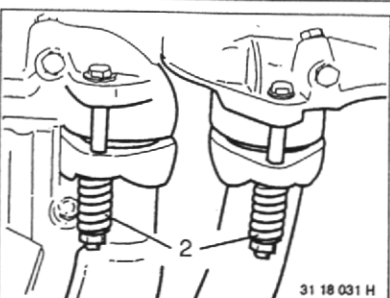
Don't bend heat shields. Tightening torque*.



Loosen bolts of exhaust pipe/manifold connections.

Important!

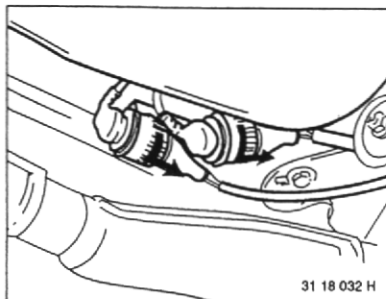
Tighten exhaust pipes only after installation of the complete exhaust assembly on the manifold.



Tightening Procedures:

Flatten springs (2) uniformly with a torque of 10 ± 2 Nm (7 ± 1.4 ft. lbs.). Loosen bolts by 1 and 1/2 turns again afterwards. Flanges must be aligned parallel. Springs must not be pressed flat.

* See Specifications

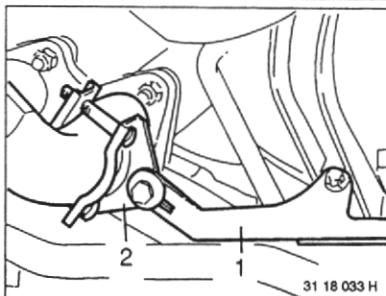


Removing Exhaust Assembly

Disconnect plug of oxygen sensors.

Important!

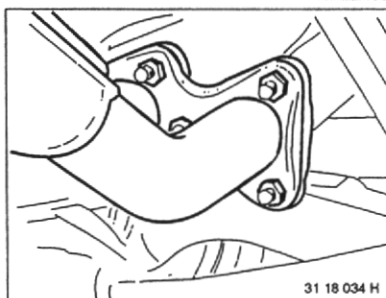
Mark oxygen sensors before pulling off — don't mix them up.



Unscrew bracket (1) on transmission. Only loosen and slide clamps (2) away.

Installation:

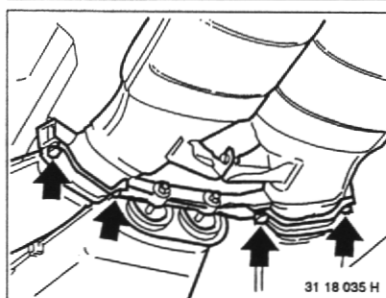
Tightening torque*.



Unbolt exhaust assembly on exhaust pipes.

Installation:

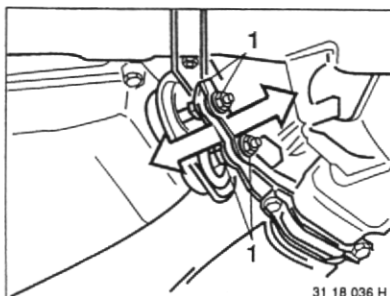
Check gaskets, replacing if necessary. Replace self-locking nuts. Tightening torque*.



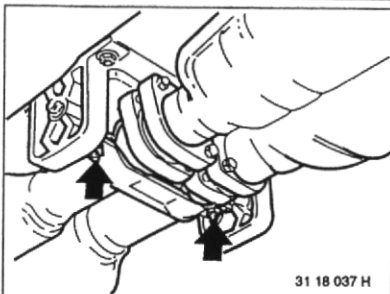
Unscrew suspension on transmission at catalyst.

* See Specifications

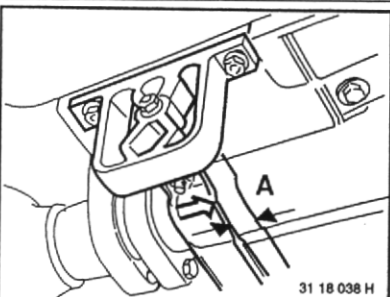
18-00/2



Installation:
Mount exhaust assembly without tension by adjusting with nuts (1).
Tightening torque*.



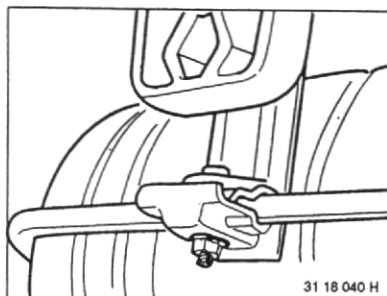
Support exhaust assembly from underneath with a lifting fixture (weight = approx. 55 kg / 120 lbs.).
Unscrew suspension on catalyst at rear.



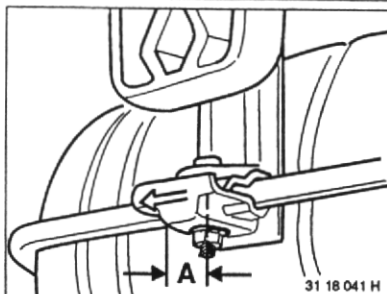
Installation:
Preload rubber mount in forward direction by distance A = 10 mm (0.394").



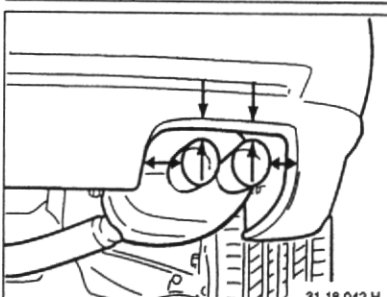
Unscrew all rear suspension points.
Remove exhaust assembly from underneath.



Installation:
Arrangement of clamp.



Installation:
Preload rubber mount in forward direction by distance A = 15 mm (0.591").
Tightening torque*.



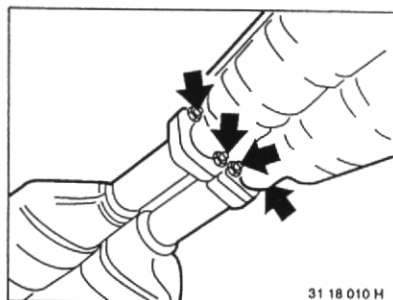
Installation:
Check position of tailpipes to the body openings.
If applicable, loosen flanges and align the exhaust assembly.

18 12 ... DISASSEMBLING EXHAUST ASSEMBLY

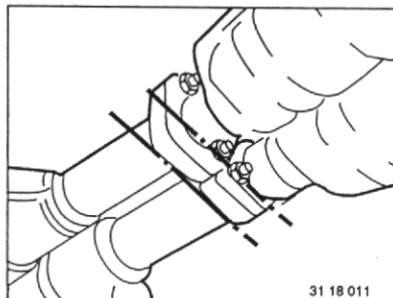
- Disconnecting Catalyst on Muffler Assembly at Rear

Note:

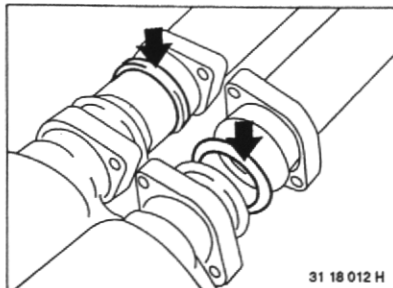
Tighten all connections only after complete installation or loosen again, in order to avoid tension on the exhaust assembly installed in the car.



Unscrew flange at left and right.



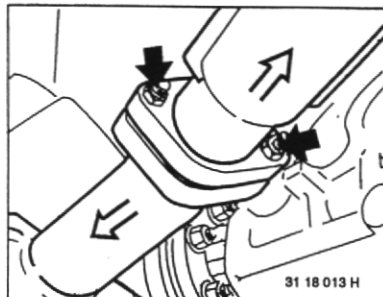
Installation:
Check position of flanges.
Tighten bolts uniformly.
Gap between flanges must be aligned parallel.
Tightening torque*.



Disconnect muffler assembly.

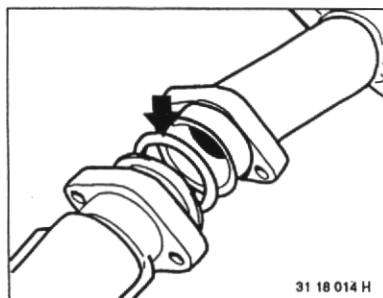
Installation:
Check seals, replacing if necessary.

* See Specifications

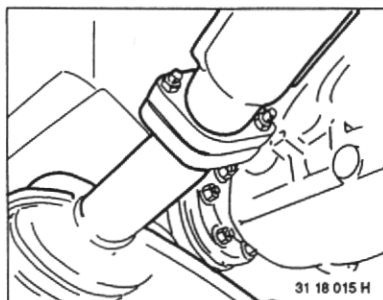


- Unbolting Left Rear Final Muffler

Unbolt flange.
Take off muffler.



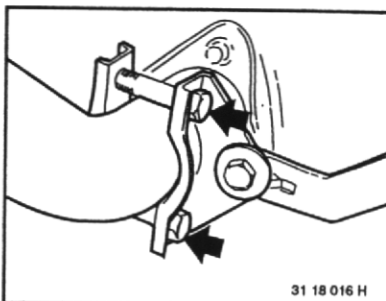
Installation:
Check seal, replacing if necessary.



Installation:
Check position of flanges.
Tighten bolts uniformly.
Gap between flanges must be aligned parallel.
Tightening torque*.

* See Specifications

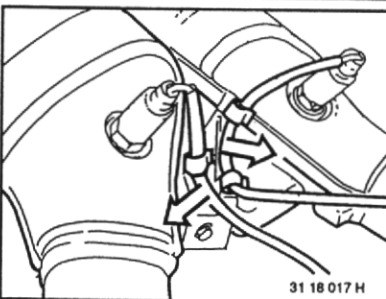
18-12/2



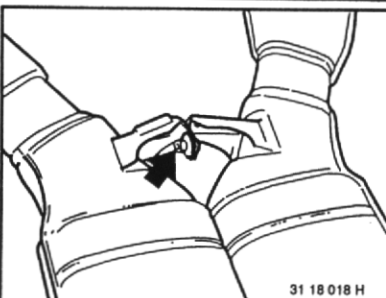
• Disconnecting Catalysts Left and Right

Unscrew clamp.

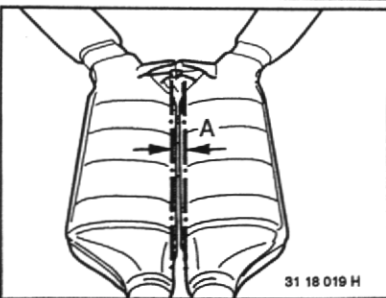
Installation:
Tighten clamp only after installation of the complete assembly.
Tightening torque*.



Take electric leads for oxygen sensors out of the holders.

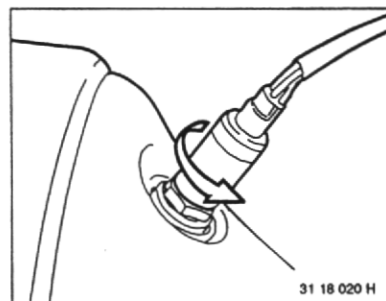


Unscrew connection.



Installation:
There must be distance A of at least 6 mm (0.236") between both catalysts.

* See Specifications



• Removing and Installing Oxygen Sensors

Unscrew oxygen sensor.

Installation:
Coat threads with Anti-Seize**. Tighten oxygen sensor with torque of 55 ± 5 Nm (40 ± 3.5 ft. lbs.).

Note:
Never clean or let oxygen sensors get in contact with lubricants.
Protect oxygen sensors when undercoating a car.

** Source of Supply: HWB

18-12/3

18 12 027 REPLACING RIGHT FINAL
MUFFLER

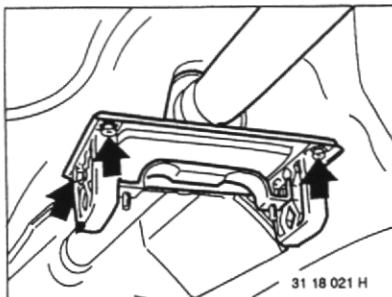
Remove following parts:

- Muffler assembly
- Mark cutting point according to new final muffler
- Cut off exhaust

Remove complete muffler assembly.
Align together with an additional sleeve
and tack weld at several points with an
Inert gas welder.

Weld the removed muffler assembly
with MAG or VIG and Inert gas K 18.
Welding wire 0.8 mm dia.; material
1.4316, 1.4370 or 1.4551.

Install complete muffler assembly.

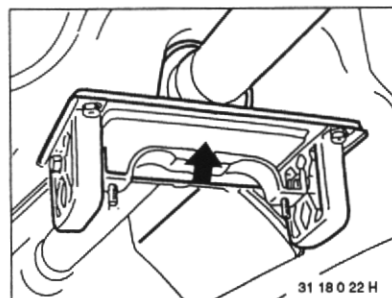


18 21 511 REPLACING ALL EXHAUST SUSPENSION PARTS
– Exhaust Assy. Removed –

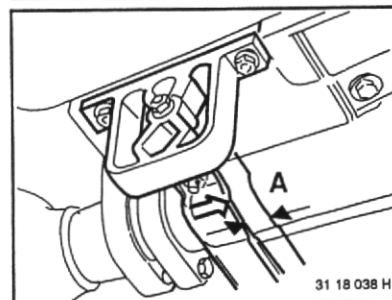
- Replacing Center Exhaust Suspension

Unscrew holder.
Unscrew rubber mount.

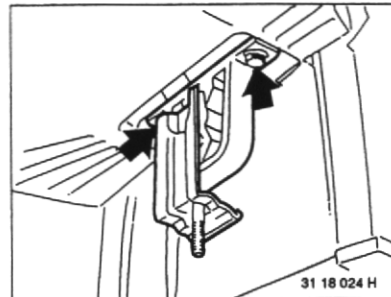
Installation:
Tighten holder only after installation of the complete exhaust assembly.



Installation:
Check reinforcement plate underneath the rubber mount.



Installation:
Preload rubber mount forward by distance $A = 10 \text{ mm}$ (0.394") when mounting on the exhaust.



- Replacing Rear Exhaust Suspensions

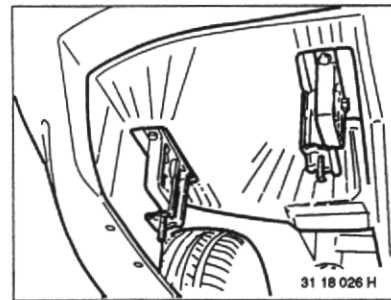
Unscrew rubber mount and holder.

Important!
Size of bolts = M 8 x 16 mm.
Longer bolts would have contact on the battery from underneath.

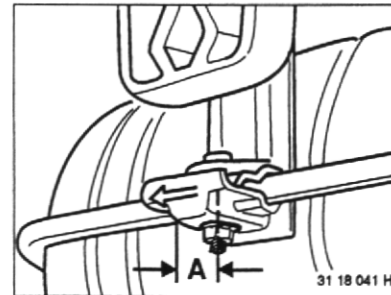


Unscrew holder.

Installation:
Align holder vertically.



Arrangement of rear suspensions



Installation:
Preload rubber mount forward by distance $A = 15 \text{ mm}$ (0.591") when mounting on the exhaust.