

Component Procedures: Muffler

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Component Procedures: Muffler

Parts and Labor (itype_189)

Parts

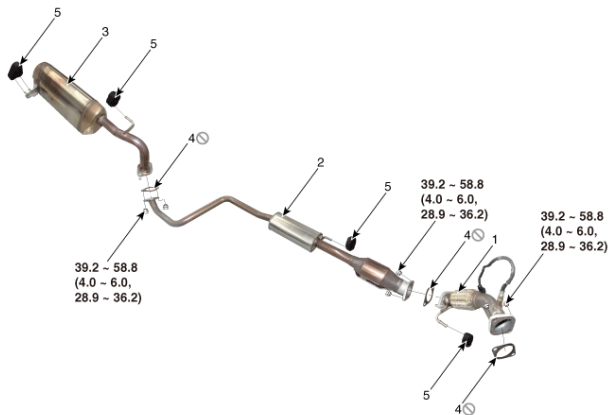
Qualifier	Part #	Name	Price	Note
Exhaust System > Muffler	28710F3400	Rear	718.61	Tailpipe Included With Rea?
Exhaust System > Muffler > C?	28600F3500	Emission Sulev	2068.66	Tailpipe Included With Rea?
Exhaust System > Muffler > C?	28600F3510	Emission Ulev	1838.87	Tailpipe Included With Rea?
Exhaust System > Muffler > C?	28600F2500	Korea Built	1669.90	Tailpipe Included With Rea?
Exhaust System > Muffler > C?	28600F3500	Us Built	2068.66	Tailpipe Included With Rea?
Exhaust System > Muffler > C?	28600F2510	Korea Built	1344.03	Tailpipe Included With Rea?
Exhaust System > Muffler > C?	28600F3510	Us Built	1838.87	Tailpipe Included With Rea?
Exhaust System > Muffler > F?	28610F2420	Korea Built	235.00	Tailpipe Included With Rea?
Exhaust System > Muffler > F?	28610F3450	Us Built	861.92	Tailpipe Included With Rea?
Exhaust System > Muffler > R?	28710F2400	Korea Built	516.71	Tailpipe Included With Rea?
Exhaust System > Muffler > R?	28710F3400	Us Built	718.61	Tailpipe Included With Rea?

Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Exhaust System > Muffler & Pipe Assembly, R&R?	B	0.7	0.0
Remove & Replace	Exhaust System > Muffler, R&R > Front	B	1.0	0.0

Muffler - Components and Components Location (Article 45398)

- Components



Tightening torque : N.m (kgf.m, lb-ft)

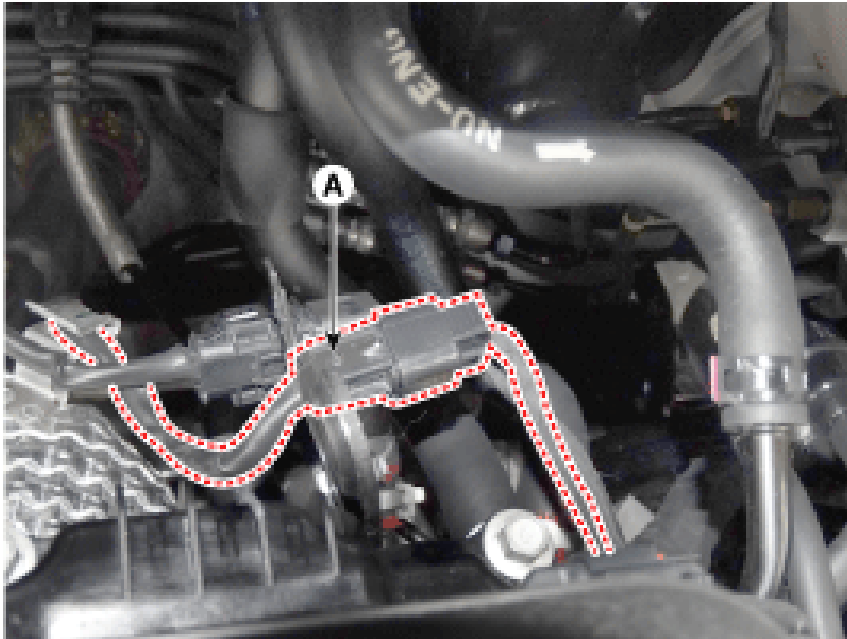
1. Front muffler 2. Catalytic converter & center muffler assembly 3. Main muffler 4. Gasket 5. Hanger

Muffler - Repair Procedures (Article 45399)

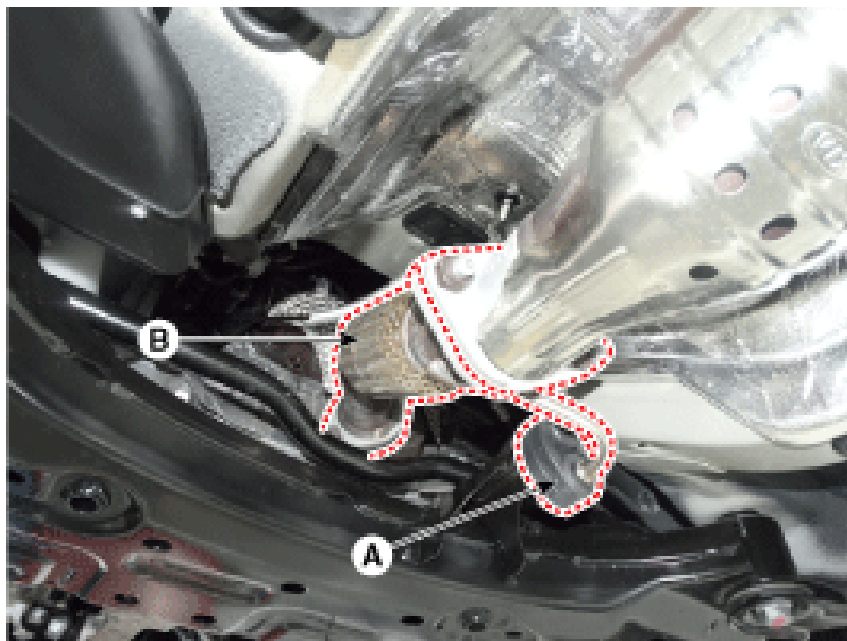
- Removal and Installation

Front Muffler

- Disconnect the battery negative terminal.
- Disconnect the oxygen sensor connector (A).



- Detach the rubber hanger (A) from the front muffler.
- Remove the front muffler (B). Tightening torque : 39.2 - 58.8 N.m (4.0 - 6.0 kgf.m, 28.9 - 43.4 lb-ft) When installing, replace with new gaskets.

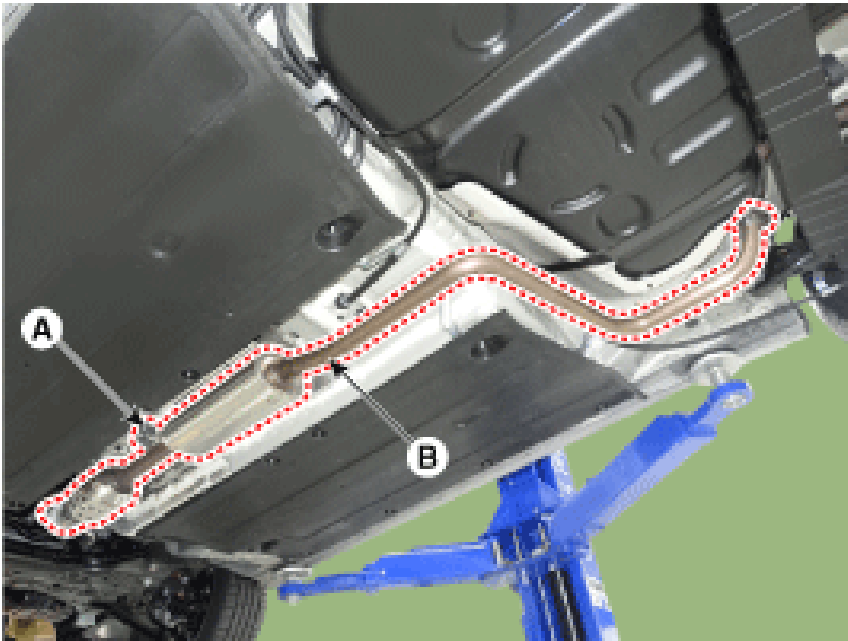


When installing, replace with new gaskets.

NOTICE

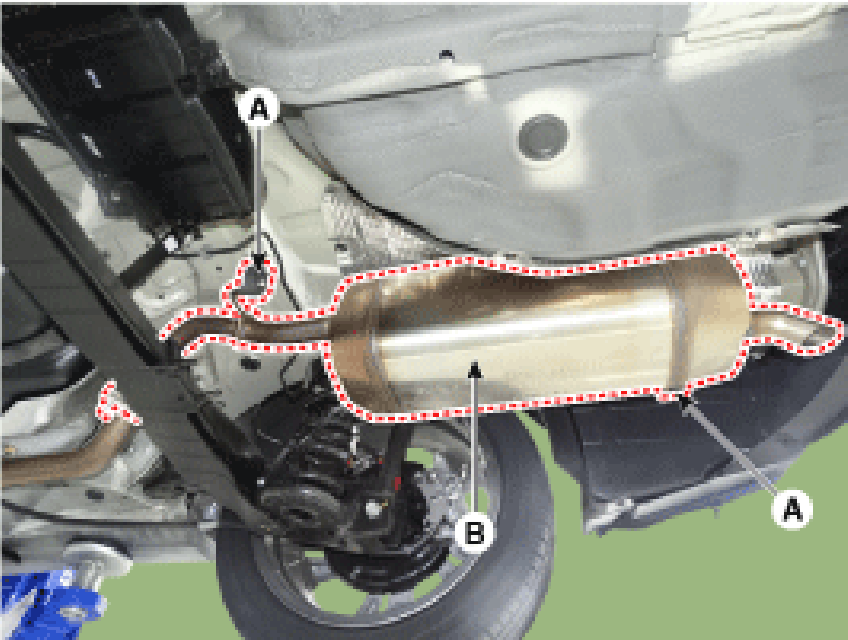
- When installing, replace with new gaskets.
 - Install in the reverse order of removal.
- Center Muffler
- Detach the rubber hanger (A) from the center muffler.

- Remove the catalytic converter & center muffler (B). When installing, replace with new gaskets.



Main Muffler

- Detach the rubber hangers (A) from the main muffler.
- Remove the main muffler (B). When installing, replace with new gaskets.

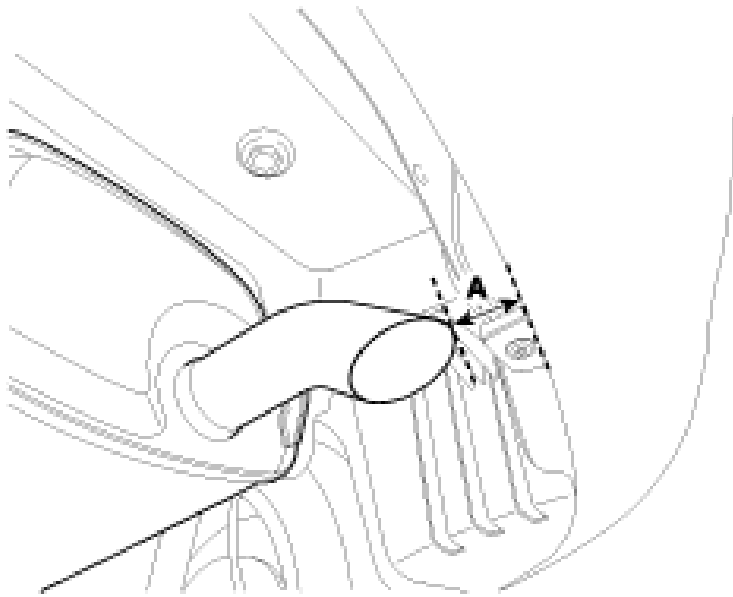


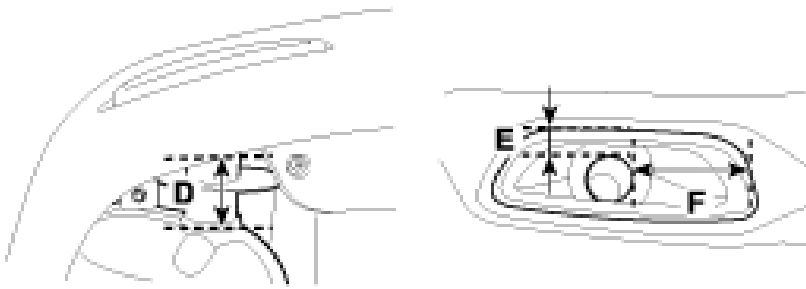
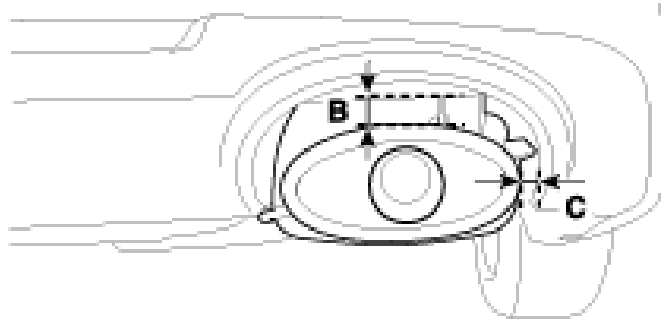
Replacement procedure of center muffler using clamp

- Check that the clamping part of the center muffler assembly is damaged or deformed. If the muffler is too corroded to clamp, replace the center muffler assembly.

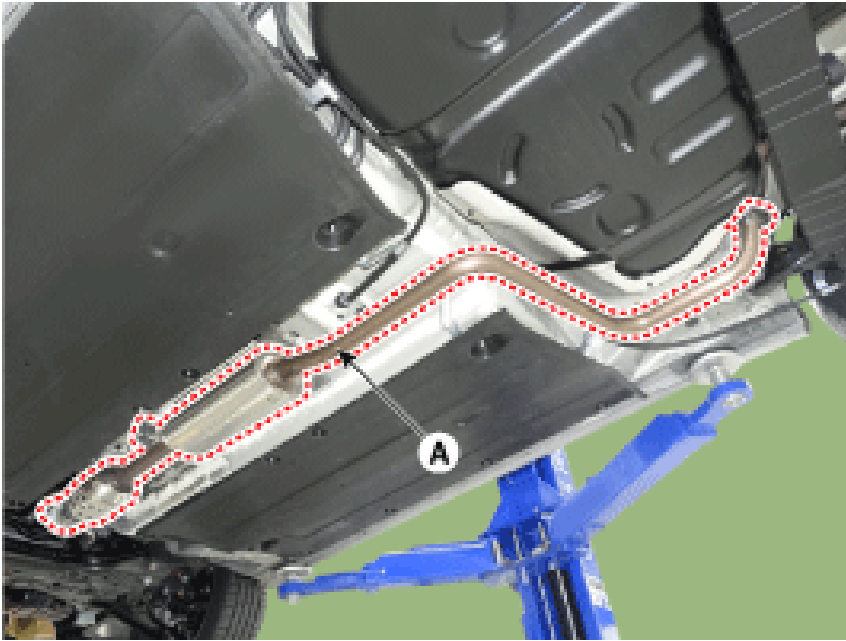


- Record the gap (A, B, C, D, E, F) between the tail pipe (or tail trim) and the rear bumper. [Pipe type]
[Trim type] [Bumper-integrated trim type]

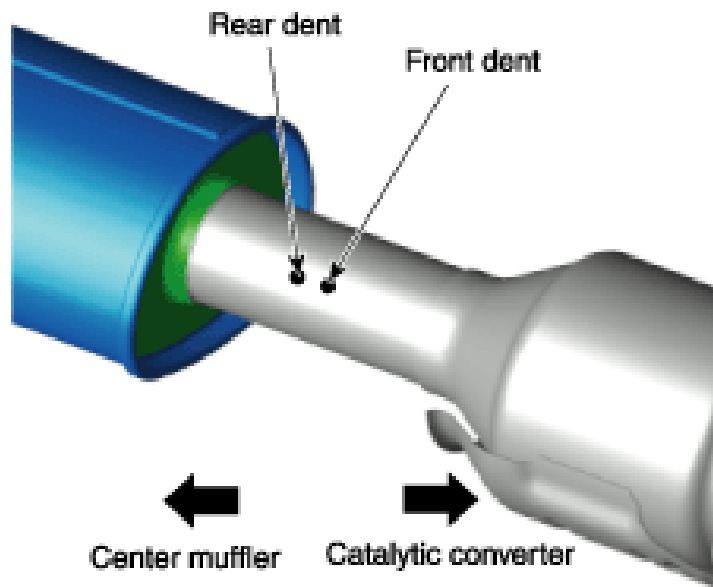




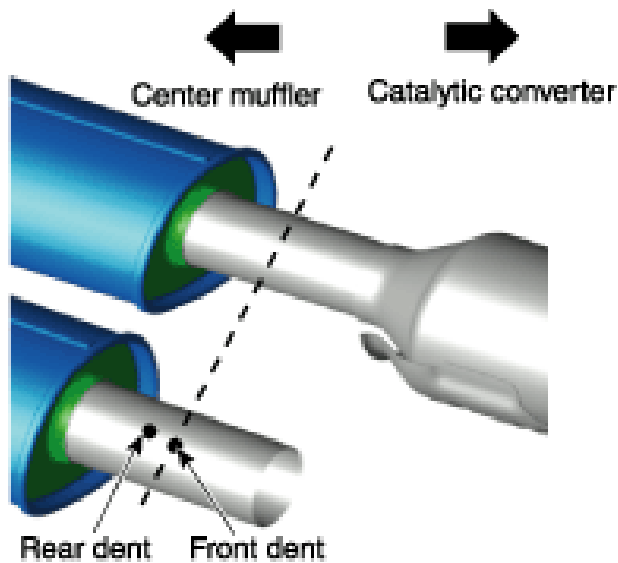
- Remove the catalytic converter & center muffler (A).



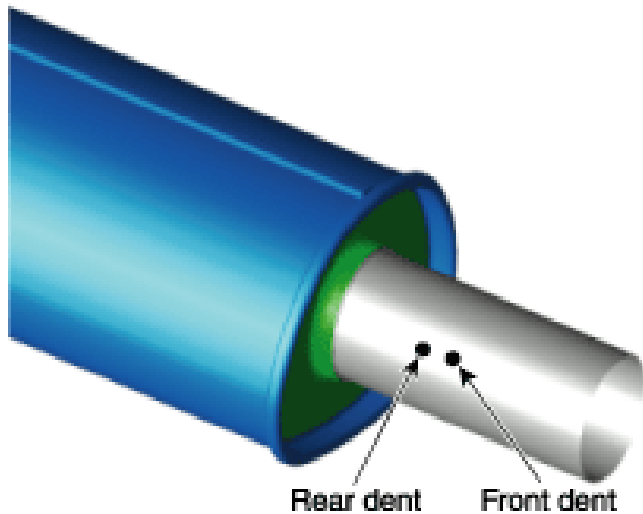
- Cut the center muffler as the instruction below. [With dent] Cut the front dent of the muffler. [Without dent] Cut the muffler by referring to the front dent of A/S muffler as shown in the image below. [A/S muffler] Cut the rear dent of the A/S muffler. To prevent a leak, remove the rust on the clamping part or the burr on the cutting part. Cut the pipe vertically. Pipe cutter available to cut the pipe vertically . Use a hacksaw as the procedure below, if a pipe cutter is unavailable. Mark the cutting position to cut the pipe vertically. Cut the pipe along the marking line by using hacksaw.
- Cut the front dent of the muffler.



- Cut the muffler by referring to the front dent of A/S muffler as shown in the image below.



- Cut the rear dent of the A/S muffler.



To prevent a leak, remove the rust on the clamping part or the burr on the cutting part. Cut the pipe vertically.

- To prevent a leak, remove the rust on the clamping part or the burr on the cutting part.

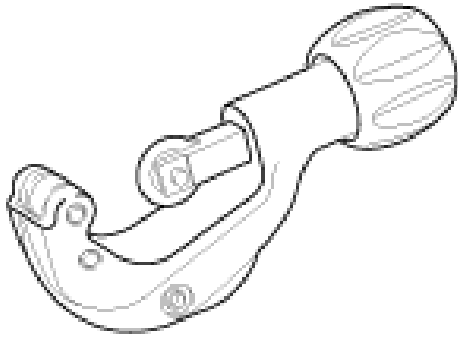
- Cut the pipe vertically.

Pipe cutter available to cut the pipe vertically . Use a hacksaw as the procedure below, if a pipe cutter is unavailable. Mark the cutting position to cut the pipe vertically. Cut the pipe along the marking line by using hacksaw.

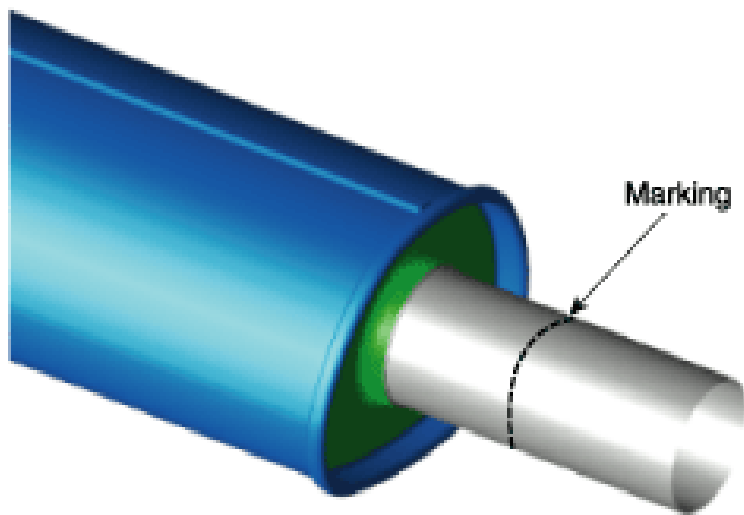


Information

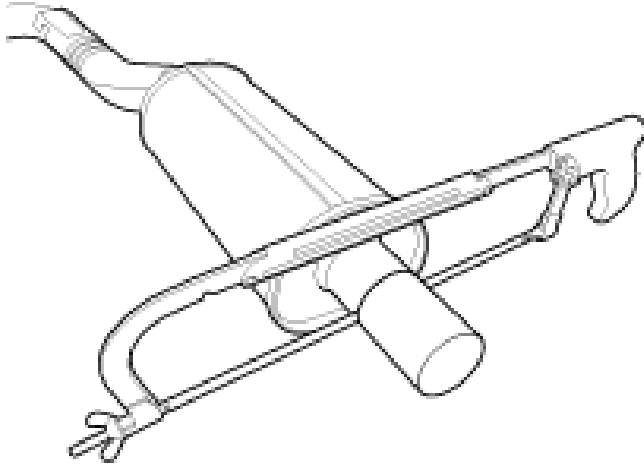
- Pipe cutter available to cut the pipe vertically .



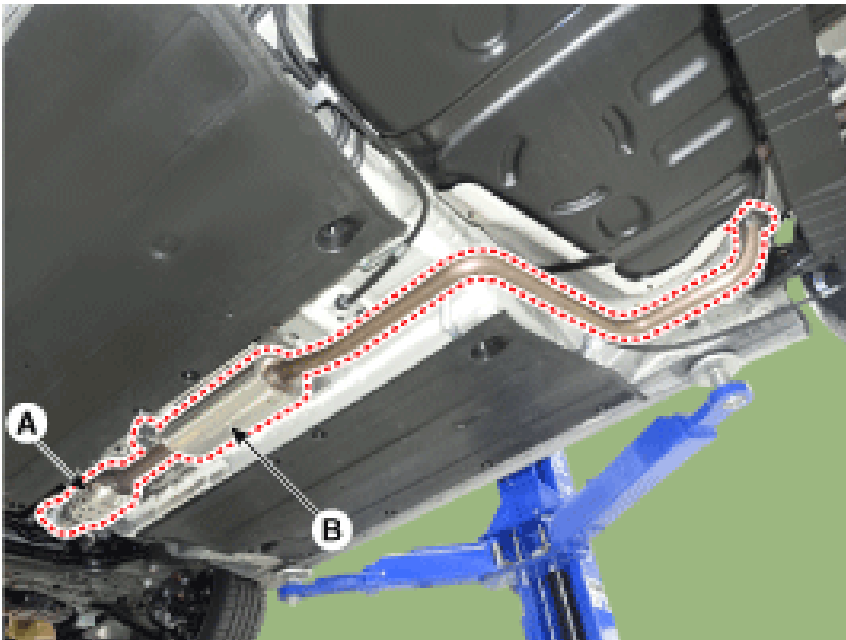
- Use a hacksaw as the procedure below, if a pipe cutter is unavailable.
- Mark the cutting position to cut the pipe vertically.



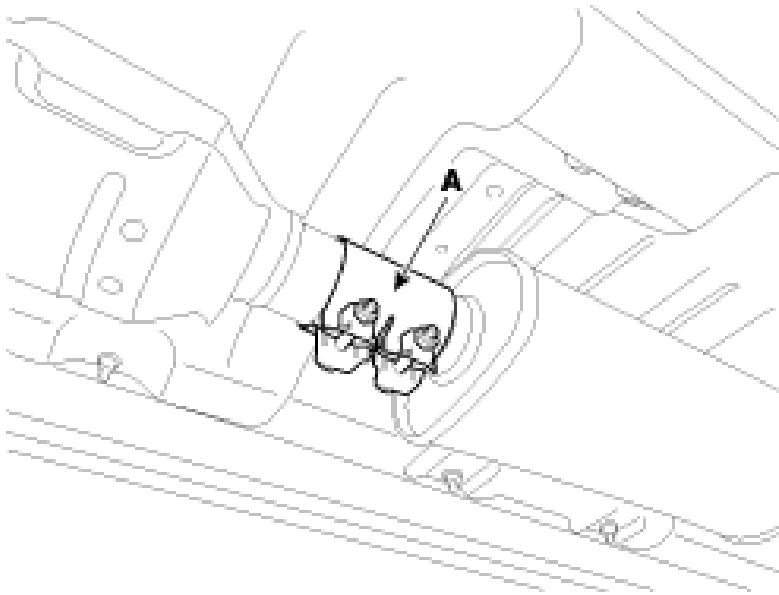
- Cut the pipe along the marking line by using hacksaw.



- Install the center muffler. Install the catalytic converter (A) and the center muffler (B) for A/S by tightening the nuts lightly, not completely. When installing the muffler, replace the gasket with new one. Put the clamp (A) between the cutting part of each pipe and tighten the clamp lightly, not completely. Tighten the catalytic converter and the center muffler with specified torque. Tightening torque : 39.2 - 58.8 N.m (4.0 - 6.0 kgf.m, 28.9 - 43.4 lb-ft) Compare the gap between the tail pipe(or tail trim) and the rear bumper with the record measured before removing the center muffler assembly. If the tail pipe is installed differently compared to the initial position, the bumper might be damaged by the pipe heat or interfere between the tail pipe and the rear bumper. Do not tighten the clamp at a time. Tighten the clamp nuts to the specified torque, by turns. Tightening torque : 17.6 - 23.5 N.m (1.8 - 2.4 kgf.m, 13.0 - 17.4 lb-ft) Do not reuse the clamp that was tightened completely. It may cause leak to reuse the clamp that was tightened completely.
- Install the catalytic converter (A) and the center muffler (B) for A/S by tightening the nuts lightly, not completely. When installing the muffler, replace the gasket with new one.



- When installing the muffler, replace the gasket with new one.
- When installing the muffler, replace the gasket with new one.
 - Put the clamp (A) between the cutting part of each pipe and tighten the clamp lightly, not completely.



- Tighten the catalytic converter and the center muffler with specified torque. Tightening torque : 39.2 - 58.8 N.m (4.0 - 6.0 kgf.m, 28.9 - 43.4 lb-ft)
- Compare the gap between the tail pipe(or tail trim) and the rear bumper with the record measured before removing the center muffler assembly. If the tail pipe is installed differently compared to the initial position, the bumper might be damaged by the pipe heat or interfere between the tail pipe and the rear bumper. If the tail pipe is installed differently compared to the initial position, the bumper might be damaged by the pipe heat or interfere between the tail pipe and the rear bumper.
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All Technical Service Bulletins (itype_100)

Tsbs

- CENTER MUFFLER ASSEMBLY REPLACEMENT (20-EM-001H, 2020/02/04)