



Mercedes W123 Thermostat Housing Gasket, Diesel Replacement

If you see a leak from the side of the cylinder head, just ahead of the exhaust manifold, it's likely your thermostat housing gasket. Learn to replace it here.

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INTRODUCTION

No one likes a leaky house! Your thermostat is no different. So fix your leaky thermostat housing gasket now and keep your engine clean and dry on the outside, wet on the inside... As always when dealing with automotive fluids you should wear the proper protective gear, such as gloves and glasses. Also be sure to catch the fluid properly and dispose of it safely and in an environmentally sound way!



TOOLS:

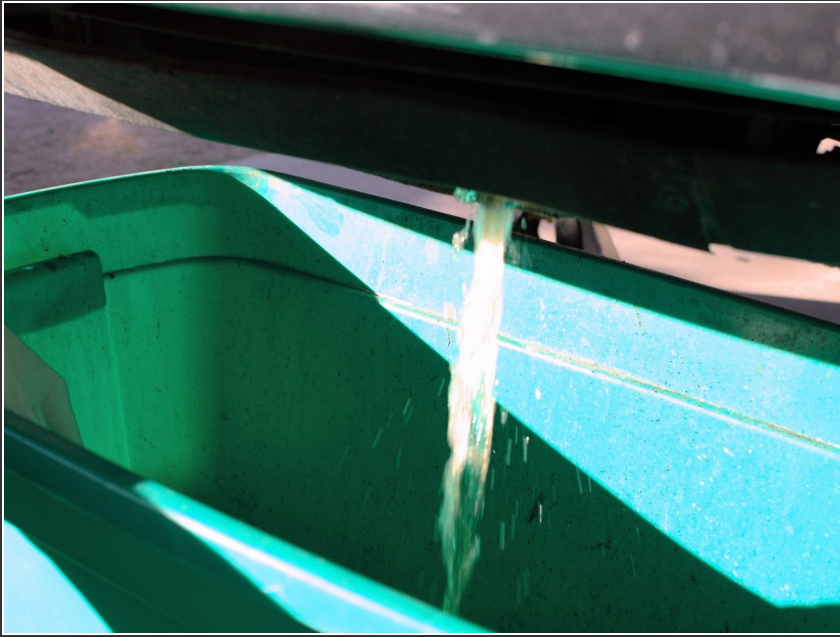
- [13mm Socket](#) (1)
- [Socket Wrench](#) (1)
- [10mm Wrench](#) (1)
- [10mm Socket](#) (1)
- [Drain Pan](#) (1)



PARTS:

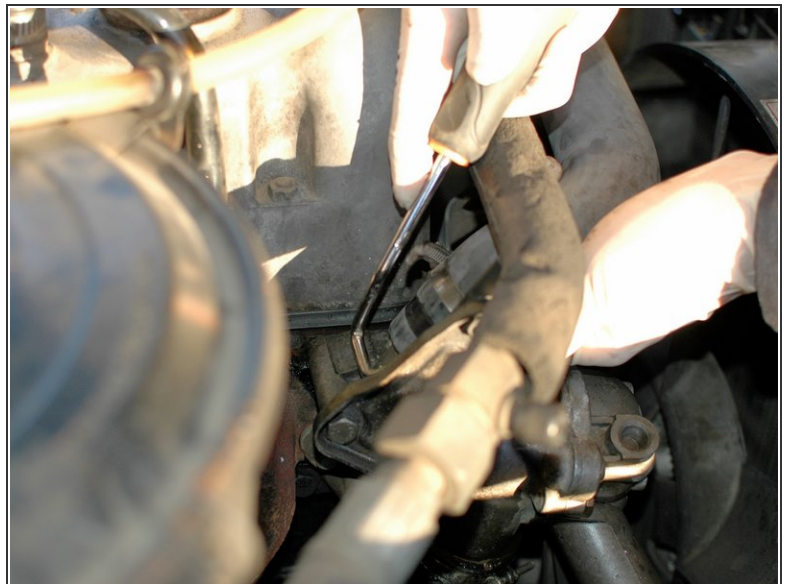
- [W123 Diesel Thermostat Housing Gasket](#) (1)
part # 6162030280
- [Penetrating Lubricant](#) (1)
- [Gasket Sealer](#) (1)

Step 1 — Thermostat Housing Gasket, Diesel



- Start by draining your coolant as [described in the coolant change guide](#).

Step 2



- Use a Phillips head screw driver to loosen the hose clamp on the upper coolant hose where it attaches to the top of the thermostat housing.
- Use a hose puller to loosen and remove the hose from the housing. It can remain attached to the radiator.

Step 3



- Use a Phillips head screw driver to loosen the hose clamp on the lower coolant hose where it attaches to the long lower neck of the thermostat housing.
- Use a hose puller to loosen and remove the hose. It can stay attached to the radiator.

Step 4



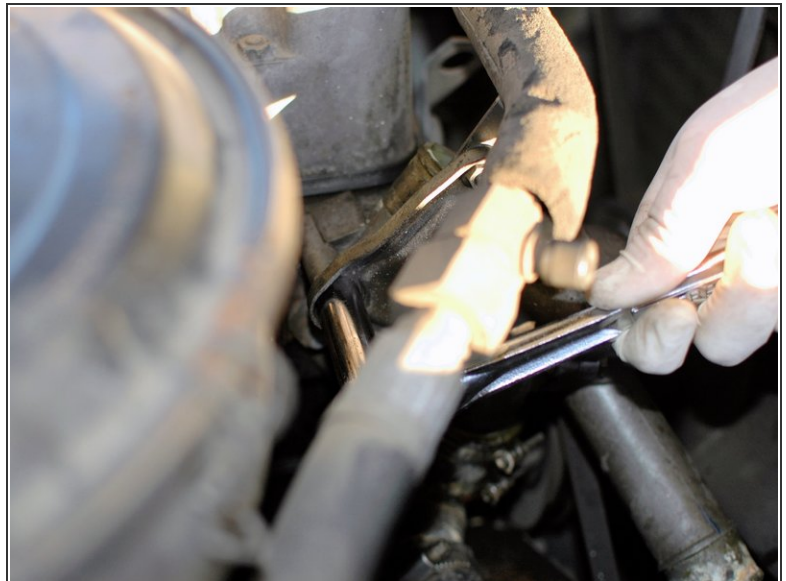
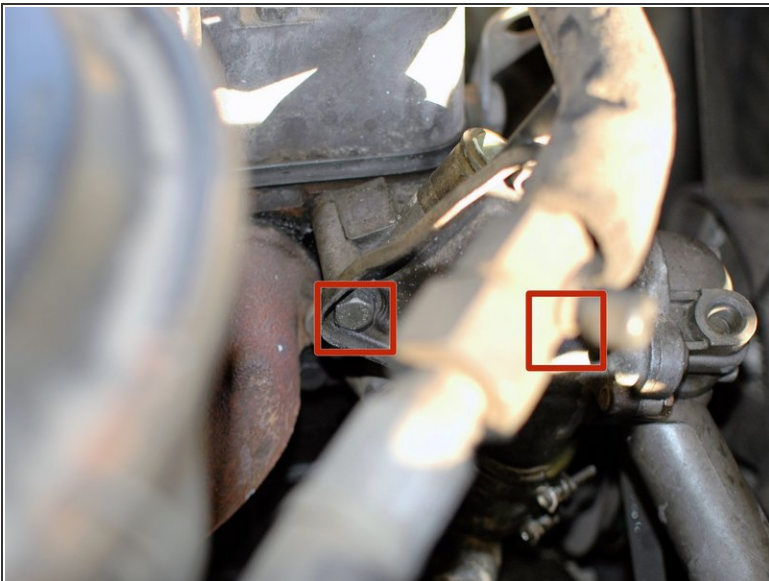
- Use a Phillips head screw driver to loosen the upper of the two hose clamps on the short coolant hose below the thermostat housing.
- If you'd like to replace this short hose while you have the thermostat housing out, see the [replacement guide for the short cooling bypass hose](#).

Step 5



- The upper A/C line, the one covered in foam, travels across the top of the housing. It attaches to the housing via a bracket, which acts as one of its mounts.
- To start the removal of the housing you'll need to detach the A/C line from the bracket. It's held in place with a 10mm bolt and nut.
- Place a 10mm socket on the nut side, and a 10mm box end wrench on the bolt side, and back out the bolt.

Step 6



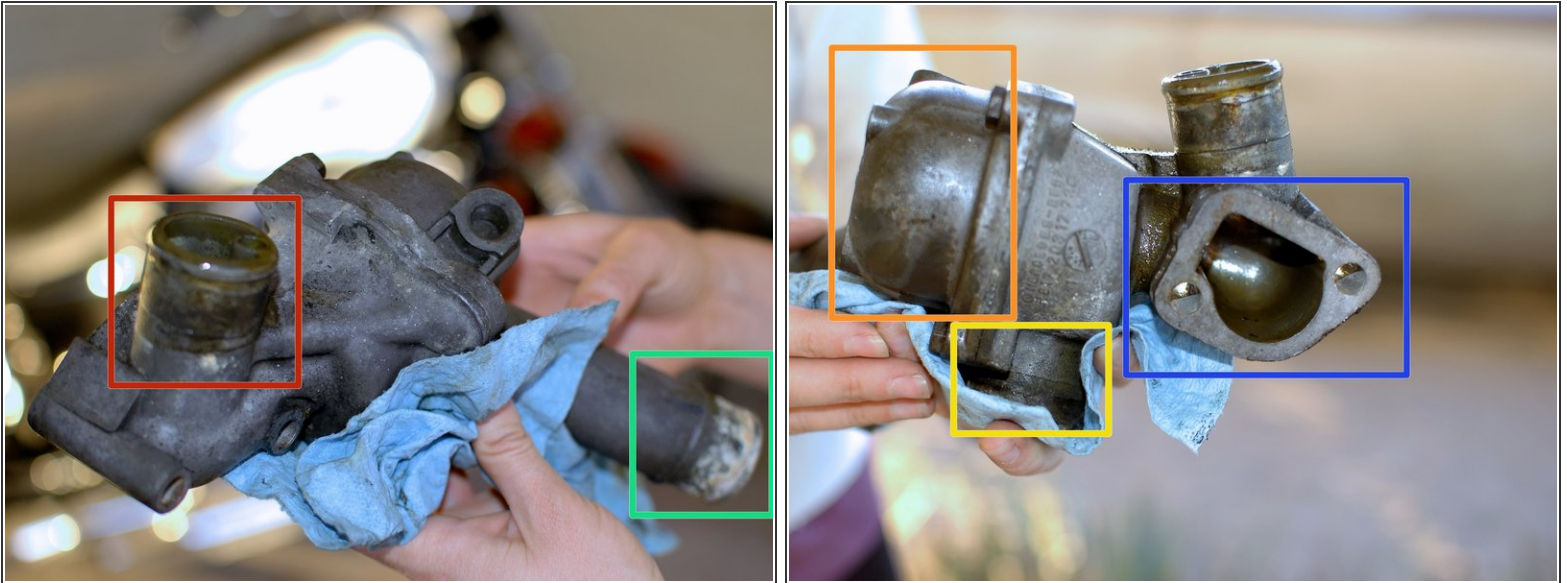
- Next find the two long 13mm bolts that hold the A/C line bracket to the thermostat housing, and the housing to the cylinder head. One is hidden just behind the A/C line in this picture.
- Use a 13mm socket on a ratchet wrench to remove these two bolts.

Step 7



- After the two long 13mm bolts are removed the first item that comes out is the bracket that attaches to the A/C line.
- Note its orientation as you remove it and set it aside.
- With the two radiator hoses disconnected and the hose clamp on the short lower hose loosened the thermostat housing should pull off the cylinder head and out of the car. If necessary use a small pry tool to gently pry it away from the cylinder head.

Step 8



- Here is the thermostat housing out of the car.
- The items on the thermostat housing are as follows:
 - Upper neck, to upper radiator hose.
 - Lower neck, to lower radiator hose.
 - Thermostat cover, thermostat is located just behind this.
 - Neck to short coolant hose for water pump bypass.
 - Cylinder head connection point, location of gasket on housing.

Step 9



- While you have the housing out of the car, consider cleaning any deposits from the three hose necks with a very fine grit sandpaper. Something 300 grit or finer is preferable. Do not use a heavy grit or you will score the metal.

Step 10



- If, after sanding, you find that the necks on your housing are severely pitted you may consider fixing them with a light coat of epoxy to fill the pits. If this doesn't work you may need to source a good used part, or a new housing.

Step 11



- The old gasket on this car stuck to the cylinder head. Yours may stick to the thermostat housing. In either case, you will need to remove the old gasket. One of the best ways to do this is with a sharp utility knife. Be sure it's all removed and the surface is smooth and clean.

Step 12



- Coat the new gasket very lightly with a suitable paper gasket sealant, such as aircraft grade gasket

sealant. Use it very sparingly. Allow it to get tacky before installing the housing.

- Then install the new gasket on the thermostat housing. Put the long bolts through the housing and put the gasket over the bolts to help keep the gasket aligned as you insert the thermostat housing back on the cylinder head.

To reassemble your device, follow these instructions in reverse order.