



MOUNT AN ATTACK

We all know rear main seals and intermediate shaft bearings can cause trouble for unfortunate 996s and early 997s, but a less commonly reported fault concerns engine mounts, which can wear as soon as the 50,000-mile mark has been reached. In this guide, we show you how to replace tired factory engine mounts with superior 'fit and forget' Rohler semi-solid engine mounts...

Words and photography Dan Furr



Engine mount failure is common on 996 and 997.1 models. The most obvious sign of a problem is a noticeable 'thud' when accelerating or braking sharply, as well as the feeling of movement at the rear of the car over uneven surfaces or when cornering under load. You may also have noticed one set of exhaust tailpipes sitting lower than the other, a tell-tale sign of engine mount failure.



With factory hydraulic engine mounts in place, the drivetrain will move independent of the chassis during acceleration and cornering loads. This movement can upset the balance of your 996/997, resulting in poor handling. Available from Design 911, Rohler CNC-machined engine mounts feature PU bushes, delivering more direct driving feel and a vastly improved service life.



3

Each mount requires two new 13mm bolts. Don't reuse the old bolts. Available from Design 911's online store (alongside the Rohler mounts), the new bolts can be found under part number 90037805501.



4

Design 911 supplies Rohler semi-solid engine mounts in pairs, complete with the required 19mm nuts and washers, though you'll need to order the aforementioned 13mm bolts.



5

If you've decided to replace tired factory mounts with new OEM parts (if so, expect to be doing this job again in the near future), you'll need new 18mm retaining nuts, part number 99908421501.



6

Lift the Porsche a few inches off the ground in order for you to be able to use a ratchet extension to reach each mount's bottom bolt. Use axle stands to support the vehicle securely.



7

You will also need to remove the air box for ease of access. It should be noted, Rohler mounts won't adversely affect ride quality or trigger knock sensor warnings (commonly associated with solid mounts).



8

Our car is a first-gen 997, but the following steps are virtually identical for the 996 and second-gen 997. The Rohler mounts suit all models. Begin by pulling the oil filler neck away from the air box.



9

Next, take a flat-headed screwdriver and use it to loosen the jubilee clip fastening the air box intake hose to the throttle body assembly.



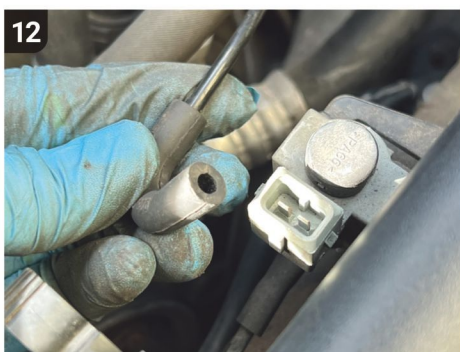
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With the jubilee clip undone, carefully pull the rubber intake hose away from the throttle body.



11

A vacuum solenoid is attached to the rear of the air box. You can leave the solenoid in place, but unplug it from the wiring loom.



12

At the base of the vacuum solenoid, potentially hidden from view, is a vacuum pipe feeding into the solenoid body. Gently pull it free.



13

You will now need to remove the mass airflow sensor connector plug located atop the air box. Press the clip on the engine-side half of the plug and wiggle it free.



14

Unclip the mass airflow sensor plug wiring from the back of the air box, which is held in place by locating lugs fed into rubber grommets. No tools are needed for removal. Pull the air box free of the engine bay.

TECH: HOW TO



15
Put the air box assembly to one side. You will now have uninhibited access to the engine mounts. This is a good time to replace your Porsche's air filter, should you suspect the part is past its best.



16
Move your jack (or use a second jack) to support the weight of the engine, which you may need to lift a few millimetres, depending on how much the old mounts are sagging. Use a rubber jack pad.



17
We'll replace the passenger-side engine mount first. Engine mounts should be replaced in pairs, but we suspect this mount was installed on its own and more recently than the offside engine mount.



18
This is the view from underneath the engine mount. Take an 18mm deep socket on the end of a ratchet extension and breaker bar, crack the old mount's bottom nut free, then unscrew and remove it.



19
As mentioned earlier, fitting superior Rohler mounts means you will have the required 19mm nuts and washers supplied as part of the kit.



20
Back in the engine bay, use a 13mm socket to unscrew the old engine mount bolts. If they have been overtightened, use your breaker bar to crack them off before unscrewing.



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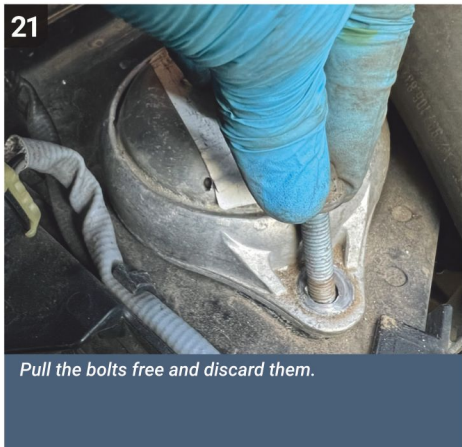
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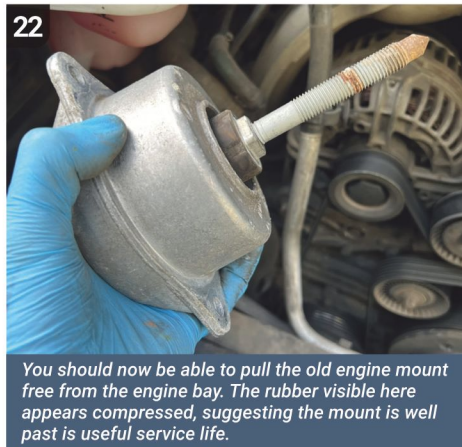
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21

Pull the bolts free and discard them.



22

You should now be able to pull the old engine mount free from the engine bay. The rubber visible here appears compressed, suggesting the mount is well past its useful service life.



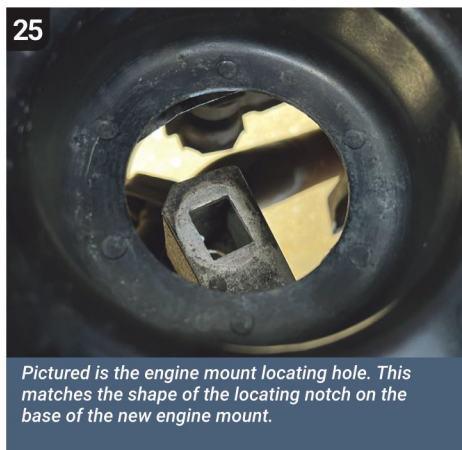
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The old OEM engine mount and the new Rohler semi-solid mount side by side. The Rohler parts dramatically decrease engine movement, resulting in better acceleration and improved handling.



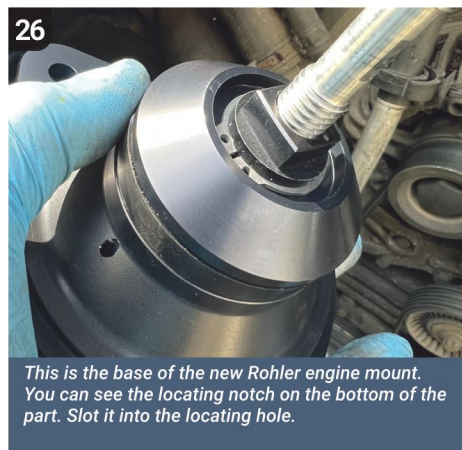
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Take the opportunity to clean the engine mount recess in the engine bay, which can attract dirt and stones flicked up from the road.



25

Pictured is the engine mount locating hole. This matches the shape of the locating notch on the base of the new engine mount.



26

This is the base of the new Rohler engine mount. You can see the locating notch on the bottom of the part. Slot it into the locating hole.

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TECH: HOW TO



27 With the Rohler engine mount placed in its new home, put your new 13mm fastening bolts in place and finger-tighten them, ensuring the mount is sitting comfortably.



28 Using a torque wrench, tighten the 13mm bolts to the manufacturer's recommended torque setting of 23lb-ft. Our old mount's bolts were hugely over-tightened. Don't make the same mistake!



29 The bottom bolts need to be tightened to the manufacturer's recommended torque setting of 63lb-ft. Again, use your torque wrench to ensure the correct value is applied.



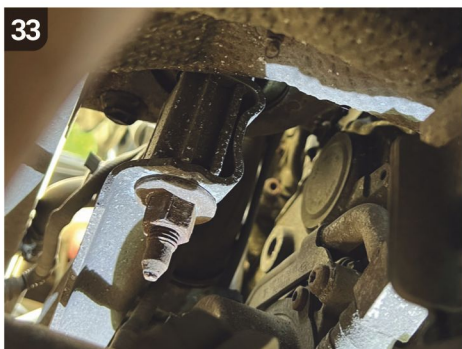
30 Back underneath the car, take a 19mm deep socket on the end of a ratchet extension and tighten the new Rohler engine mount lower nut. Make sure you've included the new washer.



31 If the engine dropped slightly when you unfastened the old mount, simply raise it a few millimetres to ensure you have enough bolt thread to work with.



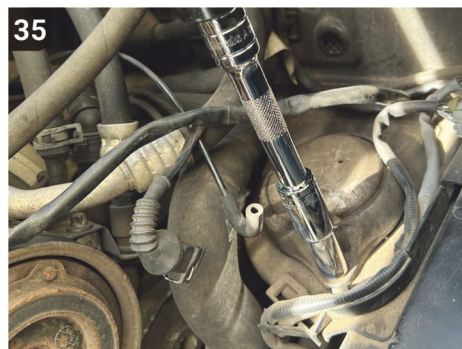
32 Here is the offside engine mount lower nut, seen from beneath the car. This area is more heavily populated with parts than where you were working on the nearside. A flashlight will prove useful.



33 The same nut viewed from the back of the car, peering through the aperture between the top of the offside exhaust tailpipes and the bumper body.



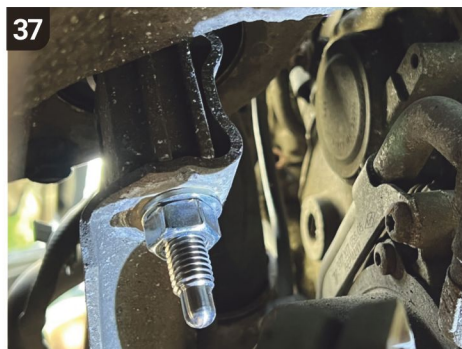
34 Take your 18mm deep socket and crack the nut free, then unscrew it. As you can see, this entire bolt assembly has become separated from the engine mount body. This won't have helped handling!



35 The part of the engine bay playing host to the offside engine mount is stifled by air-conditioning system pipework, making access to the rear 13mm bolt less straightforward. Persevere!



36 Unfasten the old engine mount bolts and discard them. Pull the old engine mount free.



37 Follow the same procedure we outlined for fitting the nearside engine mount. With both mounts now in place, refit the air box, ensuring the solenoid vacuum pipe and the two wiring loom plugs are reconnected.



38 All done! Our test drive highlighted a hugely positive difference in ride quality. The Rohler parts have eliminated movement from the rear and provide a much smoother drive. Get yours at design911.co.uk.