 Antidote oil filler tube fitment for 996 and 997 Porsche models; full kit shown (Rev 1.6)



Contents:

1. Introduction
2. Box contents
3. Warranty
4. Tools required
5. Removal of the older oil filler tube notes
6. Installation of the Antidote oil filler tube kit
7. Adding oil and plugging the lower tube
8. Optional wire locking
9. Aftermarket oil cap notes
10. Disclaimer
11. Regulatory compliance

## 1. Introduction

Thank you for your purchase of the antidote oil filler tube kit from 9ii. It is designed to be a robust and long term solution to the stock fragile Porsche oil filler tubes in 996 and 997 models with M96 and M97 gasoline engines. This installation guide will step by step describe how to install the kit; note this is for the full kit. If you purchased the kit without the supplied oil cap then the contents will not include this cap.

This manual and all of the content contained in it are copyright and property of 9ii 2024.

## 2. Box contents

- Quantity 1, Upper tube
- Quantity 1, Lower tube
- Quantity 1, Support bracket lower (L-shape)
- Quantity 1, Support bracket upper (semi-circle)
- Quantity 3, M6 flange bolts
- Quantity 3, M4 button head socket head cap screws
- Quantity 1, Main O-ring to crankcase
- Quantity 1, X-ring from upper to lower tube seal
- Quantity 1, red plastic tube stopper
- Quantity 1, blue thread locking compound
- Quantity 1, external M4 lock washer
- Quantity 2, high temperature zip tie
- Quantity 1, oil filler plastic cap

## 3. Warranty

This product is warranted for 180 days after receipt against manufacturing defects which will affect its use and performance; items such as the following are considered manufacturing defects:

- Splits
- Cracks
- Large voids
- Large feature deformation
- Metal bonded hardware defects which prevent correct assembly
- Broken features



Due to the inherent production technique used in the fabrication of this product; some aesthetic variability may occur from part to part; these do not impact functionality and performance. These are not limited by but may include:

- Surface finish texture
- Surface finish curvature
- Color

While every kit is 100% quality control checked before shipment please check your kit before fitting. Any defects which are considered warranty claims must be documented via description and images before obtaining an RMA number from 9ii prior to replacement and/or exchange. Any received items without an RMA number cannot be received for any claims. See the disclaimer at the end of this document. Check your kit prior to removal of any functional prior oil filler tube on your vehicle.

#### **4. Tools required**

- 10mm Socket, 1/4" drive
- Extensions, 1/4" 6 to 9 inches long
- 1/4" ratchet
- 2.5mm hex bit, driver, 2.5mm allen wrench
- 10mm Wrench; open+closed ends preferable
- Compact snippers for zip tie
- Optional - borescope camera

#### **5. Removal of the old oil filler tube**

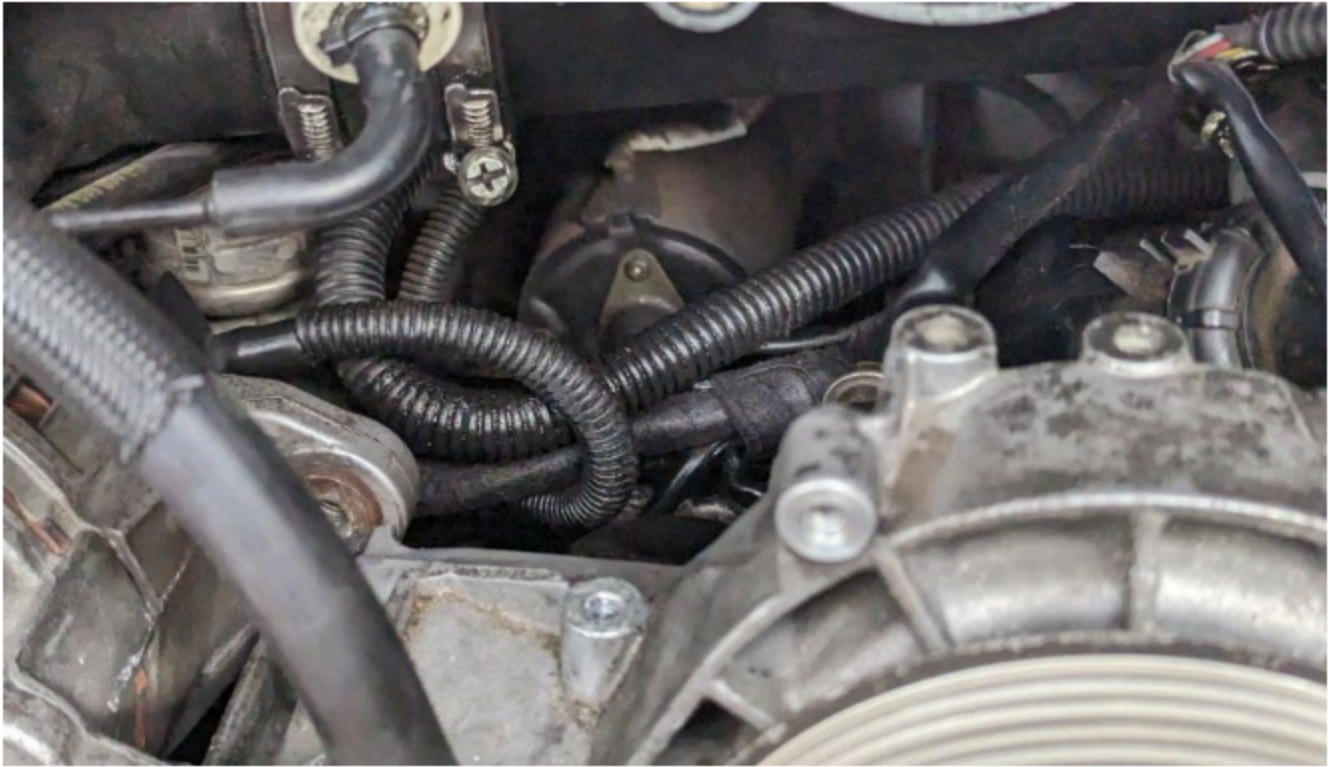
The old tube removal instructions can be found online via Porsche repair guides and replacement guides; written and video websites.

When removing the old tube take care not to damage any wiring which is routed around the oil tube against the crankcase.

Also take care not to drop any foreign debris into the crankcase; with the old tube removed a large opening is exposed; do not allow any debris into this opening.



Old tube removed:



The area for the new lower tube installation should look like the image above with the old tube removed.

## 6. Fitting of the new tube kit

Check the 9ii lower tube:



Check the tube for any defects as outlined in warranty section (3). Confirm the main crankcase O-ring is in place. If it is not; carefully stretch and fit it onto the tube as shown in the above image. A little grease or engine oil is acceptable to help it slip onto the tube. The red plastic plug may also be pre-installed from the kit.



Check the whole tube, all the features and surfaces:



Check the bottom, the flange mounts and debris catch:



Check the top, the metal threads and X-ring groove:



If you have not already done so; a little engine oil or grease on the main crankcase O-ring can help squeeze the O-ring which is on the lower tube into the crankcase orifice.



Next, guide the lower tube in place; it may be necessary to rotate it and help it in place by slightly moving the various cables to allow it more space to fit, and do not use excessive force.



The lower tube should finally sit in place and look like this:



If you have a borescope camera available, now is a good time to check the flange bolt holes line up with the crankcase threads.

With the tube in place the next step is to apply thread lock to the two M6 bolts to the crankcase:



The thread lock compound should be placed at the thread end of the bolt. Use only medium strength thread lock as supplied in the kit. Never use permanent or red thread lock.

Thread the bolts in place; when starting to engage the thread make sure it is not cross threaded as this could damage your engine casing. The bolts should turn and thread easily initially and not bind.

Tighten them down to 20 inch pounds of torque (2.25Nm) using the 10mm socket.

If you have a borescope camera, now is a good time to check the bolts are in place correctly; sample borescope images shown below of the main mounting bolts:



With the lower tube in place and bolted down; place the X-ring in the lower tube groove as shown below:



During the next steps make sure the X-ring seal is not disturbed from the lower tube groove; it must be correctly in place to seal to the upper tube.

Next; install the support L bracket, start by adding thread lock to the M6 flange bolt threads and pass it through the oval slot:



Check the thread shown in the photo is clear of debris and there is no thread damage on your vehicle, clear any debris or repair the threads if necessary before proceeding:



Note: the next steps should be done in sequence without too much delay in between (5-6 minutes); due to the addition of threadlock to the parts.

Screw the M6 flange bolt in place as shown in the image; it should not be fully tightened yet but tight enough to still allow the L bracket to rotate and move along the slot (that the M6 bolt passes through) just tighter than finger tight should be enough:



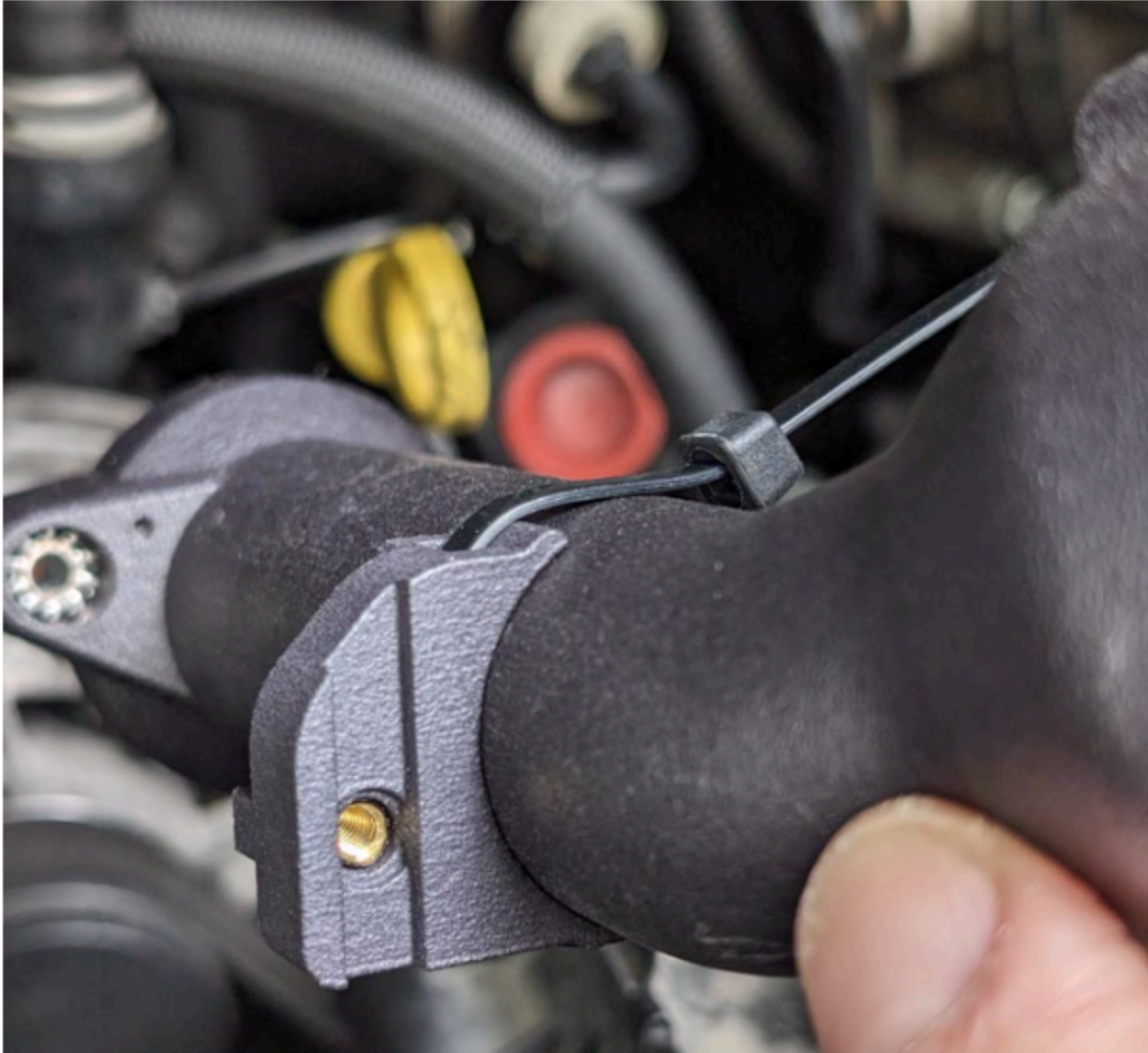
With the seal in place and the support L bracket in position, examine the upper tube as you did for the lower tube:







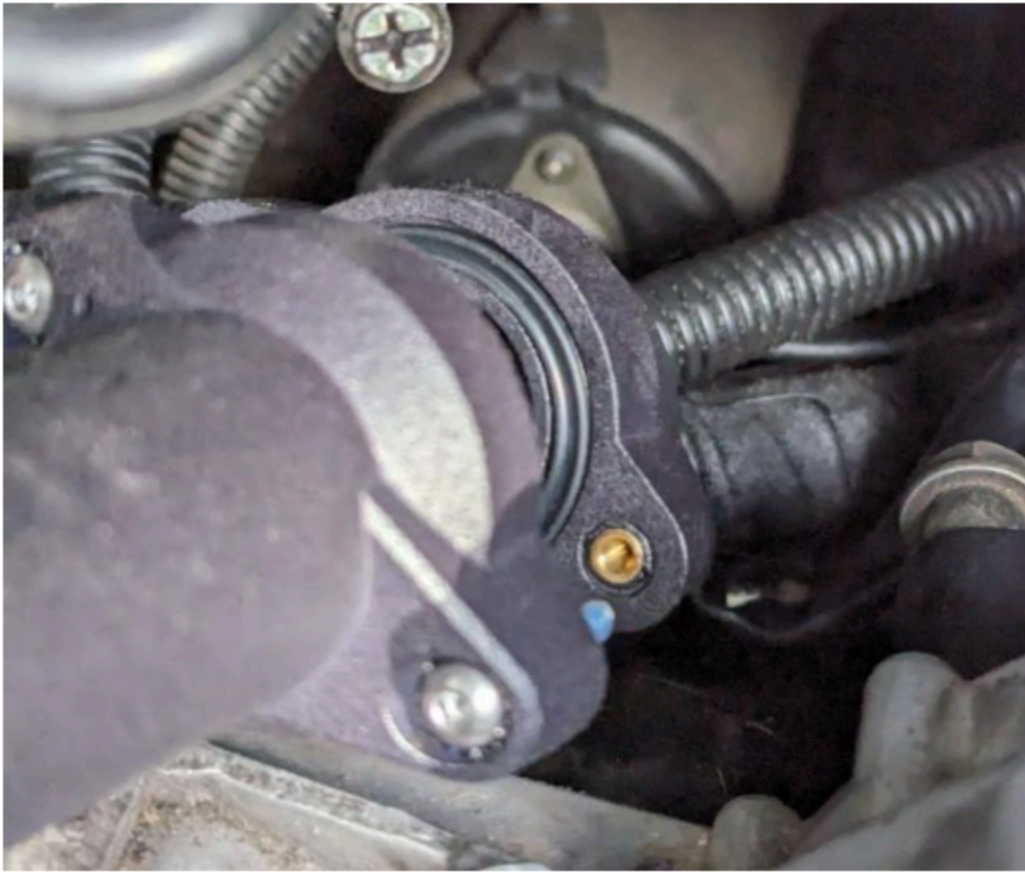
Wrap the zip tie on the upper curved bracket around the upper tube; click it down in place but not fully tight yet; it should be tight enough to hold the bracket to the tube but still be capable of sliding along the tube axis and rotating around it:



With the upper tube checked and the curved bracket zipped tied in place; add thread lock compound to the two M4 screws as shown and place them into the through holes in the upper tube as indicated in the image below:



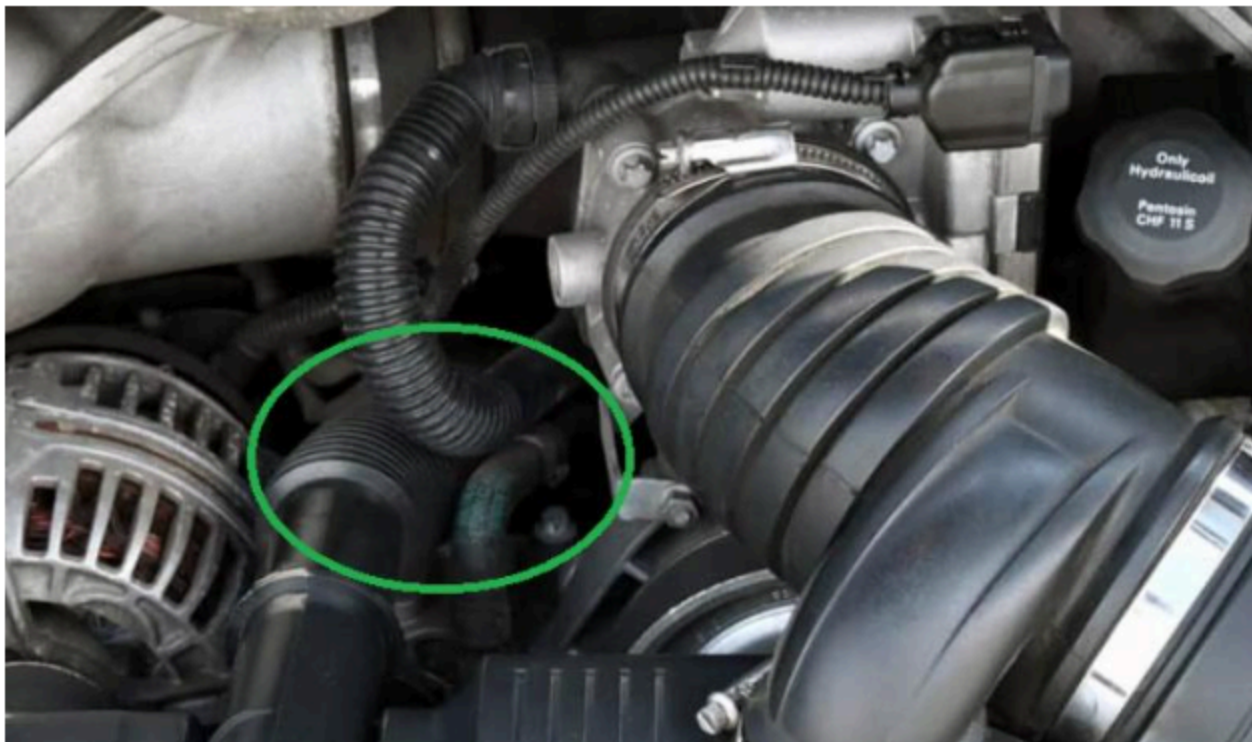
Guide the upper tube in place to the installed lower tube; take care not to move or disturb the X-ring seal:



Tighten the two M4 screws in place via the 2.5mm hex driver bit and extension(s). Tighten the screws to 20 inch pounds of torque (2.25 Nm).



Note on 996 models there is a small coolant tube which is located on the right hand side of the Antidote oil tube; curling around it. On certain 997 models the small coolant tube does not pass from right to left over the oil filler tube; it passes upwards and into the engine bay. A corrugated vent tube is also present. See the reference image below within the green highlighted area for this configuration.



Move the L-bracket and slide the curved tube bracket together; they should meet like the image below. Note that the curved bracket has a female slot feature in it; the L-bracket has a male slot, the slots should align together, make sure the male slot is inserted in the female:



Add the M4 screw with the lock washer, don't forget to add thread lock to the M4 screw before putting it in place, don't fully tighten it down yet, it should be tight enough to align the two bracket parts together but no still allow the two brackets to move relative to each other:



For final tightening of the M6 flange bolt, M4 screw and zip tie. First tighten the zip tie down and snip off the excess tie.

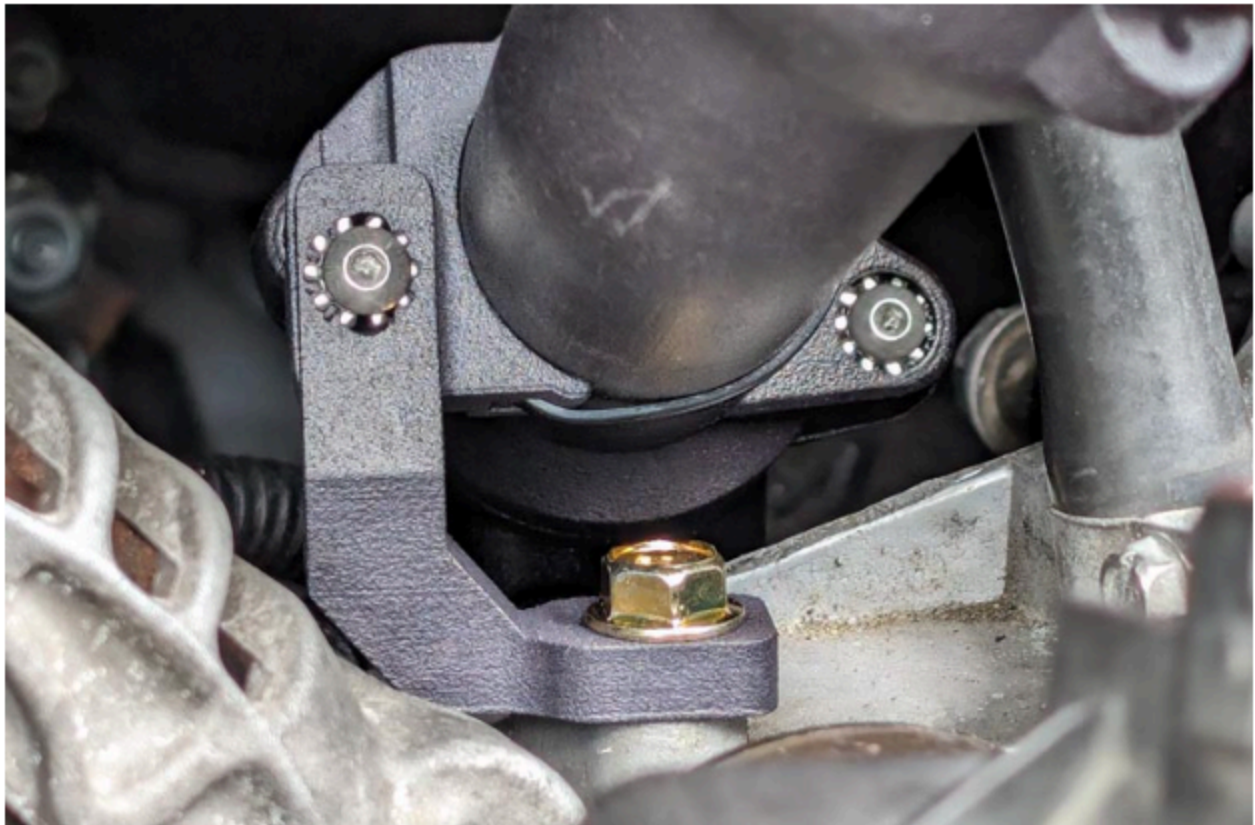
Next tighten down the M6 flange bolt in place to 20 inch pounds of torque (2.25 Nm) using a 10mm wrench. Finally check the oil tube is not being forced by the bracket vertically by lightly lifting it at the oil cap end up the down (do not use excessive force, a finger and thumb should

be enough grip). Confirm the bracket slot moves up and down following the small amount of tube movement.

This confirms the bracket is not binding the tube. It is important the oil tube is not binding on the bracket and being forced into place.

Once confirmed, tighten down the M4 screw to 20 inch pounds of torque (2.25 Nm) using a 2.5mm hex bit.

The install should look as follows:





If you have not installed the oil cap yet. Screw it in place now, your installation should look as follows:



Congratulations! You have finished!

It is generally a good idea to check the installation after driving around for 200 miles. Look for anything loose; check the tightness of the zip tie, oil cap and bracket mounting bolt/screw. They may need tightening depending on factors such as extreme ambient temperatures of hot or cold the vehicle experiences. Also check during routine maintenance, oil top ups and changes as you would with the main serpentine belt, coolant and oil level.

## 7. Adding oil

When adding oil to your engine it is always a good idea to use a corrected sized funnel; it should fit in place in the tube end as shown below:



It is not recommended to fill oil without using a funnel; spilled oil can drop directly onto the serpentine belt underneath and will cause slippage.

During oil changes when a large volume of oil is to be poured into the engine; it is recommended to place absorbent cloth or paper material under the funnel to catch any drips especially when removing the funnel after the fill. Avoid any drops of oil on the serpentine belt.

### **Plugging the lower tube**

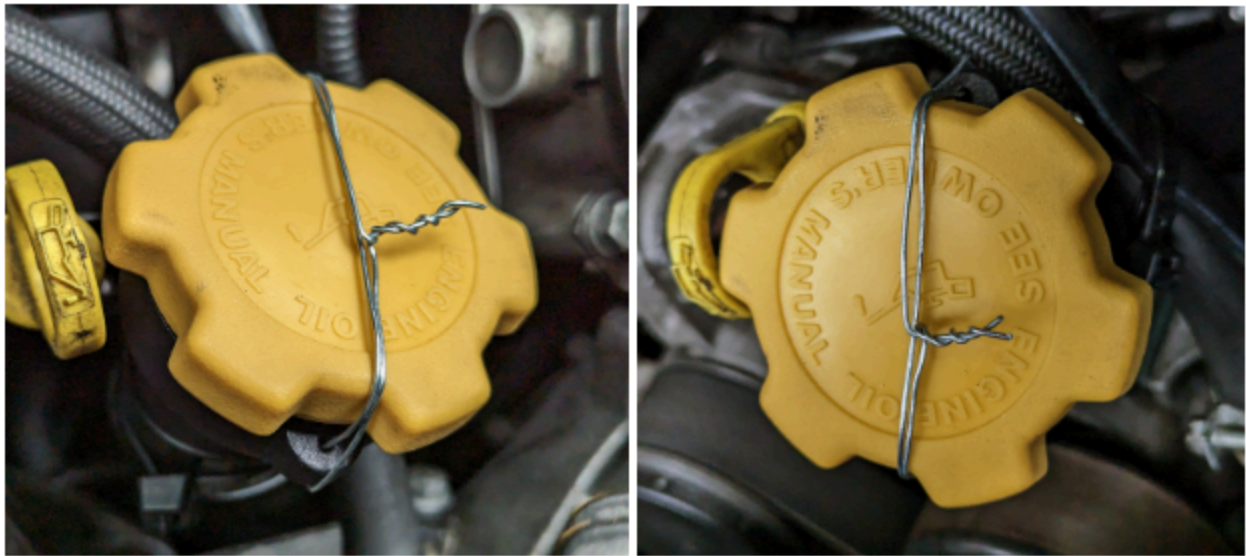
When removing the upper tube for other vehicle maintenance it is highly recommended to use the supplied red plastic plug. Don't forget to remove it before attaching the upper tube again. The plug is sized to fit correctly into the lower tube orifice/opening while the upper tube is removed. Using it will prevent risk of any debris or parts dropping into the lower tube.



## 8. Optional wire locking

If the vehicle is expected to be driven hard on a track; the driver may wish to wire lock the oil cap in place. This gives extra peace of mind that the cap cannot work loose under extreme conditions.

Two wire eyelets are provided on the inlet end of the oil tube. They have an internal diameter of 2.2mm which defines the maximum thickness of wire that can be threaded through. An example of a wire locking configuration is shown below; note how in this configuration the wire is wrapped through each tube eyelet and across the cap, then twisted tight at the cap face. Aftermarket caps may incorporate wire cutout features for locking.



## 9. Aftermarket oil cap notes

As explained in the frequently asked questions on the webpage. Aftermarket oil cap use is not discouraged but is at the owners risk.

This is due to the great deal of variety in terms of part quality available on the market. It is not feasible for 9ii to test every oil cap type worldwide. Check your local laws regarding aftermarket caps compliance.

If you do wish to use an aftermarket oil cap it is recommended to use a well known high quality brand; this will ensure quality machining especially in terms of the thread and seal to the tube. Note that some oil caps have oil viscosity recommendations printed on them; make sure this matches the recommended grade for your 996 or 997 to avoid mechanics filling your car with the incorrect oil grade. It is good practice to confirm with the oil cap vendor the thread on the cap you wish to purchase; it should be an M42 x 4.5mm thread to be compatible with the Antidote oil filler tube. Some example images of aftermarket caps are shown below (plus one installed); note these are not endorsements of these brands or caps, they are shown for illustrative purposes only:



## **10. Disclaimer**

The Seller, outside of manufacturing defects evident within 180 days of receipt of goods hereby expressly disclaims all other warranties either express or implied, including any implied warranty of merchantability or fitness for a particular purpose, and neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this part(s) and/or service. The buyer will not be entitled to recover any consequential damages, damages to property, damages for loss of use, loss of time, loss of profits, or income, or any other incidental damages. In addition, expressly excluded is any liability for defects pertaining to safety or performance, by way of "strict liability", negligence or otherwise. The Buyer has read and with any transaction, agrees to all of these terms and conditions in connection with the Seller.

- All returns or exchanges require written communication authorization and RMA number.
- No refunds on opened internal packaging or used parts.
- Items returned must be in original packaging.
- No refunds after 30 days from receipt of goods.
- 20% handling charge on all unused returned items.
- Any packaging or other damage must be reported to 9ii within 24 hours of receipt.

## **11. Regulatory compliance**

As the Antidote oil tube is a product shipped worldwide; vehicle regulatory compliance will vary country to country.

In regards to vehicle emissions and pollution compliance; users should check on their local laws and regulations; however please read all the compliance notes below.

The Antidote oil tube matches the functionality of the standard Porsche oil tube/hose in its entirety for the addition of motor oil to the engine crankcase only and has no benefits or claims on any vehicle performance metrics. It therefore has no impact or change on any vehicle systems including but not limited to the following:

- Carbon dioxide emissions
- Carbon monoxide emissions
- Nitrous oxide emissions
- Hydrocarbon emissions
- Particulate emissions
- Intake air flow
- Intake noise levels
- Intake air temperatures
- Engine air inlet temperature calibrations
- Ignition timing or quality
- Fuel flow
- Fuel pressure
- Fuel to air ratio
- Fuel and air combustion quality and performance



- Cold start emission systems
- Cold start supplementary air systems
- Exhaust flow
- Exhaust noise levels
- Exhaust gas recirculation systems
- Exhaust oxygen measurements and controls
- Exhaust catalytic converter functions
- Crankcase to intake plumbing and/or routing
- Crankcase vapor control and combustion systems
- Evaporative gasoline control, storage systems and plumbing
- Evaporative combustion emissions control systems

In summary the Antidote oil filler has no impact or function to defeat in any manner any of the vehicles compliant systems to meet local regulations on safety and/or emissions of pollutants.

For USA CARB vehicle requirements pertaining to SMOG testing and visual inspections; please refer to the "SMOG CHECK MANUAL" January 2021, Department of consumer affairs, BAR. Bureau of Automotive repair Appendix C (page 37). PDF link below:

<https://www.bar.ca.gov/pdf/smog-check-manual.pdf>

On page 40, under "Other"; "Hose(s) – Minor configuration changes are acceptable. Universal replacement hose in place of performed hose, etc." are classed EXEMPT from verification of aftermarket parts executive order (EO). NO verification is required as the Antidote is not part of any emissions device and in addition hose/tube is exempt under this classification.

### **Chemical compliance and regulated materials:**

#### **California customers please note:**



WARNING: This product can expose you to chemicals including Lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

We are providing Prop 65 warning information and labels simply to inform consumers that the product contains chemicals on the State of California's Prop 65 list. The Antidote product contains a very small quantity of brass, which contains small but detectable amounts of lead—an element included on the Prop 65 chemical list. Under normal use conditions no users or installers of this product will be exposed. In addition the Porsche 996 and 997 models already contain compounds that fall under Prop 65 in much greater quantities than the Antidote oil filling kit.



Even though a product may be found to contain a Proposition 65-listed chemical, it does not mean that use of the product will cause cancer, birth defects or other reproductive harm. Nor does it mean that a product is unsafe. We are confident there is no health hazard associated with the installation or of the 9ii Antidote oil filling tube.

What is California Proposition 65?

In 1986, California voters approved the Safe Drinking Water and Toxic Enforcement Act (known as "Proposition 65"). Proposition 65 is a "Right to Know" statute; its purpose is to make sure people are aware, before they purchase, that the product they come into contact with contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. The statute requires a warning label even if the amount of the chemical is miniscule.

The State of California has listed over 900 chemicals that must be disclosed under Prop 65. The list, which is updated annually, includes a wide variety of chemicals that can be found in many consumer products, such as kitchen utensils, footwear and handbags, exercise equipment, photo and scrapbook albums, luggage, and many other products (even foods and beverages).

Where can I find out more information about Proposition 65?

The State of California provides Proposition 65 information on the Office of Environmental Health Hazard Assessment website.

Why is this label included here if I don't live in California?

9ii products are sold worldwide. It would be considerably complex to determine which product(s) will be ultimately sold or brought into California. Therefore, to ensure compliance with Proposition 65 requirements, we have decided to include this label on this applicable product guide here, regardless of where it might be purchased or sold.

