



928 Motorsports Oil Control System Installation

For 16 valve Non-Supercharged Motors

(Installation on supercharged engines is different, and included with the supercharger kit installation instructions)

NOTE: “Left” and “Right” are always as seen from the driver’s seat-as you sit in the car.

The following instructions will help you improve the oil separator and return the oil back to the crankcase, and allow you to vacuum out or depressurize the crankcase on your 16-valve Porsche 928.

This system will do that 3 ways:

- 1) We will be adding a baffle to the crankcase vent to reduce “slinging” of oil off of the crankshaft counterweights and up into the breather system.
- 2) We will be enhancing the stock oil separator to make it more effective at removing oil from the air stream and returning it to the oil pan.
- 3) We will be adding drop-lines to the final output hose to again, make certain that vented air is as dry as possible.

Instructions for K-Jet (CIS) Motors

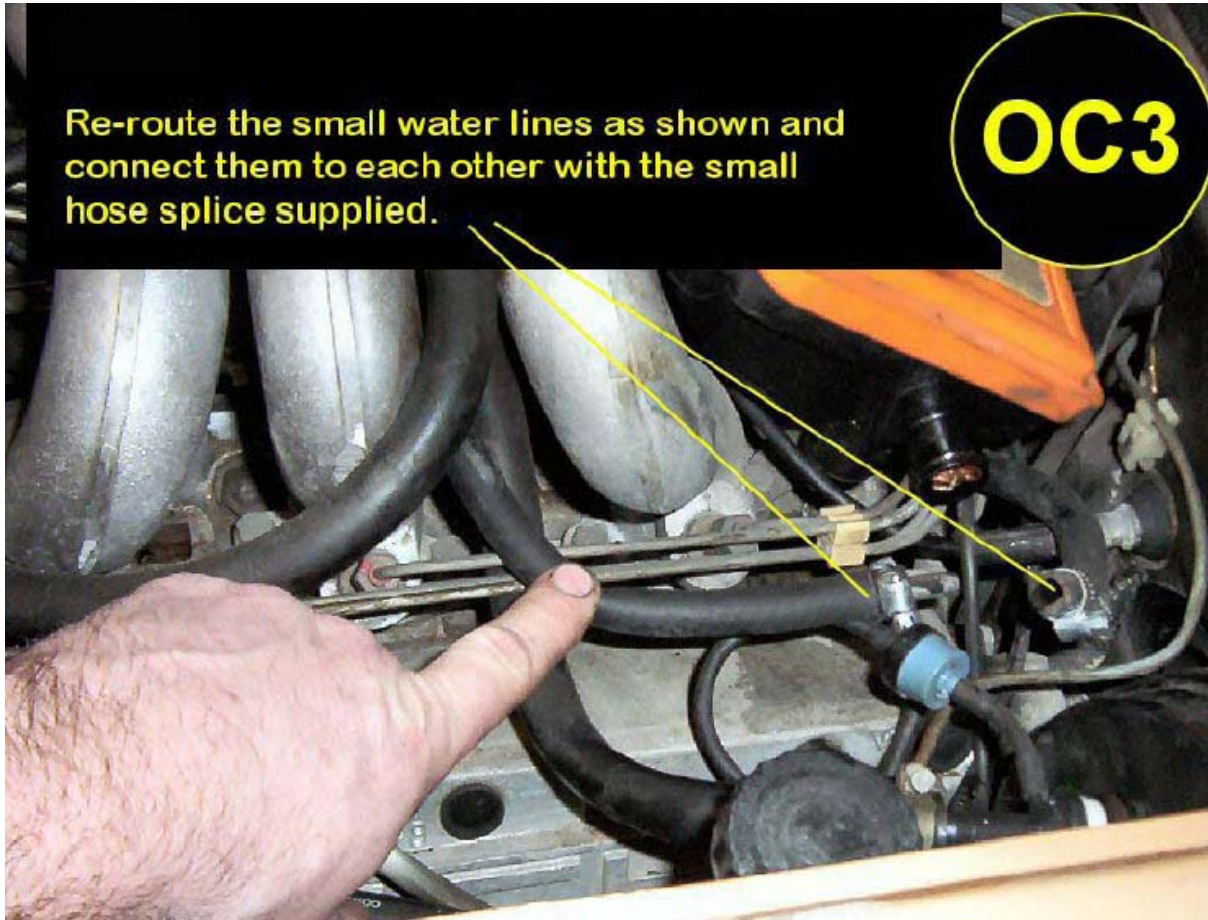
First, disconnect the stock oil breather hose in the two places as shown in **picture OC1**.



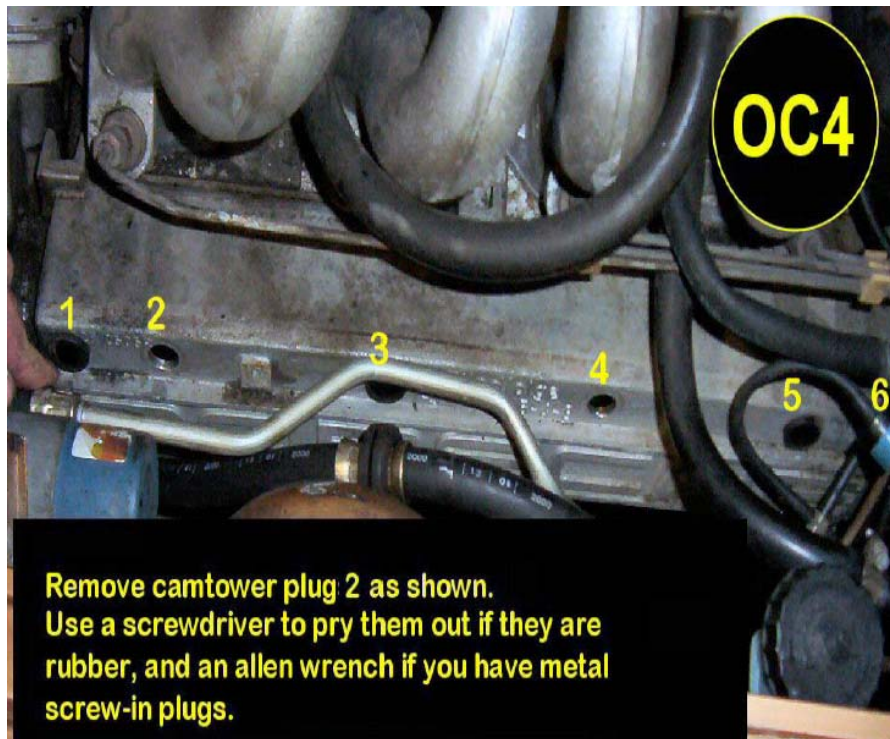
Once you have both ends disconnected, you will discover that there is some small water lines that go through that oil breather hose to warm it as shown in **picture OC2**



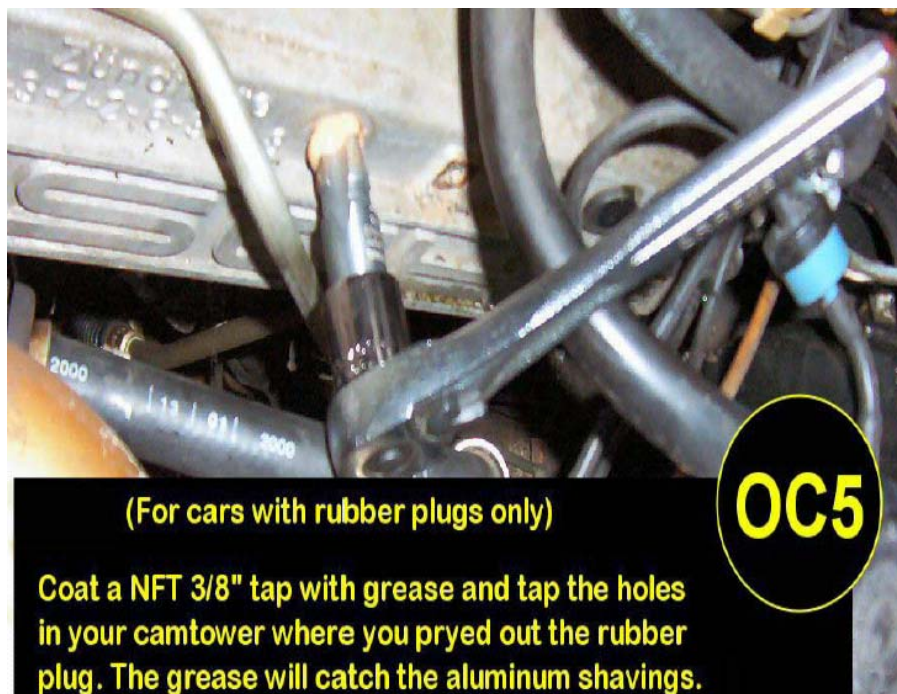
We want you to disconnect those two small water lines, re-route them so you can connect them to each other, and splice them together with the splice provided as shown in **picture OC3**.



Counting from the front of the motor, left side, remove the second cam tower plug back, as shown in **picture OC4**. On the very early cars (1977 and some 1978), those cam tower plugs are black rubber and later models have Allen head cap screws.



Only those very early cars with the black rubber plugs should follow the instructions in photo OC5.



ALL MOTORS:

Your shop will need to be at 50 degrees or warmer for the next step. Locate the cam tower elbow as shown in **picture OC6** and the two tubes of J.B. Weld metallic epoxy provided in the kit. You will need to take brake cleaner or carb spray and clean out the hole where you're just removed the cam tower plug.

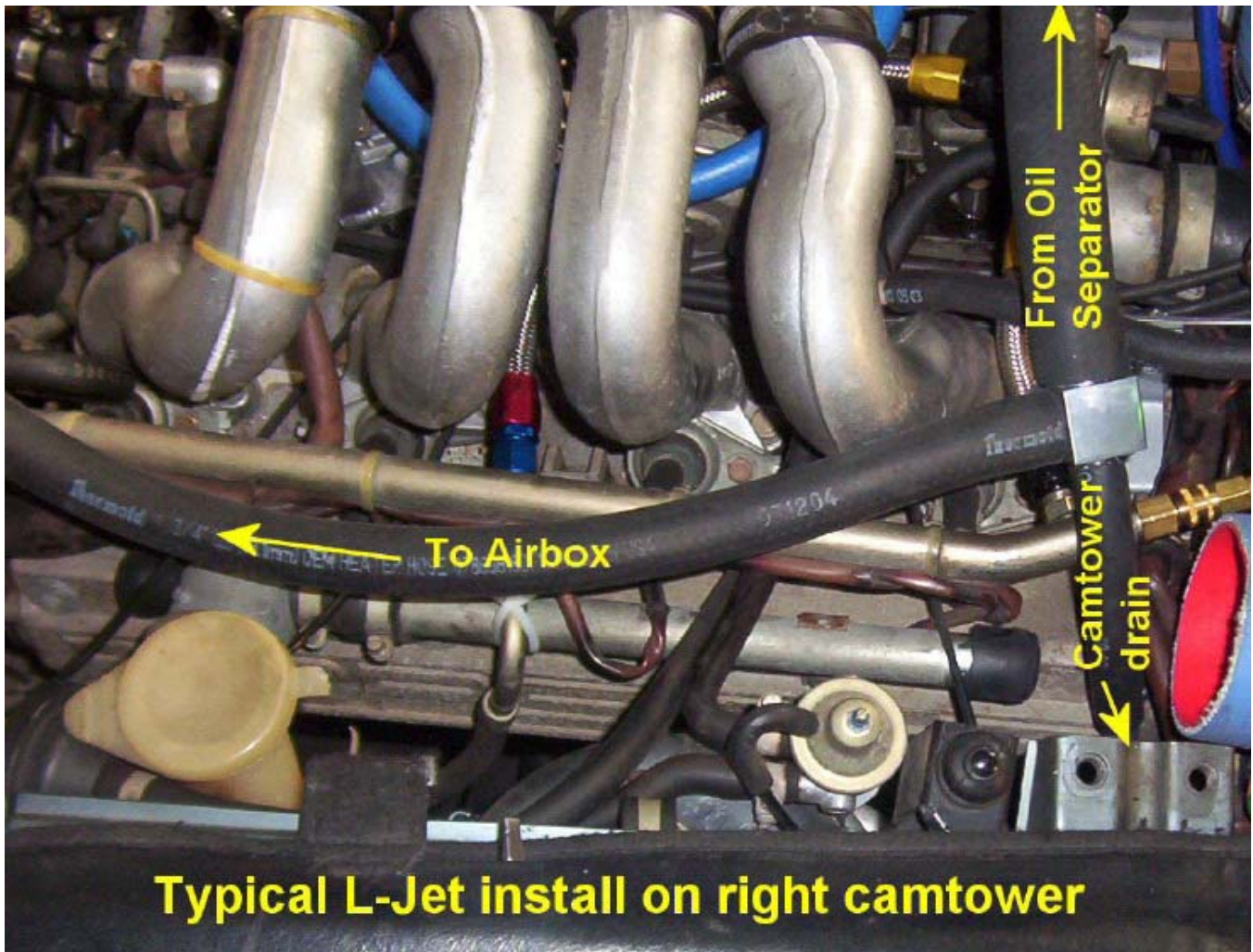


As in **OC6**, layout two equal-sized stripes of the J.B. Weld metallic epoxy, one of the hardener and one of the liquid metal. Then mix them together to where they become a consistent gray color. Coat the threads of the cam tower barbed nipple as shown in **OC6** and screw it into your cam tower.

Make sure that the barbed hose nipple points straight up when you're done. This will have to set 12 hours before we can use the nipple so we will move on to another section and come back to this after the epoxy has hardened. We use the J.B. Weld epoxy specifically because of its ability to withstand high temperature and oil. It is not softened by oil or temperature. While we wait for that to harden, let's move on to the oil separator itself.

Instructions for L-Jet Motors

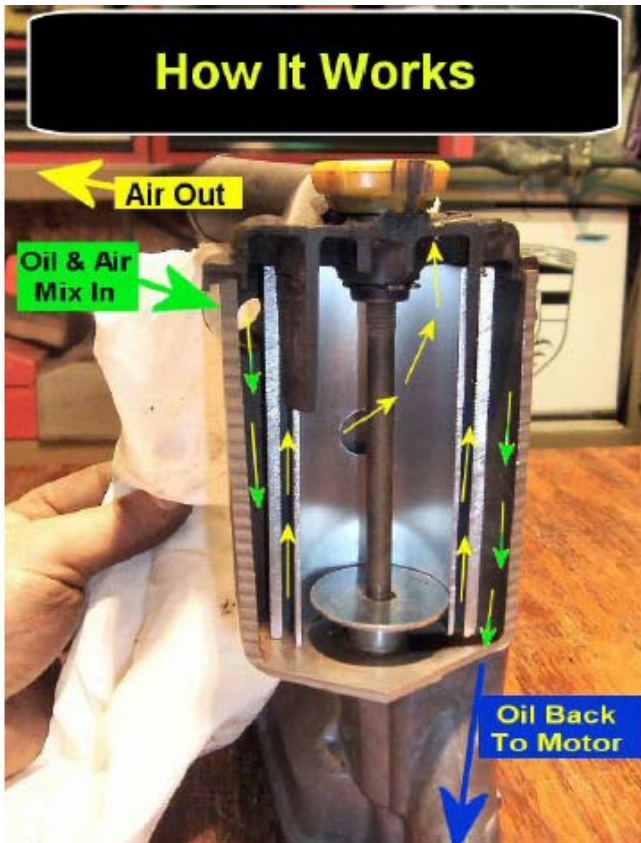
The L-Jet follows all the same instructions, on the other side of the motor. You remove the #1 or #2 cam tower plug, (your choice) and insert the elbow and hoses as shown below.



ALL MOTORS:

Modifying the Oil Separator

The oil separator is the aluminum canister at the front of the motor with the black cap and the yellow knob on it that says “OEL”. Please remove the top of the oil canister and inside you will find a wire screen that comes out. It will not be going back into the car. Lets locate the three parts you will need here that are shown in **picture OC7**, two aluminum baffles and a large steel washer.



Now trim the plastic inner baffle of the OEL cap so that it is only 1” long as shown in **picture OC9**. The small aluminum sleeve with the three holes drilled in it goes on the inside and the large aluminum sleeve goes around it to the outside. There is no chance that you can get this wrong, they only fit one way. Put the cap on a block of wood and pound the baffles down with the rubber mallet.



They fit very snugly and you will have to pound them down and into place with the rubber mallet. They fit flush at the end when you are done.

Picture OC10 shows the completed assembly with both baffles installed, ready to go.

ALL MOTORS: Adding the baffle

Before we put it back, lets add the baffle plate under the crankcase vent. At the bottom of the oil separator (where the “OEL” cap came off) there is a 10mm bolt that you need to remove, and a matching 10mm bolt on the other end of the crankcase breather housing. See **Picture “Baffle”**, you can tell where the two bolts are from that picture. There is one lower hose to detach, and then that breather housing comes off so you can put our baffle plate underneath it.

While you have the oil breather assembly off, take a flashlight and look straight down into the motor. You’ll see how easy it is for the crankshaft counterweights to sling oil up into your breather system without this baffle plate!



Place a bead of gasket sealer on both sides of the baffle plate and re-install the breather assembly.



Place the washer provided into the base of the oil canister, as shown in **picture OC11**. After this washer is put into place, you can put the cap on and tighten the cap. The outlet of the oil separator should point directly at the barbed elbow you put in the #2 cam tower access hole.



Take the 1" hose that is about 10" long and install it between the top of the oil separator black cap and down to the 928 Motorsports billet aluminum oil tee, as provided. The bottom of the oil tee has a 1/2" nipple and a small piece of hose on it that goes directly to the cam tower plug you have already installed IN TOWER HOLE #2.

On L-Jet kits, a PCV Valve is provided to install in that 1/2" diameter drain line. Make sure the PCV is installed so that oil can drain down, but it will close if air tries to go up. The long hose goes from the tee up to the air intake assembly providing positive crankcase ventilation for your crankcase fumes without drawing oil into the motor. The final assembly of the oil control system for your car looks like **picture OC12** on K-Jet cars and **OC13** on L-Jet.

