# The Jag Wrangler LLC

## Jaguar 4.0 / 4.2 Litre V8 Oil Pressure T-Adapter



Finally, there is an easy solution to adding an aftermarket oil pressure gauge to a Jaguar V8. Fitting an oil pressure gauge had been a challenge due to the unusual M10 x 1.25 sensor fitting on Jaguar 4.0 and 4.2 liter V8 engines.

We designed and fabricated these adapters for RealGauge and are now also selling them individually to use with aftermarket oil pressure gauges. They allow you to simultaneously fit the original factory oil pressure switch as well as any aftermarket oil pressure sensor with the common 1/8 NPT fitting.

This is a robust solution, made of clear chromated steel for maximum strength and corrosion resistance. The design includes a flow restricted oil pathway. There are no adapter hoses to flex and break. Included in the package is a replacement bonded seal for the original oil pressure switch, plus copper gaskets for proper fitting and sealing in the block (right next to the oil filter).

## Kit Contents supplied:

- Quantity 1- Tee adapter for oil pressure sensor and original factory pressure switch
- Quantity 1- 2.5" x 1/4" PTFE thread seal tape for new oil pressure sensor
- Quantity 4- 10 mm inside diameter, 16 mm outside diameter, 1 mm thick copper seal ring and spacer for tee adapter to engine block
- Quantity 1- Replacement steel/rubber sealing ring for original factory pressure switch

## Not supplied:

• Aftermarket 1/8 NPT pressure sensor, cable and gauge kit (75 -100 PSI).

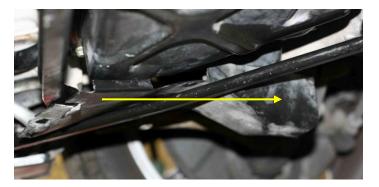
### Tools List (must be provided):

- Ratcheting torque wrench (recommended)
- 15/16" or 24mm wrench or deep socket
- 7/8" open end wrench
- 7/8" socket
- 13/16" or 21 mm wrench or deep socket
- 7mm socket
- Protective rubber gloves

#### **Installation Procedure:**

- 1. Jack up the front end or the right-hand front corner of the car, as if you were going to access the oil filter for an oil change. **Support the car on jack stands for safety.**
- 2. Locate the plastic cover (air duct) over the oil filter on the front right side under the engine. Using a 7mm socket remove the single screw and slide the plastic cover off toward the rear of the car. Note that on some cars this plastic cover might be missing.





3. Squeeze the connector tab and unplug the connector from the oil pressure switch (the one with the single orange wire) adjacent to the oil filter. If your car has another sensor with two wires (not all do), leave the other sensor alone.



4. Remove the oil pressure switch using a 13/16" or 21mm deep socket. Have a basin or jar ready to catch the drips. Expect about 2 to 4 oz. of engine oil to drip out. Clean the mating surface on the engine block. Protective rubber gloves are recommended for this step.

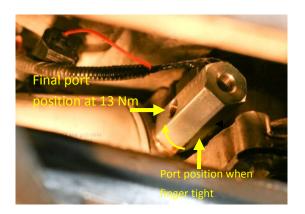


5. Read this and understand this entire step before proceeding. Place one copper seal washer from the kit on the tee adapter and screw it into the engine block. **IMPORTANT: DO NOT use thread sealing tape on these threads.** Finger tighten until it is snug. **Only if** the side port on the adapter now approximately faces down when finger tight, tighten about an additional 90 degrees (to about 13 Nm) with a 7/8" socket so the port faces the righthand side of the car (your left). **Do not overtighten!** 

If the side port on the bottom of the adapter does not face down, remove the adapter and add additional copper washers so the it will roughly face down once finger tight (Four washers are supplied in the kit, use only as many that are needed). Each washer will add about 70 degrees of rotation. Note the side port of the tee adapter must face the right-hand side of the car (your left looking at the oil filter from the front of the car) once it is torqued to 13 Nm to provide proper clearance for the pressure sensor. Tightening the tee adapter from finger tight when the port is facing down to 13 Nm will take up the final 90 degrees so the port faces the right-hand side of the car.

The *final* position after proper tightening to 13 Nm is shown below in the photo on the right.





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6. Remove and discard the old rubber and metal sealing ring from the oil pressure switch that was removed from the vehicle. Apply a drop of clean engine oil to the new rubber and metal sealing ring supplied in the kit and slide it over the threads until it bottoms at the base of the oil pressure switch. Screw the oil pressure switch into the **END** port of the tee adapter. **IMPORTANT: DO NOT use thread sealing tape on these oil pressure switch threads.** Tighten to temporarily to about 9 Nm with a 13/16" or 21mm deep socket (it will be removed again in a later step for bleeding and tightened to its final torque). **Do not overtighten!** 







7. Wrap the supplied white 1/4" x 2.5" PFTE thread sealing tape clockwise (with port facing away from you) around the brass threads of your new aftermarket oil pressure sensor. Make sure not to cover the sensor port hole with tape. Screw the oil pressure sensor into the SIDE port of the tee adapter. Tighten to 6-8 Nm with a 15/16" or 24 mm deep socket. IMPORTANT: DO NOT SCREW THIS SENSOR ALL THE WAY IN THE THREADED OPENING LIKE YOU DID FOR STEPS 26 and 27. THIS SENSOR IS DESIGNED TO BE TIGHTENED TO 6-8 Nm only. SOME THREADS MAY STILL BE VISIBLE. THIS IS CORRECT. Do not overtighten!







- 8. Using an old rag or paper towels, clean off any oil drips thoroughly from the engine and chassis.
- 9. Plug in the oil pressure switch connector with the orange wire at the oil pressure switch. If the wire now seems too short to reach, feed some additional slack by pulling the black corrugated plastic harness from which the orange wire is fed. Do not pull the orange wire itself. Do not install the connector so the orange wire is under constant tension.

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- 10. Plug in the supplied aftermarket oil pressure sensor cable into the oil pressure sensor and add a tie wrap to tie the two harnesses together.
- 11. Route the pressure sensor cable into the vehicle and install the aftermarket oil pressure gauge per manufacturer's instructions.
- 12. Allow the engine to run for at least 3 minutes and make sure no oil is leaking out at the sensor connections. Shut off the engine.
- 13. Now bleed the air out of the tee adapter. Do not skip this step, it is necessary to prevent false low oil pressure readings or alarms at idle. To perform the air bleeding, unplug the oil pressure switch connector (orange wire) and remove ONLY the oil pressure switch (at the END of the tee) again using a 13/16" or 21mm deep socket, while holding a 7/8" open end wrench on the tee so it does not loosen. Have a basin or jar ready to catch the drips from the end of the tee. Once the oil stream starts flowing out, after 3 to 4 seconds replace the oil pressure switch again and tighten the oil pressure switch this time to 13 Nm. Then plug in the connector again. Again clean up any oil drips with a rag or paper towels. Protective rubber gloves are recommended for this step.
- 14. Allow the engine to fully warm up and check for oil leaks by the sensors that were just installed.
- 15. If there are no leaks, shut off the engine and replace the plastic cover over the oil filter and 7mm cap screw.
- 16. Lower the vehicle to the ground.
- 17. Check your engine oil level and top it off if necessary.

#### Congratulations on a successful installation!

Having Difficulty?

For support, email: whitexkr@comcast.net with as much detail as possible.

#### Disclaimer

The purchaser assumes all liability for any and all damages which may result directly or indirectly from the installation, the use or the failure of this product.

No warranty is provided if this unit fails to warn of a fault condition in your vehicle and damage or expenses are incurred, other than refund of kit purchase price or replacement of the unit.

Installation of this unit, as for many aftermarket products, may void your vehicle's warranty, if any.

If you do not agree to these terms please return the product within 90 days for a full refund.