

42 Draft Designs

BMW/Mercedes 1/8" NPT Oil Pressure Relocation Kit (42-020) Installation Instructions

Tools Recommended: metric deep socket set, metric & American open end wrench set, 9/64th Allen wrench, Teflon tape, wire cutters, terminal crimpers.

Warning! Never work on a warm motor! Hot oil and metal burns. This installation should only be performed on a cold motor.

Warning! Follow the included diagram exactly. Do not assemble any portion of this kit in any way other than described. Doing so will result in stripped threads and oil leaks.

Warning! Use common sense when securing the assembled relocation block. Do not secure the aluminum block to any electrical wires. Be sure the relocation hose does not rub against anything sharp – especially the radiator fans. Electrical shorts and oil leaks are a recipe for disaster.

Warning! Thread sealant should be used on all threaded connections. Use 1-2 wraps of Teflon tape to create a tight seal. Too much sealant will cause a loss of ground. In this case less is more. Liquid pipe thread sealant may also be used.

Warning! Do not over tighten threads. M12x1.5 is a straight thread and should be tightened to 15 ft/lbs after sitting flat. NPT threads are tapered and may not sit flat. When screwing in an NPT connection by hand it will become significantly tighter as the threads engage. Tighten NPT threads to 15 ft/lbs and stop. **Be sure to use thread sealant on all connections.**

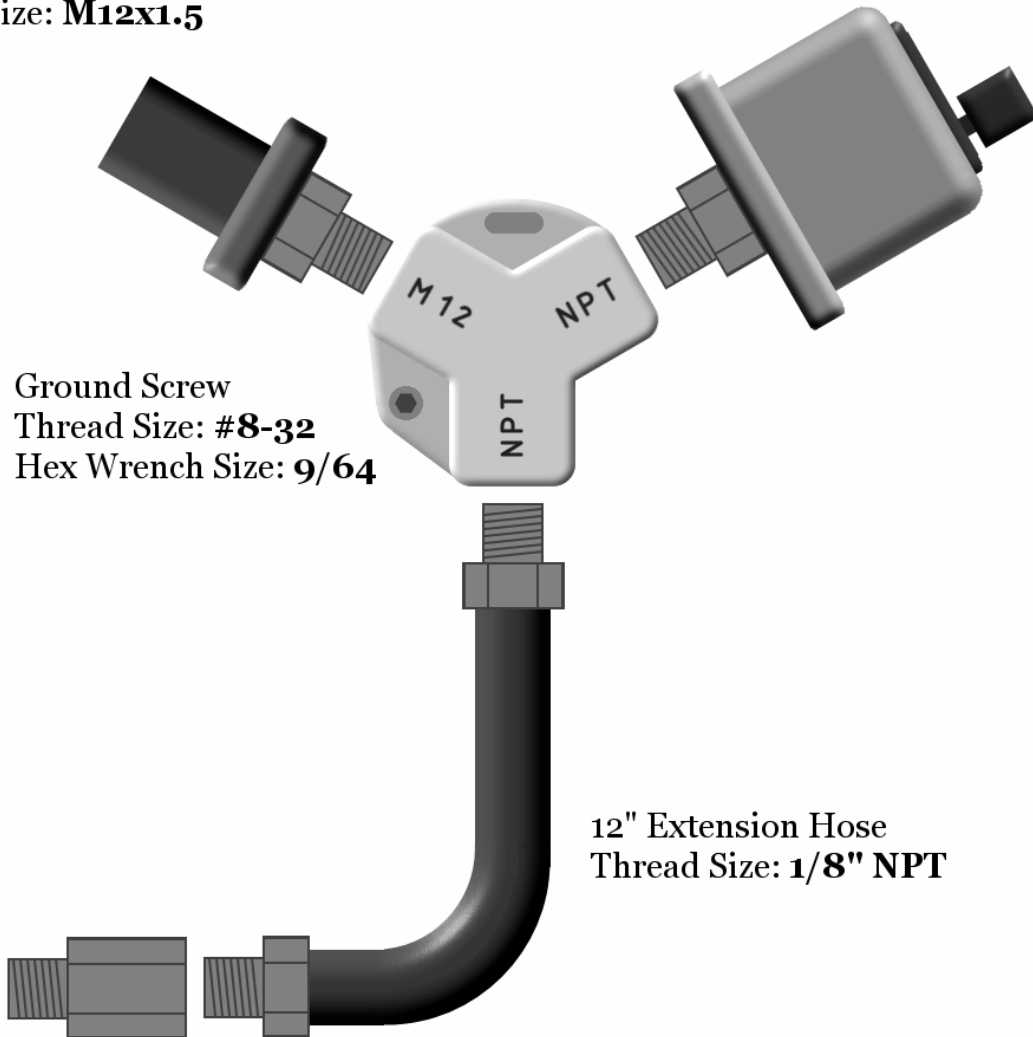
1. Locate the oil filter flange on your motor and find the stock oil pressure sender. To access this location fully, certain emissions devices or the intake manifold may need to be removed. Remove the wiring harness from the stock oil pressure sender and move aside. Using the appropriate metric deep socket, unscrew the sender.
2. Install the included M12x1.5 adaptor in the stock oil pressure sender port. Start threads by hand and tighten snug using an open end wrench. Do not over tighten this adaptor! Install one end of the 12" extension hose and use an open end wrench to tighten.
3. With relocation block in hand, thread the stock BMW/Mercedes sender into the port labeled M12. Tighten snug using the appropriate metric deep socket. Thread your aftermarket oil pressure sender into the port labeled NPT. Tighten snug using an open end wrench.
4. Install the assembled relocation block on the end of the 12" extension hose. Tighten snug using an open end wrench.
5. Decide on an appropriate mounting location and measure out your ground wire. The ground wire should attach to a chassis ground or the negative terminal on the battery. Cut your wire to length, strip both ends and crimp on the included ring terminals. The small terminal should install on the relocation block. Use a 9/64th Allen wrench to remove and tighten the ground screw.
6. Reconnect the stock oil pressure sender wiring harness. If the harness will no longer reach, pull more wire from the loom or extend the wiring. To extend the wiring, simply cut the stock wire 3" from the connector and solder in more wire. You can use a piece of the included 18 gauge ground wire. Be sure to solder this connection and use shrink wrap to seal the connection.
7. Connect your sender wire to your aftermarket oil pressure sender using the appropriate wire and terminal.
8. Using the included zip tie, secure the relocation block in your desired location. This kit is designed to be universal to all BMW/Mercedes motors. Therefore, we don't have recommended locations for any application. Use common sense and secure your relocation block in a logical location. (read the third warning above)
9. Replace any stock parts removed during installation. Start motor and watch carefully for leaks. The system may take a few days to bleed any air out of the sending units. Odd gauge behavior is a sign of air bubbles in the sending unit. Air is naturally bled from the system over time.

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Stock BMW/Mercedes Oil Pressure Sender
Thread Size: **M12x1.5**

Aftermarket Oil Pressure Sender
Thread Size: **1/8" NPT**



Ground Screw
Thread Size: **#8-32**
Hex Wrench Size: **9/64**

12" Extension Hose
Thread Size: **1/8" NPT**

Metric - NPT Adaptor
Male Thread Size: **M12x1.5**
Female Thread Size: **1/8" NPT**

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