

Detroit Tuned G1 Oil Service How-To

Welcome to Detroit Tuned's how-to guide for an oil service for all G1 MINI Coopers. It's always best to do an oil change on a hot engine as the hot oil will drain better and give you a more complete oil change. Caution must be used to prevent burns from hot fluids. Rubber gloves, work gloves, and safety glasses are all recommended for this job. Any time you are under the car, a jack stand must be used. You should never rely on just the jack to hold the weight of the car up while you are under it. Safety first!



Here are all the tools you are going to need as shown above:

- 1/2" ratchet drive
- 36mm 1/2" socket
- 13mm 1/2" socket
- Small screw driver
- Lint free paper towels
- Jack and jack stand
- New MINI oil filter (part no. 11-42-7-512-446)
- 5 Quarts of synthetic oil
- Drain pan

1. Park the car on a flat level slab of concrete, set parking brake, and open the bonnet.



2. Jack up the car and put a jack stand under the jack block.



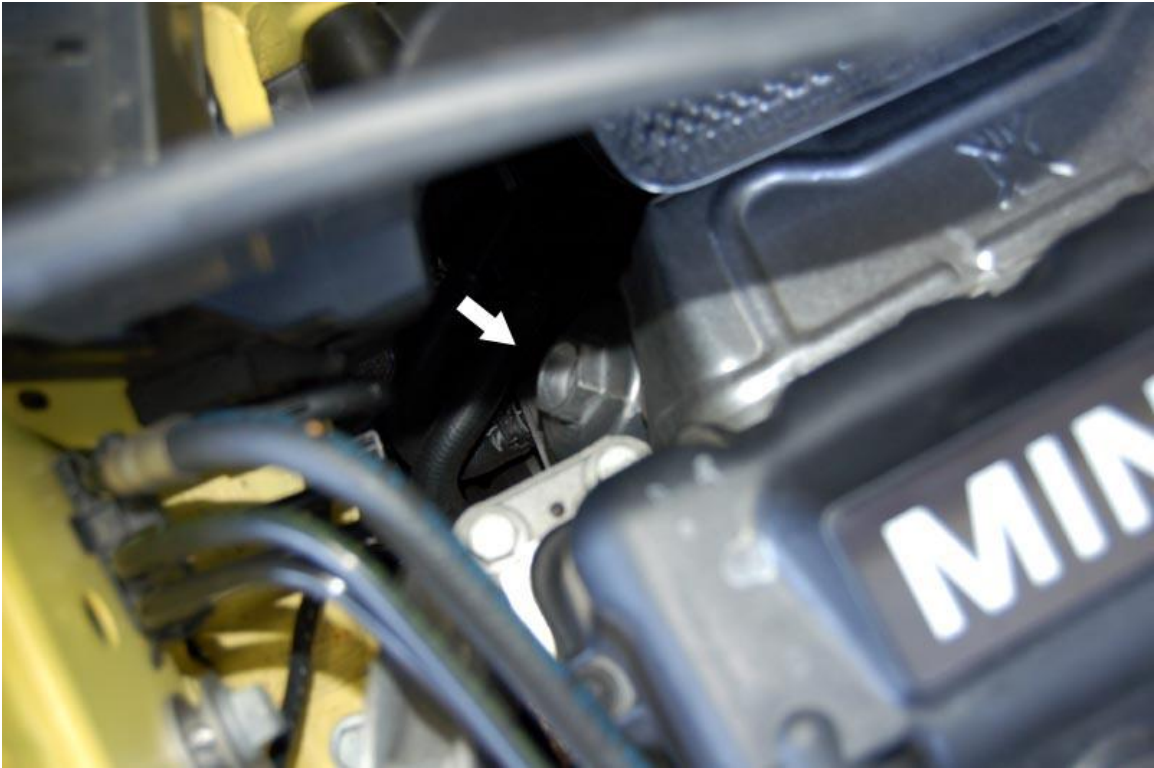
3. Find the drain plug under the car, on the back of the oil pan.



4. Remove drain plug with the 13mm socket and drain the oil into a drain pan.



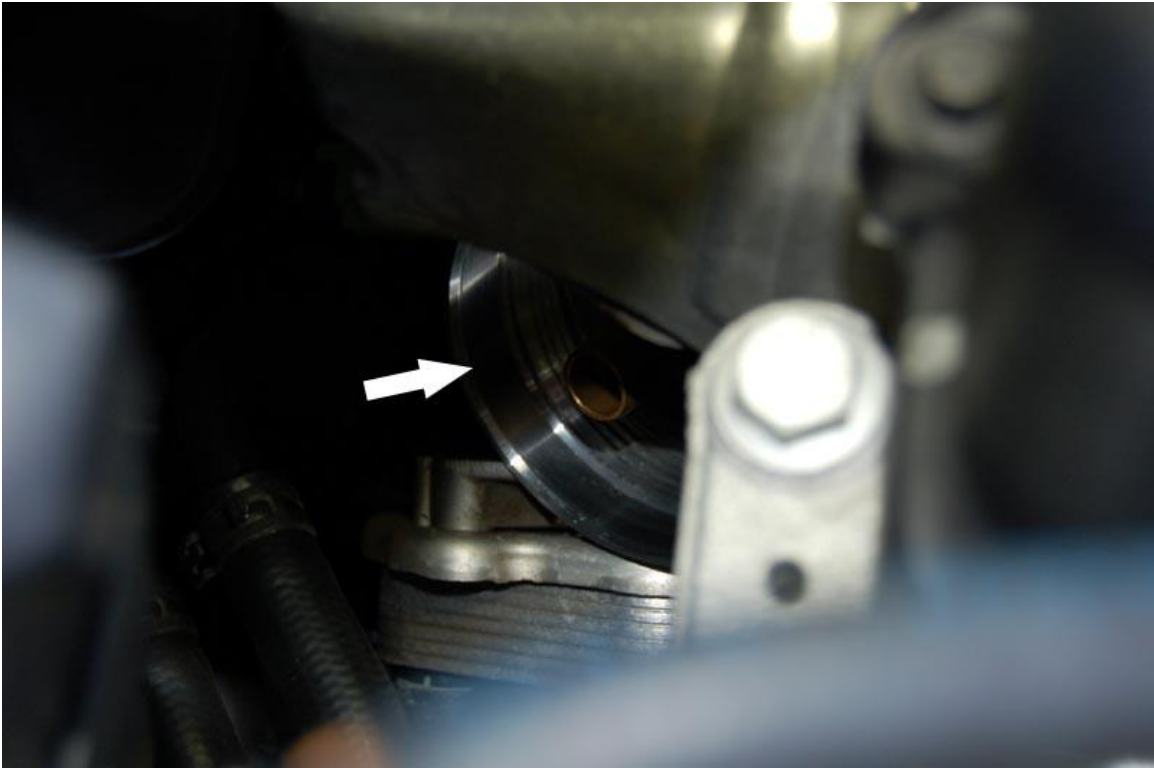
5. While the oil is draining, lower the car. Open the fill cap and pull up on the dipstick to let air into the system to help the oil drain. The dipstick likes to stick in its tube, so give it a small twist before you pull up on it to make sure it will pull out. Cooper dipsticks are in the front of the motor.



6. Here is where you will find the oil filter canister. If you have a strut tower brace or oil catch can in place you may have to remove it to gain access to the canister.



7. Use the 36mm socket to take the load off the canister and spin off till the o-ring is unseated. Do not remove it fully from the engine yet. The filter is full of oil and it is best to let it drain back into the system. It's best to let it drain for about 5 minutes so most of the oil is drained out of the filter. Once it's drained remove it.



8. Here you see the housing with the filter canister removed. Take a paper towel and clean out old oil and grit to get it ready for the new filter.



9. Remove the filter and o-ring out of the housing. For Cooper owners, make sure you do not pull out the center spring-loaded cartridge. Clean the canister and the threads/o-ring groove.



10. Install o-ring and filter as shown. Pre-lube the o-ring very well with new oil. The next step can be the most difficult. You need to reinstall the canister to the housing. Line up the canister so that it is square to the housing and start to thread it. It may take a few tries, but you need to start it by hand to make sure you do not cross thread the canister or housing as this can be a costly mistake. After a few turns by hand where you can feel it going on straight, will not come off, and has a slight resistance from the o-ring (this is why you pre-lube it), you can then use the socket if you would like and tighten it down.

11. Jack the car back up and reinstall the drain plug. While you are under there, wipe up any oil that may have spilled or dripped from the oil filter or drain plug.



12. Fill the engine with 5 quarts of synthetic motor oil and replace the oil fill cap. Start the engine, let it run for a few seconds and then turn it off. This will allow the oil to fill the filter, which will allow you to check the oil level correctly. Pull the dipstick out and clean it off. Put it back in till full seated and pull it back out. Remember to keep it pointed down so oil doesn't run back up the dipstick and give a false reading. The Cooper has an easy to read dipstick, but the Cooper S is a bit harder. The hatch marks show the oil operating range on the yellow tip. We like to see it high on the hatch marks. For cars that see more track time, we recommend half a quart more.

The final step is to make sure all oil that may be dripped or spilled on the ground or motor is wiped up. It's much easier to see any oil leaks when all oil is wiped off should one occur. Oil will also attract dirt and make working on the car later much harder and make more of a mess.

Make sure you dispose of the drained oil in proper manner. Many auto parts stores will recycle used oil, and many cities also have a community-recycling center where you can take used fluids.

Resetting the MINI Oil Indicator:

You will find this useful if you do your own oil changes. Keep in mind you should wait until your factory service expires, since resetting the indicator may lead the dealer to deny oil changes since the indicator does not indicate an oil change is due.

- 1** - Press and hold the trip odometer button.
- 2** - Insert car key and turn it to the first position (not the second position).
- 3** - You will see 51A come up in the trip odometer area.
- 4** - Release, then press and hold again.
- 5** - Watch for the word "RST" to appear on the Odometer indicator.
- 6** - Release, then press and hold again.
- 7** - Wait for the "RST" message to flash.
- 8** - Release, and then press & release (once only).

The Service interval is now reset to 10,000 miles for the first time you do this function, or 15,500 for every other time you reset it. Keep in mind that if you're having the dealer do every other service, do not reset it. The dealer will not do an oil service unless it reads that they should do so.

If you have any questions, feel free to give us a call here at Detroit Tuned Monday-Friday 8am-6pm EST.