

MINI MANIA REMOTE OIL COOLER INSTALLATION INSTRUCTIONS P/N NME1055

Mini Mania's Cooper S Remote Oil Cooler Kit is designed to reduce operating temperatures by cooling the motor oil using an external radiator. This unit replaces the factory 'water cooled' oil cooler which is limited in volume and effectiveness. Mini Mania's Remote Oil cooler uses a much more efficient 'air cooled' unit located in front of the car where maximum air flow exists.

REVIEW INSTRUCTIONS BEFORE BEGINNING!

The Mini Mania Remote Oil Cooler Kit includes:

- Instructions
- Radiator
- Adapter plate
- Oil lines (x2)
- Mounting hardware



QUICK SUMMARY

The Mini Mania Remote Oil Cooler replaces the factory oil cooler with a more efficient air cooled unit to help reduce motor oil temperatures. The factory unit uses coolant from the cooling system and has an extremely limited cooling volume. The Mini Mania Remote Oil Cooler uses a special adapter to tap into engine where the factory cooler connects. The coolant lines for the factory cooler are looped into each other to maintain circulation.

The installation requires the removal of the front bumper cover, the passenger side wheel, inner fender liner, and the factory skid plate / splash guard. The factory cooler is removed, the adapter plate installed, oil lines connected and routed, and the radiator mounted and connected.

MINI MANIA VS. FACTORY OIL COOLER



These instructions are written for Left Hand Drive cars.

PREPARATION AND GETTING ACCESS

1. Wear protective eye wear.
2. Wait until the engine is cooled.
3. Raise the passenger side of the MINI and secure with jack stands.
4. Remove the passenger side wheel.
5. Remove the Inner Fender Liner.
6. Remove splash shield under engine compartment.
7. Remove the bumper cover.
8. Drain coolant.

INSTALLING THE OIL COOLER ADAPTER

9. Working from the passenger side of the car, locate the factory oil cooler behind the engine just below the oil filter. Disconnect the two hoses connected to the factory oil cooler. Be prepared to catch residual coolant.

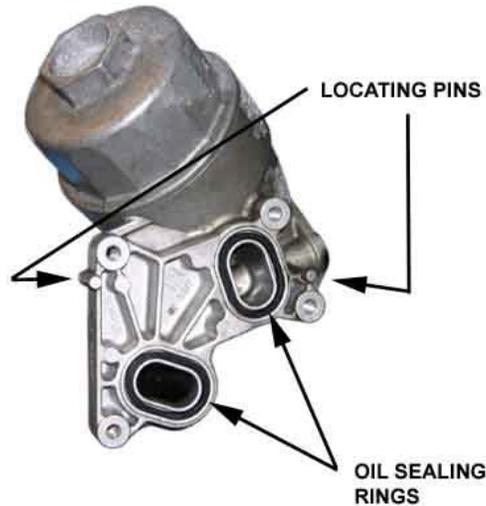


FACTORY OIL COOLER WITH COOLANT LINES REMOVED.

10. Locate the two coolant lines connected to the factory cooler that are shaped like the letter "J".
 - Remove both "J" shaped coolant lines.
 - Cut one of the "J" shaped lines to create a "U" shaped line.



- Using the modified "U" shaped line, connect the two coolant lines together to loop the coolant from one line into the other.
11. Remove the factory oil cooler. Be prepared to catch residual oil from the oil filter. There are two oval shaped oil sealing rings that may come off with the factory oil cooler units. **DO NOT LOOSE THESE!**



12. (It is recommended that these oil seals are replaced.)
13. Clean the mating surface of the factory oil cooler base and the adapter plate.
14. Install the two sealing rings into the factory oil cooler base.
15. Install the Mini Mania adapter plate, making sure the two locating pins line up for proper alignment.
16. Torque the four (4) screws to 12Nm or 9 ft-lb.

ROUTING THE OIL LINES

17. Clean the threads on the adapter plate free of any debris. Connect the two new oil lines to the adapter plate.



18. Route the oil lines from the adapter plate to the front of the car, in front of the air conditioner condenser (in front of the radiator). Leave enough play in the lines to allow for engine movement.



19. Ensure plenty of clearance between the oil lines and the pulleys and belts, taking into account engine movement.
20. Secure the oil lines away from any sharp edges.

MOUNTING THE OIL COOLER

21. Hold the oil cooler in front of the A/C condenser, about 2-rows up from the bottom, centered left-to-right.
22. Take the supplied mounting straps and feed them through the oil cooler at each corner.
23. Secure the oil cooler. (You may wish to 'prime' the oil cooler by filling it with oil, before you attach the hoses. This is not absolutely necessary, but it may speed up the purging process.)



24. Connect the oil lines to the oil cooler.



FINAL CHECKLIST

25. FILL COOLANT WITH PROPER MIX OF ANTI-FREEZE AND WATER.
Loosen the vent screw in the coolant line just in front of the intercooler. As soon as coolant starts to leak from the vent, close it tight.
26. Check that all screws and clamps are tight.
27. Check to make sure oil lines are clear from any moving parts.
28. Check for any loose tools in the engine compartment.

LEAK TEST

29. Start the engine and let run for about one minute. (Run the heater to open the heater core.) Watch for any signs of leaks from cooling or oil systems.
30. Fill with coolant as the cooling system purges air from the system.
31. Shut off the engine, let cool, and check the oil level and water level. Add fluids as necessary to proper levels.
32. Run the engine again for 5 minutes to check for leaks.
33. Shut off and confirm all fluid levels are full.

BUTTON UP

34. Install the splash shield.
35. Install the inner fender liner.
36. Install the front bumper cover.
37. Install the wheel & tire - remember to use a torque wrench in proper sequence.

TEST DRIVE

38. Take a test drive bringing the car to full operating temperature. Inspect all connections for fluid leaks. Check fluid levels again after the car is cooled.