

Lubricating Oil Analysis Information

Topic number	LI01.00-N-068885
Version	1
Function group	01.00 General
Date	10-04-2018
Validity	Applicable for all lubricating oil within Mercedes-Benz vehicles; including engine, transmission, differential, and suspension oils.
Reason for change	
Reason for block	

Complaint:

Complaints or issues involving oil contamination, long-term wear analysis, or other related issues related to lubricating oil.

Cause:

Coolant contamination, improper lubricant, excessive water, fuel dilution, etc.

Remedy:

MBUSA is partnering with ALS Laboratories to provide dealers with a low-cost option for testing of various lubricating oils within Mercedes-Benz vehicles.

This includes:

- Engine oils (gasoline and diesel)
- Transmission oils
- Differential oils
- Suspension oils

HOW TO ORDER KITS:

#1 - Fill out attached sample kit request form pdf to order lubricant test kits. Kits come in packs of 10. The same kit can be used for any type of lubricating oil.

****NOTE:** This same sample order form is used for diesel fuel testing kits. Please remember to not mix the two kits up.

#2 - Send the completed sample kit request to the nearest laboratory. Kits will arrive shortly after.

#3 - Each box of kits will include (10) shipping jars, (10) sealed sample jars, and (10) sample information sheets.

XENTRY TIPS

HOW TO PROCESS SAMPLES:

#1 - Please ensure the sample information sheet is filled out COMPLETELY. Be sure to include the VEHICLE VIN and DEALERSHIP CODE.

#1a - PLEASE NOTE: The type of testing performed on the lubricant sample is based on what type of oil the sample is indicated to be. ENSURE LUBRICANT SAMPLES ARE PROPERLY LABELED ON THE SAMPLE FORM - whether it is a transmission, differential, or engine lubricant.

#1b - PLEASE NOTE: There are TWO sides to the sample information sheet. One side is for NEW vehicles not previously sampled. The other side is for vehicles that have already been sampled. Filling out the wrong side can lead to reporting/trending errors.

#2 - Collect the sample of lubricating oil. Please see below best sampling practices.

#3 - Seal the sample collection jar using a piece of tape to help ensure no leaks. Be sure not to cross-thread the jar.

#4 - Wrap the sample information sheet around the oil sample and place into the shipping jar.

#5 - Tape shipping jar shut and apply postage. Ship sample jar TO THE SAME LAB THE KITS WERE ORDERED-FROM.

****NOTE: NEVER SHIP GASOLINE IN ANY OF THE SAMPLE KITS!**

#6 - Sample results are typically ready within 48 hours of arriving at the laboratory. If the sample information form is properly completed - the results will be emailed.

BEST SAMPLING GUIDELINES:

#1 - Ensure cleanliness when collecting samples to prevent outside influence of results. Use CLEAN and DRY containers to collect samples.

#2 - Allow sampling ports and equipment to flush. Do not collect the first quantity of oil out of the system - this does not give a best representation of what is circulating.

#3 - Collect oil samples while warm and recently operated. The longer the oil is allowed to settle in the system - the less the sample will represent what is circulating.

#4 - If you are comparing used oil to new oil - be sure to send in TWO samples. One of the un-used new oil and one of the used oil. This allows for comparison.

XENTRY TIPS

WHAT DO THESE TESTS TELL US?

#1 - If the lubricant has been contaminated. Example would be coolant contamination.

#2 - If the customer needs more frequent engine oil changes based on their driving habit.

#3 - If the wrong lubricant may have been used in a system (differential oil in a transmission, for example).

Any questions related to the lubricant analysis results can be escalated via a PTSS case to the Service Engineering level.

Attachments	
File	Description
MBUSA Order Form082018-Fillable.pdf	Sample Kit Order Form (Used For Lubricant & Diesel Fuel Testing Kits)

Symptoms
Chassis/suspension / Steering system / Noises / Humming/vibrations
Power generation / Engine lubrication/oil cooling / Function / No oil pressure
Power generation / Engine lubrication/oil cooling / Function / Oil pressure too low
Power generation / Engine lubrication/oil cooling / Function / High oil consumption
Power generation / Engine lubrication/oil cooling / Function / Oil in coolant system
Power generation / Engine lubrication/oil cooling / Function / Fuel in engine oil
Power transmission / Noises / Humming/droning
Power transmission / Noises / Grinding
Power generation / Engine lubrication/oil cooling / Display message / Oil sensor message