

TO: Service Locations

FROM: Service Systems Development

SUBJECT: **Excessive Overhead Engine Noise on GHG14 DD Platform Engines**

ISSUE

There have been cases of excessive overhead engine noise complaints on GHG14 DD Platform engines. These conditions can often be resolved by properly adjusting the valve lash.

REQUIRED ACTION

If a unit arrives at a repair facility with an excessive overhead noise complaint, first verify the noise is present and abnormal. If the noise is abnormal, perform the following steps.

 **WARNING:**

PERSONAL INJURY

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

1. Record the engine speed and coolant temperature where the noise is most noticeable.
2. Remove the rocker cover and adjust the valves and engine brakes using the applicable procedures in the workshop manual.
3. Reinstall the rocker cover and air cleaner.
4. Run the engine again to check for the abnormal noise at the operating conditions recorded in step 1.
5. If the abnormal ticking or rattling noise is still present after adjusting the valves and engine brakes, proceed to step 6. If the abnormal noise is reduced, restore the vehicle to service. The repairs are complete.
6. Remove the rocker cover again and, using a paint pen, number the exhaust rocker arms with the cylinder position.
7. Using a paint pen, number the intake rocker arms with the cylinder position.
8. Remove the rocker arm shaft assemblies using the appropriate procedure from the workshop manual.
9. Check if the first two exhaust rocker arms (exhaust rocker arm and exhaust rocker arm with actuator piston) on each cylinder are loose on the rocker arm shaft. The brake rocker

arm (last in position) does not need to be inspected. Loose refers to excessive clearance between the rocker shaft and rocker arm.

10. Check if any intake rocker arms are loose on the rocker arm shaft. Loose refers to excessive clearance between the rocker shaft and rocker arm.
11. If any rocker arms are loose, the rocker arm shaft is the primary failed part (PFP) and must be replaced along with *only* the loose rocker arm(s).
12. Repeat the inspection until the rocker arms on both rocker shafts have been checked.

It is not necessary to replace all of the rocker arms -- only the loose ones. It is also important to note that small scratches and light scoring are considered normal wear for overhead valve train components (camshaft housing, camshaft journals, camshaft lobes, rocker arm shafts, rocker arm bushings and rocker arm rollers).

CONTACT INFORMATION

Please contact the Detroit™ Customer Support Center at 800-445-1980 or email csc@daimler.com if you have any questions.