



# Technical Service Information

---

## **AUDI ZF6HP19FLA VIBRATIONS ON TURNS**

**COMPLAINT:** Vehicles equipped with a ZF6HP19 (09L) transmission may experience complaints from the vehicle owner of vibrations, humming noise or rubbing noise from the drivetrain when driving slowly around tight turns. Especially so when the steering wheel is at a full lock turn. Note: Light vibrations at full steering wheel lock is normal.

**CAUSE:** The ability for the additives in the differential fluid that allow the friction to slip reduces with wear. This scenario provides an environment that can cause the friction plates and worm wheel teeth in the center differential to be subject to wear. This then changes the friction and locking values in the center differential causing the vibration noise complaints from the drivetrain.

**CORRECTION:** First make an inspection of the fluid level and condition. If the fluid level is low and/or has metal shavings or any other sign of damage the center differential will need to be inspected for excessive wear. Repair as necessary and restore fluid retention. .

If the fluid level is correct and the condition does not indicate internal damage, changing the fluid may be all that is needed to resolve the concern. Since the center differential does not have a drain plug, the cover will need to be removed just far enough to drain the oil. Reassemble and fill with new oil.

Drive the vehicle making many turns until the gearbox has reached 80° C at which time renew your assessment of any vibrations. If the vibrations have been reduced to normal the problem is resolved. Otherwise the center differential and/or friction plates may require servicing.

### **SERVICE INFORMATION:**

*New Center Differential Fluid Part #.....G 055 145 A2*