FIRST GENERATION ZF8HP45 REVERSE GEAR WHINING NOISE

The whining in reverse mode affects almost all the early production 8HP models built before 2015, due to a poor design of the 3rd wheel set in the transmission. (Even refurbished units from ZF itself)

The three planetoid wheels of the 3rd wheel set are bedded on round washers, which divide the planetoid wheels from the aluminum frame where the wheels are mounted.

These round washers are causing the whining.

The round washers can/will also work themselves into the aluminum frame over the time, causing a even louder whining and possibly causing also a sudden complete transmission malfunction.

Following a BMW PUMA case, this defect was fixed by ZF in 2015/2016 production variants, by using oval washers instead of round washers.

Solution

Rebuilding the transmission by an independent ZF center using parts of the later models 8HP with oval washers (and some other corresponding parts).

Check list

Beforehand, the user must change the fluid and pan and make sure the fluid level is correct, then
check whether transmission clutch pressure adaptations are still within tolerances: (between 300mbar and +450mbar).