

1956 Corvette Service Bulletin: Clutch Disc - Springs - Periodic Vibration

Subject: Clutch Disc - Springs - Periodic Vibration

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TO: ALL CHEVROLET DEALERS

In cases where periodic vibration is experienced in any units having a conventional clutch, particular high performance passenger cars, the unit should be checked to make certain that it has the specific disc specified for that model and that it is functioning properly.

Chart on page 3 covers the disc part number, color identification, type lining, pressure plate spring quantity and color for each model.

PERIODIC VIBRATION - DESCRIPTION - DIAGNOSIS

The term "periodic vibration" is used to describe a noise which usually appears to center around the transmission, however, when the unit is on a hoist, it may appear to be drive line or rear axle. The noise usually appears in high performance passenger cars with 3-speed transmission units equipped with or without overdrive in the 25 to 35 MPH range in high gear, depending on the units equipment.

In all cases, either increasing or decreasing the speed of the vehicle beyond the period where the noise is experienced, the vibration will disappear.

Periodic vibration should not be confused with vibration caused by rough engine operation, sheet metal vibration, loose engine mountings, etc.

CLUTCH DISC CONSTRUCTION

To control periodic vibration as outlined above, dampers are incorporated in the clutch disc assemblies, Figure 1 on page 2 shows cutout illustration of the construction of a clutch disc assembly. The number of coil springs, size, and other details, will vary in some discs; however, this is a typical example.

One-piece friction washers are also installed on both sides of the driven plate hub. These create friction between the moving parts of the assembly, this friction is predetermined and is maintained in production to make the assembly function properly.

It is important to keep transmission lubricant or any other lubricant out to prevent any variation in friction which will change the tuning characteristics of the assembly and permit periodic vibration.

CLUTCH

When periodic vibration as described above is encountered, it is IMPORTANT that the clutch disc assembly be replaced using a new clutch disc as listed in the chart for that particular model. Make sure there is no grease on the new clutch disc hub and dampers or the transmission main drive gear splines. If grease is present on the splines, the main drive gear bearing retainer should be corrected as necessary.

Unit should be drive at least 25 miles to stabilize friction lag in the new clutch disc.

EARLY POWER PACK CLUTCHES

In some cases early Power Pack Clutches, coil spring type (6 red and 3 lavender coil springs) were found to be low in capacity. Where this condition exists, they should be changed to "6 No Color" and "3 Tan" as covered in chart. For extreme use on high performance units "9 No Color" springs or Corvette clutch cover and pressure plate assembly is recommended, although a considerably higher pedal effort will result form use of such assemblies.

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