Avoiding clutch pedal vibrations

Clutch pedal vibrations can be attributed to a faulty or worn frequency modulator. A frequency modulator is an anti vibration unit placed on many vehicles within the hydraulic line (see figure 4). The frequency modulator is specifically calibrated to the vehicle and engine in order to dampen vibrations through the clutch line.

Vibrations are generated as a result of axial torque deviations in the crankshaft. The torque deviation is transferred to the pedal via the clutch hydraulic line and the frequency modulator suppresses the pulsations in the hydraulic line preventing vibrations to the clutch pedal.

The frequency modulator dampens vibrations particularly well during actuation of the clutch but it will also reduce significantly other higher frequency oscillations such as vehicle noise/judder.

Valeo recommend during the fitment of a clutch or flywheel the following should be checked to prevent pedal vibrations:

- Is the electronic control software up to date?
- Is a frequency modulator fitted?
- Is the frequency modulator faulty?

Check and renew all of the above if necessary. These are available through the vehicle manufacturer. Failure to check and replace where necessary will result in difficult gear change or vehicle judder and/or vibration.

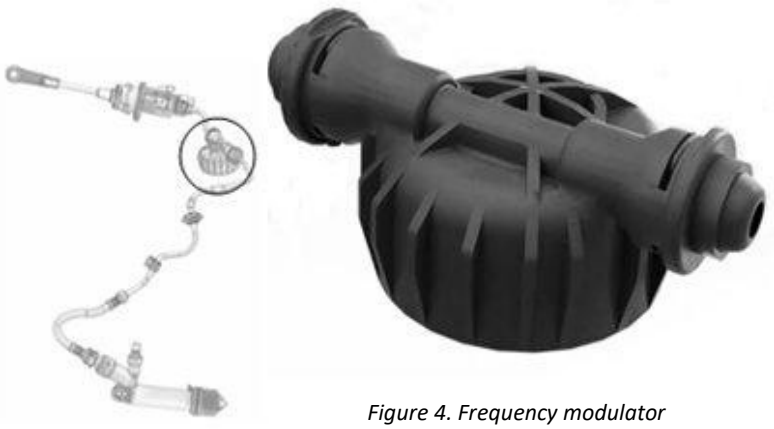

Figure 4. Frequency modulator

**Please be aware 835035 is not suitable for vehicles with Stop Start technology*

valeo tech centre

www.valeoservice.co.uk
Valeo Service (UK) Ltd,
Heming Road, Washford, Redditch, Worcestershire, B98 0DZ
Tel: 01527 838300 Fax: 01527 523732

Valeo Service