SERVICE BULLETIN

M1304 2018-09-06

M1304: BIG TWIN NEUTRAL RATTLE

Reason for Revision

Refer to Table 1.

Table 1. Document History

Date	Revision Description
2011-08-31	Initial release
2018-09-05	Updated **Vehicles Affected**

Purpose for Service Bulletin

To communicate to dealers that due to normal manufacturing variations and tolerance stack-up, some vehicles will exhibit a noise called neutral rattle. This condition is normal and has no adverse affect on the vehicle. Share this information with customers who have reported this condition on their vehicles.

Vehicles Affected

All 2007 - 2016 Touring, CVO Touring, Trike, Police and 2006 - 2017 Dyna, Softail, CVO Softail with Twin Cam engines.

Markets Affected

All markets are affected.

Description of Condition

When a motorcycle is at normal operating temperature and in neutral, a rattling sound may be heard on the right side coming from the area of the transmission side cover. This sound is normal and is referred to as neutral rattle. To verify the sound is neutral rattle, pull in the clutch lever and hold it for 10 to 15 seconds. If the sound stops, it is neutral rattle.

Neutral rattle is caused by the necessary backlash within the first gear pair. Backlash is a combination of gear tooth pitch, relative location of the support bearings to each other, along with many other factors. Even though all components are within specification, slight variances result in tolerance stack-up. Tolerance stack-up is the adding and subtracting of all the tolerances between parts as they relate to the total backlash of the gear train. This stack-up can result in gear mesh that is tight-fitting or loose-fitting. If the stack-up is toward the loose side, clearance between the teeth of the gears allows them to "clank" together and cause the sound.

Required Dealer Action

Since neutral rattle is a normal condition, the attempt to repair it is not necessary or advised. Dealers are encouraged to share this information with customers who may have reported this sound, and advise them that it is normal.

NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	WARRANTY PROCESS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO. 1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	RETURN THIS TO
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